

SCP 2019 ANNUAL CONFERENCE  
HYATT REGENCY HOTEL, SAVANNAH, GEORGIA

CONFRONTING BOTH  
**GOOD AND EVIL**  
WITH CONSUMER  
PSYCHOLOGY

FEB. 28 - MAR. 2



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# Welcome Message

Kelly Haws, Vanderbilt University, Owen Graduate School of Management

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We are thrilled to have everyone here in the lovely city of Savannah to participate in SCP's Annual Winter Conference. This promises to be an exciting and intellectually stimulating conference given the high number of quality submissions, which led us to be very selective in choosing presenters this year. Our theme dovetails on the famous book and movie about this charming city as we shine a special light on "Confronting Both Good and Evil with Consumer Psychology". Related to that theme, we have a stellar pair of keynote speakers, Kelly Brownell and Sendhil Mullainathan, for our Plenary Session at 11:30 am on Friday in the Harborside East Room that you will not want to miss. Thanks to Simona Botti for moderating this event. Further, we have the pleasure of the Presidential Address by Andrea Morales during the Friday lunch, plus the opportunity to celebrate several special award winners at the Saturday Awards Luncheon. Finally, you will not want to miss our Southern Savannah Nights Party closing event beginning at 7:00 pm on Saturday, with the additional opportunity to join your fellow SCP attendees for a Historic Haunts Trolley Tour.

We would like to extend our sincere thanks to all the people who have made this conference possible: the program committee members, and the many reviewers, authors, presenters, and volunteers who have helped ensure a phenomenal conference. We are particularly indebted to those who did an incredible job shaping our program by serving as Associate Editors: thank you to Katherine Burson, Bart de Langhe, David Dubois, Szu-chi Huang, Caglar Irmak, Yuwei Jiang, Ravi Mehta, Adriana Samper, Manoj Thomas, and Min Zhao. The working paper session was curated by Henrik Hagtvedt, Peggy Liu, and Sarah Moore, so be sure to stop by the Friday evening reception. We would also like to acknowledge our fantastic co-chairs of the Doctoral Consortium, Rebecca Walker Reczek and Aaron Brough. The doctoral consortium is supported by generous contributions from Jane and David Schumann and the Fisher College of Business at The Ohio State University.

In hindsight, we might have deemed the conference theme "Transitions" as this was the year of many. We are thankful to our new Conference Manager, Paula Rigling, as well as our "Lifesaver" Brenda Monahan for their countless behind-the-scenes contributions to pull this conference together. Further, we thank both the outgoing SCP Executive Director, Larry Compeau, as well as the incoming director, Eric Yorkston, for their guidance and support. Additionally, a special thanks to Andy Gershoff for his willingness to share with us his expertise in the new conference submission system. We also are indebted to Jenny Escalas and Sean Rhea, as well as the entire SCP Executive, for their continual efforts in supporting SCP. Finally, we would like to thank our other sponsors: The Owen Graduate School of Management at Vanderbilt University and The Beedie School of Business at Simon Fraser University.

We are grateful to have such wonderful contributions from so many people for the benefit of the society. We hope you enjoy SCP 2019!

Kelly Haws & Brent McFerran  
2019 Co-Chairs

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## **FRIDAY, MARCH, 1**

### **Session 1**

#### **Determinants of Prosocial Behaviors - Competitive Paper Session**

*Verlst (2nd Level)*

*Chair: Daniela Cristian, Cass Business School, City University of London*

#### **Ineffective Altruism: Donating Less When Donations Do More Good**

Joshua Lewis (University of Pennsylvania, USA); Deborah Small (University of Pennsylvania, USA)

##### **Brief Abstract:**

The effective altruism movement advocates donating more when donations are more cost-effective. However, in three studies (N = 1,945), when we inform experimental participants of the cost of such an impact (e.g. \$0.10 per meal), they perversely donate less when the cost is cheaper. This result arises because a lower cost allows people to achieve a tangible impact with a smaller donation. In Studies 2 and 3, we remedy this inefficiency by instead expressing cost-effectiveness in terms of “units per dollar amount” (e.g. 10 meals per dollar), rendering the cost of a tangible impact less salient as a target donation.

##### **Extended Abstract:**

Effective altruists advocate donating more when the marginal dollar does more good (Singer, 2016). To facilitate this approach, organizations such as GiveWell inform donors of the cost of providing various forms of charitable impact. In this paper, we question whether this information presentation leads to more cost-effective donations. Specifically, expressing cost-effectiveness information in terms of “cost per unit” (e.g. \$2 per mosquito net) makes the required donation to achieve a tangible impact salient as a potential target. Targeting behavior can unfortunately lead to suboptimal choices, such as cab drivers working fewer hours on days when their hourly wage is higher (Camerer, Babcock, Loewenstein, & Thaler, 1997). To see how targeting a tangible impact might cause inefficient donations, consider a charity that provides mosquito nets for malaria prevention. When told that the cost of a mosquito net is \$2.00, somebody who targets providing one mosquito net donates \$2.00. If instead told that the cost of a mosquito net is \$1.00, then that person donates only \$1.00. Consequently, this person perversely donates less when the marginal dollar buys more impact. We propose a remedy for this suboptimal behavior; cost-effectiveness information can instead be framed in terms of “units per dollar amount” (e.g., 5 nets for \$10, or 10 nets for \$10), rendering the exact cost of a unit (a mosquito net in this case) less salient. In Study 1, we demonstrate the inefficiency in a scenario using “cost per unit” information, and in Studies 2 and 3 we show the effectiveness of the proposed remedy with real donation decisions.

#### **In Praise of Pleasure: Hedonic Consumption Fosters Prosocial Behavior**

Daniela Cristian (Cass Business School, City University of London); Bob Fennis (University of Groningen, The Netherlands); Luk Warlop (Norwegian School of Management, Norway)

**Brief Abstract:**

Pleasure constantly inhabits our minds. In spite of its universal appeal, hedonic consumption has been often stigmatized as maladaptive. We contend that this prevalent negative view does not convey a complete picture and that under particular conditions, deliberately engaging in hedonic consumption leads to enhanced prosociality. Results show that freely experiencing hedonic consumption promotes both non-monetary helping and charitable donations (real and hypothetical). We find that hedonic-induced disinhibition underlies the effect and rule out alternative accounts.

**Extended Abstract:**

Hedonic experiences abound. Despite their universal appeal, a common intuition is that besides enjoyment, hedonics elicit guilt or regret (Okada 2005). Hence, pursuing pleasure has been considered generally suboptimal (Keinan and Kivetz 2008). To redress this misconception, we contend that under particular conditions hedonic consumption fosters prosociality.

Hedonic experiences are sought for their inherent affective and sensory attributes, and the enjoyment they provide (Holbrook and Hirschman 1982). When pursuing pleasure, consumers escape functional goals and derive satisfaction from hedonic consumption per se without further goals (Botti and McGill 2011). Based on this, we propose that when deliberately engaging in hedonic experiences, consumers break free from other endeavors. Because hedonics are highly immersive, they prompt a higher focus on the consumption experience and render consumers more impulsive and less inhibited. On these premises, we argue that freely engaging in hedonic consumption induces behavioral disinhibition. Extant research suggests that disinhibition is a direct precursor of prosociality (Rand, Kraft-Todd, and Gruber 2015; Van den Bos et al. 2009). Within moral psychology, the social intuitionist model stipulates that moral judgments (i.e., favoring cooperation over defection) ensue from relatively automatic intuitive processes (Haidt 2001). Building on this and on the notion that most people adhere to prosocial values (Van Lange et al. 2011) recent studies propose that our innate impulses are geared towards cooperation and that such predispositions are often overshadowed by deliberation (Rand 2016).

Prior research has suggested competing antecedents of prosociality such as positive mood (Isen and Levin 1972) and guilt-induced helping (Strahilevitz and Myers 1998; Zemack-Rugar et al. 2016). However, hedonic episodes do not unequivocally trigger positive affect or guilt, but concurrent positive and negative responses (Ramanathan and Williams 2007). Thus, we extend existing work by documenting a qualitatively different relationship between hedonics and prosociality. Specifically, we propose that following free hedonic consumption, prosociality ensues as an intuitive response, and that disinhibition underlies this effect.

Results from four experiments using real hedonic food consumption lend support to these hypotheses. To exclude the possibility that the effect is due to potential physiological correlates of food consumption (i.e., glucose), we utilized a yoked between-participants design across all studies, where hedonic consumption (free vs. instructed) was the manipulated factor. In the instructed condition, each participant consumed the same food amount as another participant consumed in the free condition. Therefore, the intake was identical across conditions. We systematically ruled out mood by measuring it before and right after the eating task in all studies.

Study 1 tested whether free hedonic consumption fosters behavioral helping. Hedonic consumption

(free vs. instructed) was manipulated. We measured behavioral prosociality by asking participants to help checking written exams for the Exam Office. A Poisson regression revealed that free hedonic consumption had a positive effect on helping ( $\beta = 0.44$ ;  $\chi^2(1) = 25.69$ ;  $p < .001$ ) (12.6% refusals coded as zero). Participants who experienced free chocolate consumption voluntarily checked 55.3% more exams than those who consumed the same chocolate amount instructed. Besides mood, we also ruled out post-consumption conflict.

To test whether the effect is germane to hedonic consumption, Study 2 employed a 2 (consumption: free vs. instructed) x 2 (food: hedonic vs. non-hedonic) between-subjects design. A control condition void of consumption was included to capture baseline prosociality. After consuming either chocolate truffles (hedonic) or rice crackers (non-hedonic), participants were asked how much of their experimental payment they wanted to donate to a charity of their own choice. Participants in the control condition proceeded directly to the prosociality measure.

A 2 (consumption: free vs. instructed) x 2 (food type: hedonic vs. non-hedonic) ANOVA on charitable donations revealed a main effect of consumption ( $F(1, 157) = 4.48$ ;  $p = .03$ ) and a main effect of food type ( $F(1, 157) = 13.52$ ;  $p < .001$ ). As predicted, free hedonic consumption led to more generous donations relative to instructed hedonic consumption. This was not the case for non-hedonic consumption. In the two non-hedonic conditions, the donation level did not differ regardless of consumption being free or instructed. Donations in the control condition ( $M = 22.58$ ) were lower than donations in the free hedonic consumption condition ( $p < .001$ ), but did not differ from the two non-hedonic conditions. Thus, nonhedonic consumption was analogous to no consumption. As predicted, the effect was not driven by consumption per se, but germane to hedonic consumption. Additionally, we tested whether psychological reactance alters prosociality. Results disconfirmed this potential explanation.

So far, we ascribed the differences in prosociality to disinhibition induced by free hedonic consumption. To test this hypothesis, Study 3 measured consumers' chronic predispositions to disinhibit. We utilized the same design (free vs. instructed hedonic consumption). Prosociality was measured as in Study 2. Following the donation task, participants completed the Behavioral Inhibition System (BIS) scale where lower scores reflect higher disinhibition. Results indicated a significant main effect of hedonic consumption on donations ( $F(1, 97) = 6.62$ ;  $p = .01$ ) qualified by an interaction with BIS ( $b = 28.21$ ;  $t(95) = 2.74$ ;  $p = .007$ ). Thus, Study 3 showed that disinhibition measured as the chronic tendency to "let go" underlied the effect.

Study 4 provided additional process evidence by directly measuring disinhibition. We used a consequential prosociality measure: real donations. Each participant had the payment in an envelope next to the computer. The hedonic eating task (free vs. instructed) was followed by an ad for Save the Children. Participants were asked to leave the desired donation amount (if any) in the envelope. Results indicated a significant main effect of hedonic consumption on real donations ( $F(1,83) = 7.21$ ;  $p < .01$ ). Importantly, the direct effect was not significant when including disinhibition in the model ( $p > .09$ ; 95% CI [.577; 7.93]; Hayes 2009) indicating full mediation.

Considered jointly, the current studies support our central hypothesis that free hedonic consumption promotes spontaneous non-monetary helping, hypothetical and real charitable donations. We augment the current understanding of hedonics and contribute to the prosociality literature. Besides providing

actionable insights for marketers that offer hedonic products and experiences, this work is highly beneficial for charity organizations.

## Promoting Welfare or Equality? Using Compassion vs. Gratitude to Motivate Different Types of Prosocial Behaviors

Shreyans Goenka (Cornell University, USA); Stijn van Osselaer (Cornell University, USA)

### **Brief Abstract:**

This research shows that charities seeking to promote different types of prosocial behaviors (welfare vs. equality) should utilize different emotions in their campaigns. We demonstrate the importance of the congruency between the moral domain of an emotion and the moral objective of a firm.

Compassion increases preferences for charities that seek to increase care in society (e.g., disaster-relief charities) but gratitude increases preferences for charities that seek to promote fairness in society (e.g., human rights charities). One field study and five experiments demonstrate that utilizing an emotion congruent to the moral objective of the firm increases monetary donations and preferences.

### **Extended Abstract:**

Charities often use a variety of positive emotions in their promotion campaigns to nudge consumers to act pro-socially (Agrawal, Menon, & Aaker, 2007; Cavanaugh, Bettman, & Luce, 2015; Small & Verrochi, 2009). Importantly, organizations seek to promote vastly different types of prosocial behaviors, encompassing various socio-moral concerns and issues (Caruana, 2007; Giesler & Veresiu, 2014). For example, some charities, like the American Red Cross, seek to raise donations for disaster relief and humanitarian welfare. Other charities, like the American Civil Liberties Union (ACLU), seek to raise donations for freedom, justice, and equal rights. Thus, different organizations aim to highlight different moral values in their campaigns and strive to make consumers perform a specific kind of moral action. In this research, we investigate how these different types of charities can utilize positive emotions effectively to motivate the specific kind of prosocial behavior. Which emotion will be the most effective for the Red Cross? Moreover, should the ACLU use the same emotion as the Red Cross?

In the past, researchers have assumed that all positive emotions motivate prosocial behaviors in a similar fashion (Ashby, Isen, & Turken, 1999; Shiota, 2017). Therefore, marketers often employed diffuse positive affect in promotional campaigns, with the underlying assumption that all positive emotions would be equally effective in motivating all types of moral behaviors. However, recent research has demonstrated that discrete emotions can motivate behaviors in unique patterns in conjunction with their appraisals and evolutionary goals (Han, Lerner, & Keltner, 2007; Keltner & Haidt, 1999; So et al., 2015). More specifically, research has demonstrated that some positive emotions (e.g., compassion, gratitude, love, and awe) are especially predisposed for motivating prosocial behaviors (Bartlett & DeSteno, 2006; Cavanaugh et al., 2015; Stellar et al., 2017). Hence, this research may be taken to suggest that some positive emotions work better than others, but that they work equally well regardless of the type of prosocial cause they promote. Thus, this line of work would suggest that both the Red Cross and ACLU can utilize the same emotion to serve their objective. For example, both organizations could utilize gratitude (or compassion) equally effectively, as this emotion has been shown to be effective at motivating prosocial tendencies.

The present research, on the other hand, presents a different proposition. We posit that because the Red Cross and the ACLU seek to promote different moral objectives, they should employ different emotions, specific to their moral causes. We build upon the social functional framework of emotions (Frijda & Mesquita, 1994; Haidt, 2003; Keltner & Haidt, 1999) to theorize and demonstrate that the congruence between the moral objective of an organization and the moral domain of an emotion can increase the effectiveness of promotion campaigns. Charities seeking to promote welfare and humanitarian relief causes should employ an emotion that prioritizes the ethical concerns of care, but charities seeking to promote justice and equality causes should employ an emotion that prioritizes ethical concerns of fairness. Specifically, the Red Cross should utilize compassion, but the ACLU should use gratitude in their respective promotion campaigns.

In this research, one field experiment (N = 2,112) and five studies (N = 2,600) together show that firms seeking to motivate prosocial behaviors should utilize gratitude or compassion, in conjunction with their respective moral objectives. Charities and products that promote care and welfare in society should employ compassion, but charities and products that promote fairness and reciprocity in society should utilize gratitude. Importantly, Studies 1, 2, and 3 induce the emotions through three different methods and measure consequential donation behavior. First, Study 1 compares the effects of compassion and gratitude on charity choice in a field experiment. We find that subtle environmental cues of compassion increase the likelihood of donating to a charity representing care values, but gratitude cues increase the likelihood of donating to a charity representing fairness values. Study 2 examines how charity appeal advertisements with subtle emotion inducing text can be more effective in soliciting monetary donations when the advertisement utilizes an emotion congruent with the organization's moral objective. Study 3 shows that explicit recall tasks of compassion and gratitude lead to different patterns of monetary donations contingent upon the charity's moral objective.

Having demonstrated the effects of the emotions on prosocial behaviors using consequential donation measures, we proceed to examine the theorization using hypothetical donation measures. Study 4 shows that the two emotions make different moral concerns salient, which mediates the effect on prosocial preferences. Study 5 rules out some alternative explanations for the effects of the emotions on prosocial preferences. Finally, Study 6 shows that compassion-evoking appeals for care-oriented charities are more effective under a prevention framing whereas gratitude-evoking appeals for fairness-oriented charities are more effective under a promotion framing.

Together these six studies employed two different sample populations, five different types of stimuli, three forms of emotion manipulation (environmental prime, essay writing, subtle advertisement), four different study designs (choice, separate evaluation, within-subjects, and direct-comparison), with three consequential donation paradigms. Across all the studies we find robust evidence that charities can increase donations by utilizing an emotion in conjunction with their moral objective. This is the first research, to the best of our knowledge, to empirically demonstrate the effects of the congruence between positive moral emotions and their moral domains. Further, this research examines the effects of moral congruence on consumption preferences. Moreover, we also demonstrate a novel moderator showing that the effectiveness of morally congruent advertising depends on regulatory focus. consequently, this research produces distinct implications for organizations operating in the moral sphere by demonstrating how managers can utilize different positive emotions to boost charitable donations and preferences for prosocial products.

# This Is My Commandment, That You Love One Another: The Match Between Cultural and Religious Orientation Predicts Prosocial Behavior

Hyewon Oh (University of Illinois at Urbana-Champaign, USA); Carlos J. Torelli (University of Illinois at Urbana-Champaign, USA)

## **Brief Abstract:**

As major influences in one's life, culture and religion have been extensively studied but often separately examined. The present research conceptualizes culture and religion as belief systems that can vary on the individualistic-collectivistic continuum. With Christian participants, we explore whether the interplay between cultural beliefs and religious beliefs has substantial impact on the extent to which consumers endorse a collectivistic view of their relationship with God and willingness to donate. The findings reveal that the collectivistic (vs. individualistic) culture-religion match increases the endorsement of collectivistic religious beliefs and donation intention.

## **Extended Abstract:**

Religion and culture are important determinants of consumer behavior (Mathras et al. 2016; Shavitt et al., 2006). Consumers often define themselves based on their religion (e.g., Protestant, Catholic) as well as their cultural orientation (e.g., European American, Asian American), which affects their prosocial tendencies. The "religious prosociality" hypothesis (Norenzayan & Shariff, 2008) suggests that religious people are more prosocial, and recent research also proposes that cultures embracing an interdependent (vs. independent) view of the self are more generous (Duclos & Barasch, 2014). However, these past effects seem to be more valid when recipients belong to one's in-group, and hence seem less related to altruistic prosocial motives and better explained by social identity processes—such as in-group favoritism (Duclos & Barasch, 2014; Galen, 2012). Thus, the link between culture/religion and prosociality remains unclear. Furthermore, past research is mute about the interplay between culture and religion in determining prosocial tendencies. This research attempts to fill this void by focusing on the additive effect of culture and religion on promoting prosocial behavior.

Recent research has started to investigate how culture and religion interact to impact psychological processes. Depending on how one perceives the relationship with other individuals or with the divine, both culture and religion can be conceptualized as belief systems (Mathras et al., 2016; Tarakeshwar et al., 2003). For example, Catholicism seems to subscribe more to collectivistic instantiations of religion (e.g., community-based religious practices), whereas Protestantism subscribes more to individualistic instantiations of religion emphasizing a personal relationship with God (Cohen et al., 2016). Extending the past findings (e.g., Sasaki & Kim, 2011), we propose that people internalize religious beliefs using a cultural filter. People with a collectivistic (vs. individualistic) orientation will internalize more the collectivistic characteristics of a religion. Because Catholicism is more likely to subscribe to a collectivistic instantiation of religion than Protestantism, we argue an additive effect of culture and religion. Specifically, Catholics with a collectivistic orientation would be the most likely to internalize a collectivistic instantiation of religion (Study 1). In turn, such endorsement, given its emphasis on teachings about fulfilling God's will by helping undifferentiated others, should increase the likelihood of behaving prosocially (i.e., the highest donation intention; Studies 2-3).

Study 1 aims to test the additive culture-religion effect on the endorsement of religious beliefs (i.e., collectivistic Catholics show the greatest endorsement of a collectivistic view of the relationship with God promoted by Christianity). Participants (N = 200) were presented with 10 pairs of validated



religious beliefs, with each pair composed of a belief aligned with a view of religion as reflecting a personal relationship with God independent from others and another aligned with a view of religion as a communal relationship with others as a way of fulfilling God's will. For each pair, participants chose one that is more personally meaningful to them.

Next, participants completed the cultural orientation scale (Triandis & Gelfand, 1998). We created an index of collectivistic orientation by subtracting the sum of individualistic items from that of collectivistic items divided by the sum of all items (Escalas & Bettman, 2005). Finally, they indicated religious affiliation (Protestant or Catholic).

We conducted a 2 (Religion: Protestant vs. Catholic)  $\times$  2 (Culture: Individualistic vs. Collectivistic) ANOVA on the number of collectivistic religious beliefs chosen by participants. As expected, the collectivistic match showed the greatest degree of endorsement of a collectivistic view of the relationship with God (Figure 1). In addition to a significant main effect of culture (i.e., collectivistic orientation index),  $F(1, 176) = 27.77, p < .0001$ , there was a significant religion  $\times$  culture interaction,  $F(1, 176) = 3.924, p < .05$ . Specifically, collectivistic Catholics demonstrated the additive effect showing an even greater endorsement of collectivistic religious beliefs than collectivistic Protestants,  $p < .0001$ . Similarly, the correlation between the collectivistic belief choice and collectivistic orientation index was higher for Catholics ( $r = .52, p < .0001$ ) than it was for Protestants ( $r = .242, p = .017$ ).

## **Enjoy it Longer: Understanding Hedonic Adaptation and Hedonic Escalation – Symposium**

### *Percival (2nd Level)*

Can products provide lasting happiness? Why do things sometimes get better the more we see them, whereas other times enjoyment quickly declines? Four papers will present research seeking to answer these questions. New theories will be presented which seek to explain hedonic adaptation and exposure effects. Variables that accelerate or decelerate hedonic adaptation to food, music, and art will be examined. We will discuss ways that consumers can enhance and prolong their enjoyment of products and experiences, whether these are consumed sequentially or simultaneously.

*Chair: Kellen Mrkva, Columbia University, USA*

### **Stimulus Intensity Increases Hedonic Adaptation**

Uzma Khan (University of Miami, USA); Alexander DePaoli (Northeastern University, USA)

#### **Brief Abstract:**

We investigate the role of stimulus intensity on the rate of adaptation, demonstrating that consumers' affective responses dissipate faster for products which they initially like more than for products which they initially like less. This pattern holds true both when consumers' hedonic responses are derived from their idiosyncratic preferences and when they are experimentally manipulated. We demonstrate this across multiple product categories and sensory modalities, and show it is not explained by a ceiling effect. The effect of higher liking on faster adaptation is especially large when products are framed as hedonic and disappears when products are framed as utilitarian.

## Don't Stop! Partitioning Increases Adaptation for Hedonic Experiences

Cammy Crolig (Oxford University, UK); Yang Yang (University of Florida, USA);  
Yangjie Gu (HEC Paris, France)

### **Brief Abstract:**

Four experiments demonstrate that people adapt more to hedonic experiences when the experience is divided through temporal, spatial, or framed partitioning. Partitioning increases adaptation because it makes consumption seem more repetitive. Study 1 shows that temporal partitioning increases adaptation, resulting in a more rapid decline in enjoyment. Study 2 demonstrates that spatial partitioning also increases adaptation. Study 3 shows that the effect of partitioning is especially large when partitions are identical (and thus perceived to be repetitive). Study 4 demonstrates that simply framing an experience as partitioned, while holding the actual consumption experience constant, is sufficient to increase adaptation.

## Salience Theory of Exposure Effects: Salience Causes Hedonic Escalation and Accounts for Exposure Effects

Kellen Mrkva (Columbia University, USA); Leaf Van Boven (University of Colorado, USA)

### **Brief Abstract:**

We demonstrate that exposure to stimuli influences evaluations by increasing salience, the relative quality of standing out. We first manipulated relative exposure as in previous mere exposure research, which consistently increased liking and evaluative extremity. In multiple mediation models, salience (rather than fluency or alternative mediators) accounted for these exposure effects. Then, we directly manipulated salience which increased liking and evaluative extremity. Finally, we demonstrated that absolute exposure (manipulated between-subjects) does not increase liking, whereas relative exposure does. These results suggest that salience explains effects previously attributed to “mere” absolute exposure. They also help reconcile mere exposure with hedonic adaptation.

## Holistic Processing Escalates Enjoyment During Hedonic Consumption

Robert W. Smith (Ohio State University, USA); Joe Redden (University of Minnesota, USA)

### **Brief Abstract:**

People frequently consume multiple things simultaneously, for example listening to music while eating a snack. We demonstrate that enjoyment of a simultaneous consumption experience is enhanced when the multiple stimuli are construed holistically as an integrated experience versus analytically as multiple distinct components. Holistic processing leads people to pay more attention to how the multiple components complement each other, while analytic processing leads people to perceive the multiple components as their own distinct experiences. As such, holistic processing only enhances enjoyment of combined (but not sequential) experiences, and only when the experiences are at least moderately complementary.

## **Labels and Language: Consumer Choices and Processes - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Iman Paul, Georgia Tech, USA*

### **Encouraging Less Bad Food Choices: How Label Structure Drives Preferences for Organic Vice Foods**

Iman Paul (Georgia Tech, USA); Jeffrey Parker (University of Illinois at Chicago, USA); Ryan Hamilton (Emory University, USA); Sundar Bharadwaj (University of Georgia, USA); Omar Rodriguez-Vila (Georgia Tech, USA)

#### **Brief Abstract:**

In contrast to previous research, which has found that consumers significantly favor non-organic over organic vice foods, the current work identifies a more nuanced relationship between “organic” and “vice.” Four studies demonstrate that it is not the presence or absence of an organic label that turns consumers off to healthier vice foods but, rather, the structure of the organic label. Evidence is presented that while product-level organic labels (e.g., “organic burrito”) result in significantly lower evaluations of vice foods relative to non-organic vice foods, ingredient-level organic labels (e.g., “burrito w/ all organic ingredients”) do not.

#### **Extended Abstract:**

Previous work has found that consumers significantly favor non-organic over organic vice foods (van Doorn and Verhoef 2011, 2015). However, we argue that the apparent negative relationship between “organic” and “vice” is more nuanced than previously recognized. Specifically, we demonstrate that product-level organic labels applied to composite vice foods (e.g., “organic burrito”) result in lower evaluations of those vice foods than do objectively equivalent ingredient-level organic labels (e.g., “burrito w/ all organic ingredients”). We build on theories associating mental categories with product evaluations (Loken and Ward 1990) and argue that product-level organic labels generate mental representations of the vice food that are more dissimilar to consumers’ prototypical organic foods and that this dissimilarity leads to negative evaluations (Landwehr, Labroo, and Herrmann 2011). Conversely, this inconsistency is attenuated when the organic label is applied at the ingredient-level. Studies 1a and 1b demonstrate the basic effect of label structure (ingredient vs. product level) on preferences for foods by measuring the likelihood of ordering a dish at a restaurant. Study 1a asked participants (N = 194) to imagine they were at a restaurant and then randomly assigned them to one of two conditions. In the ingredient-level condition, participants were asked to imagine they found a dish called “Our Famous Burger (w/ all organic ingredients).” In the product-level condition, participants were asked to imagine they found a dish called “Our Famous Organic Burger.” Participants then indicated the likelihood they would order this dish on a 1 (“very unlikely”) to 10 (“very likely”) scale. Results show that participants who were exposed to an ingredient-level labelled dish, “Our Famous Burger (w/ all organic ingredients),” were more likely to order the dish than participants who were exposed to a product-level labelled dish called “Our Famous Organic Burger” (M<sub>Ingred</sub>=7.23 vs. M<sub>Prod</sub>=5.83,  $p < .001$ ).

Study 1b included a non-organic label as a control condition and the food type was changed to either a burrito or fajitas, manipulated between-subjects. In the control condition, the dish was called “Our Famous Burrito [Fajitas]”. While there was neither a main effect of food type on likelihood of

ordering, nor any interaction between food type and organic-label structure (both  $F < 1$ , NS), the predicted main effect of label structure (control vs. ingredient-level vs. product-level) was significant ( $p < .001$ ). As in study 1, the likelihood of ordering the dish was significantly higher in the ingredient- (vs. product-) level condition ( $M = 6.73$  vs.  $5.20$ ,  $p < .001$ ). Importantly, the likelihood of ordering the dish was significantly higher in the control (vs. product-level) condition ( $M_{ingred} = 6.51$  vs.  $5.20_{prod}$ ,  $p < .005$ ), while no significant difference was found between the control and ingredient-level conditions. Study 2 tested whether the results obtained in study 1 were due to the labels generating different inferences about the foods they described (e.g., difference perceived levels of “organicness”). additionally, Study 2 asked participants to choose between organic and non-organic versions of the same food. While the purchase-likelihood results were replicated ( $M_{ingred} = 5.68$ , vs.  $M_{prod} = 4.63$ ,  $p < .02$ ), participants’ perceptions of the extent to which option was organic were not significantly different between the two label conditions ( $M_{prod} = 3.75$  vs.  $M_{ingred} = 4.04$ ). Hence, an alternative account of the results pertaining to the perceived extent of “organicness” was not supported.

Since virtue products are already consistent with consumers’ mental representations of prototypically organic foods, we expected that an organic-label structure would have less of an impact on consumers’ evaluations of virtue organic products. Confirming this prediction, Study 3 found that effect was replicated for vice organic products (nachos;  $M_{ingred} = 7.16$ , vs.  $M_{prod} = 5.10$ ,  $p < .001$ ), but not virtue organic products (salad;  $M_{ingred} = 5.98$   $M_{prod} = 5.53$ ). Finally, Study 4 examined the proposed process via moderation. Since simpler foods tend to be closer to prototypical organic foods than more complex foods, evaluations of simpler vice foods (i.e., foods with fewer ingredients) were less influenced by label structure. Participants were asked to imagine they were at a Mexican restaurant. Participants in the ingredient-simple condition were asked to imagine they had found “Corn Chips (w/ all Organic Ingredients)” on the menu. Those in the ingredient-complex were asked to imagine they had found “Nachos (w/all Organic Ingredients).” Those in the product-simple condition were asked to imagine they had found “All Organic Corn Chips.” Those in the product-complex were asked to imagine they had found “All Organic Nachos.” Participants then indicated how likely they were to order the food (1 = very unlikely, 9 = very likely), how appealing the food was (1 = not at all, 9 = very much), and how appetizing the food was (1 = not at all, 9 = very much).

The three measures (order, appetite, and appeal) were strongly correlated ( $\alpha = .96$ ) and, thus, averaged into a single composite evaluation score. A 2 (organic-label structure: ingredient-level vs. product-level) x 2 (product: simple vs. complex) between-subjects ANOVA show that there was a significant main effect of label structure (product- vs. ingredient-level) on composite evaluation scores ( $F(1, 125) = 3.93$ ,  $p < .05$ ), but no significant effect of food complexity (chips vs. nachos;  $F < 1$ , NS). More importantly, the expected interaction between label structure and complexity emerged ( $F(1, 125) = 4.05$ ,  $p < .05$ ). Planned contrasts revealed the expected pattern of results. While label structure had no significant impact on the composite evaluations of the simple chips ( $M_{ingred} = 5.79$  vs.  $M_{prod} = 5.80$ ,  $F < 1$ , NS), participants evaluated the complex nachos significantly more positively when they were described with an ingredient- (vs. product-) level organic label ( $M_{ingred} = 6.80$  vs.  $M_{prod} = 5.33$ ,  $p < .006$ ). In sum, consistent with our theorizing, four studies find that evaluations of composite vice foods with product-level organic labels are reliably significantly lower than evaluations of vice foods with ingredient-level labels and non-organic foods.

Use of Identity Labels for Stigmatized Groups: Person- versus Identity-First Language  
Esther Uduehi (University of Pennsylvania, USA); Americus Reed (University of

Pennsylvania, USA)

**Brief Abstract:**

Regulatory agencies suggest recommendations on referring to stigmatized groups. This is the first study systematically exploring these subtle language choices across several stigmatized groups. We find placing a person first in descriptions is perceived to be more acceptable in addressing stigmatized groups, but how people actually address stigmatized groups varies based on various factors. Highly stigmatized disorders (but not less stigmatized) cause people to choose person-first language when the labeler believes that the person labeled could not control the condition or was willing to improve it. Also, use of person-first conveys empathy for the person labeled, while identity-first conveys accountability.

Extended Abstract: not uploaded

## How Process Explanations Impact Assessments of Predictors

Daniel Villanova (University of Arkansas, USA); Elise Ince (University of South Carolina, USA); Rajesh Bagchi (Virginia Tech, USA)

**Brief Abstract:**

When presenting their predictions, predictors may also provide varying levels of information regarding how they arrived at their predictions. In two experiments, we demonstrate that when a predictor provides a brief explanation, consumers evaluate the predictor less positively than when a predictor simply provides no explanation or provides a detailed explanation for their prediction. This happens because a brief explanation lacks details, from which consumers infer the predictor did not do an in-depth analysis, and judge the predictor accordingly. Without an explanation (with detailed explanation), consumers assume (infer) predictors arrive at their predictions via sufficient in-depth analysis.

**Extended Abstract:**

Predictions are made about a wide variety of events, such as those relating to election outcomes (e.g., likelihood of winning an election), health (e.g., likelihood of contracting a disease), the weather, the economy, and so on. However, it is difficult to ascertain the quality of information predictors examine in forming their predictions (Dur and Swank 2005), and, yet, consumers use predictions to make a host of (erroneous) inferences (Bagchi and Ince 2016). Hence, it is important to understand how communication approaches used by predictors affect inferences. Predictors can choose to offer only the overall prediction, or also provide an explanation of the analytical process used, which can be more or less detailed. We find that, compared to providing no explanation or a detailed explanation, offering a brief explanation can backfire for predictors.

A substantial amount of research from communication to marketing would suggest that adding explanatory detail (vs. lacking an explanation) should improve source perceptions (e.g., Yates et al. 1996). However, we identify a situation when this is not the case. We suggest that consumers assume experts' predictions are the result of in-depth analytical processes. In prediction contexts, when no other information is presented (other than the overall prediction), consumers have little information to make additional inferences and assume that the expert's process of arriving at the overall prediction must be complicated. But when explanations are provided, consumers have additional information.

When the explanation is brief, it is likely to lack details and look superficial. We propose that consumers might infer from this that the predictor did not do an in-depth analysis. This will negatively impact their trust in the predictor, which, in turn, may make consumers less inclined to select or recommend the predictor in the future. However, these effects are unlikely to occur with a longer explanation of the same process, as it is likely to fit consumers' expectations of what an explanation should look like (i.e. be long and detailed) and thus successfully convey that the analysis was sufficiently developed.

Study 1. 2 Participants (N=307) from Amazon's Mechanical Turk participated for monetary compensation. Participants were randomly assigned using a 3 level of detail (no explanation, brief explanation, detailed explanation) x 2 elaboration (control, high) between-subjects design. They were told that a health expert had recently made a prediction about their chance of contracting malaria while traveling abroad. In the brief explanation condition, the analyst said he looked at two factors and combined them to make his prediction. In the detailed explanation condition, the analyst described four steps used to arrive at the two factors and in the fifth step combined them. In the high elaboration conditions, after seeing the prediction but before reporting their evaluations, participants were prompted to take time to list their thoughts about the prediction.

Participants then reported how likely they were to select this analyst for future predictions and how likely they were to recommend the analyst. They also responded to two items measuring how trustworthy the analyst was ( $\alpha=.96$ ). They responded to five items measuring perceived depth of analysis ( $\alpha=.95$ ). To assess whether other inferences could drive these effects, we measured source certainty and source likability ( $\alpha=.90$ ), as recommended by Karmarkar and Tormala (2010). Finally, they indicated perceived source expertise ( $\alpha=.95$ ). ANOVAs revealed significant effects of level of detail on likelihood of selecting the expert, likelihood of recommending the expert, depth of analysis, source likability, source expertise, and trustworthiness, and a marginal effect on source certainty. As hypothesized, the patterns of these effects were such that perceptions were lower in the brief explanation condition compared to the no explanation condition, while the detailed explanation condition remained even with the no explanation condition (see Table 1). Elaboration did not moderate the results. In order to examine the potentially mediating roles of perceived depth of analysis and the source perceptions in the relationships between explanatory detail and the persuasion outcomes, we pooled across the elaboration conditions and tested a hybrid serial-parallel mediation model (see Figure 1). The indirect effects of providing a brief (vs. no) explanation on the source perceptions through depth of analysis were all significant, indicating the importance of depth of analysis. The indirect effects of providing a brief explanation on both persuasion outcomes, through depth of analysis and then both likability and trustworthiness, were significant.

Study 2. Students (N=250) participated for course credit. Because the previous study used a probabilistic prediction (i.e., offering a subjective probability as a percent chance), we aimed to explore the robustness of this effect when a predictor provides a non-probabilistic prediction (i.e., not offering a subjective probability). Participants were randomly assigned using a 3 level of detail (no explanation, brief explanation, detailed explanation) x 2 prediction type (probabilistic, non-probabilistic) between-subjects design. They were told that an analyst had recently made predictions about upcoming elections. Participants responded to the same measures as in study 1.

ANOVAs revealed significant effects of level of detail on likelihood of selecting the analyst,

likelihood of recommending the analyst, depth of analysis, source certainty, source likability, source expertise, and trustworthiness. The level of detail x prediction type interaction was significant for only source likability, such that participants liked the analyst less when the analyst offered a non-probabilistic (vs. probabilistic) prediction with no explanation, but not within the other levels of detail. We tested mediation as in study 1. The indirect effects of providing a brief explanation on the source perceptions through depth of analysis were all significant, indicating the importance of depth of analysis. We found that the indirect effects of providing a brief explanation on both persuasion outcomes, through depth of analysis and then both source expertise and trustworthiness, were significant.

In two studies using different prediction contexts, we find that providing a brief (vs. no) explanation can backfire for predictors by reducing perceptions of analytical depth. Although this research finds that neither elaboration nor non-probabilistic predictions alter the effects, much research remains to be done in this area to assess the effects of explanatory detail under other contingencies.

## The Language Style that Fits Deservingness Beliefs: The Role of Affective Expression in Charitable Appeals

Aparna Sundar (University of Oregon, USA); Edita S Cao (University of Washington, USA); Rebecca Rabino (Texas Tech)

### **Brief Abstract:**

Given the competition for donations, charities must carefully consider how best to structure their appeals. The current research identifies a novel messaging component that can help or hinder an appeal's success: formal language style. In two studies, we demonstrate that in the context of charitable appeals, a formal language style counterintuitively enhances the message's affective intensity, thereby increasing charitable support. Surprisingly, a colloquial style actually undermines the message's intensity. This effect occurs for consumers sensitive to questions of deservingness (i.e., consumers with high belief in a just world). Furthermore, we assess how manipulating attitudes towards affective expression attenuates these effects.

### **Extended Abstract:**

Charitable organizations use a variety of tactics to compete for consumers' donations. For instance, charities may highlight how dire a victim's need is through emotionally expressive language or images. The intuition behind such tactics makes sense: the use of expressive language can bridge the psychological distance between the speaker and audience (Fitzsimons & Kay, 2004; Stephan, Liberman, & Trope, 2010). Thus, one might expect that the use of intimate, expressive language, such as that featured in a colloquial language style, would enhance the persuasiveness of charitable appeals. However, we argue that in the serious context of charitable causes, a colloquial language style may actually backfire and undermine the charity's message. Instead, we suggest that a formal language style will more effectively convey a charitable message's emotional intensity.

The (in)formality of language style is a fundamental characteristic of communication. A formal style is defined as that which is adopted in more deliberate, purposeful, impersonal contexts, while a colloquial style is often used in more familiar, spontaneous contexts (Joos, 1961; Morand, 1995). It is therefore important to consider a message's context when evaluating the efficacy of language style. Charitable appeals, which often address others' suffering, are inherently serious. We posit that a formal

language style may be perceived as conveying an appropriate level of gravity. Alternatively, a colloquial language style may actually undermine the very same message. Therefore, we hypothesize that appeals written in a formal (vs. colloquial) language style will increase charitable donation behavior.

We furthermore investigate the moderating role of belief in a just world (BJW). Consumers with high BJW are sensitive to considerations of deservingness; they act in accordance with the idea that the world is a fair, just place in which individuals receive what they deserve (Lerner, 1980). Thus, we posit that consumers with high BJW are more likely to reward charitable appeals that use a formal language style (i.e., a style that ‘fits’ the seriousness of the context) and punish those that use a colloquial language style (i.e., a style that does not appropriately reflect the gravity of the situation); this effect is predicted to be attenuated for those with low belief in a just world, who are relatively insensitive to considerations of deservingness. These propositions are consistent with prior research demonstrating that consumers’ beliefs play a powerful role in their charitable behaviors. For instance, charitable messaging that conflicts with consumers’ karmic beliefs negatively impact donation behaviors (Kulow & Kramer, 2016). Similarly, consumers motivated to seek justice have an increased preference for ethical consumption (White, MacDonnell & Ellard, 2012). Thus, messaging should ‘fit’ with consumers’ beliefs.

In sum, we predict that individuals with high BJW are more likely to donate to charitable appeals written in a formal (vs. colloquial) language style. Furthermore, we expect that this effect occurs because of perceptions of the message’s intensity. In other words, for high BJW consumers, an appeal written in a formal language style emphasizes the message’s affective intensity, thereby making a more compelling case to donate, while a colloquial language style undermines the seriousness of the message.

Two studies investigate the interactive effect of formality in language style and BJW on charitable donations. Further, the underlying role of message intensity is assessed via both mediation (Studies 1 and 2) and moderation (Study 2).

In Study 1, 122 MTurk participants completed a 2 (language style: colloquial vs. formal) between-subjects experiment with measured BJW. Participants viewed an American Heart Month appeal written in either a formal or colloquial language style (e.g., “that statistic is staggering” vs. “that stat is mind-boggling”). Participants then completed charitable support and donation measures. Finally, participants completed a two-item measure of message intensity (“I thought the message above was: passive/active; mellow/fired up”; adapted from Yin, Bond, & Zhang, 2017) and the BJW scale (Rubin & Peplau, 1975). Spotlights revealed a significant positive effect of formal language style on charitable support and donations for those with high BJW ( $p < .01$ ), but not those with low BJW ( $p > .12$ ; see Table 1). A moderated mediation analysis revealed that perceptions of message intensity mediated this effect (see Table 3).

Study 2 extends the first study in several ways. First a different charitable cause (famine) was adopted to enhance generalizability. Second, BJW was manipulated, rather than measured. Finally, and most importantly, we strengthen the evidence for our proposed process using a moderation-by-process design (Spencer, Zanna, & Fong, 2005), and directly manipulate attitudes towards suppression (vs. expression) of emotion. Study 1 established that the effect of formality in language style on charitable



support is driven by perceptions of the message's intensity. Thus, manipulating attitudes that emotions should be suppressed (vs. expressed) should lower perceptions of the message's intensity, thereby attenuating the positive effect of formal language style for those with high BJW. Thus, 345 MTurk participants completed a 2 (appeal language style: formal vs. colloquial)  $\times$  2 (BJW: low vs. high)  $\times$  2 (attitude towards emotion: suppression vs. expression) between-subjects experiment.

As predicted, there was a significant three-way interaction on charitable support ( $p < .05$ ). When emotional expression was encouraged, the pattern of results replicated Study 1: for high BJW participants, the formal (vs. colloquial) language style received marginally more support (see Table 2;  $p = .07$ ); for low BJW participants, this effect was attenuated ( $p = .59$ ). Importantly, as predicted, a different pattern emerged when emotional suppression was encouraged: there was no longer a positive effect of formal language style for those high in BJW ( $p = .40$ ). A moderated mediation analysis confirmed that perceptions of message intensity mediated these effects (see Table 3). Colloquial language may generally be perceived as more emotionally expressive and, therefore, more effective. However, the present work demonstrates that, in the context of charitable appeals, the use of a formal language style may be more effective in eliciting donations, as it enhances the message's emotional intensity. Importantly, this effect is isolated to high BJW consumers sensitive to questions of justice and the 'fit' between language style and the seriousness of the charitable context.

## **Sharing and Social Connectedness: How Different Ways of Sharing Affect Social Connection - Symposium**

### *Sloane (2nd Level)*

Sharing has become an essential part of consumers' lives. In particular, the advancement of social media and smartphones has enabled consumers to share personal experiences and opinions with others at the click of a button. For example, Facebook Messenger and WhatsApp handle 60 billion messages a day, and firms like H&M and Sephora use these messaging apps to communicate with consumers through one-on-one real-time conversations. Given the ubiquity of sharing, it is important to understand how sharing affects consumers' perceptions of and relationships with others. Prior research has shown that sharing thoughts and emotions is integral to building relationships. For example, sharing personal information increases liking between both the speaker and recipient (Collins & Miller, 1994; Insko & Wilson, 1977). However, not all sharing is created equal; certain types of sharing are more effective than others at bringing people together. In other words, sharing information and thoughts, depending on what is shared and how it is shared, can either bring individuals closer or push them apart. In this session, we ask: how and what do individuals share to build relationships with each other, what are the consequences of these sharing strategies, and what factors moderate their effectiveness. Four papers look at how different types of sharing—from jokes to gossip to excuses—influence social connectedness as well as the psychological processes through which this sharing affects interpersonal perceptions. The first two papers demonstrate how the content of what is shared impacts interpersonal connection and trust. First, Barasch, Berman, and Yoon show how sharing negative judgments about others can increase liking and trust, even though gossiping carries a strong negative stigma, as long as the recipient agrees and the negative comments make the speaker appear discerning. Donnelly, Wilson, Whillians, and Norton demonstrate that when consumers are constrained by the amount of time and money they can give to others, communicating monetary constraints increases trust and connection more than communicating time constraints, because monetary limitations are seen as outside of people's control. The next two papers provide insights about sharing strategies: depending on the recipient and how the information is shared, sharing can have either positive or negative effects on relationships. Sezer, Bitterly, Brooks, Schweitzer and Norton show that

sharing inside jokes can make people feel more identified with their group while decreasing the motivation of outsiders to interact with the same group. Finally, Critcher, Jung, and O'Donnell examine how self-deprecation, or putting oneself down in a lighthearted way, can make people seem less skilled in multiple domains, contrary to self-deprecators' intuition that making fun of themselves will signal humility and authenticity. Together, these papers provide a better understanding of how sharing affects consumers' connections with others by examining different types of sharing strategies and how people's intuitions about the effects of sharing can sometimes be misguided. This session will provide guidance for marketers on how to manage customer relationships through various methods of conversation, and will be of interest to researchers studying word of mouth, interpersonal perceptions, judgment and decision making.

*Chair: Heeyoung Yoon, New York University, USA*

**Speaking Ill of Others: When Negatively-Valenced Gossip Fosters Social Connection**  
Alixandra Barasch (New York University, USA); Jonathan Z Berman (London Business School, UK); Heeyoung Yoon (New York University, USA)

**Brief Abstract:**

We find that sharing negatively-valenced gossip can increase liking and trust of the speaker, even though it can make the speaker appear less polite and well-mannered. This is because people hold an intuition that negative traits are less observable than positive traits, so saying negative judgments about a third party makes the speaker seem more discerning and observant. Consistent with this, sharing gossip is not beneficial when the shared information is readily observable. Further, the positive effects from gossip only occur with the recipient of the gossip (not with outside parties) and when the recipient agree with the statement.

**Communicating Limited Financial Resources Increases Perceived Trustworthiness and Interpersonal Connection**  
Grant Edward Donnelly (Ohio State University, USA); Anne Wilson (Harvard Business School, USA); Ashley Whillans (Harvard Business School, USA); Michael I Norton (Harvard Business School, USA)

**Brief Abstract:**

Consumers are frequently constrained with the amount of time and money they can give to others. How should consumers communicate these constraints to others? Communicating money constraints (vs. time) increases trust and interpersonal connection because money (and not time) is seen as outside of one's personal control. Financial excuses are particularly effective in response to invitations for shared consumption. Further, when using a time excuse, demonstrating the external pressures of the resource increases trust. We provide insight into how consumer resources are differently attributed to preferences and provide practical advice on how best to communicate limited resources.

**Inside Jokes: Humor as Social Exclusion**  
Ovul Sezer (University of North Carolina, USA); Brad Bitterly (University of Pennsylvania, USA); Alison Wood Brooks (Harvard Business School, USA); Maurice Schweitzer (University of Pennsylvania, USA); Michael I Norton (Harvard Business School, USA)

School, USA)

**Brief Abstract:**

Humor can bring people together; we suggest it can also be used to divide. Inside jokes—humor attempts that require prior knowledge that is available to only certain members of a social group—are common, but little is known about the psychological consequences of inside jokes. In this paper, we investigate how inside jokes influence group dynamics and find that they lead to feelings of ostracism, and can have unforeseen negative consequences for group dynamics and hurt social connection.

**Self-Deprecation Signals Humility, but Not as Much as Self-Deprecators Assume**

Clayton R Critcher (University of California Berkeley, USA); Michael O'Donnell (University of California Berkeley, USA); Minah Jung (New York University, USA)

**Brief Abstract:**

Consumers and firms alike self-deprecate—make statements that put oneself down in a lighthearted way—to appear authentic and relatable. But how effective is self-deprecation as an impression management strategy, and do self-deprecators know what signals they are sending? Although self-deprecators were assumed to be more humble in their self-views, this was entirely explained by assumptions that self-deprecators actually were less skilled than their non-self-deprecating counterparts. Furthermore, when self-deprecators poked fun at their own self-perceived strengths, they thought they were communicating more humility than they actually were. Implications for marketing communications will be discussed.

**Money Matters: The Effect of Incidental Factors on the Subjective Value of Money – Symposium**

*Scarborough 3 (Lobby Level)*

Standard economic theory states that money is fungible. However, both consumer behavior as well as research on pricing and behavioral economics show that this is not the case. This proposed special session aims to shed light on a range of factors that influence consumers' decisions to spend and save money in ways that violate assumptions of fungibility and descriptive invariance. Given the central role of money to the consumption experience, we expect this session to have broad appeal to SCP attendees, while drawing particular interest from those interested in pricing, psychology of money, and behavioral economics.

*Chair: Shelle Santana, Harvard Business School, USA*

**Denomination Anchors: Demonstrating the Contingent Nature of the Denomination Effect as a Function of Price Level**

Elena Reutskaja (IESE); Jeremiah Iyamabo (IESE); inigo gallo (IESE); Priya Raghurir (New York University, USA)

**Brief Abstract:**

The denomination effect has documented that people are more likely to spend smaller denominations. Across thirteen studies, including three field experiments, ( $n > 5,700$ ), we show that the denomination effect is moderated by product price. We replicate the denomination effect at lower price and spending levels and show the effect can reverse at higher prices. We propose this “denomination anchor effect”

is driven by consumers anchoring on price and matching it with available denominations. The effect replicates across participants from different continents (U.S, Europe, and Africa), samples, as well as prices in different currencies (\$, € and Naira).

*Moderators of the Denomination Effect: Role of Hedonic versus Utilitarian Consumption and Denomination Matching,*

Joydeep Srivastava (Temple University, USA); Yuqian Chang (Temple University, USA)

**Brief Abstract:**

The denomination effect suggests that individuals are less likely to spend when money is in the form of a single large denomination (e.g., a \$10 bill) relative to many smaller denominations (e.g., ten \$1 bills). This research examines whether hedonic versus utilitarian considerations and denomination matching moderate the denomination effect.

*Malleable Monopoly Money: The Effect of the Form of the Source of Money on Its Subjective Value*

Priya Raghubir (New York University, USA); Shelle Santana (Harvard Business School, USA)

**Brief Abstract:**

This research demonstrates that consumers' subjective valuation of money varies with its form (e.g. cash vs. gift card) and its source (e.g., points, miles) and that these valuations persist even after a currency is converted from one form into another. For example, we show that a gift card purchased with miles is valued less than one of equivalent value purchased with cash. Similarly, a gift card purchased with a smaller (vs. larger) denomination is valued less and spent more readily. We term this phenomenon the Malleable Monopoly Money effect, and show how it affects spending behavior.

*Cashless Payments, Pain of Paying and the Role of Attachment*

Francesco Pisani (Frankfurt School of Finance and Management, Germany); Selin Atalay (Frankfurt School of Finance and Management, Germany)

**Brief Abstract:**

We focus on how cashless payments will impact pain of paying as new payment tools such as mobile phones and watches become widely available. In three studies, we provide evidence that consumers feel lower levels of pain of paying when using mobile phones and watches as compared to credit cards. Further, the pain is moderated by the attachment consumers have with the payment tool. As attachment increases, the pain of paying increases as well.

**How Lay Theory Influences Prosocial Behavior and Value Perception - Competitive Paper Session**

*Scarborough 4 (Lobby Level)*

*Chair: Mahdi Ebrahimi, California State University, Fullerton*

## Feeling Busy: How Busyness Frames Influence Psychological Empowerment and Volunteering

Mahdi Ebrahimi (California State University, Fullerton); Melanie Rudd (University of Houston, USA); Vanessa M. Patrick (University of Houston, USA)

### **Brief Abstract:**

Busyness is frequently reported as a major barrier to volunteering. In this research we argue that it is not busyness per se, but rather the lay theory about the feeling of busyness that people hold (feeling busy = good vs. feeling busy = bad) that influences volunteering behavior. In particular, we present a conceptual model that hypothesizes that the valence of people's lay theory about the feeling of busyness influences their sense of psychological empowerment, which in turn drives their volunteering behavior.

### **Extended Abstract:**

The feeling of busyness is pervasive in modern society (Gershuny, 2005; Szollos, 2009). While research has investigated social and motivational antecedents and consequences of busyness (Bellezza, Paharia, & Keinan, 2016), research on how people view busyness is scant. The current research tests the hypothesis that if people positively (vs. negatively) frame the feeling of busyness, they feel more empowered and thus become more inclined to volunteer. Volunteering rates in the US have been declining for over a decade (Bureau of Labor Statistics, 2007, 2011, 2016), and society's current busyness epidemic is often blamed as the culprit. But although some empirical evidence does indeed support the notion that busyness breeds a lack of volunteering intent (Johnson, 2004), other evidence suggests that it is busy individuals who are more likely to volunteer (Corporation for National and Community Service, 2007). For instance, amongst full time workers, those who work more hours are more likely to volunteer (Wilson & Musick, 1997). To help resolve this evidentiary inconsistency, we propose that it is not busyness per se, but rather how people frame the feeling of busyness (i.e., 'feeling busy = good' or 'feeling busy = bad') that influences volunteering behavior.

We suggest that, when people frame the feeling of busyness as a good thing, their feelings of busyness should make them feel more invigorated, intrinsically motivated, and in control of their lives—feelings which give rise to a greater sense of psychological empowerment (Zimmerman & Rappaport, 1988). In contrast, when people frame the feeling of busyness as a bad thing, their feelings of busyness should make them feel threatened and lead them to narrow their focus and deploy cognitive and emotional resources to deal with this perceived threat (LeDoux, 1995), lowering feelings of empowerment (Mullainathan & Shafir, 2013). Moreover, because individuals who feel psychologically empowered are more likely to reach out to satisfy other people's needs (Erez, Mikulincer, van Ijzendoorn, and Kroonenberg, 2008; Wilson, 2012), we also propose that a busy = good (vs. busy = bad) frame should lead to greater volunteering. Across five studies, we predicted and found that people are more inclined to volunteer when they positively (vs. negatively) frame the feeling of busyness and that this effect is driven by enhanced feelings of empowerment.

In study 1, participants' busyness frames were manipulated by randomly assigning participants to listen to one of two ostensibly real science podcasts that discussed scientific findings that suggested feeling busy should be seen as good (vs. bad). Participants then responded to manipulation checks and reported their sense of empowerment (e.g. "I feel in control"). Analyses revealed that, as predicted,

participants in the “busy = good” (vs. “busy = bad”) condition felt significantly more empowered (Figure 1).

Study 2a used a different busyness frame manipulation: an ostensibly real science magazine article that claimed either that feeling busy is good or bad (Figure 2). After reflecting on the article’s findings and providing supporting examples from their own lives, participants reported their empowerment and (in a purportedly unrelated survey) were given the opportunity to participate in a real volunteering event taking place 1-2 weeks after the survey. Whether participants signed up for at least one of the presented events served our first measure of volunteering. Last, at the end of the experimental session, participants were given the option to volunteer their time to assemble firstaid kits for families in need. Whether or not participants actually made at least one kit served as our second measure of volunteering. The results revealed that participants in the “busy = good” (vs. “busy = bad”) condition felt significantly more empowered, were significantly more likely to sign up for a volunteering event (Figure 3), and were significantly more likely to assemble first-aid kits (Figure 4). Further, empowerment mediated the effect of busyness frame condition on both measures of volunteering behavior.

Study 2b sought to conceptually replicate the prior effects of framing on volunteering using a different measure of volunteering. After completing the same frame manipulation from study 2a, participants reported feelings of empowerment and (in a purportedly unrelated survey) responded to a scenario-based measure of volunteering intentions (e.g. “How likely would you be to volunteer your time to help at a senior citizens' home?”; Henderson, Huang, & Chang, 2012). The results conceptually replicated the findings of study 2a (Figure 5).

Study 3 provided additional support for the mediating role of empowerment by manipulating both busyness framing (as in study 2a) and empowerment (by having participants either recall a time they felt empowered or not complete a recall task) before measuring volunteering intentions (as in study 2b). We expected the volunteering intentions for people in the ‘feeling busy = bad’ condition to be enhanced by a subsequent empowerment intervention. In contrast, a subsequent empowerment intervention should not enhance volunteering intentions for people in the ‘feeling busy = good’ condition because they have already been empowered by adopting the ‘feeling busy = good’ frame (i.e., there should be an empowerment ceiling effect). As predicted, our analyses revealed that participants in ‘busy = good’ (vs. ‘busy = bad’) condition reported greater willingness to volunteer in the absence of a subsequent empowerment intervention, but participants in the ‘busy = good’ and ‘busy = bad’ condition were equally likely to volunteer in the empowerment condition (Figure 6).

Study 4 sought to conceptually replicate the prior effects of busyness framing on volunteering using a less explicit manipulation of busyness frames. Participants' busyness frames were manipulated using a stressful/meaningful day recall task (Figure 7). The remainder of the study was the same as study 2b, and the findings again supported for our theoretical model (Figure 8).

Together, our findings elucidate the link between feeling busy and volunteering behavior; connect the busyness, empowerment, and volunteering literatures; and offer firms and consumers a novel volunteering intervention.

How Green Was My Valley: Lay Theories About Wealth and Happiness Influence Consumers' Willingness to Make Financial Sacrifices for the Environment  
Shilpa Madan (Nanyang Technological University, Singapore); Krishna Savani (Nanyang Technological University, Singapore); Steve Su (Steve Su & Associates); Michael Morris (Columbia University, USA)

**Brief Abstract:**

An appreciable increase in the tax on gasoline would reduce consumption and the emissions contributing to climate change. USA is one of the only major industrialized nations lacking a substantial carbon tax. Seven studies provide converging evidence that lay beliefs about wealth and happiness influence support for environment friendly, but personally costly, taxes. This research contributes to the science on lay theories and the antecedents of environmentally conscious behavior. More importantly, we contribute to the limited research in consumer behavior that focuses on curbing consumption and has important policy implications.

**Extended Abstract:**

Extant research in marketing, and specifically, consumer behavior, has been primarily concerned with the antecedents and process of consumption, such as the quantity, quality, and variety of products that people consume. However, there exist consumption domains where reducing, and not increasing, consumption is the need of the day. Specifically, the overconsumption of fossil fuels has led to serious environmental issues, such as air pollution and climate change (UCS, 2016).

In recent decades, many countries have taxed the use of fossil fuels to both reduce carbon emissions and to fund alternative sources of energy (Palmer, Oates, & Portney, 1995). USA is one of the only major industrialized nations that lack a substantial carbon tax. Given that many Americans espouse environmentalist goals, why has there been insufficient support for increasing the federal gas tax rate? Past research has found that people's environmental attitudes are weak predictors of their willingness to bear the costs of environmental policies and practices (Hines et al., 1987; Stern, 1978). What then does predict people's environmental decisions? In this research, we propose that people's theories about the relationship between wealth and happiness may be pivotal in shaping their support for costly environmental policies. Specifically, we posit that people who tend to believe that happiness adapts to changes in wealth (rather than changing with changes in wealth) are more likely to support costly environmental policies.

Most people would agree that rich people are happier than poor people. In a recent Gallup study, household income came out as the top predictor of happiness (Bachai, 2014). Yet the opposite notion that money cannot buy happiness is also proverbial in many cultural traditions. We propose that most people reconcile these paradoxical messages about wealth by picking a side—either believing that happiness adapts to changes in wealth (the adaptation theory) or believing that happiness changes with changes in wealth (the dependence theory). People can find confirming evidence for both of these theories.

One reason why people do not support such taxes is because they think that the higher taxes would reduce their discretionary income, which would make them less happy (Burman & Gale, 2005; Taylor, 2015). However, if people vary in whether they believe that happiness changes with wealth or whether happiness adapts to wealth, then they might also vary in whether they believe that a slightly lower

disposable income would reduce happiness.

## METHODS

Across seven studies measuring and manipulating lay theories of wealth and happiness, we find that people who believe that happiness adapts to changes in wealth are more likely to believe that consumers would find ways to adjust their gasoline consumption in response to the higher tax, thereby supporting the tax despite the additional costs that it imposes on them.

We first developed an 11-item scale to measure people's lay theories about money and happiness. A pilot study established internal reliability and predictive validity of the scale, and subsequent studies established discriminant validity. We recruited 173 American adults at a major US airport to participate in the city. Participants responded to the scale assessing their lay beliefs about wealth and happiness and made predictions about happiness levels of residents of a city where incomes were going up (or down) as a result of tourism patterns. The interaction between lay beliefs and direction of income change was significant ( $F(1,172)=13.28, p=.0004$ ) such that those who believed that happiness adapts to changes in wealth provided less extreme ratings of the impact of both positive and negative change in wealth.

Study 1a tested if people's lay beliefs about wealth and happiness influenced their support for close to 100% increase in gasoline tax. Four hundred five American citizens on MTurk completed the study. In line with the hypothesis, people who believed that happiness adapts to changes in wealth were more likely to support the policy ( $\beta=.22, t(404)= 2.048, p=.041$ ) Studies 1b-1d ( $N=65, 156, 162$ ) were designed to test the discriminant validity of people's lay theories about wealth and happiness against five important predictors: environmental concern, economic conservatism, personal cost incurred due to the tax, materialism, and income. We found that lay beliefs influenced support for gasoline tax even when controlling for these constructs.

Study 2 ( $N=102$ ) was designed to understand if lay theories of wealth and happiness influence the extent to which people think about how the society will adjust and modify their consumption habits in response to the gas tax. Participants first completed the 3-item scale assessing their lay theories about wealth and happiness. Participants then read a short policy proposal as in Study 1b, and were then asked to perform two "issue selection exercises where they were presented with a list of issues, half of which considered adjustment in consumption habits and the other half that considered that people will not modify their habits in response to the tax. Consistent with our expectations, the more participants believed that happiness adapts to changes in wealth, the more likely they were to select issues that considered behavioral adjustment in gasoline usage ( $\beta=.23, t(100)= 2.45, p=.016$ ).

Study 3 provided causal evidence for our hypothesis. Participants ( $N=326, MTurk$ ) either read an article advocating that happiness adapts to changes in wealth or that happiness changes with changes in wealth. They then indicated their willingness to support a close to 100% increase in gasoline tax. Consistent with our hypothesis, participants who read the adaptation article were more supportive of the consumption tax ( $M=WealthAdapt=4.37, MWealthDependence= 4.00, t(324)= -1.99, p=.048$ ). Further, we found support for an indirect effect using PROCESS Model 4 (Hayes 2012) through people's belief that the society will adjust its consumption habits in response to the tax [ $\beta =.32, SE =.12, 95\%CI [.09,.56]$ ).



## CONCLUSION

In sum, the present research identifies a novel construct—people’s lay theories about wealth and happiness—and shows that it influences consumers’ support for environmental taxes. We contribute to the science on lay theories and the antecedents of environmentally conscious behavior. Most importantly, we contribute to the limited research in consumer behavior that focuses on curbing consumption. Further, our research has important policy implications.

## Are Less “Pure” People More Likely to Recycle?

Ruomeng Wu (University of Cincinnati, USA); Meng Liu (University of Cincinnati, USA); Frank R Kardes (University of Cincinnati, USA)

### **Brief Abstract:**

Prior literature has paid limited attention to how beliefs regarding traditional morality (e.g. virginity) negatively impact recycling behavior. The current research seeks to fill this gap by examining the relationship between virginity belief and recycling behavior as a function of the perceived importance of product purity. We demonstrate that the less consumers believe that virginity and thus product purity are important, the more they prefer products constructed with recycled materials to products constructed with original materials and the more they tend to recycle products. These beliefs vary as a function of culture, resulting in consistent cultural differences in recycling behaviors.

### **Extended Abstract:**

Each year, 2.12 billion tons of waste is thrown away globally which could go around the world 24 times. 99% of the stuff we buy is trashed within 6 months (The World Counts, 2017). In the United States alone, an average family throws away 2,460 pounds of paper, 540 pounds of metals, 480 pounds of glass and 480 pounds of food scraps (Hermann, 2017). Given the gigantic amount of trash produced, it is not surprising that efforts have been made to have both economic and environmental savings by encouraging consumers to recycle. People can contribute to recycling by recycling their used items or by choosing products constructed with recycled materials. In both cases, resources are being used repeatedly. However, not everyone recycles. It is important to identify and study factors that affect recycling behavior.

In this research, we examine the roles of beliefs about virginity and associated beliefs about product purity in driving recycling behaviors. We propose that individuals who value virginity think that there is a negative relation between purity and recyclable items or/and materials. Recycling involves direct dealing with waste, distorted, and discarded materials. Therefore, recyclable products and recycled materials are perceived as less pure compared to new items and items made from original materials. Our assumption is supported by past literature, such that people perceive used distorted items as less pure (Sun & Trudel, 2016; Trudel & Argo, 2013). Indeed, in a pretest, we found that participants (N=33) rated the recyclable products and recycled materials ( $M = 4.24$ ,  $SD = 1.39$ ) as less pure than original, natural products and materials ( $M = 5.36$ ,  $SD = 1.29$ ;  $F(32) = 19.66$ ,  $p < .001$ ). Across four studies, we further demonstrate that consumers’ beliefs regarding the importance of virginity and product purity decide whether and how this perceived purity/impurity influences their recycling behaviors. We find that consumers who believe virginity and the purity of product is less important are more likely to recycle and choose products made from recycled materials.

Study 1 (NAmericans = 94; 65.8% female; Mage = 38.70) provides initial evidence for the impact of

virginity beliefs, such that consumers (regardless of their demographics) who believe virginity is less important (1 = Not important at all; 9 = Very important) are more likely to recycle rather than trash a finished soda can ( $r = -.21$ ,  $p = .045$ ). Study 2 (NAmericans = 235; 68.1% female; Mage = 37.92 ) offers evidence for the assumption that such beliefs not only impact recycling products, but also impact preferences for products constructed of recycled versus original materials. Consumers who believe virginity and thus product purity are less important have higher evaluations (indirect effect = .02, 95% CI: .0021, .0711) of and are more likely to purchase (indirect effect = .03, 95% CI: .0011, .0837) tissues made from recycled (vs. original) materials ( $ps < .05$ ). In this study, we also rule out the alternative explanation of perceived cleanliness.

In Study 3a (NAmericans = 184; 61.1% female; Mage = 37.19), we manipulated virginity beliefs by asking participants to list reasons to value/devalue virginity. Consistent with previous studies, we found participants who were made to devalue (value) virginity were more likely to choose socks with recycled over socks with original materials ( $p = .033$ ). In Study 3b (NAmericans = 116; 60.7% female; Mage = 33.00), we manipulated the perceived importance of product purity by providing participants with an argument that either supported the importance of product purity or argued against it. As expected, such manipulation altered their preference for recycled materials, such that those made to believe that product purity is unimportant were more likely to choose cups made from recycled resources over cups made from original resources ( $p = .047$ ).

Study 4 investigates how beliefs regarding physical virginity and product purity vary as a function of national culture. Importantly, we show that such beliefs can be used to predict and explain recycling behaviors in different markets. The belief that virginity is important is much more valued and emphasized in the East than in the West (Buss, 1989). Based on the different traditional beliefs regarding virginity, we predict that consumers from a Western culture (e.g. America) will be more likely to recycle than consumers from an Eastern culture (e.g. China). 441 participants (62.8% female; Mage = 35.33) from America (N = 205) and China (N = 236) were recruited. Specifically, we asked participants to choose between socks made from original materials and socks made from recycled materials. As expected, American participants were more likely to choose socks with recycled materials over socks with original materials than Chinese participants ( $p < .001$ ), because of lower beliefs regarding the importance of virginity and product purity (indirect effect =  $-.07$ , 95% CI:  $-.1397$ ,  $-.0167$ ).

By investigating the effects of morality beliefs on recycling behavior, our research offers novel and important contributions to literature regarding recycling, beliefs, and culture. This work contributes to prior literature on recycling behavior by detailing the impacts of individual beliefs about the importance of virginity and in turn product purity on recycling. Our research offers direct strategic insight for marketing recyclable products. Marketers of recyclable products and materials may benefit from our research by better understanding when and why their consumers may dislike the concept of recycling. Indeed, our findings show that when consumers (naturally or are made to) value the virginity of people and the purity of products, they are less likely to recycle. To alleviate the negative impacts of beliefs and metaphors regarding purity on recycling, marketers may promote the benefits of product impurity (as what we did in Study 3b). Promoting recycling's ultimate contribution to purifying our planet (by saving and reusing resources) may be another effective strategy. Further, marketers may benefit from our findings by better understanding and predicting how different national markets (e.g. America versus China) react to recycling.

## Price No Object!: The Effect of Power Distance Belief on Consumers' Price Sensitivity Hyejin Lee (Indiana University, USA); Ashok Lalwani (Indiana University, USA)

### **Brief Abstract:**

The current research identifies an underexplored cultural variable, namely power distance belief (PDB)—the extent to which people accept and endorse hierarchy—as an important determinant of consumers' price sensitivity. We find that consumers high (vs. low) in PDB are less price sensitive because they have a higher need for closure (NFC), which reduces the tendency to search for better prices. Hence, marketers can make consumers less price sensitive by activating a high PDB, without having to spend vast sums to increase perceptions of value.

### **Extended Abstract:**

The present research explores how power distance belief (PDB)—the extent to which people accept and endorse hierarchy (Hofstede 2001; Oyserman 2006)—influences consumers' price sensitivity—the relative change in consumers' intention to make a purchase after a price increase (Gao, Zhang, & Mittal 2017; Wakefield & Inman 2003). We demonstrate that consumers high (vs. low) in PDB have a higher need for closure, which in turn reduces their price sensitivity (i.e., more accepting the currently available price rather than exploring better price).

A fundamental tenet of high PDB cultures and contexts is a desire for clear, unambiguous, and well-specified situations (Lalwani & Forcum 2016), all of which are hallmarks of people high (vs. low) need for closure (Kruglanski 2004). Further, individuals with high need for closure prefer autocratic group process and a hierarchic group structure (Kruglanski et al. 2006). Other research provides more evidence that PDB is positively associated with all key elements that define a need for closure (Lalwani & Forcum 2016; Biggart & Hamilton 1984; Carl, Gupta, & Javidan 2004; Hofstede 2001). As aptly summarized by Webster & Kruglanski (1994), defining characteristics of people high in need for closure include (a) a discomfort with ambiguity, (b) a preference for order and structure, (c) a desire for predictability, (d) decisiveness, and (e) close-mindedness. All these components are also high PDB individuals' key characteristics (Hofstede 2001; Carl et al. 2004; Lalwani and Forcum 2016), implying the two constructs (PDB and need for closure) are positively associated. Therefore, we predict high (vs. low) PDB individuals have a higher need for closure—desire for a firm answer to a question as compared to confusion and/or ambiguity (Kruglanski 2004).

We further expect that individuals with a higher need for closure would be less price sensitive. Specifically, we expect that individuals high (vs. low) in need for closure would have a greater motivation to arrive at a quick answer and will be less likely to engage in price search behavior, and be more likely to accept the currently available offer, exhibiting a lower price sensitivity. Formally,

H1: When PDB is high (vs. low), people are less price sensitive.

H2: The relationship between PDB and price sensitivity is mediated by a need for closure.

Boundary condition: Social Density

Research suggests that when social density is high, people's sense of control is threatened (Dion 2004; Hui & Bateson 1991; Schmidt & Keating 1979). Indeed, high social density can obstruct desired behaviors, which in turn mitigates perceptions of control (Proshansky et al. 1994). In contrast, low

social density leaves enough room for people to move about freely and perform activities without any hindrances, enhancing perceptions of control (Dion 2004; Hui & Bateson 1991; Schmidt & Keating 1979). A high social density is aversive and leads people to attempt to get out of the situation to regain control. Therefore, we propose that low PDB individuals—whose baseline need for closure is low—are more likely to be affected by a high social density (vs. control condition) manipulation. These individuals' need for closure should increase and their price sensitivity should decrease when social density is high (vs. a control condition). However, high PDB individuals—whose baseline need for closure is high—are less likely to be affected by a high social density (vs. control condition) manipulation due to a ceiling effect. Hence, their price sensitivity should not change when social density is manipulated to be high (compared to a control condition). See figure 1 for the conceptual framework

H3: Under high social density condition, low (not high) PDB individuals will be less price sensitive, compared to the control condition.

In study 1 ( $N = 276$ ), participants were randomly assigned to the high ( $N = 134$ ) or low ( $N = 142$ ) PDB condition following Zhang, Winterich, & Mittal (2010)'s procedure. Price sensitivity was measured as in Gao et al. (2017; study 5) using backpack as the product. Participants were asked to indicate their willingness to purchase a new backpack at the current price (15% price increase from last week) with a five-item scale ( $\alpha = .98$ ). A t-test revealed that high (vs. low) PDB individuals scored lower on price sensitivity, indicating that they are less price sensitive ( $M_{\text{low PDB}} = 5.17$ ,  $M_{\text{high PDB}} = 4.69$ ;  $t(274) = 2.49$ ,  $p < .02$ ; see figure 2), supporting H1.

In study 2 ( $N = 138$ ), PDB was measured with a 5-item, 9-point scale ( $\alpha = .90$ ) used by Yoo, Donthu, & Lenartowicz (2011) and state need for closure was assessed via a 15-item, 6-point scale ( $\alpha = .91$ ) adapted from Roets & Van Hiel (2011). Price sensitivity was measured as in Gao et al. (2017; study 5). The procedure was similar to study 1, but the product was a rug (25% price increase from last week). As predicted, a bootstrapping procedure (10,000 iterations) with 95% bias-corrected confidence estimates (Model 4, Hayes 2012) suggested that the indirect effect of need for closure on the link between PDB and price sensitivity was significant ( $\beta = -.02$ ,  $SE = .01$ ,  $CI_{95} = -.0562, -.0006$ ), supporting H2.

In study 3 ( $N = 131$ ), PDB was manipulated as in study 1: high PDB ( $N = 73$ ) vs. low PDB ( $N = 58$ ). After that, participants were randomly assigned to the high social density ( $N = 71$ ) or to the control condition ( $N = 60$ ). Further, price sensitivity was measured followed by Gao et al. (2017; study 5) but we used a different product (a portable charger) when the price increases from last week (\$35.99 to now \$41.99). A 2 x 2 ANOVA on the price sensitivity revealed nonsignificant effects of PDB ( $F(1, 127) = 1.49$ ,  $p > .22$ ) and social density condition ( $F(1, 127) = .30$ ,  $p > .58$ ). More importantly, a significant two-way interaction emerged ( $F(1, 127) = 3.95$ ,  $p < .05$ ). Follow-up analyses indicated that low PDB individuals are marginally less price sensitive in the high social density condition (vs. control) ( $F(1, 56) = 3.62$ ,  $p = .062$ ;  $M_{\text{high social density}} = 4.52$  vs.  $M_{\text{control}} = 5.26$ ) while high PDB individuals do not differ between the two conditions ( $F(1, 71) = 1.02$ ,  $p > .31$ ;  $M_{\text{high social density}} = 4.75$  vs.  $M_{\text{control}} = 4.33$ ; see figure 3), supporting H3.

Taken together, these findings support our prediction that high (vs. low) PDB individuals are less price sensitive, and that this effect is mediated by need for closure. This paper is expected to contribute to

several different literatures: cross-cultural, pricing, and need for closure. This research will enrich cross-cultural research by shedding light on less explored cultural component, PDB, compared to the dominant one, individualism-collectivism. In addition, this paper is one of the first attempts to examine the role of PDB in price literature. Lastly, this is the first to reveal the relationship between PDB and need for closure, which potentially has more diverse implications in other areas. Also, marketers can make consumers less price sensitive by activating a high PDB, without having to spend vast sums to increase perceptions of value.

## Session 2

### Consumer Self-Perception and Mindset - Competitive Paper Session

*Verlst (2nd Level)*

*Chair: Raymond Lavoie, Merrimack College*

#### Consumer Creativity: Breaking Your (Un)Creative Flow

Raymond Lavoie (Merrimack College); Kelley Main (University of Manitoba, Canada)

##### **Brief Abstract:**

The psychological state of flow offers a fruitful source of positive experiences for consumers. Flow experiences happen in a variety of consumption contexts, most notably those which leverage digital media (e.g. searching online, playing video games). Despite having well-established positive consequences, this research demonstrates that flow can also be negative. Across four studies in a variety of consumption contexts, we demonstrate that experiencing flow decreases subsequent creativity. Our findings suggest that flow limits analytical thinking, in favour of path-of-least-resistance processing which carries over to the subsequent task, limiting creativity.

##### **Extended Abstract:**

Organizations rely on the creative design/use of products to elicit positive consumption experiences now more than ever, given the increasing capacity to customize product offerings (Moreau and Engeset 2016). Flow offers an intriguing inquiry into consumer creativity, as it is suggested to augment human performance, and to have a strong correlation with creativity (Csikszentmihalyi and LeFevre 1989). Moreover, given flow's prevalence when engaging with digital media such as shopping online (Hoffman and Novak 2009), the influence of flow on consumption behavior is becoming increasingly important to understand.

We suggest that the relationship between creativity and flow is more nuanced than previously thought. In addition to being a state of narrowed attention, flow requires one to process information fluently/efficiently. This type of processing is necessarily devoid of 'effortful' analytical processing (Dietrich 2003), and carries forward to the subsequent task, encouraging path-of-least-resistance processing (Ward 1994). Studies 1 and 2 demonstrate the negative effect of flow on creativity. Study 3 provides process evidence by showing that cognitive flexibility, which requires analytical thinking to switch the focus of attention (Finke et al. 1992), is hindered by flow and mediates the relationship. Study 4 provides further support for the mechanism by mitigating the effect in a creative task that does not require analytical thinking.

### Study 1

Participants (N= 77 undergraduates, 58.3% male, Mage= 22.49) either played a moderate (flow) or hard (no-flow) Sudoku puzzle. The Sudokus were pretested for difficulty. In this and all studies, flow was measured using the flow questionnaire (yes/no) (Csikszentmihalyi and Csikszentmihalyi 1988).

We assessed creativity using the Alternate-Uses Task 'AUT' (Guilford 1959) which asks participants to generate different uses for a brick. We divided the number of times each idea was given by the number of participants. If less than 1% of participants had the idea it received two points, while ideas generated by 1%-5% of participants received one point and all others received zero. The results of an independent samples t-test on creativity revealed that those in flow were less creative (MFlow= .90) than those who didn't experience flow (MNoFlow= 1.81,  $t(58) = -2.03$ ,  $p = .048$ ,  $d = .53$ ).

### Study 2

Here, we used an experiential flow-task; listening to music. An online sample of Turkprime panelists participated (N= 247, 41.1% male, Mage= 43.89). It is possible that our results from Study 1 could be explained because participants who had a difficult Sudoku puzzle were more determined to redeem themselves. In order to assess this, we asked them to what degree do you feel determined (1= not at all, 5= very much so). We then provided the Remote Associates Test (RAT) as a measure of creativity (Mednick 1962).

An independent samples t-test revealed that those who experienced flow were less creative (MFlow= 3.12) than those who did not experience flow (MNoFlow= 4.27,  $t(247) = 3.07$ ,  $p = .002$ ). With respect to the alternative explanation, the results were in the reverse direction such that those who experienced flow were more determined (MFlow= 3.99, SD= 1.25) than those who did not experience flow (MNoFlow= 3.22, SD= 1.09,  $t(247) = -5.08$ ,  $p < .001$ ).

### Study 3

Participants were from the crowdsourcing site Crowdfunder (N= 99, 51.3% male, Mage= 38.49). We expect that flow limits analytical thinking, which mediates the negative effect. To demonstrate this, we measured cognitive flexibility using the AUT (Guilford 1959). More categories given to represent possible uses for a brick (e.g. building, weapon) suggest higher flexibility and thus analytical thinking. Three independent coders counted the categories (1 male, 2 females,  $\alpha = .92$ ) and the average of their scores was used.

An independent samples t-test revealed that those who experienced flow were significantly less creative (MFlow= 2.63) than those who did not experience flow (MNoFlow= 3.63,  $t(97) = -2.17$ ,  $p = .032$ ,  $d = .44$ ). Those in flow also had less flexibility in their ideas (MFlow= 2.54) than those who were not (MNoFlow= 3.41,  $t(83) = -2.62$ ,  $p = .01$ ,  $d = .56$ ). We tested cognitive flexibility as the mediator using Model 4 of the SPSS PROCESS macro with 10,000 bootstrap re-samples (Hayes 2017). There was a significant indirect effect [B= -.2741, S.E.= .1797, CI: -.7973, -.0288], as flow decreased cognitive flexibility [B= -.5337, S.E.= .2446, CI: -1.0199, -.0474], which is a driving factor of creativity [B= .5136, S.E.= .2129, CI: .0903, .9370].

### Study 4

Given our theorizing, the relationship between flow and creativity should be moderated by the degree of analytical processing required in the creative task. As opposed to the prior verbal tasks, spatial

forms of creativity require less analytical thinking and should not be impaired by flow. Turkprime panelists were recruited to participate (N= 458, 39.1% male, Mage= 41.22). The flow-inducing task had participants shop on Amazon.com. This was a 2(flow vs. no flow) x 2(creative-task: spatial vs. verbal) between-participants design.

Participants were given two lines and asked to imagine a larger picture that the two lines could be a part of. Independent coders (2 male, 2 female) rated the imagined pictures based on creativity ( $\alpha = .900$ ) and novelty ( $\alpha = .872$ ), each from 1(not at all creative/novel) to 7 (very creative/novel). The ratings of creativity and novelty were then combined as the measure of creativity ( $r = .967$ ,  $p < .001$ ).

The results of a 2(flow: yes vs. no) x 2(creative task: verbal vs. spatial) between participants ANOVA revealed a significant interaction ( $F(1, 454) = 10.67$ ,  $p = .01$ ). As expected, flow had a negative influence on verbal creativity, with those who experienced flow being significantly less creative in the verbal task (i.e. RAT) ( $M = 4.66$ ) than those who did not experience flow ( $M = 5.67$ ;  $F(1,454) = 7.81$ ,  $p = .005$ ). However, flow did not influence spatial creativity ( $F(1,454) = .56$ ,  $p = .455$ ).

### Discussion

As a rich source of happiness, and with increasing prevalence in the digital world, it is important to understand the construct of flow and its influence on consumption. Our research makes theoretical advancements in both regards. First, by demonstrating the nature of processing within flow. Second, by demonstrating that despite common knowledge, flow can be negative. These results also provide practical implications for both consumers and marketers with regards to fostering creativity.

## Is Beauty Only Skin-deep? The Self-Confirming Effects of Physical Attractiveness *Stereotype*

Youjung Jun (Columbia University, USA); Keith Wilcox (Columbia University, USA);  
Sandra Matz (Columbia University, USA)

### **Brief Abstract:**

Although much research has shown how attractiveness perception plays out in social interactions, we examine the effects of self-perceived attractiveness on individuals' stereotype-related behaviors. Specifically, we demonstrate the existence and self-confirming effects of a negative stereotype regarding physical attractiveness and intelligence (i.e., attractive people are less intelligent). Relative to those who have a modest view of their appearance, those who believe they are attractive perform worse on intelligence tests and consume less educational media, conforming to the negative stereotype. These effects are mitigated when people do not hold a negative attractiveness stereotype.

### **Extended Abstract:**

One of the most widely known effects of physical attractiveness is that people ascribe more socially desirable characteristics to, and, prefer attractive people to unattractive people, implying the "beautiful-is-good" halo effect (Dion et al., 1972). Much research has shown that the advantages of physical attractiveness are ubiquitous and strong (Eagly et al., 1991; Langlois et al., 2000). However, one exception where attractive people are not assumed to have a clear advantage is intelligence. When people form judgments about someone's intellectual abilities, physical attractiveness can evoke a negative stigma (Dijksterhuis et al., 2001) that good-looking people are less intelligent.

According to the social expectancy theory (Rosenthal, 1973; Darley & Fazio, 1980), targets of social expectancies (i.e., stereotypes) internalize those stereotypes as part of who they are and behave accordingly, resulting in self-fulfilling prophecies. Thus, we hypothesize that attractiveness stereotypes can produce self-confirming outcomes such that if attractive people are expected to be more (vs. less) intelligent, those who think they are attractive would conform to the stereotypical expectation and behave more (vs. less) intellectually. If this is the case, could this influence people's behavior such as their media consumption? The following 4 studies test these hypotheses.

In study 1, 145 participants took a version of Raven's Matrices Test (Raven, 1998), which is a standard measure of IQ. After the test, participants rated themselves on a number of positive character traits including how attractive they viewed themselves. Self-ratings of attractiveness negatively predicted participants' test score ( $\beta = -3.22$ ,  $p = 0.03$ ). Controlling for self-perception on other traits (e.g., athletic, intelligent), the correlation remained significant ( $p = 0.03$ ). This shows an inverse relationship between self-perceived attractiveness and intellectual performance.

In Study 2, we aimed to show that our finding is driven by expectancy by manipulating its relevance. That is, the expectancy about attractive people's intelligence will influence people's score only if this expectancy is relevant to the current task (i.e., if the test measures intelligence). We predicted that people will perform worse on a test that they believe is a measure of intelligence, even if the test itself does not measure intelligence. Participants ( $N = 173$ ) self-rated their attractiveness and took a numeric version of the Stroop test (Windes, 1968). The same test was described as an intelligence test to half the participants, or a number recognition test to the other half. Our dependent measure was the test score. Indeed, those in the intelligence condition believed the test was measuring their intelligence more strongly than those in the number recognition condition ( $p = 0.03$ ). Results revealed a significant interaction ( $p = 0.03$ ) such that self-perceived attractiveness negatively predicted test score ( $\beta = -4.08$ ,  $SE = 1.65$ ,  $t(169) = -2.48$ ,  $p = 0.01$ ) when participants thought they were taking an intelligence test. However, when the same test was described as a number recognition test, self-perceived attractiveness did not influence the test score ( $\beta = 1.16$ ,  $SE = 1.75$ ,  $t(169) = 0.66$ , NS). This shows the effect of self-perceived attractiveness on intelligence-related behavior is driven by the relevant expectancy.

Study 3 further tests the expectancy-confirmation explanation by manipulating the stereotype—whether attractive people are expected to be more or less intelligent. If those who perceive themselves as attractive are conforming to stereotypical expectations, highlighting differential expectations about attractive people's intelligence will alter their behavior in a way that reflects specific presumptions about them. Participants ( $N=202$ ) read a news article describing attractiveness to be either positively or negatively correlated with intelligence. Then, they took the IQ test from Study 1 and self-rated their physical attractiveness. Results revealed an interaction ( $p = 0.07$ ) such that people did better on the IQ test after reading that attractive people are more intelligent ( $\beta = 1.60$ ,  $SE = 2.02$ ,  $t(198) = 0.79$ ,  $p = 0.43$ ), but did worse after reading that attractive people are less intelligent ( $\beta = -3.59$ ,  $SE = 2.02$ ,  $t(198) = -1.77$ ,  $p = 0.08$ ). This shows the boundary of the negative stereotype's self-confirming effect: self-rated attractive people no longer get lower scores on an intelligence test when exposed to a positive expectancy regarding their intelligence (i.e., attractive people are expected to be smarter than less attractive people).

Can expectancies about attractive people's intelligence impact media consumption? The objective of study 4 was to show that people consume media in a way that confirms a specific attractiveness



stereotype. Like people, some products are categorized as more intellectual than others. Participants (N= 195) were randomly assigned to read one of the news articles from Study 3. Then, half the participants from each condition were assigned to spend time reading the science section from a national newspaper (Intellectual condition). The other half read an entertainment section from a consumer magazine (Non-intellectual condition). Our dependent measure was the time people spent reading the media. There was a 3-way interaction between product type (intellectual vs. non-intellectual), attractiveness stereotype (positive vs. negative), and self-perceived attractiveness on ( $p = 0.03$ ). For an educational media, self-rated attractive people spent more or less time reading the science news, confirming positive or negative stereotypes about attractive people's intelligence, respectively ( $\beta = 0.19$ ,  $SE = 0.07$ ,  $t(153) = 2.78$ ,  $p = 0.01$ ). However, for non-intellectual content, differential stereotypes did not influence participants' consumption amount ( $\beta = -0.02$ ,  $SE = 0.07$ ,  $t(153) = -0.32$ , NS). This suggests that self-perceived attractiveness can influence everyday behavior that constitutes attractiveness stereotype. When consuming products that are intellectually engaging or educational, people may confirm the stereotypes about attractive people's intelligence.

Overall, we show that self-concept of attractiveness has systematic effects on individuals' behavior associated with intelligence due to the self-confirming effects of stereotypes. People who view themselves as physically attractive tended to be less successful on tasks framed as intellectual tests and consumed less of educational content, confirming and potentially perpetuating the negative stereotype against attractive people. However, providing a positive expectancy reversed this tendency. Thus, the role of entertainment media—where attractive people are vastly overrepresented—is all the more important in generating and disseminating healthy societal expectations.

**Enjoyment Makes an Expert: The Impact of Enjoyment on Self-Perceptions of Expertise**  
Daniel M. Zane (University of Miami, USA); Jacob Teeny (Ohio State University, USA); Anna Paley (Ohio State University, USA); Robert W. Smith (Ohio State University, USA)

**Brief Abstract:**

In addition to enjoyment being an output of the consumer experience, we demonstrate that consumers' enjoyment also serves as an input for their perceptions of their own personal qualities. Specifically, we manipulate consumers' perceived enjoyment and demonstrate that enjoyment of a task influences perceptions of expertise in the associated domain. We propose that this effect arises from a lay theory that consumers hold about the positive relationship between enjoyment and expertise. This work highlights an interesting and important antecedent of subjective expertise and offers theoretical and managerial implications across domains such as self-evaluation, gamification, and education.

**Extended Abstract:**

Enjoyment stands at the root of the consumer experience, and research has explored factors that affect consumers' enjoyment of products and experiences (Alba & Williams, 2013). However, in addition to being an output of the consumer experience, might consumers' level of enjoyment also serve as an input for their perceptions of their own personal qualities? In this research, we demonstrate that consumers' enjoyment of a task influences their perceptions of their expertise in the associated domain. We propose that this effect occurs because consumers hold a lay theory about the relationship between enjoyment and expertise, stemming from an intuitive connection between the two constructs.

Prior research has shown that demonstrating skill/knowledge is inherently enjoyable (Deci & Ryan, 2000), and that achieving the enjoyable flow state necessitates having the skills to meet the challenges of the task at hand (Csikszentmihályi et al., 2005). In contrast to these examples, we show that the reverse causal relationship holds (i.e., enjoyment influences subjective expertise), while accounting for several alternative explanations. This work also contributes to the literature on consumer expertise (Alba & Hutchinson, 1987) by highlighting a novel and impactful antecedent of self-evaluation.

In study 1, participants responded to a 10-question multiple choice task asking them to identify the names of various plants. They then indicated their enjoyment (1-7) and recorded three thoughts about the task. We then randomly assigned participants to one of two conditions, ostensibly based on their prior responses. Specifically, participants were told that they either enjoyed the task more (high perceived enjoyment) or less (low perceived enjoyment) than other survey participants. As expected, participants in the high perceived enjoyment condition ( $M = 4.00$ ) reported being more knowledgeable about plants than those in the low perceived enjoyment condition ( $M = 3.35$ ;  $F(1, 130) = 10.28$ ,  $p = .002$ ). This was true only for the relevant domain (and not for reported knowledge about paintings, tea, etc.), ruling out a mood effect. Importantly, the actual number of correct answers (i.e., actual knowledge) did not differ across conditions ( $p = .31$ ).

In study 2a, participants played a “Bubble Shooter” game, and then we manipulated their perceived enjoyment as in study 1. Those in the high perceived enjoyment condition placed themselves in a higher percentile (1st-99th percentile; Kruger & Dunning, 1999) in regards to their skill-level ( $M_{\text{high\_enjoyment}} = 56.35$  vs.  $M_{\text{low\_enjoyment}} = 43.24$ ;  $F(1, 204) = 21.19$ ,  $p < .001$ ). Importantly, there was no difference in how much participants reported playing similar games in the past ( $p = .394$ ) nor how much they expected to play similar games in the future ( $p = .443$ ). Thus, the effect does not seem to be driven by beliefs about past or future experience in the domain.

Study 2b replicated the above findings and considered the possible role of beliefs about the ease/difficulty of the task in a 2(Perceived Enjoyment: high or low)  $\times$  2(Task Ease Feedback: present or absent) between-subjects design. This study used the same task and perceived enjoyment manipulation from study 2a. Additionally, in the task ease feedback present condition, participants received feedback that their responses indicated they found the game to be just as easy as other players. If high perceived enjoyment increases consumers’ perceptions of their expertise by making them believe a task was easy for them, then telling these individuals that the task was no easier for them than ostensible others should eliminate any effect of perceived enjoyment. However, only a main effect of the Perceived Enjoyment factor emerged on the percentile-based measure from study 2a ( $M_{\text{high\_enjoyment}} = 57.73$  vs.  $M_{\text{low\_enjoyment}} = 51.39$ ;  $F(1, 349) = 8.63$ ,  $p = .004$ ). Thus, consumers’ beliefs about how easy the task was for themselves does not explain the relationship between perceived enjoyment and perceived level of skill.

Study 3 establishes process evidence that the observed effect is driven by consumers’ lay theory about the relationship between enjoyment and expertise. We posit that consumers draw conclusions about their level of knowledge or skill in a domain based on their enjoyment of task because they overgeneralize the relationship between enjoyment and knowledge/skill. They likely have learned that demonstrating knowledge or ability themselves is enjoyable, also recognize that experts usually really enjoy doing the things they love (e.g., professional athletes, professors, etc.), and tend to also overgeneralize the causal direction of this relationship as they do with other relationships that exist

(Sackett et al., 2010).

In study 3, consumers first completed an implicit association test (IAT), which revealed that participants were faster to respond during congruent trials (i.e., when “expert” and “enjoyable” were paired together as one category label and “novice” and “unenjoyable” were paired together as the other category label;  $M = 963.09$  ms) versus incongruent trials (i.e., when “expert” and “unenjoyable” were paired together as a category label;  $M = 1031.13$  ms; MD-score = 0.17;  $t(85) = 3.68$ ,  $p < .001$ ). They then completed the same task and perceived enjoyment manipulation as in study 1. Next, we regressed the skill percentile measure on the Perceived Enjoyment factor, the calculated IAT score, and their interaction. A significant interaction emerged ( $b = 12.43$ ,  $SE = 5.21$ ,  $t(82) = 2.38$ ,  $p = .019$ ). Among participants who demonstrated the implicit association between enjoyment and expertise to at least a moderate degree (an IAT d-score of .11 or above; a score above 0 can be said to demonstrate the implicit association, with a more positive score representing a stronger association; Greenwald, Nosek, & Banaji, 2003), those in the high perceived enjoyment condition placed themselves in a significantly greater percentile than those in the low perceived enjoyment condition ( $p < .05$ ). This difference was attenuated among participants who had an average IAT d-score below .11.

Taken together, this research demonstrates that consumers’ enjoyment of a task can influence their subjective expertise in the associated domain. Further, it is among the first to demonstrate that enjoyment can serve as an input for consumers’ self-perceptions. The implications of these findings extend across domains, providing insights for gamification in marketing and student learning in education.

## Joint Effects of Goal Specificity and Implemental-Deliberative Mindset on Green Consumption

Xiaodong Nie (University of Texas at Arlington); Zhiyong Yang (University of North Carolina at Greensboro); Min Zhao (Boston College, USA)

### **Brief Abstract:**

This research examines how goal specificity and implemental-deliberative mindset jointly influence consumers’ green consumption. Three studies across different domains show that when an implemental mindset is activated, consumers with specific-number-goal (e.g., “to save \$50” on utility bill) are more likely to choose green products that cost more but are energy-saving in the long run. However, when a deliberative mindset is activated, consumers with range-goal (e.g., “to save \$30-\$70” on utility bill) are more likely to choose such green products. The process underlying these effects is perceived importance of goal-relevant information (e.g., energy-saving).

### **Extended Abstract:**

Despite the advantage of green products in saving on consumers’ long-term utility bill and contributing to sustainability efforts, consumer’s adoption of green products is challenging due to the high purchase price (Olsen 2013). In the present research we investigate the joint effects of goal specificity and implemental-deliberative mindset on consumers’ choice of green products.

Previous research reveals that consumer behavior is largely goal-directed (Custers and Aarts 2005). A goal can be a specific number (e.g., “to save \$50”) or a range (“to save \$30- \$70”). However, it is

unclear which type of goals is more effective. While some scholars show that goals with specificity is more effective (Soman and Zhao 2011), others argue that range-goal is more effective (Scott and Nowlis 2013). In this research, we predict that both types of goal can be effective in the context of green consumption, depending upon consumers' implemental/deliberative mindset. As individuals with deliberative mindset weigh the pros/cons of the decisions and are more open to all types of information, whereas those with implemental mindset are more selective to action-related information and focus more on when, where, and how to achieve a goal (Brandstätter et al. 2015; Gollwitzer 1999), we predict that when implemental mindset is activated for green consumption goals, specific-number-goals are more effective in increasing choice of green products, whereas when deliberative mindset is activated, consumers with range-goal are more likely to choose green products. Further, drawing on prior research on goal specificity (Ülkümen and Cheema 2011), we predict that an implemental mindset paired with specific numbers and a deliberative mindset paired with ranges enhances perceived importance of goal-relevant information.

Three experiments were conducted to test the proposed effects. Study 1 (N=170) featured a 2 (goal specificity: number vs. range) × 2 (mindset: implemental vs. deliberative) between-subjects design. Participants were asked to consider the goal of saving utility at home by stating either a specific monetary amount or a range for saving (Scott and Nowlis 2013). Participants in the implemental-mindset condition were asked to write important steps including when, where, and how to accomplish the goal, whereas those in the deliberative-mindset condition were asked to write pros and cons of pursuing the goal (Gollwitzer 1999). Participants were then asked to choose between a green washer (higher purchase price but lower lifetime-running costs) and a regular washer (lower purchase price but higher lifetime-running costs). A logistic regression revealed a significant interaction between goal specificity and mindset ( $\beta=1.87$ , Wald=8.21,  $p$

Study 2 (N=170) replicated the findings of study 1 using a dishwasher, and tested the mediating role of perceived importance of goal-relevant information. Study 2 used a similar 2 (goal specificity) × 2 (mindset) between-subjects design and goal specificity was manipulated by assigning participants to either a specific-number-goal ("to save \$50") or a range-goal ("to save \$30-\$70") on monthly utility consumption. Participants were asked to choose between a green dishwasher with higher purchase price but lower future cost and a regular dishwasher with lower price and higher future cost. Participants then rated the importance of (1) purchase price, (2) lifetime-running cost, (3) annual-operation cost, and (4) green rating when evaluating the two dishwashers. An index of perceived importance was derived by subtracting the score of purchase price (goal-irrelevant information) from the average score of the other three attributes (goal-relevant information). A logistic regression revealed a significant interaction between goal specificity and mindset ( $\beta=2.64$ , Wald=6.87,  $p=.01$ ). As predicted, under implemental mindset, more participants selected the green dishwasher when having a specific goal (M=93.9%) than when having a range goal (M=80.5%;  $\chi^2(1)=3.73$ ,  $p=.05$ ). Under deliberative mindset, the choice of the green dishwasher reversed (M<sub>range</sub>=93.0% vs. M<sub>specific</sub>=78.0%;  $\chi^2(1)=3.84$ ,  $p=.05$ ). These effects were mediated by perceived importance of goal-relevant information (2.36, 95% CI=[.68 to 4.91]).

If perceived importance of goal-relevant information is the key process, changing type of goals should reverse this effect. In study 3 we test this premise. Study 3 (N=339) featured a 2 (goal type: save-for-future vs. save-for-now) × 2 (goal specificity: number vs. range) × 2 (mindset: implemental vs. deliberative) between-subjects design. The manipulation of goal specificity and mindset were the same

as in study 2, except that a new product (light bulb) was used. Goal type was manipulated by asking participants to save either for ongoing utility consumption (save-for-future) or for just this month's utility consumption (save-for-now). Participants were then asked to choose from either a LED light bulb that saves costs for future or an incandescent light bulb that saves cost now. Perceived importance of goal-relevant information was measured using the same scales as in study 2. A logistic regression revealed an expected three-way interaction ( $\beta=1.03$ , Wald=15.70,  $p < .001$ ). When the goal was to save for future, we replicated earlier findings: Under implemental mindset, participants were more likely to choose the LED light bulb with a specific goal ( $M_{\text{specific}} = 97.8\%$  vs.  $M_{\text{range}} = 83.8\%$ ;  $\chi^2(1)=5.24$ ,  $p=.02$ ), whereas under deliberative mindset, range-goal was more effective ( $M_{\text{range}} = 97.7\%$  vs.  $M_{\text{specific}} = 78.3\%$ ;  $\chi^2(1)=7.94$ ,  $p=.01$ ). When the goal was to save for now, the results were reversed. Under implemental mindset, participants with a specific goal were less likely to choose the LED light bulb ( $M_{\text{specific}} = 86.8\%$  vs.  $M_{\text{range}} = 97.9\%$ ;  $\chi^2(1)= 4.01$ ,  $p=.05$ ); and under a deliberative mindset, participants with a range-goal were less likely to choose the LED light bulb ( $M_{\text{range}} = 79.5\%$  vs.  $M_{\text{specific}} = 95.1\%$ ;  $\chi^2(1)= 4.47$ ,  $p=.04$ ). The effects were mediated by perceived importance of goal-relevant information (.78, 95%CI=[.28, 1.40]).

Taken together, these studies demonstrate the joint effect of goal specificity and implemental-deliberative mindset on the goal of green consumption. This research contributes to the literature in goal specificity and mindset and as well as green consumption

## **The Up-Side of Material Consumption: Exploring the Psychological Value of Material Goods - Symposium**

### *Percival (2nd Level)*

Material possessions offer utilitarian and hedonic benefits, and that fact lends plausibility to the implicit promise that acquiring them will bring benefits to their owners, and while many consumers believe and anticipate that material consumption will increase their happiness—considerable evidence indicates that material consumption leads to less happiness than experiential consumption. Further, material (vs. experiential) consumption is associated with negative implications for interpersonal relationships and maladaptive consumption. But is all material consumption bad? This symposium presents cutting-edge research demonstrating the benefits of material consumption, more closely looking at when and how material consumption results in more positive benefits for consumers.

*Chair: Grant Edward Donnelly, Ohio State University, USA*

### The Psychological Value of Material Goods

Joseph K Goodman (The Ohio State University, USA); Kathleen Vohs (University of Minnesota, USA)

#### **Brief Abstract:**

Recently consumer psychology has focused on how consumption shapes happiness, consistently showing an experiential advantage—experiential purchases lead to more happiness than material purchases. Despite these advantages, consumers continue to purchase material goods. We explore this paradox and provide evidence that material goods reduce negative risk via four process: making negative outcomes less negative, guarding against negative evaluations of the self, guarding against impulsivity and providing residual social welfare, and having lower interpersonal risk. The evidence suggests neither marketers nor consumers should abandon the pursuit of material goods as they can

offer important psychological value.

### Some of the Best Things in Life Are Things

Ryan Howell (San Francisco State University, USA); Tiffany Vu (University of Michigan); Darwin Guevarra (University of Michigan, USA)

#### **Brief Abstract:**

There has long been a debate over whether money can buy happiness. A considerable amount of research suggests that people derive more happiness from experiential purchases compared to material ones. We present evidence suggesting that people also derive happiness from their material purchases. In three studies, we show that (1) people believe that allocating 19.08% of their discretionary income to material purchases will lead to happiness, (2) most material items provide people with high levels of happiness, and (3) consumer expectations and engagement play an important role in maximizing a material item's hedonic benefits.

### Reversing the Experiential Advantage: Happiness Leads People to Perceive Purchases as More Experiential Than Material

Hyewon Oh (University of Illinois at Urbana-Champaign, USA); Joseph K Goodman (The Ohio State University, USA); Incheol Choi (Seoul National University, USA)

#### **Brief Abstract:**

The experiential advantage suggests that experiential (vs. material) purchases provides more happiness. The present research questions this finding, suggesting it may, in part, be backwards. We propose that (1) consumers' material-experiential perceptions are malleable, (2) happy consumers perceive their purchases as more experiential (vs. material) than their less happy counterparts, and (3) consumers can increase their well-being by practicing experiential framing. Four studies demonstrate that chronic and incidental happiness increases experiential perceptions, and that a change in abstract (vs. concrete) construal underlies the effect. The final intervention study demonstrates important implications of experiential perception: Practicing experiential framing increased consumer well-being.

### Giving the Gift that is Most Appreciated: The Costs and Benefits of Time-Saving Gifts

Grant Edward Donnelly (Ohio State University, USA); Ashley Whillans (Harvard Business School, USA)

#### **Brief Abstract:**

Research evaluating gift-giving suggests that gifting experiences better enhances social relationships than giving material items. In the current investigation, we evaluate the effectiveness of giving the gift of time. We find that time-saving gifts result in greater happiness compared to material gifts because they reduce anticipated guilt of consumption. However, we find that time-saving gifts are not preferred in identity-relevant domains, where saving time might be an identity threat by preventing consumers from bolstering their identity through identity relevant tasks. Our results suggest that time-saving gifts are generally appreciated, but provides evidence as to when time-saving gifts should be avoided.

## **When the Good Goes Bad and Efforts to Raise Charity Donations Backfire – Symposium**

*Vernon (2nd Level)*

Competition in pursuing donations is fierce. Thus, organizations' charitable appeals take many forms (Online websites, cause-related marketing, etc.) and they ask for all types of help (money, sponsorship, volunteerism, etc.). Nevertheless, it seems that crafting an engaging and effective appeal remains a significant challenge. This session presents four projects that shed light on several common mistakes that charitable organizations make. Taken together, these four projects demonstrate how common practices such as requesting monetary donations, sharing information about organizations' financial decisions, allowing donors to choose their donation target or giving an incentive to donate might backfire and reduce overall donations.

*Chairs: Liat Levontin, Technion University, Israel; Danit Ein-Gar, Tel Aviv University, Israel*

**The Fear of Making the Wrong Decision: The Need to Choose Between Donation Targets Decreases Donations**

Danit Ein-Gar (Tel Aviv University, Israel); Liat Levontin (Technion University, Israel); Tehila Kogut (Ben Gurion University, Israel)

**Brief Abstract:**

Many charitable organizations offer prospective donors the option to choose to whom to donate. We investigate the magnitude of “opting-out” – wherein prospective donors refrain from donating when asked to choose between donation targets. This effect is enhanced the more donation targets seem similar and is driven by the fear of making a wrong decision and can be attenuated when the target options have a differentiating cue that donors can use to justify their choice.

**Risky Business: The Risk-Reward Tradeoff is Different for Charities**

Rachel Gershon (Washington University in St. Louis); Cynthia Cryder (Washington University, USA); Merriah Croston (Washington University, USA)

**Brief Abstract:**

This research finds that consumers penalize nonprofits that make risky (but high expected value) choices over safe (but low expected value) choices, yet they do not similarly penalize for-profit companies for taking similar risks. We find that this pattern occurs because consumers expect nonprofits to behave in a way that is beyond reproach morally, and thus they judge non-profits more harshly for violating morality norms via financial risk-taking. Such harsh judgments compromise the ability of non-profits to pursue innovation without exposing themselves to negative reputational concerns.

**Opting-in to Prosocial Incentives**

Daniel Schwartz (University of Chile); Elizabeth Keenan (Harvard Business School, USA); Alex Imas (Carnegie Mellon University, USA); Ayelet Gneezy (University of California San Diego, USA)

**Brief Abstract:**

We examine the effect of prosocial incentives – where individuals' effort benefits a charitable organization – on people's decision to opt-in to an incentivized activity. To date, most research has focused on the effect of prosocial incentives on effort, assuming that participation in the activity (whether voluntary or mandatory) is certain. Across four experiments that vary in incentive size, we find that individuals are more likely to avoid activities that involve any prosocial incentive, even if the associated donation is optional.

## My Money is Yours, but My Time is Mine: Inseparability of Consumption from the Self Increases Agency and Giving

John Costello (The Ohio State University); Selin A Malkoc (The Ohio State University)

**Brief Abstract:**

We introduce the inseparability of the self from the resource as a previously unexamined time/money difference. We suggest that giving separates givers from their money, but not from their time. In turn, while giving reduces agency over money, consumers retain agency over time even after giving. Across eight studies we demonstrate the implications of this asymmetry on perceived agency and subsequently on donation behavior. Our framework explains differences in giving time and money, demonstrates when and why other forms of donation might be attractive, and how people can use time donations to compensate for lack of control.

## Better Together? How Sharing Consumption with Others Impacts Consumers' Choices and Perceptions - Symposium

*Sloane (2nd Level)*

How do consumers share their consumption experiences with others? A key finding in prior work on shared consumption is that consuming the same content with another person provides social benefits such as feelings of connectedness, subsequently amplifying enjoyment of the shared experience (Raghunathan and Corfman 2006; Ramanathan and McGill 2007). Similarly, desire for social connectedness leads consumers to make choices congruent with the accompanying individual's preferences (Dzhogleva and Lambertson 2014; Lowe and Haws 2014). While both forms of shared consumption are important, shared consumption can also occur in various other forms. In this special session, we present four papers that broaden the scope of shared consumption and expand its implications. The first paper, by McFerran and Argo, demonstrates that when two people engage in an experience together, one person might have enabled access to the experience for the other person. VIPs attending an event as part of preferential treatment can grant access to the same experience to a guest. In such a situation, a VIP (vs. guest) has strong (vs. weak) personal associations with the experience. Five studies show that guests can be more helpful to a firm than the VIPs themselves, as they feel more status during the experience and are more likely to spread WOM. The second and third papers investigate how simultaneity of experience impacts consumer perceptions. Shaddy, Tu, and Fishbach show that the sense of sharing an experience with another person can be fostered when similar events happen close in time, even if the events themselves are somewhat different. Across five studies, consumers prefer these two events to occur to them and another person on the same day, rather than on different days, particularly when the events are small in magnitude, positive in valence, and they like the other person. This effect is driven by consumers' desire for social connection. The third paper, by Duani, Barasch, and Ward, investigates consumer preference



for different formats of content on social media, such as live streamed versus prerecorded. Five studies show that consumers prefer and enjoy live streamed (vs. prerecorded) content more, because they think that many others would also be watching the same content, increasing perceived social connectedness. Finally, Kim and Ratner investigate how sharing one's consumption choice with others impacts consumer choice. Across four studies, they demonstrate that anticipating another person will view what one has consumed, either because the audience is physically present for the consumption experience or the audience will learn about the experience on social media, increases consumers' choice of hedonic (vs. utilitarian) options. This effect is driven by consumers' desires to signal positive information about themselves, such as that they are having a good time and are fun people. This session enhances our understanding of how consumers share consumption with others by demonstrating novel approaches of defining shared consumption. Furthermore, this session also provides interesting marketing implications, such as whether firms should prioritize guests of VIPs and how social media impacts what people choose to consume and how they feel about their shared experiences.

*Chairs: Nicole Kim, University of Maryland, USA; Rebecca Ratner, University of Maryland, USA*

### Felt Status, Social Contagion, and Consumer Word-of-Mouth in Preferential Treatment Contexts

Brent McFerran (Simon Fraser University, Canada); Jennifer J Argo (University of Alberta, Canada)

**Brief Abstract:**

This research demonstrates that guests of VIPs often report feeling the same (or more) status than their sponsor during preferential treatment, an effect driven by experienced satiation. We also document a causal relationship between felt status and the sharing of word-of mouth.

### The Preference for Simultaneity: When Different Events Happen to Different People at the Same Time

Franklin Shaddy (University of California Los Angeles, USA); Yanping Tu (University of Florida, USA); Ayelet Fishbach (University of Chicago, USA)

**Brief Abstract:**

We explore the preference for simultaneity, which we define as the preference for events that happen to the self and to close others to occur at the same time. We propose that people prefer simultaneity because it facilitates social connection. To that end, we find that people choose simultaneity, that this preference extends to negative events, and that this preference is bounded by the emotional impact of those events, such that it systematically decreases as positive and negative events increase in magnitude. The preference for simultaneity is further moderated and mediated by the desire to connect with others.

### Better Together? How Sharing Consumption with Others Impacts Consumers' Choices and Perceptions

Nofar Duani (New York University, USA); Alixandra Barasch (New York University, USA); Adrian Ward (University of Texas at Austin, USA)

**Brief Abstract:**

With the rise of peer-to-peer live streaming platforms, the consumption of live content is becoming more social than ever before. This change points to a previously neglected aspect of live content consumption: the interpersonal connection that bonds viewers with others who are simultaneously watching the same event in real time. Across five studies, we find that consumers enjoy the exact same experience more when watching it live versus prerecorded. This effect is driven by feelings of social connection, and operates above and beyond indeterminacy. Accordingly, consumers choose to continue watching live content longer than prerecorded content.

**Signaling Fun: Anticipated Sharing Leads to Hedonic Choice**

Nicole Kim (University of Maryland, USA); Rebecca Ratner (University of Maryland, USA)

**Brief Abstract:**

Across four studies, we find that consumers make hedonic (vs. utilitarian) consumption choices to signal having fun. In particular, consumers are more likely to choose hedonic options when their choice is visible to others, such as in the physical presence of others or when they anticipate posting about their choice on social media, compared to when it is not visible, such as when choices are made alone. This signaling motive is particularly relevant when the audience is someone whose evaluation is important to the consumer, such as a friend, or a person with whom the consumer envisions future interactions with.

**Revealing More Than We Might Realize: The Interpersonal and Strategic Impacts of Self-Disclosure Strategies – Symposium***Scarborough 3 (Lobby Level)*

Consumers and marketers alike often face situations in which they must carefully manage what information they withhold or disclose, and they employ a variety of strategies to share or avoid sharing information. The four papers of this session explore these strategies, identifying ways in which individuals often make errors in making disclosures or in withholding information, describing methods of disclosure that lead to more favorable impressions, and showing how to guide conversation partners to divulge information that they would otherwise rather withhold.

*Chair: Eric VanEpps, University of Utah, USA*

**Ask-Bragging and Ask-Complaining: Feigning Interest in Others to Elicit Admiration and Sympathy**

Ryan Hauser (Yale University, USA); Alison Wood Brooks (Harvard Business School, USA); Michael I Norton (Harvard Business School, USA)

**Brief Abstract:**

People often wish to share positive or negative information about themselves—bragging to elicit admiration or complaining to elicit sympathy—but subtly, not blatantly. We introduce an indirect strategy: asking one’s conversation partner to share something about themselves first (“How was your weekend?”), with the expectation that their partner will ask the same question. Ask-brags and ask-

complaints are commonly deployed, but ineffective: recipients realize that ask-braggarts and -complainers are not interested in their response, but are merely setting up their own disclosure (“Mine was amazing”/“Mine was awful”)—and prefer those who straightforwardly brag or complain.

### Hiding One's Successes

Annabelle Roberts (University of Chicago, USA); Emma Levine (University of Chicago, USA); Ovul Sezer (University of North Carolina, USA)

#### **Brief Abstract:**

Effective communication is an integral aspect of social life. Unsuccessful communication can hurt people or backfire in unintended ways. Across five studies (N = 1,625), we find that individuals often hide – rather than share – their successes from close others, and that such hiding is penalized in social interactions. We explore the underlying mechanism and find that hiding one’s success uniquely leads targets to make negative inferences about the communicator’s motives and beliefs. These results challenge prior research about the ubiquity of self-promotion and provide new insights into the consequences of hiding information in everyday communication.

### The Impression Management Benefits of Humorous Self-Disclosure

Brad Bitterly (University of Pennsylvania, USA); Maurice Schweitzer (University of Pennsylvania, USA)

#### **Brief Abstract:**

Across six studies, we identify humor as a powerful impression management tool. In many domains, such as negotiations and interviews, individuals face a challenge with respect to disclosing negative information and managing impressions. In these settings, disclosures that reveal negative information can harm perceptions of warmth and competence. We demonstrate that the perceived veracity of a disclosure is lower when it is humorous than when it is not humorous, which has beneficial effects for perceptions of warmth and competence. We discuss the implications of humorous self-disclosure on interpersonal perception and impression management.

### Eliciting the Truth, the Whole Truth, and Nothing but the Truth: The Effect of Question Phrasing on Deception

Julia A Minson (Harvard Business School, USA); Eric VanEpps (University of Utah, USA); Jeremy A. Yip (Georgetown University, USA); Maurice Schweitzer (University of Pennsylvania, USA)

#### **Brief Abstract:**

Information asymmetry exists across numerous consumer contexts, and the phrase “caveat emptor” even reflects the common perspective that buyers are responsible for asking questions to resolve these asymmetries. Across four experimental studies, we examine how different types of questions influence the veracity of people’s responses in situations of information asymmetry. We find that questions that presuppose a problem promote greater disclosure of past unethical behaviors, increase honest responses in face-to-face job interviews, and elicit more honest disclosures of damaging product information by sellers. Perceptions of the question-asker’s knowledge and assertiveness mediate this

relationship between question type and honest disclosures.

## **Embody This: New Issues in Sensory Marketing - Competitive Paper Session**

*Scarborough 4 (Lobby Level)*

*Chair: Claire Tsai, University of Toronto, Canada*

### *Bad Things Escalate and Good Things Siate? A Reference Point Stickiness Perspective*

Claire Tsai (University of Toronto, Canada); Kailuo Liu (University of Toronto, Canada); Ruoning Li (University of Toronto, Canada)

#### **Brief Abstract:**

This research illustrates that people adapt to positive events much faster than negative events. We attribute the phenomenon to people's tendency to update their reference point faster in the domain of gains than losses. That is, experiences are coded as gains or losses relative to a point of comparison. When experiencing positive events, people adapt to them quickly and increase the reference point. The updating is much slower when encountering negative events. In six experiments, we demonstrated the asymmetric speed of hedonic adaptation and found support for the mechanism concerning stickiness of reference points. Data also ruled out alternative explanations.

#### **Extended Abstract:**

Inspired by Coombs and Avrunin's (1977) principle: Good things satiate and bad things escalate, we examine how the speed of adaptation (Frederick & Loewenstein 1999; Weinstein, 1978; Wilson & Gilbert 2009) varies systematically by stimulus valence. Specifically, we find that happiness derived from a positive event (e.g., food delivery arrives early) weakens after people experience it only a few times. However, people's unhappiness with a negative event (e.g., food delivery arrives late) increases for the first few times and then plateaus. It did not decrease. We trace the asymmetry in the adaptation speed to the stickiness of reference point such that people update reference point more slowly when encountering losses than gains. Our work extends prior research on reference point updating for risky choices (Arkes, Hirshleifer, Jiang, & Lim, 2008) to consumption experiences with riskless stimuli. It also adds insights on hedonic sensitization since relevant research is limited (Weinstein 1978).

Study 1 (154 online panelists) demonstrated the asymmetry in adaptation speed by employing a 2 (valence: positive vs. negative; between-subjects)  $\times$  6 (trials; within-subject) mixed design. Participants watched several video clips and were told each video would take 15 seconds to load. Depending on the condition, the actual wait time was either 10 seconds shorter (positive) or longer (negative) than the promised time (15s). Then participants reported their happiness with the wait (-50 = Extremely unhappy, 50 = Extremely happy). They repeated this process five more times, yielding six repeated measures. After all happiness measures, participants' reported reference points for three rounds by indicating how much time was reasonable for them to wait for the 1st, 3rd, and 5th videos.

Following Galak, Kruger, and Loewenstein (2012), we first computed the slope of happiness over six trials for each participant as a measure of adaptation speed. We then took the absolute value of the slopes for the negative condition in order to compare with the positive condition meaningfully. Analysis results confirmed that people adapted to the positive event faster than the negative event (slope mean = 1.34 vs. -0.89,  $t(153) = 4.61$ ,  $p < .01$ ; Figure 1). Both trends are significantly different

from a flat trend where slope coefficient equals zero (both  $p$ s  $<.01$ ). The negative slope in the positive condition confirmed that people adapted to positive events over time, whereas the negative slope in the negative condition showed hedonic sensitization toward negative events. Using happiness as the dependent variable, mixed ANOVA revealed a significant main effect of valence ( $F(1, 152) = 9.76, p <.01$ ) and interaction effect between time and valence ( $F(5, 760) = 9.73, p <.01$ ). In addition, by the last trial, participants updated their reference point ( $M = 7.59$  sec) according to the actual wait time in the positive condition, but not in the negative condition ( $M = 14.43$  sec; Figure 2). This result suggested that a slower updating of reference point could be the psychological mechanism that drives the effect.

Study 2 (90 students) replicated the effect in a business service scenario. Participants imagined ordering food delivery and the wait would be 25 minutes. Depending on the condition, participants were told the food actually arrived ten minutes early (positive-A condition), five minutes early (positive-B), or five minutes late. This design allows us to test whether the effect is sensitive to the absolute difference in the deviation from the promised time (5-min difference) or loss aversion (10-min gain vs. 5-min loss). Participants reported how happy/unhappy they would feel about the wait time. They repeated this process five times. As expected, adaptation speed differed across conditions ( $F(2, 87) = 15.08, p <.01$ ; Figure 3). Planned contrasts showed that people adapted more slowly in the negative condition (slope mean = 2.36) than in the positive conditions ( $M = -4.01$  and  $-4.51$ , both  $p$ s  $<.01$ ), while the two positive conditions were not different from each other ( $p >.7$ ). We replicated this finding in Studies 3 and 4 using different sample populations and different presentation of gains and losses.

Study 5 ( $N = 107$ ) collected data on the subway trains in Toronto to see if the effect can be shown with people who are very familiar with the experiences. Participants were told that a subway trip between two stations took 28 minutes on average. Depending on the condition, they imagined themselves to have several 5-minute delays (negative) or 5-minute early arrivals (positive) when taking the trip. Participants reported how happy/unhappy they would feel about the trip for three times. Again, the results demonstrated different adaptation rate (i.e., slope coefficients) across conditions (mean = 0.37 vs. 0.87,  $t(106) = 2.56, p <.02$ ; Figure 4). Within-subject comparisons between time1 and time3 suggested that happiness decreased for the negative condition ( $t(55) = 7.72, p <.01$ ), but remain unchanged in the positive condition ( $p >.3$ ). The positive condition did not show an adaptation trend probably because commuters experience delays much more often than early arrivals. On average, participants reported to experience delays for 30-50% of their trips, while only 0 – 10% early arrivals.

Also, there might be too few trials (only 3), due to the time constraint in this field setting.

Study 6 addressed an alternative account—perceived control—which pertains to one's perceived ability in influencing future outcomes. One might argue that updating the reference point in the negative domain essentially requires people to accept that future outcomes would not improve, indicating a sense of low control. We did not find support for this claim and replicated results in Study 1.

In conclusion, we illustrated asymmetrical speed of adaptation between positive and negative hedonic responses with five experiments and found support for our reference-point stickiness hypothesis.

## Dumb Muscle: When and Why Physical Strength Increases Persuadability

Irene Consiglio (Nova School of Business and Economics); Margaret C. Campbell (University of Colorado, USA); Stijn van Osselaer (Cornell University, USA)

### **Brief Abstract:**

Because physical strength reduces the perception of threats in the environment, we propose that individuals who feel stronger (vs. weaker) are less likely to detect persuasion threat in ambiguous situations (i.e., situations in which persuasion intent is not salient); this, ironically, makes them vulnerable to persuasion. However, when persuasion is salient, stronger people detect it and resist it. In sum, subtle persuasion attempts may go undetected among stronger individuals, however blatant persuasion attempts may backfire.

### **Extended Abstract:**

A widespread trope is that physically formidable individuals are simpletons who are easy to manipulate. We propose that whether strong individuals are indeed easy to persuade depends on the characteristics of the persuasive attempt. Our predictions rest on the notion that humans have a threat detection system that scans the environment for potential threats (Holbrook, Sousa, & Hahn-Holbrook 2011). Stronger individuals have a higher threshold for threat detection; instead, weaker individuals are more vigilant towards potential threats, because an underestimation of danger puts them at a greater risk of injury (Fessler, Holbrook & Gervais 2014; McNaughton & Corr, 2004). We theorize that this threat detection system may involve also the detection of persuasion threat. Indeed, persuasion is generally conceived as a potential threat—individuals are vigilant against manipulative intent, and when they detect it, they resist it (Campbell & Kirmani 2000; Kirmani & Zhu, 2007). We hypothesize that subtle persuasion flies under stronger individuals' less sensitive radar. In contrast, the more vigilant weaker individuals are more resistant to persuasion. However, when a persuasion threat is clear, even stronger individuals detect it and resist it, therefore the effect of strength on persuadability is attenuated.

Three studies tested these predictions. Missing cases were excluded pairwise. In study 1, respondents ( $N = 200$ ;  $Mage = 33.84$ ; 61% male; MTurk) completed a physical strength measure (1 = I have absolutely no strength, 7 = I have exceptional strength; Rahamni-Nia et al. 2011). Next, they saw five wine pairs and indicated their preference for one wine in each pair after reading an alleged expert's advice (knowing that a random winner would receive a chosen wine). Finally, they indicated if they perceived the expert as manipulative (two items; 1 = Extremely sincere/manipulative, 7 = Not sincere/manipulative at all; Campbell & Kirmani 2000). Strength had a positive effect on advice taking (i.e., the number of times participants chose a recommended wine, Sniezek & Buckley 1995;  $B = .21$ ,  $t(147) = 2.36$ ,  $p < .05$ ;  $R^2 = .04$ ,  $F(1, 147) = 5.56$ ,  $p = .02$ ). Moreover, as strength increased, participants perceived the expert as less manipulative ( $B = -.13$ ,  $t(146) = -1.68$ ,  $p < .10$ ;  $R^2 = .02$ ,  $F(1, 146) = 2.78$ ,  $p < .10$ ). This, in turn, increased advice taking (LLCI  $> 0$ , ULCI = .12; 90% bootstrap confidence interval). These results exclude participants who opted out of the lottery. Including all participants reinforces the mediation pattern (LLCI  $> 0$ , ULCI = 11; 95% bootstrap confidence interval).

In study 2, participants ( $N = 145$ ;  $Mage = 36.37$ ; 53.8% male; MTurk) wrote about a situation in which they felt physically weak, or strong, or a typical day (this manipulation did not influence affect,  $p < .21$ ). Next, they watched an infomercial and reported their purchase intentions (e.g., "If I

needed/wanted a TV... I would be likely to buy the Panasonic AS640;" 1 = Strongly disagree, 7 = Strongly agree). Participants who recalled being strong expressed higher purchase intentions ( $M = 5.73$ ,  $SD = .86$ ) than participants who recalled being weak ( $M = 4.98$ ,  $SD = 1.63$ ,  $p < .01$ ), or a typical day ( $M = 5.02$ ,  $SD = 1.45$ ;  $p = .01$ ;  $F(2, 141) = 4.65$ ,  $p = 0.01$ ). The control and weakness condition did not differ ( $p > .88$ ). In study 3, we manipulated strength by providing a bogus reference performance on a physical test, and tested the moderating role of persuasion salience. Participants ( $N = 304$ ;  $Mage = 37.11$ ; 51.3% male; MTurk) in the weakness [strength] condition read that the best [worst] performers in their age group could do more than 47 [just 3] push-ups in 1 minute. Next, participants indicated how strong they felt (1 = Very weak, 7 = Very strong). Then, they read a description of a TV; participants in the high salience condition read it was a commercial written by an advertising agency, whereas participants in the low salience condition read that it was a review written by an independent agency (biased vs. independent sources make persuasion intent more salient; Kirmani & Zhu, 2007). Finally, participants filled in their purchase intentions (see study 2), and an attention check.

Participants in the strength (vs. weakness) condition felt stronger ( $M = 4.61$ ,  $SD = 1.60$ ; vs.  $M = 3.21$ ;  $SD = 1.60$ ;  $t(302) = 7.65$ ,  $p < .001$ ). Two validation studies confirmed (respectively) that the strength manipulation affected perceived strength but not self-esteem and that participants in the high salience (vs. low salience) condition were more skeptical about the commercial (i.e. the manipulation succeeded; Kirmani & Zhu, 2007). The predicted interaction emerged ( $F(3, 221) = 5.00$ ,  $p < .05$ ): participants who felt stronger indicated higher purchase intentions when persuasion was less ( $M = 4.89$ ,  $SD = 1.15$ ) versus more salient ( $M = 3.87$ ,  $SD = 1.28$ ;  $F(1, 221) = 17.00$ ,  $p < .001$ ). Salience did not affect purchase intentions among participants who felt weak ( $p = .25$ ). These results exclude participants who failed the attention check. Including them makes the interaction not significant ( $p = .32$ ).

This initial evidence suggests that persuasion intent goes undetected and encounters little resistance among stronger (but not weaker) individuals when persuasion is not salient; however, when persuasion is evident this effect is nulled. This research has important implications. For instance, it could offer guidelines for advertising on mobile fitness apps that track physical prowess (a rapidly growing industry). Moreover, aging consumers become increasingly weaker. If aging consumers tend to resist persuasion, it might be problematic— imagine trying to convince physically frail parents to take their medication. More broadly, patients often get medical advice while they are in a state of physical frailty. Our results suggest that increasing perceptions of strength (e.g., by comparison to a weaker reference point, study 3) may make frail patients more malleable. Physically fit individuals, on the other hand, are malleable with mild persuasion tactics, but may be resistant to overt persuasion attempts. Thus, this research may also aid consumer protection as it speaks to which fraudulent schemes different consumer groups are likely to succumb.

## Look but Don't Touch! The Impact of Interpersonal Haptic Blocking on Compensatory Touching

Christine Ringler (University of Alabama); Nancy J Sirianni (University of Alabama); Anders Gustafsson (Norwegian Business School (BI)); Joann Peck (University of Wisconsin - Madison, USA)

**Brief Abstract:**

This research investigates situations in which frontline employees deliberately restrict customers' access to touch products, and how this understudied form of haptic blocking may increase customers' downstream purchasing. While previous research examines the benefits of increased product touch, we look at temporarily blocking touch. Through two studies, we find that when an employee blocks a customer's haptic perception, this motivates customers to engage in compensatory touching after the initial employee interaction has ceased and leads to significantly increased downstream purchasing. This process is explained by psychological reactance that results from a personally directed loss of customers' freedom to touch.

**Extended Abstract:**

Despite the popularity of online shopping, over 85% of customer purchases still occur in retail stores. The reason customers prefer to shop in stores is "to see, touch, feel, and try out items" (Skrovana 2017). In some instances, the role of the retail employee is to encourage product touch, but, what if an employee temporarily blocks customer touch? Interpersonal haptic blocking is the deliberate limitation of a customer's use of haptics by an employee. This can occur passively via a product demonstration or actively via a "do not touch" instruction. We show that interpersonal haptic blocking leads to feelings of psychological reactance resulting from a loss of sensory freedom.

Psychological reactance is a motivational state directed toward the re-establishment of the threatened or eliminated freedom (Brehm 1966). Once psychological reactance has been engendered, research suggests that the threatened freedom becomes more attractive (Lessne and Notarantonio 1988), and individuals are likely to attempt to reestablish that freedom (Brehm and Brehm 1981). However, they can not acquire just any freedom, only the threatened freedom can be used to restore the customer's perceived freedom (Brehm 1989). We expect that customers who experience interpersonal haptic blocking and its resulting feelings of psychological reactance will attempt to reestablish their haptic freedom after leaving the psychological reactance-inducing exchange. Thus, when permitted to touch again, their subsequent product touching will be intensified so that they may indulge their need to restore this specific freedom.

Additionally, research has shown that touching products facilitates a sense of ownership and increases the likelihood of purchase (Peck and Shu 2009), thus we anticipate compensatory touching leads to increased purchasing.

Study 1 tests whether interpersonal haptic blocking results in an increased level of psychological reactance, an increase in compensatory touching, and that psychological reactance mediates this effect. We randomly assigned 250 students (35.98% female,  $M_{age}=20.89$ ) to interpersonal haptic blocking, display case or control conditions.

In the control condition, the book was laying on the table and a lab assistant stated: "Evaluate the product and let me know when you are finished" (they were free to touch or not). In the display case, participants saw the book in a large clear plexiglass box and received the same instructions. In the interpersonal, "do not touch" was added to the end of the instructions.

After the evaluation, participants completed the psychological reactance scale (adapted from Fitzsimons and Lehman 2004;  $\alpha=.93$ ) and were sent to another station where they read that the



University Bookstore wanted a better understanding of the products students were interested in, and a sampling of products had been provided. Participant evaluation of products was recorded and coded to determine the number of product touches and time spent touching. Participants then answered questions consistent with the cover story.

There was a main effect of haptic blocking on total number of product touches ( $F(2, 236)=4.15, p=.017$ ). Post hoc tests indicate that when interpersonal, this resulted in more touches after ability to touch was restored ( $M=16.53$ ) compared to the control ( $M=11.01; F(1, 236)=7.20, p=.008$ ) and display case conditions ( $M=11.81; F(1, 236)=5.01, p=.026$ ). The difference between the control and display case was not significant ( $F < 1$ ).

Next, the effect of haptic blocking on the amount of time spent touching resulted in a main effect ( $F(2, 236)=5.31, p=.006$ ). Post hoc tests indicate that when interpersonal, this resulted in more time spent touching after ability to touch was restored ( $M=29.22$  seconds) compared to both the control ( $M=17.20; F(1, 236)=8.94, p=.003$ ) and display case condition ( $M=18.48$  seconds;  $F(1, 236)=6.80, p=.01$ ). The difference between the control and display case conditions was not significant ( $F < 1$ ).

A main effect of haptic blocking on psychological reactance ( $F(2, 236)=3.58, p=.029$ ) indicates that when interpersonal, higher levels of psychological reactance ( $M=3.33$ ) compared to the control ( $M=2.88; F(1, 236)=5.98, p=.015$ ) and display case condition ( $M=2.92; F(1, 236)=4.60, p=.033$ ) were found. The difference between the control and display case was not significant ( $F < 1$ ).

Next, we ran a series of mediation models, the first series compared the control condition with the interpersonal on psychological reactance for the two dependent variables of interest. We find a significant indirect effect on total number of product touches and the total amount of time spent touching the products.

In the second series, we compare the display case with the interpersonal on psychological reactance for the dependent variables. We find a significant indirect effect of on total number of product touches and the total amount of time spent touching the products.

In the third series, we compare the display case with the control on psychological reactance for the dependent variables of interest. No significant indirect effects were found (see table 1 for full results).

Our second study tested the prediction that interpersonal haptic blocking increases downstream purchasing. 125 customers at a home goods department store (76% female, 18-65) were randomly assigned to interpersonal or touch conditions.

The manipulation took place in a display area which showcased a customizable closet. A confederate employee asked the customer to examine the product by “looking only” (no touching) and led them through a guided demonstration. Customers in the touch condition were led them through the demonstration by the confederate who had the customer touch the features.

All customers were directed to continue shopping as they normally would. After checkout, assistants recorded the number of items purchased and amount spent.

We found that customers purchased more items when the employee blocked them from touching ( $M=10.50$ ) than when they could touch ( $M=7.60$ ;  $F(1, 118)=4.13$   $p=.044$ ). Further, customers spent more when the employee blocked them from touching ( $M=\$144.00$ ) versus when they could touch ( $M=\$55.93$ ;  $F(1, 118)=7.23$ ,  $p=.008$ ).

Overall, we find that when an employee blocks a customer's ability to touch, this: (1) engenders the customer's feelings of psychological reactance, which results in (2) an increase in downstream product touching and time spent touching, and (3) purchasing. Thus, when an employee blocks a customer's ability to touch a retailer's products, this can have a significant positive impact on downstream compensatory touch behaviors and subsequent purchase.

## Can't Touch Me: The Effect of Loneliness on Preference for Haptic Consumption Experiences

Elena Fumagalli (Universidad Torcuato Di Tella, Argentina); Jaehoon Lee (Southern Illinois University); L. J. SHRUM (HEC Paris, France)

### **Brief Abstract:**

Common wisdom suggests that feeling lonely prompts individuals to seek reconnection with others, such as through interpersonal touch. In the consumerism field, products and services are being designed to compensate for the lack of haptic interaction in mediated communication and online shopping. However, the present research shows that chronically lonely individuals avoid interpersonal touch and that investments in the field of haptics might be unwarranted. Specifically, we find that lonely individuals report lower levels of interpersonal trust and of comfort with interpersonal touch, and that this discomfort spills over to lower preferences for in-store interactions and touch-related products and services.

### **Extended Abstract:**

Even though we live in an era of increasing connectedness and social networking in which the average person spends 135 minutes a day on social media (GlobalWebIndex, 2017), we are in the midst of a loneliness epidemic (Irving, 2018). The question we address in this research is how people respond to—or cope with—loneliness. Research shows that certain types of goods may help alleviate loneliness (Mourey, Olson, & Yoon, 2017), particularly by providing some sort of social reconnection (Chen, Wan, & Levy, 2017; Wang, Zhu, & Shiv, 2012).

One avenue to social reconnection that may help alleviate loneliness and establish reconnection is through interpersonal touch. Humans have an inherent need for interpersonal touch and social connectedness that begins at infancy, and interpersonal touch fosters many positive outcomes, such as increasing positive affect and oxytocin levels (i.e., “the cuddle hormone”), and acting as a salient reminder of social inclusion (Gallace & Spence, 2010). Thus, conventional wisdom might suggest that increasing interpersonal touch may be an antidote for loneliness.

In the present research, we show that in fact the opposite is true, at least for the chronically lonely (long-term loneliness). In three studies, we show that rather than seeking out interpersonal touch, those who are chronically lonely are actually uncomfortable with interpersonal touch, and that this discomfort spills over into in-store interactions with salespeople and other customers. Specifically, we show that chronic loneliness is negatively correlated with preferences for in-store interpersonal

interactions (e.g., interacting with salespeople) and services that involve interpersonal touch (e.g., massage), but unrelated to products that do not involve interpersonal touch (e.g., video game). Further, through both measured mediation and moderation of process methods, we provide evidence that chronically lonely individuals' lower preferences for haptic experiences is mediated by lower levels of interpersonal trust and of comfort with interpersonal touch (serially, in this order). Finally, we show that the sequential mediation just described is moderated by the adoption of active coping strategies (i.e., ones that directly address the problem), such that the sequential mediation effects are eliminated for those who are more likely to adopt active coping strategies.

Summary statistics and scale items for all studies can be seen in Table 1.

Study 1 tested the sequential mediation model and ruled out alternative explanations. Participants ( $n = 199$ ) were members of the Prolific online panel who completed measures of need for product touch, comfort with interpersonal touch, interpersonal trust, fear of contamination, social risk-taking, preferences for both interpersonal and non-interpersonal interactions in a retail setting, and chronic loneliness, in that order.

As expected, the indirect effect of loneliness on preferences for interpersonal interactions through interpersonal trust and interpersonal touch was significant ( $\beta = -.08$ ,  $SE = .03$ , 95% CI  $[-.16 \text{ } -.03]$ ; Hayes Process Model 6), showing that loneliness negatively affects preferences for interpersonal service interactions through its negative impact on both trust and interpersonal touch (Figure 1). Contamination cognitions and social risk-taking are not correlated with chronic loneliness, thus ruling out alternative explanations associated with these factors.

Study 2 attempts to replicate Study 1 using different consumption scenarios that directly assessed preferences for both touch- and non-touch-related consumption experiences, and also tests the hypothesis that the indirect effect observed in Study 1 will be moderated by active coping behavior. Participants ( $n = 201$ ) of the Prolific online panel completed the following measures in the following order: preference for touch-related and non-touch-related consumption activities, comfort with interpersonal touch, interpersonal trust, chronic loneliness, and active/passive coping strategies.

Replicating Study 1, the indirect effect of loneliness on preferences for touch-related experiences through interpersonal trust and interpersonal touch was significant ( $\beta = -.03$ ,  $SE = .02$ , 95% CI  $[-.09 \text{ } -.00]$ ; Figure 2). This indirect effect was moderated by whether participants adopted active coping strategies, such that the negative effect was eliminated when participants adopted active coping ( $\beta = -.05$ ,  $SE = .03$ , 95% CI  $[-.00 \text{ } .12]$ ; Hayes Model 86; Figure 3).

In Study 3, we tested the underlying process using the moderation-of-process method (Spencer, Zanna, & Fong, 2005) by manipulating interpersonal trust, and we also created new haptic interaction scenarios for dependent measures that distinguished between functional (e.g., salesperson taking your measurement) and imposed (e.g., salesperson bumping into you) touch in retail settings.

Participants ( $n = 203$ ) of the Prolific online panel were first randomly assigned to conditions in a two-group (trust: boost vs. no-boost) between-subjects design. Participants in the trust-boost condition read a fictitious article titled "People Are More Trustworthy than We Think" and wrote in support of the article's main argument. Participants in the no-boost condition read a fictitious article titled "Shelf Effacement: How Not to Organize Your Bookshelves" and wrote in support of the main argument.

Preferences for haptic interactions were measured via nine touch-related scenarios that depicted instances of functional and imposed touch between customers and salespersons that were embedded with seven filler ones. We then measured comfort with interpersonal touch, interpersonal trust, and chronic loneliness.

The moderated mediation model was significant (Hayes Model 8; Index = .39, SE = .14, 95% CI= [.11, .65]). Specifically, replicating Studies 1 and 2, the indirect effect of loneliness on preferences for haptic interactions through interpersonal touch was significant only in the no-trust-boost condition (CI trust-boost = [-.15, .24], CI no-trust-boost = [-.52, -.14]), indicating that the negative effect of loneliness on preferences for haptic interactions was eliminated when trust was boosted. These results remained significant when we used the scales of functional and imposed haptic interactions separately (Figure 4).

Throughout three studies, we show that, contrary to both common wisdom and the reconnection hypothesis (DeWall & Richman, 2011), chronically lonely consumers eschew haptic-related consumption experiences because they lack interpersonal trust, which in turn lowers their comfort with interpersonal touch. Taken together, our findings provide evidence that consumers differ in their preference for haptic engagement. Recent studies show that loneliness is widespread among millennials (Twenge, 2014) and, if modern shoppers are characterized by high trait loneliness, marketers' investments in the field of haptics might indeed be unwarranted.

### **Session 3**

#### **Sensory and Hedonic Influences: From Purchase to Disposal - Competitive Paper Session**

*Verlst (2nd Level)*

*Chair: Dionysius Ang, Leeds University Business School*

All That Glitters Is Not Gold: When Glossy Packaging Hurts Brand Trust  
Yegyu Han (Virginia Tech, USA); Mario Pandelaere (Virginia Tech, USA)

##### **Brief Abstract:**

Compared to matte objects, glossy ones not only excel in drawing attention, but also lead to positive evaluations of consumers. Prior literature suggests that consumers' attitudes towards glossy objects are tied to evolutionary needs to survive. Deviating from the literature that shows benefits of glossiness, we show that consumers evaluate a product in a glossy package as less trustworthy because they believe the use of a glossy package indicates a desperate attempt to draw consumers' attention.

##### **Extended Abstract:**

Paying attention to glossy objects is almost an automatic behavior (LaBonte, 2009), since it is closely related to human survival, to find water and food from nature (Hiramatsu & Fujita, 2015; Yang, Kanazawa, & Yamaguchi, 2013). The superiority of glossy packages in drawing consumers' attention could provide a key edge in a highly competitive retail environment (Young, 2004). Although drawing consumers' attention is important to survive in the market (Eliaz & Spiegler, 2011) as it often increases their interest (Greenwald & Leavitt, 1984; MacKenzie, 1986) and thereby positively influences their

choices (Atalay, Bodur, & Rasolofoarison, 2012; Pieters & Warlop, 1999), we propose that effort to grab attention can backfire, once consumers regard it as a marketing tactic. Indeed, consumers negatively evaluate a brand once they realize it is trying to influence them with any marketing tactics, since they feel such practice is unfair (Campbell, 1995; Campbell & Kirmani, 2000). Despite our evolutionary preference for glossiness (Meert, Pandelaere, & Patrick, 2014), we propose that its use can backfire in a product packaging context. Perceived attention-grabbing of a brand can activate negative inferences about credibility, and lower consumers' purchase intention.

In Study 1, we tested whether consumers distrust a brand with glossy packages compared to the matte ones. Participants ( $N = 183$ ) were asked to imagine they were in a grocery store to purchase granola bars and found two brands with the same flavor, one in a glossy and the other in a matte package. They were randomly assigned to one of the two counterbalance conditions where Brand A is glossy (and B is matte) or vice versa. Since Study 1 aimed to see whether consumers have strong associations between a package finish and brand trust, no product images were provided. Participants indicated which of the two brands they would trust more (1 = Definitely Brand A; 4 = Indifferent; 7 = Definitely Brand B). As predicted, participants trusted Brand A more when A was matte and Brand B was glossy than when Brand A was glossy and B was matte ( $F(1, 181) = 5.35, p = .022$ ; MA-is-glossy = 4.36 (1.44) vs. MA-is-matte = 3.89 (1.31)). Thus, the first study confirmed our theorization that people have negative lay beliefs about glossy packages.

Study 2 generalizes the results of Study 1 by using actual images of product packages and using different types of products. Participants ( $N = 121$ ) were asked to imagine that they were a product manager of a company, which is trying to establish a trustworthy brand image to its customers. As a manager, the participants were asked to make a decision to reach the goal by choosing a package between the two. Participants were randomly assigned to two counterbalance conditions of on-screen location of the matte and glossy package (glossy on the left/right side). Then they were asked to indicate which package to choose and which signals a more trustworthy brand, on the same 7-point scales in Study 1. An ANOVA on product choice revealed consistent results for both chocolate ( $F(1, 119) = 60.22, p < .001$ ; MA-is-glossy = 5.10 (1.84) vs. MA-is-matte = 2.52 (1.82)) and granola ( $F(1, 119) = 9.54, p = .003$ ; MA-is-glossy = 4.79 (1.96) vs. MA-is-matte = 3.63 (2.15)), where matte package was preferred for both of the products. The same pattern was observed for perceived trustworthiness (chocolate:  $F(1, 119) = 34.71, p < .001$ , MA-is-glossy = 5.03 (1.58) vs. MA-is-matte = 3.15 (1.92); granola:  $F(1, 119) = 5.13, p = .025$ , MA-is-glossy = 4.66 (1.47) vs. MA-is-matte = 4.02 (1.91)). Mediation analyses showed that trustworthiness successfully mediated the effect on package choice respectively (95% CI for chocolate [.8262, 1.9525]; granola [.0804, 1.0570]).

Studies 1 and 2 demonstrate that package glossiness may harm brand trust. Study 3 aims to test the proposed underlying mechanism that leads consumers to generate negative inferences towards glossy packages. Participants ( $N = 152$ ) were told that a cosmetics company is planning to change its package design and would like to get consumers' evaluations. Two versions of the package (i.e., glossy vs. matte) were presented to all participants, but in a counterbalanced onscreen location, and they were asked to evaluate the trustworthiness exuded by package A and B with three items for each. Participants then reported how attention grabbing each package was and their impression of persuasive intent associated with glossy and matte packages, also with three items each. Consistent with our previous studies, a general linear model with a trustworthiness score for glossy and matte package as within-subjects variables and counterbalance order as a between-subjects variable yielded a significant

effect of package finish ( $F(1, 150) = 21.27, p < .001; M_{\text{glossy}} = 4.88, M_{\text{matte}} = 5.36$ ). In addition, participants perceived the glossy package to be superior in drawing consumers' attention ( $F(1, 150) = 62.31, p < .001; M_{\text{glossy}} = 5.50$  vs.  $M_{\text{matte}} = 4.65$ ) and also to be more likely to reflect a persuasive intent ( $F(1, 150) = 78.12, p < .001; M_{\text{glossy}} = 4.62$  vs.  $M_{\text{matte}} = 3.12$ ). A serial mediation analysis using MEMORE macro on SPSS (Montoya & Hayes, 2017) with attention and perceived persuasive intent as two mediators and the trustworthiness as the dependent variable confirmed the proposed underlying mechanism ( $b = -.18, se = .05, 95\% \text{ CI } [-.3141, -.0938]$  for BC 5,000). Thus, consumers' negative inferences of glossy packaging stems from enhanced attention grabbing and its increased level of perceived persuasive intent.

Across three experiments, the results consistently support our theory that all that glitters is not gold, by showing that the use of a glossy finish can activate consumers' persuasion knowledge, thereby reducing the credibility of a brand that does so. With these findings, we extend previous research of glossiness, and demonstrate the two-sided aspects of attentiongrabbing triggered by design. By showing that drawing attention is not always the best solution to appeal to consumers, we provide an evidence that a solicitation that is too blatant can harm a brand.

## Going My Way? The Effect of Perceived Lighting on Perceptions of Provision and Elimination

Kevin L. Sample (University of Georgia, USA); Julio Sevilla (University of Georgia, USA)

### **Brief Abstract:**

Consumers' reliance on visual information is shown to be susceptible to the influence of perceived lighting directionality. Packaging and promotional cues evoke perceptions that interact with consumers' anticipation regarding providing (e.g., energy drinks) and eliminating (e.g., odor removing spray) products. Specifically, products lit from above appear to be coming, whereas when lit from below they appear to be going. Consequently, products that provide are more preferred when lit from above due to consumers expecting a provider to come closer. Conversely, products that eliminate are more preferred when lit from below due to consumers expecting an eliminating agent to depart.

### **Extended Abstract:**

While prior research has examined the influence of ambient light on consumer behavior (Biswas, Szocs, Chacko & Wansink, 2017; Huang, Dong & Labroo, 2017; Xu & Labroo, 2014), we study lighting from a different perspective – lighting direction. Extant research has noted that consumers see ambiguous objects lit from above as closer (i.e., coming) and lit from below as further (i.e., going; figure 1; Hess 1950; Gibson, 1950; Ramachandran, 1988). We extend this phenomenon to complex product shapes that have a discernable top and bottom, demonstrating that a product can be perceived as more coming (lit from above) or going (lit from below).

Further, in alignment with past work noting how product properties can have metaphorical associations and perceptual influences (Deng & Kahn, 2009; Nelson & Simmons, 2009), we examine the prevalent product properties of provision (i.e., giving a benefit) and elimination (i.e., getting rid of an undesirable). Because of consumer experience, provisional properties/claims generate an anticipation of an arrival (i.e., coming). Conversely, elimination properties/claims generate an anticipation of a departure (i.e., going).

Together, lighting and providing/eliminating properties/claims interact to shape consumer preference. Specifically, consumers prefer lighting from above for providing products, as this matches anticipation/envisioning of coming. Conversely, consumers prefer lighting from below for eliminating products, as this matches anticipation/envisioning of going. Five studies investigate this novel area.

For study 1, we demonstrate that consumers see a product with light from above (vs. below) as more coming (vs. going). Undergraduates ( $n=89$ ) saw a product with light from above or below (figure 2) and were asked about perceived proximity. An ANOVA reveals a significant difference such that light from above appears coming while light from below appears going ( $M_{Above}=-.55$  vs.  $M_{Below}=.15$ ;  $F(1,87)=6.576$ ,  $p=.012$ ).

For study 2, we demonstrate that consumers have perceptual expectations of coming (vs. going) for provision (vs. elimination). MTurk workers ( $n=131$ ) were told to order three of six randomly displayed images of a truck (figure 3) for the delivery (vs. removal) of a new (vs. old) appliance. We expected the first image to be chosen significantly more for delivery (i.e., provision/coming) and the sixth image to be chosen significantly more for removal (i.e., elimination/going). A contingency table analysis of utilization of image 1 reveals a significant difference such that those encountering the provision claim were envisioning coming ( $M_{Provides}=65.7\%$  vs.  $M_{Eliminates}=38.8\%$ ;  $\chi^2(1)=11.582$ ,  $p=.001$ ). Results reverse when looking at utilization of image 6 such that those encountering the elimination claim were envisioning going ( $M_{Provides}=38.8\%$  vs.  $M_{Eliminates}=56.3\%$ ;  $\chi^2(1)=3.996$ ,  $p=.046$ ).

In study 3, we demonstrate that preference is higher for lighting from above with a providing product and for lighting from below for an eliminating product. MTurk workers ( $n=444$ ) were presented with one of four images with either a claim of provision or elimination and lighting from above or below (figure 4). An ANOVA examining preference ( $\alpha = .92$ ) reveals that consumers prefer products lit from above claiming to provide and products lit from below claiming to eliminate (figure 5;  $F(1,440)=10.649$ ,  $p =.001$ ). Simple effects were also significant.

In study 4, we demonstrate the role of the perceptual system through adaptation – a technique commonly employed in perceptual psychology to demonstrate different operations of the perceptual system (Sekuler & Blake, 2002; Uttal, 1981). Participants were shown a large (close) or small (far away) image of a camera. By having participants focus on a distant stimulus (i.e., the small camera), they should be primed to expect something closer next no matter the claim. We did not anticipate any change for those encountering the large camera or a provision claim, thus these results should mirror the results from study 3. However, for those seeing the small camera and elimination claim exhibited preferences should be reversed from study 3 results.

Participants ( $n=345$  MTurk workers) were shown a camera [figure 6: small(150 pixels) vs. large (650 pixels)] for 20-30 seconds, followed by a few inconsequential questions. In a subsequent study, participants were shown two advertisements randomly presented for a face wash with both advertisements having either provisional or elimination claims (figure 7). One advertisement showed a bottle lit from above while the other showed this same bottle lit from below. Assignment and presentation on the screen was completely randomized. We assessed preference by asking participants to choose the ad they preferred. Logistic regression reveals a significant interaction (figure 8) based on the camera size and claim seen ( $\beta=.335$ ,  $\chi^2(1)=5.927$ ,  $p=.015$ ). As expected, there was a simple effect

for elimination claim in support of our prediction ( $M_{Large}=51.8\%$  vs.  $M_{Small}=27.0\%$ ;  $\beta=-.533$ ,  $\chi^2(1)=7.484$ ,  $p=.006$ ), but not for provision ( $p=.48$ ).

In study 5, we demonstrate that consumers prefer matched lighting and claims over no directional lighting. MTurk workers ( $n=225$ ) were randomly shown one pair of images with a claim of either provision or elimination on both advertisements. There was one experimental image, with lighting from above or below, and one control image with no apparent directional lighting (figure 9), resulting in a 2 (claim: provision vs. provision) X 2 (perceived lighting: above vs. below) between-subjects design. Thus, every participant saw a control image with no directional lighting. Presentation and assignment of images was completely randomized. Participants were asked which product they preferred, would be more likely to purchase, and would pay more for. Logistic regression reveals a significant interaction for preference ( $\beta=.581$ ,  $\chi^2(1)=17.287$ ,  $p<.001$ ) and significant simple effects for both provision and elimination (figure 10). Even though presentation of image location was randomized for all three questions, similar significant interactions and simple effects were found for purchase intentions (figure 11;  $\beta=.510$ ,  $\chi^2(1)=13.507$ ,  $p<.001$ ) and willingness to pay (figure 12;  $\beta=.399$ ,  $\chi^2(1)=8.452$ ,  $p=.004$ ).

The present work investigates the role of lighting directionality and perceptual expectations regarding product properties in an increasingly visually presented and assessed marketplace (Kane & Pear, 2016). Products lit from above (i.e., coming) better match consumers' expectations for products that provide (i.e., coming), but products lit from below (i.e., going) better match consumers' expectations for products that eliminate (i.e., going). This subtle manipulation has critically important implications for both researchers and practitioners in an increasingly crowded visual marketplace.

## Put the Chips & Candies First: How Food Assortments' In-Store Positioning Can Make a Difference

Julie Verstraeten (Ghent University, Belgium); Maggie Geuens (Ghent University, Belgium)

### **Brief Abstract:**

Nevertheless many retailers position fresh produce at the store entrance and indulgent food products more store-inwards, this research reveals that this practice instigates unhealthy purchases. In three studies consumers' shopping baskets were healthier when they encountered healthy food assortments at the beginning (vs. end) of their shopping trip. We propose that this is due to will-power depletion and licensing, leading consumers to entitle themselves more unhealthy foods towards the end of their shopping trip. In light of the persisting obesity epidemic, this research presents an alternative approach to nudge consumers to healthier purchases.

### **Extended Abstract:**

The goal of this research is to enhance our understanding of how the in-store sequence of healthy and unhealthy food assortments impacts (un)healthy choices [15]. As 70% of our grocery decisions are made in-store [6], the retail environment plays a crucial role in consumers' purchases [1, 4, 3, 5]. Specifically, this research investigates if the retail trend to position healthy foods at the store entrance and unhealthy foods more store inwards—near the check-out—affects the healthiness of consumers' shopping baskets.



The last decennia, retailers have increasingly opted to expose their customers to fresh produce like fruit and vegetables at the store entrance and to more indulgent product categories like snacks and confectionary store inwards [8, 16], as they believe this practice enhances their store image [2, 13]. To date, literature mostly focused on single binary choice contexts (i.e., choosing between an apple or a cake), remaining silent on how consumers cope with consecutive choices between healthy and unhealthy products, as is typical for grocery shopping.

While ‘goal balancing’ literature assumes that consumers alternate between healthy and indulgent goals to arrive at a balance between both [7, 9] and as such that the sequence of food assortments may not matter much, licensing theory points to adverse effects in case of a healthy-unhealthy sequence. Licensing theory states that committing to a virtuous act in a preceding choice (e.g., donating money), activates a positive self-concept and subsequently ‘licenses’ the choice of a less virtuous option (e.g., buying luxuries) [12]. As such, a healthy-unhealthy assortment sequence could boost consumers’ self-concept (if they buy healthy products) leading them to license successive unhealthy purchases. We postulate the following hypotheses:

H1: In stores that apply a ‘healthy-unhealthy’ (vs. ‘unhealthy-healthy’) layout, consumers buy relatively more unhealthy foods.

H2: Licensing underlies this effect.

## STUDIES

STUDY 1 used a between subjects design with two conditions (sequence: healthy-unhealthy vs. unhealthy-healthy). Respondents were recruited via the University’s online Consumer Panel. They all (N = 93) received the same online grocery shopping task (i.e., shop for yourself, you have no supplies) and were then randomly assigned to one of the conditions. In the ‘healthy-unhealthy’ condition, respondents were first exposed to twelve healthy assortments (e.g., fruit, vegetables... [14]) on the computer. Each assortment contained ten products and respondents could select one, more or none of them. Next, they were confronted with twelve unhealthy assortments (e.g. chocolate, candy... [14]). In the ‘unhealthy-healthy’ condition the order was reversed. In line with expectations, respondents’ shopping baskets contained more unhealthy foods (M=9.76) in the ‘healthy-unhealthy’ than ‘unhealthy-healthy’ condition (M=6.40;  $t(73.69)=-2.60, p=.01$ ), but they also purchased more products in total (M=28.87) in the former than latter condition (M =23.15;  $t(63.56)=-2.20, p=.03$ ), which supports the “licensing” account.

STUDY 2 replicates these findings using the same conditions, but a different approach and refining the DV. Again, respondents were recruited via the University’s online Consumer Panel and they all (N = 74) read the same scenario. Next, they saw a picture of a shopping shelf with healthy products in the ‘healthy-unhealthy’ condition. Respondents could click on the products on this picture and the software as such recorded their choices. Alike, they subsequently encountered a shelf with unhealthy products and vice versa in the ‘unhealthy-healthy’ condition. This time, we calculated the (un)healthiness of shopping baskets by averaging the (un)healthiness ratings of each product in the basket. To this end, we drew the food products’ (un)healthiness rating from prior research (1=“Very healthy,” 9=“Very unhealthy”; [11]). Shopping baskets were healthier in the ‘healthy-unhealthy’ (M=4.04) than in the ‘unhealthy-healthy’ condition (M=3.75;  $t(72)=-2.01, p<.05$ ). Respondents also indicated that they felt more “tempted” by (M=50.09) and found it more “difficult to resist” (M=43.09) the unhealthy foods in the ‘healthy-unhealthy’ (vs. ‘unhealthy-healthy’) condition (Mtempted=36.80;

$t(72)=-2.05, p<.05$  &  $M_{resist}=31.66; t(72)=-1.83, p=.07$ ).

STUDY 3 aimed to replicate these findings with real choices. Therefore, a small grocery store was constructed in the laboratory; a shopping rack was positioned such that only its frontside was visible when participants entered the room. In the ‘healthy-unhealthy’ condition, healthy food assortments were positioned at the rack’s front side and unhealthy foods at its back- side and vice versa for the ‘unhealthy-healthy’ condition. Undergraduates ( $N = 86$ ) received the same shopping task and were randomly assigned to one of the two conditions. Afterwards, we measured to what extent they licensed themselves unhealthy foods on a slider [1-100]. Again, shopping baskets were healthier in the ‘healthy-unhealthy’ ( $M=2.83$ ) than in the ‘unhealthy-healthy’ condition ( $M=2.03; t(78.22)=2.29, p=.03$ ). Importantly, consumers found it more difficult to license themselves unhealthy purchases in the ‘unhealthy-healthy’ (vs. ‘healthy-unhealthy’) condition. A mediation analysis [10] indicated that, as we hypothesized, decreased licensing in the ‘unhealthy-healthy’ condition drove this effect ( $ab=-.18, SE=.13; 95\% CI=[-.52, -.01]$ )

Nowadays, many retailers run online web stores, so STUDY 4 explores to what extent our results generalize to this context. Undergraduates ( $N = 115$ ) read the same scenario and then shopped for groceries in a real online web store, which we specifically constructed for this study. The homepage depicted thirteen healthy and unhealthy categories and we manipulated the order in which these categories were listed. Whereas in Study 1 and 2 participants could not return to previous product categories, to change their choices, this study did allow them to do so. Moreover, in this study participants saw the budget they spend and could overview their grocery basket, which was not the case in the previous online studies. We pretested ( $N = 419$ ) the 280 products used on the (un)healthiness-continuum [11]. The results remain to be announced.

This research aims to contribute to a better understanding of the impact of retail environments on consumers’ unhealthy choices. In light of the obesity epidemic, we believe this insight offers substantive relevance for retailers, public policy makers, and consumers. Indeed, despite that fact that many retailers position fresh produce at the store entrance, our findings suggest that positioning unhealthy foods instead, thus reversing stores’ layout, might contribute to healthier purchase-patterns. Thus, we propose to nudge consumers towards healthier choices by reversing the sequence of food assortments in grocery stores.

## Consumer Disposal Decisions for Hedonic and Utilitarian Products

Mustafa Karataş (Koc University, Turkey); Rabia Bayer (Koc University, Turkey); Zeynep Gürhan-Canli (Koc University, Turkey)

### **Brief Abstract:**

We show that hedonic products are more likely to be recycled, whereas utilitarian products are more likely to be trashed. Different underlying mechanisms drive this effect. For hedonic products, whose consumption is associated with guilt, consumers tend to use recycling as a guilt-reduction mechanism. Consequently, providing consumers with a guilt reduction cue attenuates this effect for hedonic products. For utilitarian products, however, consumers’ disposal decision is driven by perceiving little value from recycling due to raw material degradation. Thus, trashing intentions for utilitarian products further increase when it is salient that the product is worn out.

### **Extended Abstract:**

Despite early suggestions that product characteristics might play a significant role at the stage of disposition (Jacoby, Berning, & Dietvorst, 1977), extant research largely ignored the product characteristics on disposal behavior. In the current research, we investigate how hedonism/utilitarianism dimension of a product impacts recycling versus trashing intentions.

Based on past research suggesting (1) that hedonic products evokes a sense of guilt (Strahilevitz & Myers, 1998), and (2) that recycling is a compensatory behavior consumers actively engage in when they experience guilt related to a consumption act (Dahl et al., 2003), we predict that hedonic products are more likely to be recycled than trashed.

The choice and consumption of utilitarian products, however, are not associated with guilt. Hence, they do not motivate consumers to engage in guilt-reducing compensatory acts like recycling. On the other hand, the disposition decision for utilitarian products is likely to be driven by physical obsolescence (Cooper, 2004). In other words, consumers dispose of utilitarian products when they are no longer physically capable of conferring the practical utility they are used for. Following this, we predict that consumers perceive little value from recycling utilitarian products—which are perceived to be depreciated—at the stage of disposition, which increases trashing intentions.

We tested our predictions in four experiments. In study 1, three research assistants observed student customers' disposition behavior of utilitarian or hedonic coffees at the cafeteria of a college. Among 59 utilitarian coffee cups, 34 cups (57.6%) were trashed whereas 25 cups (42.4%) were recycled. Conversely, among 68 cups of hedonic types of coffee, more cups were recycled (72.1%) than trashed (27.9%). A binary logistic regression revealed that this effect was significant ( $\chi^2(1)=11.05, p<.001$ ).

In study 2, Mechanical Turk participants (N=104) indicated either a hedonic or a utilitarian possession. Next, they were asked to state their intentions to either recycle or trash this product when they decide to no longer use it on a 101-point scale. Since age had a marginally significant impact ( $p<.07$ ), it was included as a covariate. A two-way ANOVA yielded a significant interaction ( $F(1, 99)=10.50, p<.002$ ). In the utilitarian condition, participants indicated a significantly higher intention to trash ( $M=45.8$ ) than to recycle ( $M=25.5; F(1, 99)=5.33, p<.03$ ). In the hedonic product condition, this pattern reversed ( $M_{\text{recycle}}=44.6, M_{\text{trash}}=22.6; F(1, 99)=5.16, p<.03$ ).

In study 3 (N=200), we kept the product constant across conditions, and manipulated the usage goal in an aim to provide a more controlled test. We further aimed at testing the process for hedonic products by either providing or not providing a guilt-reduction cue. The study had a 2(consumption goal: utilitarian vs. hedonic)x2(disposal: trashing vs. recycling)x2(guilt: low vs. high), between-subjects design. In the hedonic (vs. utilitarian) condition, participants were asked to imagine that they had a kindle for reading lowbrow (vs. highbrow) books. Following past research (Choi et al., 2014), we used price promotion as the guilt-reducing cue. In the high-guilt (vs. low-guilt) condition, participants were told that they bought the kindle at original (vs. discounted) price. Finally, participants were asked indicated their intention to either recycle or trash the kindle when they no longer use it.

Supporting our basic prediction, the three-way ANOVA yielded a significant interaction of usage goal and disposal type ( $F(1,192)=19.45, p<.001$ ). For the hedonic kindle, consumers reported a significantly higher intention to recycle ( $M_{\text{recycle}}=50.0, M_{\text{trash}}=30.6; F(1,192)=8.83, p<.004$ ). Conversely,

trashing intentions were higher for the utilitarian kindle ( $M_{\text{recycle}}=23.5$ ,  $M_{\text{trash}}=45.6$ ;  $F(1,192)=10.66$ ,  $p=.001$ ). Further analyses provided support also for the process prediction. Under high guilt, recycling intentions for the hedonic kindle ( $M=62.0$ ) were significantly higher than trashing intentions ( $M=28.7$ ;  $F(1,192)=11.88$ ,  $p=.45$ ). On the other hand, providing the guilt reduction cue did not change the pattern of findings in the utilitarian condition. Consumers were more likely to trash a utilitarian kindle under both high guilt ( $M_{\text{trash}}=47.2$ ,  $M_{\text{recycle}}=24.8$ ;  $F(1,192)=5.48$ ,  $p=.02$ ) and low guilt ( $M_{\text{trash}}=44.1$ ,  $M_{\text{recycle}}=22.2$ ;  $F(1,192)=5.19$ ,  $p<.025$ ).

We tested the process prediction for utilitarian products in Study 4 ( $N=240$ ), which employed a 2(usage goal: hedonic vs. utilitarian) $\times$ 2(disposal: recycling vs. trashing) $\times$ 2(product condition: not worn-out vs. worn-out), between-subjects design. Participants first thought about a shirt they use either for utilitarian or hedonic purposes. Next, they were asked to further imagine that they decided to no longer use this product. In the worn-out condition, they were given the additional information that the reason why they made such a decision was because the shirt was worn and torn.

The results replicated our basic prediction by yielding a significant interaction of usage goal and disposal type ( $F(1,232)=60.39$ ,  $p<.001$ ). In the utilitarian condition, trashing intentions were significantly higher ( $M_{\text{trash}}=66.4$ ,  $M_{\text{recycle}}=33.3$ ;  $F(1,232)=33.73$ ,  $p<.001$ ). This pattern reversed in the hedonic condition ( $M_{\text{recycle}}=63.8$ ,  $M_{\text{trashing}}=33.1$ ;  $F(1,232)=26.91$ ,  $p<.001$ ). The worn-out condition of the shirt did not influence the disposal intentions for the hedonic product. When the shirt was hedonic, it was more likely to be recycled in both wornout ( $M_{\text{recycle}} = 62.6$ ,  $M_{\text{trash}} = 39.7$ ;  $F(1,232)=7.46$ ,  $p<.01$ ) and not worn-out ( $M_{\text{recycle}}=65.1$ ,  $M_{\text{trash}}=27.1$ ;  $F(1,232)=21.37$ ,  $p<.001$ ) conditions. The physical condition of the shirt, however, exerted a significant influence on consumers' disposal intentions when the shirt was utilitarian. In not worn-out condition, trashing intentions ( $M=58.4$ ) were significantly higher than recycling intentions ( $M=40.3$ ;  $F(1,232)=5.06$ ,  $p=.025$ ). When the utilitarian product was worn-out, the significance of the difference between trashing ( $M=74.9$ ) and recycling ( $M=25.8$ ) improved ( $F(1, 232)=34.89$ ,  $p<.001$ ). This improvement occurred because trashing intentions significantly increased ( $M_{\text{worn-out}}=74.9$ ,  $M_{\text{no worn-out}}=58.4$ ;  $F(1,232)=4.28$ ,  $p<.05$ ).

The current research advances extant knowledge on consumer disposal behavior by investigating the impact of product type—as it relates to hedonic and utilitarian perceptions—on disposal decisions. Our findings also provide significant implications for public policy makers, who put significant efforts to increase recycling figures. Most importantly, public policy makers should coordinate their efforts with companies offering utilitarian consumer products, which are more likely to be trashed by consumers at the stage of disposition. Moreover, public policy efforts should communicate with consumers that any product—regardless of physical condition at the stage of disposition—has a significant recycling value.

## **Brands and Companies: Consumer Impressions and Reactions - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Chi Hoang, Norwegian School of Management, Norway*

Resolving Humorous Incongruity in Advertising Facilitates Impressions of Firm Competence

Chi Hoang (Norwegian School of Management, Norway); Klemens Knoferle (Norwegian School of Management, Norway); Luk Warlop (Norwegian School of Management, Norway)

**Brief Abstract:**

In four studies, we show that humorous incongruity in advertising triggers inferences of increased advertiser competence in consumers who successfully decode the incongruity. A boundary condition for the effect of incongruity-resolution is advertising agencies – and not advertisers – being identified as the main source of humor. Process evidence suggests that the effect is driven by consumers projecting their own incongruity resolution competence to the advertisers. We discuss implications for the use of humor in impression management.

**Extended Abstract:**

Humor is a common executional tactic in advertising (Eisend, 2009). Given that humor affects impression formation in inter-individual settings (Greengross, Martin, & Miller, 2012), we propose that humor influences the impressions that consumers form of a company that uses humor in advertising. Although both warmth and competence impressions can result from observing humor, we focus on the competence impressions, which take priority in consumers' choice of products and service providers (Kirmani, Hamilton, Thompson, & Lantzy, 2017). The first goal of this research is, therefore, to identify a humor execution that particularly enhances competence impressions of advertisers. The second goal is to explain why this effect occurs.

Research has identified three humor processes that can elicit laughter, namely incongruity-resolution, tension-relief, and humorous disparagement (Speck, 1991). Incongruity-resolution represents a humor process in which perceivers first experience something surprising, peculiar, or unusual and later are able to resolve it. This process is characteristic of humor forms such as puns, punchlines, or comic irony. Since the resolution of incongruity requires cognitive skills (Martin, 2010), we predict that incongruous humor, if successfully resolved, triggers competence impressions of advertisers. Tension-relief, on the other hand, mainly induces laughter as a way to release nervous energy. This humor process leads perceivers to experience empathetic emotions, which can be transferred to improve any subsequently evaluations of advertisers, but not specifically competence evaluations. Lastly, humorous disparagement mostly harms, rather than improves competence impressions, since it may indicate the deprecators' unjust ridicule and ignorance of social boundaries (i.e. otherdisparagement) or draws attention to the deprecators' real weaknesses (i.e. selfdisparagement) (Greengross & Miller, 2008).

Study 1 (N = 3487) explored the effects of all three humor executions. We distributed 300 real ads to eight groups of Mturk raters; each group rated a subset of ads on a different variable. Specifically, a group evaluated either the extent to which ads used one of the three humor executions or rated ads on one of the impression dimensions (warmth/ competence). The results indicated that both incongruity-resolution and tension-relief had positive effects on competence impressions, while both self- and other-disparagement had negative effects. Incongruity-resolution did not alter warmth impressions, while tension-relief enhanced both warmth and competence impressions. This suggests that tension-relief improved the overall impression of advertisers via a rather generic affect transfer account. Contrarily, humorous incongruity, once successfully resolved, specifically and most strongly enhanced competence impressions. Our subsequent studies, hence, focused on incongruity-resolution.

Study 2 (N = 100) replicated the effect of incongruity-resolution on competence impressions. Since Study 1 was a correlational study, an alternative explanation for its findings may be that competent advertisers tend to use incongruous humor (rather than incongruence-based humor triggering competence impressions). To rule out this explanation, we asked Mturk participants to evaluate incongruous/congruous ads of the same advertisers; their impressions of the advertisers were then compared across ad conditions and participants. The results confirmed a positive causal relationship between humorous incongruity and competence impressions.

Study 3 (N = 300) examined whether the effect of incongruity-resolution persisted when the advertisers were not perceived as the humor source (i.e. when an external agency produced the ads). Furthermore, since incongruous ads are often creative, Study 3 examined whether creativity was the driver of the effect. The study had a 2 (ad: incongruous vs. congruous)  $\times$  2 (ad agency: major vs. minor) between-subject design. The ad-agency manipulation was intended to alter the belief about whether the advertisers or the agencies were the source of humor. Specifically, we predicted that when consumers perceived a bigger (compared to smaller) external agency as being responsible for the ad, they would be less likely to see the advertisers as the main contributors to the ads, and thus less likely to form competence impressions about the advertisers. The results confirmed our prediction: Incongruity-based humor, when successfully resolved, enhanced competence impressions of the advertisers, but only in the minor-agency condition. Furthermore, when controlling for the effect of perceived ad creativity, the positive effect of incongruity-resolution remained, suggesting that creativity was not the only driver of the effect.

Study 4 (N = 301) tested a competence projection process as a potential driver of the effect of incongruity-resolution. Extant research supports the idea that appreciation of humor, especially incongruity-based humor, signals similarity between the perceivers and the source of humor (Flamson & Barrett, 2008). On one hand, similarity is an antecedent of projection, the act of introspecting one's own qualities and ascribing them to others (Ames, 2004). On the other hand, resolution of incongruity may signal to the perceivers their mastery of competent skills such as flexible thinking and problem solving (Martin, 2010). We thus proposed that perceivers, while resolving and appreciating incongruity-based humor, may project their perceived self-competence to the advertisers. To test this process, each participant in Study 4 evaluated one ad (incongruous or congruous) on the measures of incongruity, ad familiarity, advertiser competence, self-perception of competence, and perceived self-advertiser similarity. We then ran a serial mediation model where incongruity and-resolution was the independent variable, advertiser competence is the dependent variable, while self-perception of competence and perceived self-advertiser similarity were the two mediators. The results confirmed significant serial mediation, and thus supported the proposed process. Particularly, those who successfully decoded incongruous humor first perceived themselves as more competent and then more similar to the advertisers (on competence domains); this dual perception (which might have caused competence projection) then led to increased competence impressions of the advertisers.

It is well established that humor influences our impressions of people in social settings. However, the fact that this mechanism also applies to companies using humor in their marketing has not been demonstrated until now. Our research addresses this gap by documenting that incongruity-resolution is the only major humor execution that specifically enhances competence impressions of advertisers. This effect seems to work via competence projection, a novel process that distinguishes incongruity-resolution from other types of humor. Practically, our findings provide implications to optimize the use

of humor in impression management, which is essential in guiding consumers' choices and interactions with companies.

## The Shame of It: Consumer Response to Transgressive In-Group Brand Behavior Daniel Villanova (University of Arkansas, USA); Ted Matherly (Oklahoma State University, USA)

### **Brief Abstract:**

Individuals with high self-brand connection respond to negative information about their brand by defending it, because they view this information as a threat to themselves. When this negative information is transgressive brand usage by others, highly connected consumers maintain positive evaluations of the brand, but we argue they experience vicarious shame. Because they perceive these behaviors as reflecting poorly on themselves, they experience identity threat. We demonstrate these effects in four studies, showing that this negative experience also motivates highly connected observers to distance themselves from the brand, and observe actual distancing behavior in real-world data collected from Twitter.

### **Extended Abstract:**

Individuals with high self-brand connection respond to negative information about their brand by maintaining their positive attitudes towards it (Cheng, White and Chaplin 2012; Swaminathan, Page and Gurhan-Canli 2007). They do so because the connection between the brand and their self-concept leads them to view this information as identity threat, and protect the brand by protecting themselves (Angle and Forehand 2016; Chae, Dahl and Zhu 2017). Even when the source of the negative information is transgressive behavior by other brand users, such as through conspicuous brand usage (Cannon and Rucker 2015), highly connected consumers will maintain positive attitudes towards the brand, but those whose connections are weaker will not (Ferraro, Kirmani, and Matherly 2013).

While they may maintain positive attitudes, we argue they experience self-conscious emotions, in the form of vicarious shame (Brown and Cehajic 2008; Johns, Schmader and Lickel 2005), where individuals experience shame due to the behavior of other group members. These group-based emotional responses are likely to occur when an in-group member behaves transgressively (Doosje, et al. 2006). Because other users form a part of the individual's social identity, transgressive behavior should prompt social identity threats (Reed and Forehand 2016). The experience of vicarious shame and subsequent identity threat motivates individuals to distance themselves when they share a social identity with the transgressor (Lickel et al. 2005).

We predict that, when observing transgressive brand usage, higher levels of connection to the brand will lead to higher levels of vicarious shame, and that this motivates them to distance themselves from the brand and other brand users, reflected in attenuation of the otherwise positive relationship between brand connection and distancing. We test these predictions in four studies.

Study 1 used a 2 (transgressiveness: low, high) design, with self-brand connection (SBC) as a measured factor. MTurk participants (N = 319) were shown videos of a person using Beats headphones in a coffee shop. In the low transgressiveness condition, he puts his headphones on and drinks coffee. In the high transgressiveness condition, after putting on his headphones, he looks around the room, ostentatiously showing off the Beats logo. After the video, participants rated their distancing

motivation (Schmader and Lickel 2006), vicarious shame (Welten, et al. 2012), and their SBC to Beats (Escalas and Bettman 2005). A regression revealed interaction effects of transgressiveness and SBC on vicarious shame ( $t(315) = 2.11, p = .036$ ) and distancing ( $t(315) = 2.60, p = .010$ , see figure 1). A moderated mediation analysis (Hayes 2013) revealed a significant indirect effect on distancing through vicarious shame.

Study 2 examined the process, which prior work has argued can occur through two mechanisms: empathy, where observers are able to imagine experience the situation from their perspective, and identity threat, where observers feel that the behavior reflects poorly on the shared identity (Welten, et al. 2012; Hawk, et al. 2011). By providing participants with an opportunity to self-affirm, identity threat should be attenuated. The study used a 2 (transgressiveness: low, high) X 2 (self-affirmation: control, present) design, with SBC as a measured factor ( $N = 203$ , undergraduates). Transgressiveness was manipulated as in S1, and was followed by either a personal characteristics/values self-affirmation task adapted from prior work (Steele 1988; White and Argo 2009), or a distractor task. A regression revealed a three-way interaction effect on vicarious shame ( $t(195) = -1.99, p = .048$ , see figure 2); in the control condition, the interaction effects replicated those of study 1 ( $t(195) = 2.88, p = .004$ ), but in the self-affirmation condition this interaction was not significant ( $t(195) = .45, p = .657$ ), and similar results were obtained for distancing. In a process analysis, we observed a significant indirect effect in the high transgressiveness-control condition (replicating study 1), but no effects were observed when participants self-affirmed.

In study 3, we test a boundary condition in a justification for the behavior. The study used a 2 (transgressiveness: high, justified) design with SBC as a measured factor ( $N = 226$ , MTurk). Participants viewed a photo from Instagram where the target flaunted Nike shoes, but in the justified condition, text indicating that the post was sponsored content was included. Significant interactions were observed for vicarious shame ( $t(223) = 2.44, p = .015$ ) and distancing ( $b = -.45, t(223) = -5.45, p < .001$ , see figure 3), and there was a significant indirect effect through vicarious shame on distancing, with justification attenuating vicarious shame and the effect on distancing.

In study 4, we examine transgressive behavior on Twitter by fans of sports teams following championship wins. Tweets from a sample of followers during and for one month after the season for the two most recent championship winning teams in the four major U.S. leagues were collected. SBC was measured by the number of tweets mentioning the team, league or sport made by followers, and distancing was measured by the number of tweets mentioning the team in the month after the championship. Transgressiveness was operationalized through bandwagon behavior, measured as the number of followers who only tweeted about the team after the win, and analysis of their tweets indicated they engaged in transgressive namedropping (Cannon and Rucker 2015). A negative binomial model revealed a significant interaction effect ( $b = -.491, z = -10.91, p < .001$ ), with the presence of more bandwagon fans leading to less frequent tweeting about the team after the championship for highly connected consumers (see figure 4). These results were robust to a variety of alternative specifications, including measuring transgressiveness through profanity use and SBC through “BIRGing” tweets (Cialdini, et al. 1976), and the effects did not occur for opponents, suggesting they are specific to the target brand.

Taken together, our results show that highly connected consumers experience vicarious shame after observing transgressive brand usage, and this motivates them to distance themselves from the brand,



both in measured motives and in actual behavior. This demonstrates that the insulating effects of brand connections may have limits, and also highlights how broad exposure of such behavior through social media may create problems for brand managers.

## Twins Raised in Different Families: An Integrative Framework to Bridge Brand Transgression and Service Failure-Recovery

Mansur Khamitov (Nanyang Technological University, Singapore); Yany Grégoire (HEC Montreal, Canada); Anshu Suri (HEC Montreal, Canada)

### **Brief Abstract:**

Research on brand transgressions and service failure-recovery appear to study a similar phenomenon, yet both streams developed surprisingly independently and with limited reference to each other. In response, we synthesize the growing brand transgression and service failure-recovery literatures by systematically reviewing 203 articles across 21 years using a 10-dimension integrative conceptual framework. Along the way, we explicate complementary insights, future research avenues, and best practices to encourage consumer psychologists to contribute to the interface between these two managerially and theoretically important fields.

### **Extended Abstract:**

There has been a swell of interest among consumer psychologists in services as well as branding pertaining to the role of negative critical incidents and customers' responses to such incidents. In services, the service failure-recovery stream (SFR) has emerged with researchers investigating various manners in which such failures manifest and how customers respond to both failure and recovery by service firms. A tradition among services scholars has been to explore service executions that fall below or disappoint the expectation of customers (Tax et al., 1998; Smith et al., 1999). Similarly, branding scholars investigated brands' acts that violate norms endorsed by consumers (Aaker, Fournier, & Brasel, 2004). Within branding, this sub-field of brand transgression (BT) has developed which explores the role of brands' wrongdoings and how consumers react to them. These two streams appear to study the same phenomenon—that is, individual conflict between customers and firms/brands.

Despite their common focus, these two streams developed surprisingly independently, with limited reference to each other. This situation is unfortunate given that the streams appear to study a similar phenomenon while using rather diverging perspectives, theories, and methods. We argue this strict division of labor is not only unjustified but also an obstacle to fostering major advancements. This is consistent with a recent notable call for cross-level integration (Fournier & Alvarez, 2013), whereby scholars claim it is critical to “integrate and further articulate existing research under the science of negative relationships umbrella, including theory on BT and SFR.”

To generate our database, we searched all relevant literature that touched on SFR and BT phenomena. For inclusion in our systematic review, we retained articles and peer-reviewed book chapters which included an act interpretable as SFR and/or BT. Using studies from April 1998 through May 2018, our final database contains 203 publications over 21 years.

Our results suggest SFR researchers have used a rather “macro”, managerial lens to understand the phenomenon. Most proposed theories have clear implications for managers. The choice of these

theories seems primarily motivated by relevance and pursuit of external validity. As a way to move forward, this stream should consider using theoretical frameworks that offer a “micro” perspective, with a greater emphasis on mental processes and counterintuitive findings. For instance, SFR could go beyond the adoption of a B2B relationship paradigm (Hibbard et al., 2003) and explore theories from interpersonal relationships (Berscheid, 1994). Turning to BT, the theories utilized naturally focus on internal validity, causality and process evaluation. This stream is advised to integrate theories that could offer a “macro” perspective, with a greater focus on relevance, usefulness, and managerial implications. We encourage this stream to expand beyond psychological application, so it becomes more useable for managers. To do, this stream could dive deeper into justice theory and the notion of recovery (Smith et al. 1999).

Our findings also indicate an agreement between the two literatures about the basic cognitive foundations—i.e., external attributions, severity, and type of failure or transgression—used to understand a negative event. Importantly, we believe that the strong SFR focus on the notion of recovery may have become problematic, especially when researchers are interested in mapping a new phenomenon. Without a thorough understanding of the focal event, the design of any recovery becomes the equivalent of putting “the cart before the horse.” We encourage SFR researchers to actualize their view of an initial failure by using research in BT, which tends to focus on the initial act of transgression itself. In turn, BT keeps introducing novel theories with limited reference to the usual stages of a negative event (i.e., focal event, recovery, postrecovery). We believe BT would gain from having its theories organized according to this logical sequence. Building on SFR, some theories naturally fit certain stages—e.g., attribution theory best applies to the initial event whereas justice maps well onto the recovery stage.

A reliable conclusion at the intersection of two streams is a moderate overlap with respect to examining negative emotions (anger) and some cognitions (perceived betrayal). However, while certain phenomena can be best captured by models with multiple simultaneous or serial mediators, it is important for both areas to thoroughly investigate conditions under which certain process mechanism (forgiveness) hold over others (reconciliation), thus reconciling extant work on processes. Additionally, the predominant focus in both streams has been to investigate the negative emotions and cognitions mediating the effect of SFR and BT on consumer reactions, however not all consumers respond bitterly to such negative incidents. Therefore, future research should pay more attention to the process variables such as sympathy and forgiveness and conditions under which they prevail over their negative counterparts.

Lastly, the results suggest BT researchers have traditionally emphasized individual differences and personality traits as focal moderators. This represents an area where BT can inspire SFR to gain a more in-depth understanding of how customer differentially respond to SFR as a function of their individual characteristics. SFR would benefit from exploring more deeply the role of a variety of individual differences and their moderating impact on customer’s response to both failure and recovery. For instance, one avenue is to go beyond examination of consumers’ conflict style (Beverland et al., 2010) to explore the moderating influence of attachment (Paulssen & Bagozzi, 2009), thinking (Lee et al., 2011), and attribution (Um, 2013) styles.

This systematic review seeks to showcase how SFR in concert with BT can inform and enrich each other as well as our understanding of the broader topic of negative critical incidents. Although the

literature generally treats these streams independently, we propose an integrative approach. Such a synthesis has the potential to explain the origins, evolution, and current status of this whole field that focuses on an individual conflict between customers and firms/brands as well as advance a series of insights, future avenues, and best practices. Additionally, this review facilitates a more impactful future research agenda in both theory and practice at the interface of BT and SFR from the perspective of advancing a science of negative critical incidents (Fournier & Alvarez, 2013).

## **Numerosity Effects on Debt Payments, Price Promotions, Price Quotes, and Ranking - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Tamanna Hussain, prospective PhD student*

### **Minimum Payments Alter Debt Repayment Strategies Across Multiple Cards**

Samuel David Hirshman (Chicago Booth); Abigail Sussman (University of Chicago, USA)

#### **Brief Abstract:**

The average US consumer holds about 4 credit cards, but fail to make repayment decisions optimally across cards. Data from the lab and field suggest consumers are sensitive to the importance of interest rates in debt repayment, but insufficiently so. Furthermore, we find that minimum payment requirements lead participants to be more likely to make suboptimal repayment decisions by encouraging them to put additional money towards each outstanding account. Our results suggest the presence of minimum payments may play a role in explaining economically anomalous behavior in debt repayment.

#### **Extended Abstract:**

Americans hold an increasing amount of revolving credit card debt, currently estimated at \$808 billion (Federal Reserve Bank of New York, 2017), on an average of four cards per cardholder (Consumer Financial Protection Bureau, 2015). A growing body of literature suggests people do not repay their debt in the cheapest possible way (e.g., Ponce et al, 2017). Prior work explains suboptimal repayment through lack of interest rate knowledge (Seira, Elizondo, Laguna-Muggenburg, 2017) or through a variety of heuristic strategies inconsistent with the optimal repayment (Amar et al., 2011; Gathergood et al., 2017). In particular, a laboratory examination of borrowers with multiple cards shows that they prioritize paying off smaller debts rather than high interest rate debts (Amar et al., 2011). By contrast, data from the field suggests that credit card holders use a balance matching heuristic, paying more to their largest debts (Gathergood et al., 2017).

In the current paper, we draw on lab and field data to provide evidence that people are knowledgeable that they should repay their highest interest rate debts first. Furthermore, borrowers do prioritize these debts to some degree, above and beyond any alternative heuristics. Additionally, we find that minimum payments induce participants to spread their excess repayments (i.e., payments above the minimum) across more accounts than those without minimum payments. We find that this strategy change persists after accounting for the tendency to target minimum payment amounts (e.g., Stewart, 2009).

Data from the lab and field suggest consumers are sensitive to the importance of interest rates in debt repayment. Our field data comes from a budgeting app and has 39,626 months of repayment data for 1,956 unique consumers. We find that consumers repay about \$132 more ( $t(37,668)=3.14$ ,  $p=.0017$ , equivalent to 4% of the average balance) to their highest interest rate debt in a month, controlling for the size of their balance. These data are consistent with self-reported strategies from Mturk experiments. A plurality of our participants (47%) report repaying high interest debt is the most important element in their decision, much more than the second highest strategy, splitting evenly across cards (14.5%). However, of the group focused on high interest, 38.5% report wanting to pay most, relative to all, of their repayments toward their highest interest rate debt, thus insufficiently weighting interest in their decisions.

Beyond placing insufficient weight on interest, participants are less likely to repay optimally when credit cards have minimum payments. In study two, participants responded to a three round debt repayment scenario. Each participant had 6 credit cards to repay, with outstanding balances and interest rates stated for all cards. Participants ( $N=375$ ) were randomly assigned either to have a minimum payment associated with each debt or not. In the minimum payment condition, participants faced a \$25 fee per account paid below the minimum. Participants in study one made allocations to all debts in the same table. We find that participants in the minimum payment condition were less likely to repay optimally ( $t(373)=2.91$ ,  $p<.01$ ). This suboptimal allocation in the minimum payment condition was driven by participants making payments towards each card, over and above the minimums payments themselves ( $t(373)=3.624$ ,  $p<.01$ ). We did not find evidence of substantial portions of participants paying off the smallest debt first, contrary to prior literature. We replicated these findings utilizing a within subject design over 3 weeks. Participants ( $n=189$ ) completed the self-report measures discussed previously and were then randomly assigned to one of two orders of our minimum payment and no minimum control. We find a marginally significant decrease in optimal play when participants are doing the minimum payment version of our task ( $t(188)=1.698$ ,  $p=.091$ ) and a significant increase in the proportion of accounts paid above the minimum ( $t(188)=4.513$ ,  $p<.00001$ ). The within subject version suggests that knowledge and individual differences are unlikely the key driver of the strategic effects we document in study two.

In our fourth experiment we allow participants ( $N=366$ ) to save money in addition to repaying debt. Participants in the minimum payment condition are significantly more likely to save than those without minimums ( $t(364)=3.20$ ,  $p<.01$ ), leading to higher interest costs incurred. In addition to repaying less, they continued to repay less optimally than those without minimums ( $t(364)=3.46$ ,  $p<.01$ ). Among participants who made any excess repayment, participants in the minimum payment condition allocated to more accounts above the minimum ( $t(360)=1.97$ ,  $p<.05$ ). These results suggest that impacts of minimum payments on strategy remain important even after allowing for the effects of targeting. Finally, in experiment five we introduce a condition where minimum payments are autofilled for participants (i.e., the default is to pay the minimum amount on all cards;  $N=258$ ). Since the optimal strategy in the autofill and the minimum payment conditions are the same, differences between these conditions are unlikely to be driven by the optimal strategy. We find that the autofill condition attenuates the strategic differences between the minimum payment and no minimum payment condition. Like the no minimum condition ( $t(167)=3.52$ ,  $p<.01$ ), participants in the autofill condition are more likely to use the optimal strategy ( $t(171)=2.16$ ,  $p<.05$ ). These findings suggest that it is unlikely that the complexity of the optimal rule is responsible for the changes induced by minimum payments. Additionally, the increase in optimal play above the minimum payment condition provides

suggestive evidence that actively selecting an allocation amount for each debt contributes to the strategic differences we observe induced by the minimum payments.

We provide new evidence on the strategies that lead people to repay their debts suboptimally. Contrary to prior literature, we find people are aware of the importance of prioritizing payments to higher interest rate debts. They are sensitive to interest rates, but insufficiently so. We document a novel cost of minimum payments: minimums induce participants to spread money more evenly across accounts in a multiple payment setting. This leads participants to pay higher interest costs, over and above those associated with minimum payments. Our results suggest that minimum payments may play a role in the over-dispersed repayments documented in the field.

## Why (and When) Are Uncertain Price Promotions More Effective Than Equivalent Sure Discounts?

Celia Gaertig (University of Pennsylvania, USA); Joseph Simmons (University of Pennsylvania, USA)

### **Brief Abstract:**

Past research suggests that offering an uncertain promotion, such as an X% chance to get a product for free, is more effective than providing a sure discount of equal expected value. In four studies (N = 6,713), we find that this is only true when the sure discount is small or when it feels small (because of the context or framing). Our findings suggest that people's preferences for uncertainty are more strongly tethered to their perceptions of the size of the sure outcome than they are to their perceptions of the probability of getting the uncertain reward.

### **Extended Abstract:**

What do consumers prefer - a sure discount on a purchase or an X% chance to get the product at an even greater discount? Although the ubiquity of sure discounts might lead one to infer that they are more effective, recent research on this question suggests the opposite: Consumers seem to prefer uncertain promotions to equivalent promotions that offer a discount or reward with certainty (Goldsmith and Amir 2010; Mazar, Shampanier, and Ariely 2017; also see Shen, Fishbach, and Hsee 2014). In an important paper, Mazar, Shampanier, and Ariely (2017) demonstrated that people are more likely to purchase a product when it comes with a chance to get it for free than when it comes with a sure discount of equal expected value. This suggests that marketers should make more use of uncertain promotions than they currently do.

In the current project, we offer a theory that more fully explains these results, and that predicts that the effect will only emerge when the sure discount feels small. In four studies (N = 6,713), we find that uncertain price promotions are more effective than equivalent sure discounts only when those sure discounts feel small. Specifically, we find that uncertain promotions are relatively more effective when the sure discounts are actually smaller (Studies 1 and 2) or when the sure discounts are made to feel smaller by presenting them alongside a larger discount (Study 3) or by framing them as a percentage-discount rather than a dollar amount (Study 4).

In Study 1 (N = 2,302), we asked participants to choose among three hotels, one of which was promoted. We manipulated whether the promotion was certain (10% off) or uncertain (10% chance to get it for free), and whether the price of the promoted hotel was low (\$48) or high (\$480). Figure 1

shows the results. Participants were more likely to choose the promoted hotel when it came with a chance-for-free promotion than when it came with a sure discount,  $b = .057$ ,  $SE = .021$ ,  $p = .006$ , and when the price was low (\$48) than when it was high (\$480),  $b = .041$ ,  $SE = .021$ ,  $p = .045$ . However, a significant interaction,  $b = .084$ ,  $SE = .041$ ,  $p = .041$ , revealed that the difference between the two promotion types was only significant for the low-price condition ( $p = .001$ ), but not for the high-price condition ( $p = .609$ ). Thus, the chance-for-free promotion only outperformed the sure discount when the sure discount was small (\$4.80). Because the percentage associated with the promotion was held constant at 10%, this effect cannot be explained by consumers' overweighting of small probabilities. In Study 2 ( $N = 852$ ),  $\frac{1}{4}$  we replicated the findings from Study 1 in a within-subjects design, where participants were asked to directly choose between the two types of promotions.

In Study 3 ( $N = 1,188$ ), we manipulated how large or small a sure discount felt by manipulating the context. Participants were asked to imagine that they were buying a \$50 training session, and that they could choose between receiving a \$5 sure discount or a 10% chance to get it for free. We presented the training session alongside a gym membership which was either priced at \$480/year (with a \$48 discount) or \$40/month (with a \$4 discount). Participants were more likely to prefer the 10% chance-for-free promotion over a sure discount of \$5 when the context was a \$48 discount of the yearly membership price than when the context was a \$4 discount of the monthly membership price,  $b = .229$ ,  $SE = .108$ ,  $p = .034$ . Thus, asking consumers to consider the same discount in the context of a larger discount increased people's relative preference for an uncertain promotion.

In Study 4 ( $N = 2,371$ ), we tested an additional way to manipulate how large a sure discount feels, namely by manipulating whether the sure discount is framed as a percentage or a dollar amount. We first conducted a pretest which revealed that a sure discount is rated as smaller when it is framed as a percentage off than when it is framed as a dollar amount (see Figure 2 Panel A). In Study 4, we then asked participants to imagine that they were buying a product that came with one of two types of promotions, either a 10% sure discount or a 10% chance to get it for free, and that they could choose which they would like to receive. We manipulated the price of the product to be low (\$11) or high (\$311), and, importantly, we also manipulated whether the sure discount was presented as a percentage (i.e., 10% off) or as the equivalent dollar amount (i.e., \$1.10/\$31.10 off). Figure 2 Panel B shows the results. Participants were more likely to choose the chance-for-free promotion over the sure discount when the price was low than when it was high,  $b = .241$ ,  $SE = .075$ ,  $p = .001$ . More importantly and in line with our pretest, participants were also more likely to choose the chance-for-free promotion over the sure discount when the sure discount was framed as a percentage than when it was framed as a dollar amount,  $b = .523$ ,  $SE = .075$ ,  $p < .001$ . The interaction was significant as well,  $b = .352$ ,  $SE = .151$ ,  $p = .019$ , such that the framing of the sure discount had a larger effect in the low-price condition. Thus, the results from this study suggest that we can alter people's preferences for uncertain promotions simply by changing whether the sure discount is framed as a percentage or as a dollar amount.

Our findings are inconsistent with two leading explanations of consumers' preferences for uncertain over certain promotions – diminishing sensitivity and the overweighting of small probabilities – and suggest that people's preferences for uncertainty are more strongly tethered to their perceptions of the size of the sure outcome than they are to their perceptions of the probability of getting the uncertain reward.

## Price quote Format and Inferred Artisanship and Marketing Orientation

Shai Danziger (Tel Aviv University, Israel); Liat Hadar (The Interdisciplinary Center Herzliya); Ran Kivetz (Columbia University, USA); Itzhak Gnizy (Ono Academic College)

### **Brief Abstracts:**

We propose consumers perceive contractors itemizing price quotes by final outputs (e.g., deck, lawn) rather than by inputs (e.g., labor and materials) as more likely to be artisans and to have a self-centered marketing orientation. The results of four studies demonstrate this effect is driven by consumers' attributing a higher-level construal to contractors who itemize by final outputs than by inputs. Further, priming a favorable impression of artisanship in an ostensibly unrelated task increases consumers' preference to hire a contractor that itemizes the price quote by outputs rather than by inputs.

### **Extended Abstract:**

We investigate whether and how consumers use the format of price quotes to infer the likelihood that the contractors preparing the quotes are artisans (people skilled in an applied art, creating high-quality or distinctive products in small quantities), and the likelihood they behave in a manner consistent with a self-orientated marketing concept (creating in order to express themselves and to satisfy personal criteria and not necessarily to meet the expectations of the mass markets, value the uniqueness of their work, strive to achieve perfection, and emphasizing the aesthetic experience, even at the cost of utilitarian functionality; Hirschman, 1983).

We hypothesize consumers infer that contractors pricing projects based on final outputs (FO; e.g., deck, lawn, walkway) are more likely to be artisans and more likely to hold a self-oriented marketing concept than contractors pricing projects based on the labor and materials required to complete the project (LM; e.g., pumps, sprinklers, and labor pay-per-day). We posit that consumers associate the use of FO price quotes with a high-level construal because such quotes emphasize outputs or final deliverables; conversely, consumers associate the use of LM price quotes with a low-level construal because such price quotes emphasize inputs or means to an end (Lieberman & Trope, 1998). We further propose that consumers associate artisanship with a relatively high construal level because artisan work is holistic, has abstract dimensions, it is created to be extraordinary, beyond what is strictly necessary for mundane, functional creations, and it is evaluated globally, as a whole; conversely, we suggest consumers associate nonartisanship with a relatively low construal level because the work of non-artisans is typically functional, concrete, and it is evaluated locally, as the sum of its attributes (Förster, Friedman, & Liberman, 2004; Hirschman, 1983). We hypothesize that consumers infer that FO contractors are more likely to be artisans and more likely to be characterized by a self-oriented marketing concept than LM contractors because both artisanship and the provision of a FO price quote are associated with a relatively high construal level, whereas both non-artisanship and the provision of a LM price quote are associated with a relatively low construal level. The results of four studies support our predictions: Participants in Study 1 ( $n = 80$ ) reviewed both FO and LM price quotes for redoing their kitchen or garden and rated whether the FO, the LM, or both contractors were more likely to be artisans (on a 1-9 scale, 5 being "equally likely"), and how many contractors provide each type of quote out of every 10. The results revealed participants rated FO contractors as more likely to be artisans than LM contractors, for both gardeners and carpenters ( $M = 5.83$ ,  $SD = 1.75$ ,  $t(79) = 4.22$ ;  $p < .0001$ ), despite being equally familiar with both price quote formats.

Study 2 examined whether construal level inferences mediate the effect of price quote format on self-centered marketing concept inferences. Participants ( $n = 203$ ) observed a FO or a LM price quote and indicated the likelihood that the gardener preparing the quote had a self-centered marketing orientation (Hirschman, 1983; using four items,  $\alpha = 0.88$ ). Next, participants indicated whether the gardener was more likely to hike at a beautiful but distant park (an option typically chosen under high construal level), a modestly-beautiful but close park (typically chosen under low construal level), or both. We used this measure of construal level to verify that the manipulation of the price quote format was independent of the measure of construal level. The results indicated consumers inferred that FO contractors' construal level is higher ( $M = 4.98$ ) than LM contractors' ( $M = 4.46$ ,  $t(201) = 1.97$ ;  $p = .05$ ), that they are more likely to have a self-centered marketing concept ( $M = 4.97$ ) than LM contractors ( $M = 4.56$ ,  $t(201) = 2.02$ ;  $p = .045$ ), and that construal level inferences mediate the effect of price quote format on self-centered marketing concept inferences ( $B = -.12$ ; 95% CI =  $-.3, -.01$ ).

Study 3 tested the causal effect of contractors' inferred construal level on artisan and on self-oriented marketing concept inferences. Participants ( $n = 160$ ) read high [low] level descriptions of 10 typical activities (e.g., describing "making a list" as "getting organized" vs. "writing things down"), allegedly written by a contractor. Next, they rated the likelihood that the contractor was an artisan and had a self-centered marketing concept.

Participants' ratings of the contractor's artisanship and self-centered marketing concept formed a single factor and were thus averaged. Participants in the high construal level condition inferred that the contractor was more likely to be an artisan (and to have a self-centered marketing concept;  $M = 5.08$ ) than participants in the low construal level condition ( $M = 3.64$ ,  $t(158) = 6.81$ ;  $p < .0001$ ).

Study 4 examined consumer preferences ( $n = 306$ ). Participants completed two (ostensibly) unrelated studies. In the first "study" they read two newspaper articles. The last article supported or opposed hiring artisan contractors. On the second "Study" participants reviewed gardeners' FO and LM price quotes and indicated which gardener they were more likely to hire. Participants exposed to the pro-artisan article were more likely to hire the FO gardener ( $M = 5.03$ ) than participants exposed to the con-artisan article ( $M = 4.48$ ,  $t(304) = 1.97$ ;  $p = .049$ ).

This research makes several contributions: First, it is first to examine consumer inferences from the format of price quotes regarding the contractors preparing the quotes and their work. Second, while past literature examined consumer choice of products or experiences, we examine contractor choice, a choice with especially expensive outcomes, requiring a relatively long and potentially painful interaction with the contractor during the production process, and with which consumers are typically unfamiliar with. Third, while more research is devoted to aesthetics and creativity, not much has been done on choice of artisans, providing services that combine the functional and the aesthetic. This paper helps fill this gap. Fourth, past research has examined construal level inferences based on others' use of abstract language. We contribute by examining consumer construal-level inferences based on price quote format.

### The Rank Length Effect

Fengyan (Cindy) Cai (Shanghai Jiao Tong University); Jieru Xie (Virginia Tech, USA);  
Rajesh Bagchi (Virginia Tech, USA)



### **Brief Abstract:**

Rank lists often vary on the number of items ranked (e.g., Top 20 vs. Top 5). This research examines whether the rank length (e.g., Top 20 vs. Top 5) influences consumers' evaluations of the ranked items (e.g., items ranked 1, 2, and so on). Across four studies, we show that all the ranked items are evaluated more positively in a list with more items (e.g., Top 20 vs. 5). However, the difference between items (e.g., 1st ranked vs. 3rd ranked item) will be smaller in the longer list (e.g., Top 20 list) than in the shorter one (e.g., Top 5).

### **Extended Abstract:**

#### Introduction

Advent of modern technology and competition has led to the age of choice abundance. Within any category, and for any product, there are multiplicity of options. When selecting a movie to watch, a restaurant to visit, or even a product to purchase, a consumer may have to sift through hundreds of choices. To make these comparisons tenable, several organizations such as Rotten Tomatoes, Yelp.Com, and Consumer Reports offer rank lists, which aid decision-making. These rank lists often vary on the number of items ranked—for e.g., Top 100, Top 20, or Top 5. We investigate how the number of items in the list affects evaluations.

Consumers use an item's rank to make inferences (Sorensen 2007; Pope 2009; Isaac and Schindler 2013). We propose that evaluations of an item in a rank list not only depends on its rank, but also on the number of items ranked. Specifically, we posit that the Number 1 item will be evaluated more positively in a list with more items (Top 20 vs. 5). However, the difference between items will be smaller in the longer list.

#### Conceptualization

Recognize that, at its core, a rank is a number. Past research suggests that consumers construct mental number lines to make sense of numbers (Dehaene 1997; Restle 1970). We believe that consumers may construct such mental number lines when evaluating ranked items. The mental number line is labile and is usually constructed during task execution (Pinhas and Pothos 2013; Fischer, Mills and Shaki 2010). We posit that the position of items on this evaluation scale will be constructed based on the number of items in the list—when more (less) items are in a rank list, the corresponding items will be placed further away from (closer to) each other.

We propose that when people transfer ranks from a rank list to their mental evaluation line, they try to accommodate all the items on this list. A Top 20 (vs. 5) list has more items so consumers use more of their mental number line when representing these items. This leads to two consequences—first, consumers use the extremities of their mental number line to place items when the rank list is longer (vs. shorter). Therefore, the top ranked and the bottom ranked items are farther apart with a longer rank list (Top 20 vs. 5). Consequently, the top ranked item in a longer (vs. shorter) list will be evaluated more positively. Secondly, because a longer rank list has more items, consumers will compress these items to fit them on their mental number line. Consequently, the distance between the different ranked items will be compressed more with a Top 20 (vs. 5) list. Results from four studies support these propositions.

#### Experiments

In experiment 1A, we recruited 220 participants and randomly assigned them to one of five movie rank

lists (Rank Length: TOP 3, TOP 5, TOP 10, TOP 15, and TOP 20). Participants then rated the Number 1 movie by providing their overall evaluations (0 = Not good/100 = Very Good) and liking (0= Not at all/10-Very much). As shown in Table 1, the Number 1 movie was rated more positively when the rank list was longer (vs. shorter). One possible alternative explanation could be that people may have inadvertently confused the length of the rank list with the total number of movies the rank list was chosen from. To rule this explanation out, in Experiment 1B, we used a 2 (Rank length: Top 20 vs. Top 3) by 2 (Information about total number of movies: available vs. not available) between-subject design. In the information (not) available condition, we explicitly told (did not tell) participants that the Top 20/3 list was chosen from 102 movies. The results of a two-way ANOVA (see Table 1) showed that participants judged the Number 1 movie more positively in the Top 20 (vs. 3) condition, and these evaluations were not influenced by whether or not information about the total number of movies was provided or not.

In two subsequent experiments, we explored the underlying mechanism. In Experiment 2, we used a similar movie ranking context (Top 20 vs. 5), but we asked participants to evaluate both the Number 1 and the Number 3 movie. If the scale points of the mental evaluation line contract (expand) when the list length increases (decreases), then the difference in evaluations between the Number 1 and the Number 3 movie should shrink (increase). As shown in Table 1, evaluations of both the Number 1 and 3 movies were significantly higher in the Top 20 (vs. 5) condition. However, the difference between the Number 1 and Number 3 movie was lower in the Top 20 (vs. 5) condition.

Experiment 3 replicates these results in a product evaluation context. Participants (N = 86) were informed they were considering purchasing hiking boots and were randomly assigned to one of two conditions—and shown either a Top 20 vs. 5 list of hiking shoes. In the Top 20 (5) condition, participants were presented a scale printed on a piece of paper and were asked to indicate their evaluations for all 20 (5) pairs of hiking shoes. After finishing this task, all participants indicated their evaluations (0 = Not good at all/10 = Very good), willingness to pay, and assessments of how much better the Number 1 ranked shoes were relative to the Number 5 ranked shoes. As shown in Table 1, participants' responses (including willingness to pay) for both the Number 1 and the Number 5 shoes were higher in the Top 20 (vs. 5) condition. However, the difference between the Number 1 and the Number 5 shoes was smaller in the Top 20 (vs. 5) condition. Moreover, evaluations mediated the effect of rank length of rank on willingness to pay, demonstrating downstream consequences.

In summary, we introduce a novel effect that has both theoretical and practical implications. We show how consumers make sense of rank lists and how deviations in length can influence evaluations.

## **Social Media and Sharing - Competitive Paper Session**

*Sloane (2nd Level)*

*Chair: Dhruv Grewal, Babson College, USA*

Managing Online Venting: The Impact of Temporal Distance on the Perception of Negative Online Reviews

Lauren Grewal (Dartmouth College, USA); Andrew Stephen (Oxford University, UK); Yakov Bart (Northeastern University, USA)

**Brief Abstract:**

While research has shown evidence of a negativity bias when it comes to online reviews (i.e., discounting of positive information), we propose a situation wherein negative information is more likely to be discounted. Specifically, we propose that when online reviews exhibit “venting” (i.e., a combination of being negatively emotional and temporally close), they are more likely to be discounted as they will be seen as more emotional and less rational, causing the review to be attributed more to the reviewer than to the reviewed product or service. We examine this effect using real-world data and experiments.

**Extended Abstract:**

Brands are concerned with negative online reviews as it is a popular source of information (Leffler 2018). Brands have a right to be concerned: online reviews influence consumer’s product evaluations and sales (Chevalier and Mayzlin 2006). As well, while research has shown that positive reviews are more widespread, they have less impact than negative reviews (Chevalier and Mayzlin 2006; Mizerski 1982). Although there is research that has examined the negativity bias (Baumeister et al. 2001), there is limited research on what reduces the negativity bias (Chen and Lurie 2013).

However, unlike Chen and Lurie (2013) who found that temporal contiguity cues mitigated the negativity bias by changing reader beliefs about the cause of positive information, we propose that temporal contiguity, when combined with emotionality, may cause consumers to discount negative reviews. In the case of reviews that exhibit “venting” (i.e., the combination of negatively emotional and temporally close reviews), we believe that the review may be attributed more to the reviewer rather than the situation, causing the review to be less influential (Folkes 1988; Mizerski 1982). We believe this will occur as the review will give readers the impression that the reviewer has “a bone to pick” or wrote “in the heat of the moment” and thus, may not be rationally examining the situation that caused their negative experience. As this is often what occurs in the case of positive reviews (and possibly an underlying reason for the negativity bias), we believe that when there appears to be more personal reasons for a negative review, as exhibited through venting, that it will be the negative, rather than positive, information that is discounted. Thus far, we test this prediction in real-world data and two experiments.

In Study 1, we analyzed real-world data from TripAdvisor covering 1,665,026 reviews from 2,393 hotels between 2010 and 2015. We tested the effect of valence (review rating) and temporal distance between review-writing and the experience (defined by month of visit and date of review) on negative emotionality (determined through LIWC; Pennebaker et al. 2007), controlling for other factors. We first found the 2-way interaction to be significant ( $b = .06, z = 28.69, p < 0.001$ ). Looking at the findings, we see on average less negative emotion when there’s a greater temporal distance between review writing and the stay and on average, we are more likely to see negative emotion when the stay and review occur in the same calendar month. Essentially, we found that negative reviews written close to an experience were likely to exhibit negative emotionality, and thus, “venting.”

Next, considering that consumers exhibit venting, we examined how this behavior influenced the perceived helpfulness of online reviews. We examined review rating, temporal distance, and negative emotionality on the count of how “helpful” a review was. While the 3-way interaction was not significant, all 2-way interactions and main effects were. Therefore, we looked at the simple effects where we found that the average helpfulness of a review associated with a low rating (e.g., 1 or 2 stars)

and with moderate to strong negative emotionality (i.e., 50% or higher), will be lower when the review is written in the same calendar month as the hotel stay. Conversely, when the temporal distance increases, the helpfulness count increases when there's negative emotion. This finding represents our core prediction: Reviews that exhibit venting (i.e., negative emotions that occur shortly after an experience) are more likely to be discounted (i.e., deemed "less helpful"), possibly because venting is attributed more to the reviewer rather than the situation. On the other hand, negative emotions that are temporally distant from an experience are not seen as venting, and thus are more likely to be viewed as "helpful" and persuasive (replicating the negativity bias).

To understand why we found this pattern in the real-world, in two experiments thus far, we examined the impact venting has on other consumers' valuation of a review. In Study 2 (n=406), participants were randomly assigned to a condition in a 2(valence: positive, negative) x 2(time of review: immediate, later) between-subjects design. Participants read the same hotel review that was framed as being positive (4 stars) or negative (2 stars). They were told the review was written either right after the experience or sometime after the experience occurred (two weeks later). We found a significant interaction on purchase consideration ( $p < .001$ ) where, for negative reviews, temporal proximity mattered ( $p < .001$ ), such that when a negative review was written close to an experience, participants were more likely to consider the hotel than when time had passed before the negative review was written. Temporal proximity did not matter for positive reviews ( $p = .282$ ).

Using the same experimental design, in Study 3, participants (n=196) indicated their belief that they would consider a positively [negatively] rated restaurant when the review was written right after the experience [two weeks later]. Participants additionally rated how emotional and rational the review appeared to be. We found significant interactions on purchase consideration ( $p = .025$ ), emotionality ( $p = .008$ ), and rationality ( $p = .028$ ) where for negative reviews, reviews written soon after the experience were seen as less rational, more emotional, and had higher purchase consideration than negative reviews that were written with greater temporal distance. There were no differences among positive reviews (all  $p > .10$ ). Running moderated mediation analyses through rationality and emotionality (with valence as the moderator), we found the likelihood of trying the reviewed restaurant for negative reviews was significantly and negatively impacted by perceived rationality (CI95[-.12, -.01]), and significantly and positively impacted by perceived emotionality (CI95[.001, .135]).

Thus far our results provide evidence that consumer venting may not be a negative thing for brands and retailers. In fact, reviews that exhibit venting may be discounted, as negative information, when written in "the heat of the moment," is seen as emotional and lacking rationality, leading to the information being seen as less diagnostic. Our research considers a scenario where consumers may discount negative, rather than positive, information. To further understand this effect, we are continuing to run experiments and run additional analyses on the real-world data.

## Bearers of Good News: Why Unhappy Customers Are Unlikely to Share Their Opinions with Brands

Chris Hydock (Georgetown University, USA); Zoey Chen (Miami University); Kurt Carlson (William and Mary)

### **Brief Abstract:**

We examine how consumers' attitude toward a brand affects their willingness to share with the brand.

Research in word of mouth (WOM) suggests that consumer-to-brand sharing may be U-shaped, characterized by sharing from those with very positive and negative attitudes. We show a hockey stick-shaped relationship between attitude toward a brand and consumers sharing with the brand. This is caused by three underlying mechanisms. On the negative side of the attitude spectrum, countervailing effects of venting and an aversion to criticize result in a null relationship between attitude and sharing; on the positive side, reciprocity results in a positive relationship.

### **Extended Abstract:**

It's imperative for brands understand customers' sentiment, but their understanding sometimes depends on consumers' willingness to share information. We examine how consumers' attitude toward a brand affects their willingness to share with the brand. Research in word of mouth (WOM) suggests that consumer-to-brand sharing may be U-shaped, characterized by sharing from those with very positive and negative attitudes (Anderson 1998).

We show this pattern does not apply to consumer-to-brand sharing. Specifically, we posit that reciprocity norms drive those with positive attitudes to share with brands as a way of reciprocating (Morales 2005), and the need to regulate negative emotions drives sharing among those with negative attitudes as a form of venting (Berger 2014; Hennig-Thurau et al. 2004). Together, these two motivations produce a U-shaped relationship between attitude and sharing.

However, in contrast to WOM, in consumer-to-brand sharing, the attitude object and audience are one in the same. People avoid sharing negative information with the target of the negativity, even anonymously (O'Neal, Levine, and Frank 1979), because doing so induces social discomfort, guilt, and conflict (Tesser and Rosen 1972; Timmerman and Harrison 2005). Thus, sharing with the brand is predicted to be hockey stick-shaped (\_\_\_/). While reciprocity norms drive very happy consumers to share and the desire to vent drives very unhappy consumers to share, this latter process is counteracted by an aversion to criticize others directly ("aversion to criticize" for fluency).

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

We collaborated with an on-campus retailer to test the relationship between attitude toward the retailer and sharing through completion of a real survey sent by the retailer.

### **Methods**

Data were collected from 1,285 participants (47% female, mean age 21.2) from research pool. Participants indicated their attitude toward a well-known campus retailer. Two weeks later, participants received a survey request from the campus retailer, with customized links so that we could connect whether or not they responded with the attitude data provided in the lab.

### **Results and Discussion**

We regressed attitude on sharing as consumers moved from the neutral midpoint to negative attitude and find no effect ( $p > .1$ ); as consumers moved from the neutral midpoint to positive attitude, we find a positive effect ( $\beta = 0.362$ ,  $\chi^2(858) = 9.80$ ,  $p < .01$ ), consistent with the hockey stick-shaped relationship.

### **Study 2: The Inability to Exit**

We propose the null relationship between attitude and sharing is driven by counteracting process of a

desire to vent, and an aversion to criticize. In study 2, we shed light on venting as a driver of sharing, which is just one way of regulating one's negative emotion toward a brand (Singh 1988). Accordingly, when we restrict consumers' ability to leave a brand, an alternative route to emotion regulation, sharing increases because this common alternative is unavailable, resulting in a U-shaped relationship between attitude and sharing.

### Methods

We recruited 320 workers from MTurk (46.3% female, average age of 34.03). Participants read a scenario about a negative, neutral or positive experience with a TV purchase from an electronics retailer; participants were told that they could (or could not) return the TV. They then indicated their likelihood to share, by completing a survey for the brand, on a sevenpoint scale.

### Results and Discussion

An ANOVA revealed a significant interaction of attitude and the ability to exit on likelihood to share ( $F(5, 315) = 10.05, p < .001$ ). Among consumers who could exit, we see a hockey stick-shaped relationship; pairwise analyses show consumers in the positive attitude condition ( $M = 5.07$ ) were more likely to share than those in the neutral ( $M = 3.906$ ) ( $p < .01$ ) and negative condition ( $M = 3.90$ ) ( $p < .01$ ). Among consumers who could not exit, we see a Ushaped relationship; pairwise analysis show consumers in the positive attitude condition ( $M = 5.39$ ) ( $p < .001$ ) and negative attitude condition ( $M = 5.79$ ) ( $p < .001$ ) were more likely to share than those in the neutral condition ( $M = 3.80$ ).

### Study 3: Brands vs Consumers

To test our theory that the aversion to criticize uniquely deters sharing negative information with brands, we compare consumer-to-brand and consumer-to-consumer sharing. Consumer-to-consumer sharing (i.e., WOM) should be less affected by the aversion to criticize relative to consumer-to-brand sharing because the attitude object (brand) is different from the audience (another consumer). Accordingly, we predict a hockey stick-shaped (U-shaped) relationship between attitude and sharing when the audience is the brand (consumers).

### Methods

We recruited 2120 workers (51% female and mean age of 34.57) from MTurk). Consumers first listed their cable/internet company, 408 identified their company as N/A and were excluded. Participants, then reported their willingness to share (respond to an email), from the company itself or other consumers. They then indicated their attitude toward the brand.

### Results and Discussion

We first regressed attitude and audience on sharing among those with negative to neutral attitude, revealing an interaction, ( $\beta = -.33, t(710) = -2.56, p < .05$ ). Simple effects revealed a null effect of attitude, ( $p > .1$ ) when the audience was the brand; but a significant negative effect of attitude, ( $\beta = -.29, t(341) = -3.34, p < .000$ ) when the audience was consumers, consistent with our prediction that the aversion to criticize deters sharing negative information with brands. We regressed attitude and audience on sharing among those with neutral to positive attitude, revealing an interaction, ( $\beta = -.18, t(1302) = -2.41, p < .05$ ); simple effects revealed there was a positive effect of attitude for each audience condition, brand ( $\beta = .66, t(643) = 10.82, p < .001$ ) and consumer ( $\beta = .47, t(659) = 10.53, p < .001$ ).

## General Discussion

We show a hockey stick-shaped relationship between attitude toward a brand and consumers sharing with the brand. This is caused by three underlying mechanisms. On the negative side of the attitude spectrum, countervailing effects of venting and an aversion to criticize result in a null relationship between attitude and sharing; on the positive side, reciprocity results in a positive relationship between attitude and sharing.

**Have You Heard the News?: How Consumer Narratives Change Through Retelling**  
Shiri Melumad (University of Pennsylvania, USA); Robert Meyer (University of Pennsylvania, USA); Yoon Duk Kim (University of Pennsylvania, USA); Ani Nenkova (University of Pennsylvania, USA)

### **Brief Abstract:**

The process by which accounts of news events become distorted through retelling by consumers is investigated. Two experiments are reported in which participants summarize an original article, and these summaries then form the basis of new summaries that are successively created and passed along by other participants. The results suggest that as stories are retold they become increasingly altered by disagreeable personalization, where objective reporting gives way to negatively-slanted opinions about the topic. An explanation based on a theory of linguistic mimicry is provided.

### **Extended Abstract:**

While social media has helped expand consumer access to news and information, it has also raised concerns that it may be reducing the fidelity of the information that many consumers are exposed to (e.g., Dubois, Rucker, D. D., and Tormala, 2011; Tan, Friggeri, and Adamic 2016). In this research we investigate this issue by studying both theoretically and empirically how accounts of news events change character as they are successively re-summarized by different consumers in re-telling chains. While prior research in psychology and communication has shown that the smaller details of events tend to become lost when stories are retold from memory (e.g., Allport and Postman 1947; Bartlett 1932 Marsh 2007), less is known about whether loss is accompanied by systematic changes in content of the information that is retold.

Drawing on results from two large-scale repeated summarization experiments we emerge with two major sets of findings about how news stories become distorted by successive retelling. The first is that summaries that start as dispassionate accounts of objective events tend to evolve into personalized gist-like accounts laced with injections of personal opinion—with the expression of disapproval being more dominant mode of expression. This disagreeable personalization effect is quite robust; we see it across different kinds of original news articles and when participants are given different motivations for retelling. The shift to personalization occurs, for example, even when writers are instructed to be as accurate as possible when retelling news stories, and contentiousness arises even in stories that are originally written with a positive tone.

The second finding is that this evolution appears to be the consequence of a linguistic mimicry process where injections of opinion by one writer in a chain implicitly signals the next to do the same. Because negative content is typically seen as more salient than positive (the negativity bias; Baumeister et al. 2001), this process tends to privilege the creation and retelling of more negative linguistic elements (e.g., expressions of disagreement over agreement).

## Study Details

Two studies are reported that all involve the same general methodology. In an initial wave of summarization, a sample of participants from the MTurk panel were paid to read an ostensibly real news article, and then write a short synopsis of the article as they would if they were summarizing it for others over social media. Their summaries were then passed on to a second wave of different participants who were asked to provide a new summary of the news event—this time based just on the summary provided by a previous writer (the original article was no longer presented). This process was then repeated for a third wave. The two studies manipulated three sets of factors that we hypothesized might affect the fidelity of the summaries to the original source: the valence of the original story (Study 1), and the motivation given to the participants for retelling (Study 2). Each study involved the participation of over 1,000 different M-Turk workers writing summaries across the three waves.

Once written, the content of the summaries was analyzed both by natural language processing tools and human judges. The automated tools included measures of linguistic specificity and diversity (e.g., the Jensen-Shannon divergence of each summary to the total pool of summaries in each wave), lexical novelty (e.g., the proportion of new words created in each wave) and semantic content (e.g., LIWC measures of affective content and style). Human judgments were provided by a separate group of MTurk participants who rated the summaries on each of 14 content dimensions (e.g., how detailed the summary was, how interesting it was to read, how positive or negative it was about the subject matter). These analyses suggested that as the news events were retold they underwent three major changes that were robust to the valence of the original story and writer motivation:

1: A transition from objective reporting to interpretation. With each passing wave the objective reporting of the facts of the events increasingly gave way to subjective interpretations of facts as evidenced by increased usage of subjective words and those suggestive of explanatory reasoning;

2: A rise in disagreeableness. Across each wave judges of the summaries observed an increase in injections of disagreeable personal opinion, as evidenced by more frequent expressions of disagreement, negativity, and greater usage of first-person pronouns; and

3: A rise in uniqueness but a decrease in reader interest. Across—and within—waves the summaries became increasingly unique from one another in style and content, but were also seen as decreasingly interesting to read by outside judges. These effects were evidenced by increased overall linguistic divergence and novelty of words by objective measures, and decreased assessments of writing quality and interest based on subjective human judgements.

To explain this pattern of results, we examined the degree to which the linguistic content of each summary could be modeled as function of the content of the summary on which it was based. This analysis gave strong support for a hypothesized mimicry or style-matching process (Moore and McFerran 2017), in which the injection of disagreeable opinions by one writer served as a catalyst that encouraged the next to the same. Most importantly, this carry-over effect was not observed for all linguistic features; expressions of opinion appeared to have a uniquely powerful influence on guiding the way the next writer in a chain crafted his or her summary.

We conclude with a discussion of the implications of the work for the possible effects of information proliferation on social media in terms of the style and tone of with which news is conveyed across consumers. The findings, for example, provide a possible explanation for what some see as a rise in contentiousness in public discourse over social media, particularly in political settings, as well as the



persistence of consumers' belief in "half-truths" about product quality and efficacy.

## When Intention to Share on Social Media Increases Variety-Seeking: The Role of Self-Enhancement

Fei Jin (Peking University); Jingjing Ma (Peking University); David Dubois (INSEAD, France)

### **Brief Abstract:**

This research proposes that calls to sharing a purchase with others can increase consumers' tendency to seek variety. We further argue that this is because merely thinking about sharing a purchase with others heightens its potential social value and in turn the propensity to view and use variety as a signaling tool. Specifically, we propose that the effect stems (1) from increased self-enhancement and (2) is reduced (a) for purchases that are conspicuous (vs. inconspicuous) goods or (b) among experts (vs. non experts) in the consumption domain who tend to view and value less variety as a signaling tool.

### **Extended Abstract:**

Given the ubiquitous use of social media, consumers are sharing their experiences and consumptions both online and offline. Companies also invest heavily in engaging with consumers online. How might this possibly be related to consumers' behavior? Prior research has provided much insight into the antecedents and consequences of sharing (e.g., Berger and Schwartz 2011; Chen 2017; Dubois et al. 2016). However, the type of sharing that has been examined is mostly sharing behaviors after consumers' decisions or choices (Barasch et al. 2017), less is known regarding the impact of intention to share on consumers' subsequent decisions.

We propose and find that the intention to share during decision process increases variety seeking. We argue that this is because sharing with others activates a motive to self-enhance, and variety which is both stimulating and rewarding (Kahn and Ratner 2005), could be instrumental to self-enhancement.

To probe the role of self-enhancement, we propose that this effect should reduce for (1) products that are inherently conspicuous and thus lend themselves to self-enhancement (vs. inconspicuous products that do not) and (2) among experts likely to draw from their own knowledge rather than external features of the choice (vs. non-experts) to self-enhance. This gives us an integrative understanding that how consumers use variety strategically to enhance the self. Second, this research answers recent calls for more research on how fast-moving digital environment influences consumers' behaviors (Stephen 2016; Wilcox and Stephen 2013).

Study 1a tested whether inducing consumers to think about sharing their purchase may increase variety seeking. We tested whether the mere presence of a sharing button would boost variety seeking by activating participants' intention to share. 428 participants were randomly assigned to either an intention to share or a control condition. While there was a sharing button below the chocolates in the intention to share condition, participants only viewed the chocolates in the control condition. We coded variety seeking to reflect the numbers of different flavors (1-12). There was a significant effect of intention to share on variety seeking ( $F(1, 426) = 17.74, p < .01, d = .58$ ), such that participants sought more variety in the intention to share condition ( $M = 6.66, SD = 3.38$ ) than in the control condition

( $M=5.45$ ,  $SD=2.49$ ).

Study 1b using a similar intention to share manipulation was to provide converging evidence and test the role of self-enhancement. 124 participants were randomly assigned one of two conditions in a lab setting. Participants were told they would actually get the item(s) chosen at the end. After choosing, we assessed participants' motives to self-enhance using three items adapted from Chen (2017) and Dubois et al. (2016). A one-way ANOVA revealed a significant effect of intention to share ( $F(1, 122) = 8.45$ ,  $p < .01$ ,  $d = .74$ ), such that participants sought more variety in the intention to share condition ( $M=5.56$ ,  $SD=1.31$ ) than in control condition ( $M=4.82$ ,  $SD=1.52$ ). Furthermore, the indirect effect through self-enhancement was significant (95% confidence interval  $CI = [.081, .510]$ ).

In Study 2, we activated intention to share by prompting participants to write about what they would share on Weibo. 462 participants were randomly assigned to a 3 (intention to share: focus on share vs. focus on do vs. control)  $\times$  3 (destinations: Xiamen, Guilin and Beijing) mixed design, with intention to share as a between-subjects factor and destination as a within-subjects factor. Across destinations, participants sought more variety in the focus on share condition than in other conditions (72.59% vs. 59.31% vs. 60.04%;  $\chi(2) = 22.17$ ,  $p < .01$ ). Specifically, participants sought more variety after reflecting on they would share compared to reflecting about what they would do or no reflection ( $\chi(1) = 18.01$ ,  $p < .01$ ;  $\chi(1) = 16.25$ ,  $p < .01$ , respectively). The two baseline conditions did not differ ( $\chi(1) = 0.05$ ,  $p > .05$ ).

Study 3 examined whether the effect is reduced when the purchase is conspicuous (vs. inconspicuous). 145 participants were randomly assigned to a 2 (intention to share: share vs. control)  $\times$  2 (option conspicuousness: high vs. low) between-subjects design. We varied the descriptions of two travel packages involving European destinations (Bellezza, Paharia, and Keinan 2017). The intention to share manipulation was the same with Study 2. A binary logistic regression regressed participants' choice on intention to share, conspicuousness, and their interaction. The effect of intention to share (Wald  $\chi^2 = 5.50$ ,  $p = .02$ ) and the intention to share  $\times$  conspicuousness interaction (Wald  $\chi^2 = 4.78$ ,  $p = .03$ ) were both significant. Within the conspicuous options, the percentage of participants who chose multiple options did not differ across the intention to share (54.55%) and control (64.86%) conditions (Wald  $\chi^2 = .77$ ,  $p > .1$ ). However, within the non-conspicuous options, participants in the intention to share condition were more likely to choose multiple (79.49%) than single (20.51%; Wald  $\chi^2 = 4.93$ ,  $p < .05$ ) options.

Study 4 tested whether expertise moderates the effect of sharing potential on variety seeking. 119 participants were randomly assigned to an intention to share or a control condition with measuring expertise. Participants were told that Netease Music was holding a music ranking activity and needed their help to choose three songs from three popular singers. In the intention to share (control) condition, the activity was: "Share (Treasure) pleasant music moments". Participants chose three songs they would share with others (they liked most). We regressed the number of singers on intention to share, mean-centered expertise score, and their interaction. There was no effect of intention to share ( $\beta = -.036$ ,  $t = .404$ ,  $p > .05$ ) and a main effect of expertise ( $\beta = -.252$ ,  $t = -2.809$ ,  $p < .01$ ,  $d = .52$ ). Crucially, there was a significant interaction between intention to share and expertise ( $\beta = .398$ ,  $t = 3.462$ ,  $p < .01$ ,  $d = .87$ ).

Our work echoes emerging theme in recent years that how sharing impacts consumer behavior (Berger

2014; Stephen 2016). It advances the knowledge of social sharing by demonstrating that sharing goals during decisions can have significant positive effects on consumers' variety seeking behaviors.

## **Paradoxes in Good Behavior and Social Signaling: When Ulterior Motives Pay Off and Good Intentions Backfire - Symposium**

### *Scarborough 3 (Lobby Level)*

Actors that engage in good (i.e., other-oriented and/or socially-positive) behavior often enjoy substantial benefits. However, these benefits do not always materialize: even seemingly good behaviors can backfire if the actor is perceived as having ulterior motives. While extant research has established that good behavior can yield benefits so long as ulterior motives are not present, little work has examined cases in which this dynamic breaks down. This session expands our understanding of the relationship between good behavior, incentives, and associated benefits by exploring situations in which ulterior motives and positive outcomes coexist, and those in which seemingly well-intentioned behaviors backfire.

*Chairs: Jackie Silverman, University of Pennsylvania, USA; Ike Silver, University of Pennsylvania, USA*

**Doing Good for Nothing: Motive Inferences from the Probabilistic Profits of Prosociality**  
Ike Silver (University of Pennsylvania, USA); Jackie Silverman (University of Pennsylvania, USA)

#### **Brief Abstract:**

When do prosocial actors receive credit for their good behavior, and when are they seen as merely motivated by external rewards? Seven experiments (N=3,376) find that actors who do good with a small chance of earning a large reward (but a large chance of earning nothing) are viewed as more purely motivated, socially good, and likely to be prosocial in the future than those who do good for a small, certain reward of equivalent expected value. We argue that a willingness to do good despite a possibility of earning nothing signals motive purity, even when handsome rewards are also possible.

**The Reputational Benefits and Material Burdens of Prosocial Referral Incentives**  
Rachel Gershon (Washington University in St. Louis); Cynthia Cryder (Washington University, USA); Leslie John (Harvard Business School, USA)

#### **Brief Abstract:**

Companies frequently offer “selfish” incentives for customer referrals, incentivizing those customers directly for recruiting friends. However, companies can alternatively offer “prosocial” incentives that reward the referred friend. In multiple field and incentive-compatible experiments, we find that prosocial (vs. selfish) referrals result in more new customers. This pattern occurs for two reasons. First, at the referral stage, customers expect to receive reputational benefits when making prosocial referrals within their social network, thereby boosting performance of prosocial referrals. Second, at the uptake stage, the burden of signing up is high, and therefore referral recipients prefer to receive an incentive themselves.

## Emotional Entitlement

Stephanie Lin (Singapore Management University, Singapore); Tamar A. Kreps (University of Hawaii, USA)

### **Brief Abstract:**

We find that consumers are viewed as being entitled to a certain amount of emotion commensurate with their personal investment in the emotion targets. For instance, consumers who have volunteered at a homeless shelter for only a short time are viewed as being entitled to lower intensity emotions at the shelter's closure than long-standing volunteers. Thus, although showing emotions is linked with having moral characteristics such as being altruistic, consumers with low personal investment who show high intensity emotions are viewed as less moral. This is partially because they are seen as being socially manipulative.

## The First Mover Motive Purity Advantage: On the Costs of Emulating Prosocial Initiatives

Ike Silver (University of Pennsylvania, USA); Brooke Kelly (University of Pennsylvania, USA); Deborah Small (University of Pennsylvania, USA)

### **Brief Abstract:**

Although emulating the prosocial behavior of others may seem intuitively appealing, we find that brands that do so face sharp reputational costs. Five studies testing participants' reactions to real and hypothetical prosocial initiatives demonstrate that observers use order of entry as a signal of underlying motive purity. Follower prosocial brands are seen as having ulterior motives and evaluated more negatively as a result. We also find that emulating another brand's prosocial initiative is more harshly penalized than emulating their profit-maximizing initiative and that observers give more credit to brands that launch less impactful, but more original, prosocial initiatives.

## **Machines and Humans - Competitive Paper Session**

*Scarborough 4 (Lobby Level)*

*Chair: Christian Hildebrand, University of Geneva*

Detrimental Trust in Automation: How Conversational Robo Advisors Leverage Trust and Miscalibrated Risk Taking

Christian Hildebrand (University of Geneva); Anouk Bergner (University of Geneva)

### **Brief Abstract:**

Robo advisors provide an automated process of risk profiling and portfolio management to private investors. The current work is the first to reveal that dialogue-based, or 'conversational', robo advisors cause greater levels of affective and cognitive trust compared to non-conversational robo advisors, and a more benevolent evaluation of a financial services firm. We further show that this benevolence attribution can lead to potentially detrimental consequences for consumers, such as selecting objectively incorrect portfolio recommendations that are inconsistent with their actual risk profile or to accept costly investment products that invoke larger annual management fees.

**Extended Abstract:**

Robo advisors have been praised as the next operating system in finance and the “new wealth management interface of the 21st century” (Andrus 2014; Deloitte 2016), enabling an entirely automated process of investment advisory from assessing clients’ financial goals and risk profile, to ultimately managing their portfolio (Gomber, Koch, and Siering 2017).

Research on the impact of these novel forms of financial advisory has largely focused on factors related to their general acceptance (Jung et al. 2018), the design aspects of the interface (Jung et al. 2017; Kilic, Heinrich, and Schwabe 2015), and the role of cost transparency (Nussbaumer et al. 2012). Very little is known about how these interfaces may fundamentally change consumers’ experience of the advisory process and impact their perceptions of the financial services firm, as well as the downstream consequences for consumers.

The current work explores an emerging variation in modalities among robo advisors, and provides a conceptualization based on prior work on speech patterns and the formation of trust through turn-taking in human-to-human dialogue (Bickmore and Cassell 2001; Sprecher et al. 2013; Wiemann and Knapp 1975). In three experiments, we show that dialogue-based, conversational robo advisors cause greater levels of affective and cognitive trust compared to non-conversational robo advisors, resulting in a more benevolent evaluation of the financial services firm, which can lead to detrimental consequences for consumers, such as selecting objectively incorrect portfolio recommendations or accepting costly investment products.

Study 1 was designed to test our hypothesis of whether conversational as opposed to nonconversational robo advisors cause greater levels of affective and cognitive trust, and whether these changes in trust trigger the predicted increase in benevolence attributions. We built a native robo advisor using the flowXO technology (Jung et al. 2018), mimicking the characteristics of actual conversational robo advisors across financial markets (Williams 2017). A total of 101 active private investors (i.e., having a portfolio with a financial service provider or bank) were recruited through a European market research agency (MAge=36.57, SDAge=11.59, 36% females) and randomly assigned to either a conversational or a non-conversational advisory interface. Participants in the non-conversational condition answered a series of ten questions related to their current financial situation, goals, and perception of risk via a traditional risk assessment questionnaire (Hallahan, Faff, and McKenzie 2004; Hanna, Gutter, and Fan 2001), while those in the conversational robo advisory condition answered the same series of questions in the exact same order but provided their answers in a chat console at the bottom of the interface. Participants subsequently received a matching financial portfolio based on their current risk profile. We then assessed participants’ level of affective and cognitive trust toward the robo advisory interface (Johnson and Grayson 2005, sample item affective trust: “I felt that the system cares about listening to my financial situation to help me.”,  $\alpha_{TrustAff}=.88$ ; sample item cognitive trust: “I truly doubt the competence of the advisory system. (reversed)”,  $\alpha_{TrustCog}=.85$ ), and their perception of benevolent intentions of the financial services firm (Schlosser et al. 2006, sample item: “It doesn’t seem that this financial services firm would knowingly do anything to hurt me.”,  $\alpha_{FirmBenevolence}=.86$ ). In line with our prediction, we found that consumers attributed a significantly greater level of affective trust toward the conversational robo advisory interface compared to the non-conversational interface ( $M_{Conversational}=4.62$ ,  $M_{NonConversational}=3.35$ ,  $t(99)=4.425$ ,  $p<.001$ ), as well as a significantly greater level of cognitive trust ( $M_{Conversational}=4.64$ ,  $M_{NonConversational}=4.10$ ,  $t(99)=2.382$ ,  $p<.05$ ). Furthermore, consumers attributed significantly greater benevolence toward the financial

services firm when using the conversational as opposed to non-conversational interface ( $M_{\text{Conversational}}=4.27$ ,  $3 M_{\text{NonConversational}}=3.75$ ,  $t(99)=2.384$ ,  $p<.05$ ). We observe comparatively larger effect sizes for affective compared to cognitive levels of trust (Cohen's  $d_{\text{TrustAff}}=.89$ , Cohen's  $d_{\text{TrustCog}}=.48$ ) and show that both produce directionally consistent but statistically separable effects on perceptions of benevolence (95% CI Parallel Mediation of indirect effect [.44;1.12]). A series of model comparisons provides additional robustness and rules out alternative mechanisms via a mere ease-of-use account.

Studies 2 and 3 further explored the potentially detrimental consequences of more benevolent attributions on consumers' downstream decisions. Specifically, Study 2 explores whether increased levels of cognitive and affective trust make consumers more likely to accept an objectively incorrect portfolio recommendation that is inconsistent with their actual risk profile. Replicating Study 1, we systematically altered the recommended portfolio so that risk-averse investors received more aggressive portfolio recommendations whereas risk-seeking investors received a recommended capital-preserving portfolio. All other procedures were identical to Study 1 and we used the same scale items to assess the level of affective trust ( $\alpha_{\text{TrustAff}}=.94$ ), cognitive trust ( $\alpha_{\text{TrustCog}}=.90$ ), and benevolence of the firm ( $\alpha_{\text{FirmBenevolence}}=.93$ ). A total of 154 private investors ( $M_{\text{Age}}=34.57$ ,  $SD_{\text{Age}}=10.62$ , 33.7% females) participated in this study (same pre-screening criteria as Study 1). Even though the recommended portfolio was entirely opposite to consumers' risk profile, we observe only a moderate adjustment in cognitive trust and a marginal significant difference between both robo advisor conditions ( $M_{\text{Conversational}}=4.25$ ,  $M_{\text{NonConversational}}=3.84$ ,  $t(152)=1.692$ ,  $p=.09$ ), while the findings on affective trust were unaffected ( $M_{\text{Conversational}}=4.78$ ,  $M_{\text{NonConversational}}=3.24$ ,  $t(152)=5.662$ ,  $p<.001$ ). Furthermore, the findings on benevolence mirrored those on affective trust and replicated the pattern of parallel mediation revealed in Study 1. Finally, we found that while 60% of consumers in the non-conversational advisory condition adequately adjusted their recommended portfolio only 26.6% did so in the conversational robo advisor condition ( $\chi^2(1)=17.54$ ,  $p<.001$ ). This effect was robust across risk-averse and risk-seeking consumers.

Study 3 further extends these findings across a broad range of investment decisions (such as selecting among a specific percentage of active to passive investments) and shows that these effects persist even when consumers are exposed to a disclaimer highlighting the potential financial interest of the firm.

To the best of our knowledge, this is the first work that contrasts the effects of traditional, non-conversational compared to conversational, dialogue-based robo advisor interfaces. This research contributes to the emerging field of immersive consumer experiences and shows that the turn-taking interaction paradigm of conversational robo interfaces evokes more affective experiences when making financial decisions. The findings of this work have important policy and managerial implications in terms of consumer welfare and financial regulation.

## When Virtual Reality Backfires on Reality: VR Reduces High Sensation Seekers' Product Evaluation

Youjung Jun (Columbia University, USA); Jaeyeon Chung (Rice University, USA); Gita Johar (Columbia University, USA)

### **Brief Abstract:**

Studying the downside of immersive virtual reality (VR) experiences, we find that using VR to

promote a product may be ineffective for high sensation-seeking consumers. For these consumers, an immersive VR experience substitutes physical reality more easily and, thus, can satiate their need for stimulation from actual consumption experience. As a result, these individuals express less desire to use VR-promoted products in reality after having gone through a similar experience through VR.

**Extended Abstract:**

Virtual Reality is “a set of technologies that enable people to immersively experience a world beyond reality” (Berg & Vance, 2016). Businesses utilize VR as a medium to engage consumers, hoping that the immersive VR experiences boost brand engagement (Barnes, 2011; Wasko, et al., 2011). For example, Cedar point promotes VR roller coaster rides as a potential gateway experience that can bring consumers into Cedar Point. Despite the growing accessibility of VR in practice, however, there is a lack of research on how consumers’ immersion into VR alters their perception in physical reality. Contrary to marketers’ expectations, this research reveals that using VR can backfire—specifically, for high sensation seekers.

Those with high need for sensation (i.e., high sensation seekers) are eager to seek out and respond to external stimulation (Raju, 1980), and one way people achieve such stimulation is through consumption (Zuckerman, 1979; Menon & Kahn, 1995). We predict that for high sensation seeking consumers, immersion to VR can fulfill and, therefore, lower the need for stimulation they seek from actual consumption. Therefore, they will evaluate actual consumption experiences more negatively after having gone through a similar experience through VR.

We first conducted a pilot study to reveal that VR experiences are typically highly stimulating. A content-analysis of 50 top-rated mobile VR apps and 100 VR videos online (i.e., Youtube “Virtual Reality” channel) revealed that 80 % of VR videos were high on realism, using actual sceneries and people as supposed to animated cartoon-like graphics. Also, 77% of the videos featured highly adventurous outdoor activities (e.g., roller coasters, skydiving). Even the remaining 23% of the videos that featured indoor activities used highly stimulating contexts (e.g., haunted house). This suggests that most VR experiences are highly immersive, making consumers just as responsive to the virtual world as to the physical one. The following studies demonstrate the potential drawbacks of such highly immersive VR experiences.

The goal of field study 1 was to reveal that high sensation seekers report attenuated desire for sensation after using VR. The study took place in a South Korean “VR theme park”, a commercial VR entertainment complex. All customers to the theme park were considered high sensation seekers. Upon their visit, customers indicated their preferences for exciting products by choosing between a candy of unknown taste (exciting choice) or a familiar fruit taste (common choice). This choice task was done either before or after they played VR games in the theme park (2 conditions). Results revealed that the percentage of consumers who sought excitement dropped from 63% to 47% after playing VR games ( $p = 0.002$ ).

In a controlled lab study 2, we test our hypothesis that high sensation seekers negatively evaluate products that share the same theme with VR (vs. non-VR) videos. In a 2 (VR vs. control) x continuous (sensation-seeking score) design, participants ( $N = 222$ ) watched a 4- minute video about TomorrowLand Electric Dance (EDM) music festival, one of the largest dance music festivals. The video allowed a 360° view of this outdoor festival, putting viewers right in the middle of the crowded

concert scene from a 1st person perspective. Participants watched the same video on a smartphone either through a VR device (VR condition) or without using the VR headset (Control condition). In the VR condition, the smartphone was inserted into a VR headset, Google Cardboard, so that participants could put on the gear to watch the video, hands-free. Participants in the Control condition watched the same video while holding the smartphone in their hands (see Figure 1). Then, all participants indicated their preference to download each of the 8 musical genres, including Classical, EDM, R&B, and Jazz, onto their playlist by allocating 100 points. Finally, they completed individual sensation-seeking scale (Zuckerman et al., 1964). We found a significant interaction ( $p = 0.02$ ) such that when high sensation seekers experienced the EDM festival through VR, their desire to download EDM onto their playlist significantly decreased, compared those in the control condition (floodlight region significant on sensation-seeking score: 3.67 and higher).

Lab study 3 identifies a boundary effect by showing that the attenuated preference among high sensation seekers is only observed when the VR experience and actual product experience incite similar (vs. dissimilar) feeling (e.g., adventurousness). If the virtual experience is unrelated to the actual experience, using VR would not affect consumers' needs in the physical world, thereby allowing them to continue seeking out stimulation via actual consumption. Study 3 employed a 2 (VR vs. Control) x 2 (ad framing: adventurous vs. control) x continuous (sensation-seeking score) design. Participants ( $N = 286$ ) were assigned to either VR or Control condition. First, participants watched a video of an adventurer walking on a rope across a cliff, filmed as if participants themselves were crossing the cliff. Similar to study 2, they either did or did not use the VR headset. Next, all participants saw an outdoor gear advertisement that was either framed as, "Now adventure and excitement await" (Adventurous framing) or "Now calm and peacefulness await" (Calm framing). Participants evaluated the ad and completed the sensation-seeking scale. Results revealed a significant 3-way ( $p = 0.03$ ) interaction: for the ad that highlighted adventurousness, high sensation seekers who already had an adventurous experience in VR evaluated the ad more negatively (VR x sensation seeking:  $p = 0.03$ ; floodlight region - sensation seeking score ad 3.98 and above); however, they did not lower their evaluation of the ad highlighting calmness after using VR (VR x sensation seeking:  $p = 0.38$ ).

Together, we find that VR experiences decrease high sensation seekers' evaluation of products or ads associated with the VR experience. Given that most of the commercial VR content encourages consumers' sensational engagement, this research warns and informs marketers that offering trials through VR may actually reduce the likelihood that consumers adopt the products in real life. Firms should be mindful about who they are targeting and the possibility of VR's "spoiler effect".

## Augmented Reality Helps Low-Involved Consumers to Build Self-Brand Connection Jaeyeon Chung (Rice University, USA); Youjung Jun (Columbia University, USA)

### **Brief Abstract:**

Augmented Reality (AR) overlays digital data or images onto physical objects and have the two interact in real time. For example, consumers can shop online to see how a pair of sunglasses suit their face by virtually trying them. This technology, visually rich and interactive, helps consumers pre-experience a product. Three experiments reveal that AR is useful especially for less involved consumers, because it facilitates their consumption experience through temporal focus—attention to mentally travel along one's past, present and future. The facilitation of temporal focus, then, translates



into enhancing their brand loyalty and self-brand connection.

**Extended Abstract:**

Augmented reality (AR) bridges physical and virtual worlds by overlaying digital data, such as an image of a product, onto the physical world (Javornik, 2016). For example, customers use their mobile devices to project how Ray-Ban sunglasses look on their face or which CoverGirl lipstick looks good on them, without physically trying it on. The market for AR products is expected to reach \$117.4 billion by 2022, increasingly transforming consumer experiences especially in the era of digital marketing (Stewart, 2016). Despite its widespread use, research on the psychological effects of AR is yet sparse.

Digital product presentations are essential to consumers' understanding of, and, connection with, products (Hoch & Deighton, 1989). Since strong visual effects in product presentations help consumers imagine actual product experiences (Vessey & Galletta, 1991), we hypothesize that AR's integration of digital products into consumers' physical environment can lead to a stronger self-brand connection, especially for low-involvement consumers who will benefit most from AR's assistance.

How does AR develop consumers' connection with brands? We hypothesize that one way is by encouraging consumers to vividly focus on the temporal relationship with a brand. Attention to temporality makes people feel close to their past and future (Guo et al., 2012) and allows them to mentally re-experience events in the continuum of a time horizon (Suddendorf & Corballis, 1997). As a result, consumers can experience "mental time travel" (Eacott & Easton, 2012) from the past, to the future. This helps strengthen brand loyalty, which derives from a habituated usage of a brand from the past that extends to one's future (Rindfleisch et al., 2009). Thus, heightened temporal focus can help consumers think of their history with a brand, increasing brand loyalty and self-brand connection.

In a pilot study, we aimed to show that AR increases consumers' temporal focus. Participants (N = 204) were randomly assigned to shop for hats on a website (<https://www.lovehats.com/try-it-on#>). Half the participants overlaid different hats onto photos of themselves (AR condition), and the other half simply shopped different hats without using the AR feature (Control condition). Then, they indicated their temporal focus by writing about their past, present, and future experiences of hat consumption. Participants in the AR (vs. control) condition used significantly more words to describe their present ( $p = .014$ ), past ( $p = .060$ ), and future ( $p = .007$ ) hat consumption. This suggests that using AR to pre-experience consumption drew people's attention to the temporal horizon of wearing a hat.

Study 1 shows that consumers who are not involved in shopping can build strong selfbrand connection after using AR. In a 2 (AR vs. Control)  $\times$  2 (high vs. low involvement) between-subjects design, 169 participants reported their attitude towards a sunglasses brand twice – before and after negative brand information was given. This is a common measure of self-brand connection (Ahluwalia, Burnkrant & Unnava, 2000). Our prediction was that participants who have a strong self-brand connection would be less disturbed by the negative information and continue to prefer the brand (i.e., small change in brand attitude due to negative information). We manipulated involvement (Litt & Tormala, 2010) by varying the emphasis on the importance of this shopping task. Participants shopped for Ray-ban sunglasses, either by overlaying sunglasses onto their own photo (AR condition) or using a default model's face (Control condition; Figure 1). There was a significant AR  $\times$  involvement interaction ( $p = .043$ ). Among less involved participants, AR buffered the impact of negative brand information on attitude ( $p$

= .018), whereas AR did not affect highly involved participants' attitude change (n.s.).

Study 2 replicates Study 1 and shows that strong self-brand connection among low involvement consumers is driven by their temporal focus. 154 participants shopped for sunglasses as in Study 1, responded to a Self-brand Connection scale (Escalas & Bettman, 2005), and completed the Temporal Focus scale (Shipp, Edwards, & Lambert, 2009) which measures attention to the past, present and future. Next, all participants self-reported their involvement. A regression analysis revealed a significant interaction ( $p = .043$ ). Importantly, lowly involved consumers developed stronger self-brand connection after using AR (vs. not using AR; Figure 2), but there was no AR's effect on highly involved consumers. Also, there was a significant moderated mediation of AR and involvement on self-brand connection through temporal focus (model 8:  $CI = [-.198, -.004]$ ). This shows that AR helps low-involvement consumers to focus more onto the temporal aspect of their own past-to-future, which then enhanced their self-brand connection.

Building on these results, study 3 further explains the link between temporal focus to self-brand connection by revealing that temporality draws consumers' attention to lasting brand relationships (i.e., brand loyalty), which then boosts self-brand connection. In a 2 (AR vs. Control)  $\times$  involvement (high vs. low) between-subjects design, 181 female participants imagined shopping for a lipstick, and browsed Sephora website either using AR to try various lipsticks on their lips (AR) or on a default model's lips (Control; Figure 3: <https://sephoravirtualartist.com/>).

Here, we manipulated involvement by using a scenario where participants are strongly in need for a new lipstick or not. Participants reported self-brand connection, temporal focus, and reported brand loyalty (Chang & Chieng, 2006). We found a significant interaction of AR  $\times$  involvement ( $p = .006$ ). Specifically, participants in the low-involvement condition perceived stronger self-brand connection after using (vs. not using) AR ( $p = .005$ ), but highly involved consumers were not affected by using AR (n.s.). We again replicated the mediating role of temporal focus in study 2. Importantly, a moderated serial mediation analysis (Hayes, 2012: model 85) revealed that low-involvement consumers using (vs. not using) AR had greater temporal focus, which increased their brand loyalty, which then led to stronger self-brand connection (Figure 4: AR  $\times$  involvement  $\rightarrow$  temporal focus  $\rightarrow$  brand loyalty  $\rightarrow$  self-brand connection:  $CI = [.0015, .0885]$ ).

Our results show that AR increases temporal focus, which positively predicts brand loyalty and self-brand connection. Attending to the temporal past-to-future horizon makes consumers attend to their loyal, repeated brand usage experience, which then strengthens their perceived self-brand connection.

## Session 4

### **Hedonic and Instrumental Emotion Regulation: The Good and Evil Effects of Negative Emotions - Symposium**

#### *Verlst (2nd Level)*

Prior literature has shown that negative emotions activate a hedonic need for mood repair, thereby increasing the desire to indulge in pleasure (i.e., hedonic emotion regulation). Negative emotions, however, also activate instrumental needs that increase the desire to engage in behaviors that help cope with challenges evoking negative emotions (instrumental emotion regulation). Across four papers we identify two factors that predict when negative emotions, including fear, anger, envy and guilt, encourage

instrumental over hedonic regulation: 1) when the available means directly facilitate instrumental needs, and 2) when negative emotions increase self-awareness.

*Chair: Shruti Koley, University of Virginia, USA*

### Understanding the Determinants of Hedonic versus Instrumental Affect Regulation

Anthony Salerno (University of Cincinnati, USA); Chris Janiszewski (University of Florida, USA); Juliano Laran (University of Miami, USA)

#### **Brief Abstract:**

Hedonic affect regulation occurs when consumers want to feel better, whereas instrumental affect regulation occurs when consumers use their affect to intensify goal pursuit. Although each affect regulation has been documented, it is not understood when each takes precedence. We identify affect type (incidental vs. integral) as a determinant of affect regulation within the context of negative affect arising from an unfulfilled need. Incidental affect encourages hedonic affect regulation because feeling better overrides need-based-goal-pursuit. Conversely, integral affect leads consumers to engage in instrumental affect regulation because the affect signifies the importance of addressing the unfulfilled need.

### How Anger Influences Choice

Shruti Koley (University of Virginia, USA); Caleb Warren (University of Arizona, USA); Suresh Ramanathan (Texas A&M University, USA)

#### **Brief Abstract:**

Anger is experienced when consumers' approach towards a reward is unfairly blocked. Thus, we predict that anger activates the desire to exert dominance, and increases preference for options that are associated with power or toughness, such as jobs that offer power, and products associated with toughness. Consequently, angry consumers are also more likely to exert self-control (e.g., study) when doing so increases their ability to exert dominance (e.g., find a job that offers power). However, while anger activates a need for dominance, we show that it does not activate other closely related needs, such as prestige, or status.

### Benign Envy, Malicious Envy, and Self-Control

Yunhui Huang (Hong Kong University of Science and Technology); Jaideep Sengupta (Hong Kong University of Science and Technology)

#### **Brief Abstract:**

This research hypothesizes that benign envy, as compared to malicious envy, heightens people's private self-awareness, which in turn leads to improved self-control in domains unrelated to the source of envy. Results from four experiments provide support for our predictions, while outlining theoretically-derived boundary conditions as well as reversals of the basic effect. Collectively, these results contribute to both the envy literature (highlighting hitherto-unexamined effects of feeling benignly versus maliciously envious) and also the literature on self-regulation, by identifying a new antecedent of heightened self-control: benign envy.

## Threatening Emotions: When Feelings Evoke Moral Self-Threat

Stephanie Lin (Singapore Management University, Singapore); Taly Reich (Yale University, USA); Tamar A. Kreps (University of Hawaii, USA)

### **Brief Abstract:**

We find that consumers feel moral self-reproach (i.e., guilty) when they experience emotions that reflect poor moral character (e.g., not caring enough about others). This occurs whether the emotion is opposite in valence to a moral response (e.g., feeling happy at someone's suffering; Study 1), or insufficient in intensity (e.g., not feeling sad enough after a natural disaster; Studies 2 and 3). We further find that the guilt that stems from insufficient caring for others can lead consumers to morally cleanse by engaging in prosocial behavior (Study 4).

## **Goals and Motivation: Pursuit and Abandonment - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Heather Honea, San Diego State, USA*

### Goal Pursuit Recommendations and Self-Conscious Emotions: Why and When the Form of Recommendation Affects Closeness and Motivation

Lauren Grewal (Dartmouth College, USA); Peggy Liu (University of Pittsburgh, USA); Ernest Baskin (St. Joseph University)

In our research, we bridge the goals literature with the self-conscious emotions literature to hypothesize how, why, and when the form of goal pursuit recommendation that others provide has differing consequences. Across six studies, we compare “traditional” goal recommendations (recommending a goal-relevant product or service to others without mentioning an intention to try it oneself) with “concurrent” goal recommendations (recommending a goal-relevant product or service to others while mentioning an intention to try it oneself). We find that concurrent (vs. traditional) recommendations increase both interpersonal closeness and goal motivation due to a reduced self-conscious feelings.

### The “Break-in” Effect: A Token Gesture Can Increase Task Initiation and Prevent Goal Abandonment

Adelle Xue Yang (National University of Singapore, Singapore); Babu Gounder (University of Miami, USA); Rajesh Bagchi (Virginia Tech, USA)

### **Brief Abstract:**

Many goal pursuits fail at the initiation of the first task. Prior theories suggest that the adoption of a goal creates a virtual barrier in the mental representation between goal-relevant and goal-irrelevant tasks, which amplifies the perceived dauntingness of task initiation. We propose that a “break-in” token action, which perceptually breaks the virtual barrier, can increase the likelihood of task initiation by reducing the perceived dauntingness of the initial task. Four studies (N=1,018) including one field experiment demonstrate the effectiveness of these simple “break-in” tokens (e.g., random marks on task materials) and shed light on the underlying mechanism.

### **Extended Abstract:**

Many goal pursuits fail at the stage of commencement. Even when an initial task is well within one's capabilities, the thought of goal commencement can feel overwhelming that people often end up procrastinating and even abandoning the goal. How can people overcome their dread of starting and more promptly pursue important goals?

We examine this question in the present research. Based on prior theories of goal pursuit and mental accounting, we theorize that the adoption of a goal prompts the categorization of tasks by goal-relevance, which creates a virtual barrier in the mental representation between goal-relevant and goal-irrelevant tasks. Consequently, the small first step of goal commencement can be perceived as a big step that breaks this virtual barrier and enters one into goal-pursuit. We thus posit that people will be more likely to commence a goal if perceptual cues help them inadvertently cross this virtual barrier. We thus test the effectiveness of “jumpstart” interventions—leveraging perceptual cues to facilitate goal commencement in five experiments including a field experiment. This research sheds new light on goal commencement failures, an under-explored question, and joins a growing literature on leveraging behavioral insights to facilitate goal pursuit (Dai, Milkman and Riis 2015, Rogers and Milkman 2016, Tu and Soman 2014).

In a pilot study (N=409), we find that participants tend to perceive the first task in goal pursuit as the most daunting regardless of task familiarity ( $M_{\text{first}}=4.57$ ,  $SD=1.50$  vs.  $M_{\text{rest}}=4.21$ ,  $SD=1.34$ ; repeated-measures within-subjects  $F(1, 407)=26.8$ ,  $p<.001$ ,  $\eta^2=.06$ ), and participants reported the greatest difficulty to initiate the first task than the rest of tasks regardless of task familiarity ( $M_{\text{first}}=4.65$ ,  $SD=1.72$  vs.  $M_{\text{rest}}=4.10$ ,  $SD=1.42$ ; repeatedmeasures within-subjects  $F(1, 407)=43.4$ ,  $p<.001$ ,  $\eta^2=.10$ ). These results substantiate the theorized starting problem.

In Study 1 (N=795), we tested if perceptual cues can be leveraged to increase goal commencement. We used a mixed design with 2 between-subjects conditions (in-pursuit vs. pre-pursuit) and 2 within-subjects conditions (first task vs. second task). Participants read that they had adopted a fitness goal and were interested in attending exercise classes in a community center. We presented participants with an image in the exercise App showcasing all future classes, in which their user icon was placed either on the immediate left of the starting marker for the first class (pre-pursuit condition), or on the immediate right of the starting marker (in-pursuit condition). We found this subtle manipulation of perceptual cues significantly influenced how likely participants would attend the first class ( $M_{\text{in-pursuit}}=5.22$ ,  $SD=1.54$  vs.  $M_{\text{pre-pursuit}}=4.85$ ,  $SD=1.61$ ,  $t(794)=3.32$ ,  $p<.001$ ). Meanwhile, when participants assumed that they had attended the first class, they were similarly likely to attend the second class ( $t(794)=1.19$ ,  $p=.234$ ). A 2-way interaction validated these differences ( $F(1, 794)=8.00$ ,  $p=.005$ ). In sum, perceptual cues can affect how people mentally represent their relative position to goals and hence facilitate actual goal commencement.

In Study 2 (N=151), we examined the effect of a jumpstart intervention with real goal pursuit. We recruited students to an incentivized take-home research assignment, and randomly assigned them to 2 (in-pursuit vs. pre-pursuit) between-subjects conditions. Participants were asked to sign an honor code sheet and given an answer sheet and a pen with green ink, with which they would use to complete the answer sheet at home. They were asked to test out this pen by scribbling either on the margin of the answer sheet (in-pursuit condition) or the honor-code sheet (pre-pursuit condition). Then they left the honor-code sheet in the lab and took the answer sheet home in a folder. We predict that the scribble

would serve as a perceptual cue signalling previous interaction with the task sheet such that participants would be more likely to construe their relative position as in-pursuit when seeing the scribbles (in-pursuit condition), and as pre-pursuit when not (pre-pursuit condition). Three weeks later, online submission records showed that more participants in the in-pursuit condition started the assignment by accessing the submission link than in the pre-pursuit condition (52.0% vs. 35.5%,  $\chi^2=4.16$ ,  $p=.041$ ,  $w=.17$ ).

In Study 3 (N=249), we examined the role of perceived task dauntingness. We asked MTurkers to imagine that they were to read a dense scientific report in the next few days among other job duties. We presented the image of the first page of the printed report, which was either tainted by an accidental coffee spill (in-pursuit condition) or not (pre-pursuit condition). Despite the stain from the spill being obviously goal-irrelevant and explicitly described as incidental, it increased the self-reported likelihood of task initiation (Minpursuit=5.57, SD=1.40 vs. Mpre-pursuit=5.07, SD=1.68,  $t(247)=2.53$ ,  $p=.012$ ), and reduced perceived task dauntingness (Min-pursuit=4.13, SD=1.96 vs. Mpre-pursuit=4.67, SD=1.74;  $t=-2.29$ ,  $p=.023$ ). Consistent with our theorization, perceived dauntingness mediated the effect of the break-in token on the predicted likelihood of task initiation (indirect effect  $b=.10$ ,  $SE=.05$ ,  $p<.001$ ,  $CI95\%=[.02, .23]$ ).

In Study 4 (N=363) and Study 5 (N=255), we further tested the jumpstart intervention in other domains of goal pursuit, and identified important moderators of the effect. In Study 4, a field experiment, we recruited undergraduate students to an incentivized “Tidy-up Challenge” campaign, which promotes a more organized lifestyle. The jumpstart intervention was more effective among male participants who had made less recent progress toward the focal goal of being organized ( $F(1, 179)=5.75$ ,  $p=.015$ ,  $\eta^2=.03$ ) than female participants who had made more recent progress toward the focal goal ( $F(1, 180)<1$ ,  $p>.250$ ). In Study 5, we recruited participants who vary in their level of motivation for fitness goals and introduced to them a novel exercise routine. The jumpstart intervention was more effective among those with high (conditional effect = 1.49,  $CI95\% = [.25, 2.72]$ ) or moderate levels of motivation for the fitness goal (conditional effect = 1.06,  $CI95\% = [.21, 1.90]$ ), and was attenuated among those with a low level of motivation (conditional effect = .63,  $CI95\% = [-.23, 1.47]$ ).

### *When Consumers Choose for Others, Their Preferences Diverge from Their Own Salient Goals*

Olya Bullard (University of Winnipeg)

#### **Brief Abstract:**

Consumers frequently make choices and purchase products for other people (e.g., buying a gift for a friend). The current research investigates how choices made for others are influenced by consumers own salient goals. Results demonstrate that consumers prefer goal-incongruent products for other people to enhance the perception of their own progress toward the salient goal. Importantly, this effect cannot be attributed to misprediction of preferences or to a motive to select socially appropriate/desirable option.

#### **Extended Abstract:**

This research examines how consumers’ choices for others are influenced by their own salient goals. Extant research demonstrated that consumers are motivated to fulfil goals through consumption (Yang et al., 2015), that consumers’ evaluations and choices of products are based on instrumentality of those

products to consumer-goal fulfilment (Garbarino and Johnson, 2001; Ramirez et al., 2015), and that goals with higher levels of activation (i.e., more salient goals) have a stronger influence on product evaluation and choice (van Osselaer and Janiszewski, 2012). In other words, consumers prefer products congruent with their salient goals because consumption of these products allows them to experience progress toward these salient goals.

Perception of goal progress is not only influenced by a consumer's own goal-consistent or goal-inconsistent actions, but also by social comparison (e.g., Fishbach and Dhar, 2005; Fishbach et al., 2006). Consumers perceive making more (vs. less) goal-progress if they compare themselves to a lower (vs. higher) standard (e.g., Etkin and Ratner, 2012) or if they compare themselves to a person who is making less (vs. more) goal progress or engages in less (vs. more) goal-consistent actions, which can also be represented by consumption of goal-consistent product(s) (e.g., Fishbach and Dhar, 2005; Fishbach et al., 2006; Park and Hedgecock, 2016).

We predict that choosing a product for another person (vs. for oneself) increases preference for products that are incongruent (vs. congruent) with a salient goal because the perception of consumer's own goal-progress is enhanced (vs. undermined) by goal-incongruent (vs. goal-congruent) products chosen for another person (vs. oneself).

Further, we suggest that this effect is attenuated for goals held at group level. A goal is set at a group level when a specific level of performance that is to be attained is measured by collectively assessing the level of performance of all group members (Weingart and Weldon 1991; Weldon and Weingart 1988). Consumers should prefer goal-congruent products for others for salient goals set at group level because choosing a goal-congruent (vs. goal-incongruent) product for another person should contribute to the perception of progress on the salient goal.

In Study 1 participants were primed either with a healthy-eating goal or with a taking-pleasure-in-the-food-they-eat goal. After completing a filler task, participants made a choice between an apple and a chocolate bar to either keep for themselves or give to a friend. There was a significant interaction between the primed goal and choice recipient on product choice ( $\beta = -2.284$ ,  $SE = .708$ ;  $W(1) = 10.417$ ,  $p = .001$ ). Priming healthy-eating goal increased choice of chocolate-bar for a friend relative to oneself ( $\beta = .982$ ,  $SE = .441$ ;  $W(1) = 4.959$ ,  $p = .026$ ). Priming enjoyment-of-food goal increased choice of chocolate-bar for oneself relative to a friend ( $\beta = -1.352$ ,  $SE = .552$ ;  $W(1) = 6.004$ ,  $p = .014$ ). In study 2 female participants were primed with a beauty-goal and imagined buying a beauty or wine-tasting gift-card either for themselves or for a friend (beauty gift-card was pretested to make a more socially desirable/appropriate gift for a friend). We measured goal-progress perception and purchase evaluation. Participants who imagined buying for themselves evaluated a goal-consistent purchase ( $M = 5.81$ ,  $SD = 1.44$ ) higher than a goal-inconsistent purchase ( $M = 4.69$ ,  $SD = 1.77$ ,  $F(1, 172) = 11.150$ ,  $p < .001$ ). Participants who imagined buying for a friend evaluated a goal-consistent purchase ( $M = 5.15$ ,  $SD = 1.68$ ) lower than a goal-inconsistent purchase ( $M = 5.84$ ,  $SD = 1.28$ ;  $F(1, 172) = 4.175$ ,  $p = .043$ ). Perception of goal-progress followed the same pattern of results and mediated the effect of choice recipient on purchase evaluation of a goal-consistent versus goal-inconsistent product. In study 3, participants were primed with a goal of professional success and presented with two book-choice-options: *The Success Principles* by Jack Canfield (a goal-consistent option) and *The New York Times Cook Book* by Craig Claiborne (a goal-inconsistent option). Goal consistent option was pre-tested on an independent sample to be a better gift for a colleague than a goal inconsistent option. Participants

either made a choice for themselves or for a colleague or predicted colleague's preferences (to test misprediction of preferences account). In a dummymoded logistic regression participants' choices for a colleague were significantly more goalinconsistent than choices for the self ( $\beta = .875$ ,  $SE = .396$ ,  $W(1) = 4.882$ ,  $p = .027$ ); predictions about colleagues' own choices were not significantly different from choices for the self ( $\beta = .169$ ,  $SE = .359$ ,  $W(1) = .222$ ,  $p = .638$ ). Participants' predictions of their colleagues' choices were more consistent with their own salient goal than the choices participants actually made for their colleague ( $\beta = -.707$ ,  $SE = .363$ ,  $W(1) = 3.779$ ,  $p = .052$ ). In study 4 participants were primed with a goal of relaxation either on a personal or family level and imagined shopping for themselves or for a spouse. Participants made a choice between a goal consistent option (day-spa package) and a goal-inconsistent option (paintball-park package). There was a significant interaction between goal level (personal vs. group) and choice recipient on option choice ( $\beta = -1.273$ ,  $SE = .617$ ,  $W(1) = 4.265$ ,  $p = .039$ ). In personal-level goal condition, choosing for a spouse increased preference for a goal-inconsistent option ( $\beta = .932$ ,  $SE = .425$ ,  $W(1) = 4.815$ ,  $p = .028$ ). In group-level-goal condition, choosing for a spouse did not significantly influence choice of option ( $\beta = -.342$ ,  $SE = .447$ ,  $W(1) = .584$ ,  $p = .445$ ). To look at simple effects differently, a group-level goal did not significantly influence choice of option for the self, compared to a personal-level goal ( $\beta = .334$ ,  $SE = .429$ ,  $W(1) = .606$ ,  $p = .436$ ). In the case of choosing for a spouse group-level goal increased choice of a goal-consistent option compared to a personal-level goal ( $\beta = -.939$ ,  $SE = .442$ ,  $W(1) = 4.506$ ,  $p = .034$ ).

This research contributes to the body of research on goal-directed consumption by demonstrating that choices made for others are influenced by salient goals differently than choices made for the self.

## Parenting Motivations, Source Attractiveness, and Advertising Evaluations

Jonathan Hasford (University of Central Florida, USA); Aysu Senyuz (University of Central Florida, USA)

### **Brief Abstract:**

The authors extend research on source attractiveness in marketing communications by examining how parenting affects evaluations of advertisements featuring physically attractive models. Across five studies, individuals with a parenting motive were less favorable in their evaluations of ads featuring attractive sources. Based on the parenting/mating trade-off, activating a parenting motivation led individuals to perceive ads featuring attractive models as less personally relevant, ultimately reducing ad attitudes and purchase intentions relative to individuals without a parenting motivation. This research contributes to the persuasion literature by providing new insights on when the use of physically attractive models does not increase consumer preferences.

### **Extended Abstract:**

The transition to parenthood involves many sacrifices and trade-offs. A fundamental trade-off associated with parenting is that individuals who invest more effort in child care cannot invest as much in mating and romantic relationships. This parenting/mating trade-off is widely documented and has several implications for individual behavior such as decreased interest in short-term mating opportunities (Beall & Schaller, 2014) and placing less importance on the role as a marriage partner after the birth of a child (Alexander & Higgins, 1993; Hackel & Ruble, 1992).

Despite these important studies, however, research has been limited on examining how the parenting/mating trade-off may impact consumer judgment and decision making. One area where this



trade-off may be particularly influential is advertising and persuasive communication, where physically attractive sources are frequently integrated into marketing messages. The use of physically attractive models in advertising is commonplace given that physically attractive models represent a standard of beauty that is desirable, individuals make favorable attributions about the personality of attractive individuals, and individuals often attempt to affiliate with attractive others in both social and romantic relationships (Baker & Churchill, 1977; Buss, 1988; Campbell, Holderness, & Riggs, 2015; Eagly et al., 1991; Joseph, 1982; Kang & Herr, 2006). However, given that the potential activation of mating and affiliation goals upon viewing a physically attractive source would interfere with one's parenting goals, could parenting impact one's responsiveness to physically attractive sources in advertising?

We propose that when parenting motivations are made salient, goals associated with parenting will also affect how consumers respond to physically attractive sources. We expect ads featuring physically attractive sources to increase consumer attitudes and purchase intentions toward the featured product, except when parenting motives are salient. Brand evaluations should be less favorable for individuals with a parenting motive relative to those without parenting motivations, as individuals with a parenting motive will view advertisements featuring physically attractive sources as less personally relevant (since cues associated with affiliation and mating, physical attractiveness in this case, are of reduced importance).

Study 1 provided initial evidence of our conceptual model. Using a consumer panel with 147 individuals (49 single without children, 49 in a committed relationship without children, and 49 in a committed relationship with children), we demonstrated that individuals in a relationship with children rated the ads featuring attractive models less favorably ( $M = 4.97$ ,  $SD = 1.48$ ) than single individuals without children ( $M = 5.63$ ,  $SD = 1.19$ ,  $p = .027$ ) and individuals in a relationship without children ( $M = 5.78$ ,  $SD = 1.02$ ,  $p = .005$ ). Additionally, no differences in attitudes were observed between the single individuals without children and individuals in a relationship without children ( $p = .82$ ). Furthermore, no differences in attitudes were observed across the participant groups for either the average-looking model ads or the control model ads (all post-hoc comparison  $p$ s  $> .51$ ).

Study 2 provided experimental evidence of our predictions regarding parenting and advertising evaluations. After priming different motives, results revealed that individuals with a parenting motive had significantly lower purchase intentions ( $M = 3.52$ ) toward the product (contact lenses) featuring an attractive model relative to participants with a mate retention motive ( $M = 4.56$ ,  $p = .011$ ) or control condition ( $M = 4.34$ ,  $p = .055$ ).

Study 3 was designed to test our prediction that individuals with a parenting motive view ads featuring attractive models as less personally relevant given the parenting/mating trade-off. To test our full conceptual model, we conducted a moderated mediation analysis via PROCESS model 8 (Hayes, 2013). In the model, the motive (parenting or control) x ad type (attractive model or average-looking model) interaction predicted perceptions of ad relevance, while perceptions of ad relevance predicted purchase intentions toward the product (pen). In our analysis, the 95% confidence interval of the index of moderated mediation excluded zero (index = -1.1773, 95% CI [-1.9413, -.2310]). Additionally, the indirect effect was significant for the attractive model ad (effect = -.7574, 95% CI [-1.3531, -.1140]), but not for the average model ad (effect = .4199, 95% CI [-.1521, .9937]). Finally, the motive x ad type direct effect became nonsignificant ( $t = .49$ ,  $p = .62$ ) when perceptions of ad relevance were included

in the model.

Study 4 further explored our conceptual model by manipulating the relevancy of the spokesperson to parents. Participants were shown an ad featuring an attractive male model or child model and were asked to indicate their purchase intentions toward the product (bleach). Results revealed that for participants who viewed the adult model ad, purchase intentions were lower for individuals with a parenting motive relative to individuals in the control condition ( $M_{\text{parenting}} = 3.42$ ,  $M_{\text{control}} = 4.18$ ,  $p = .030$ ). However, for participants who viewed the child ad, purchase intentions were higher for individuals with a parenting motive relative to individuals in the control condition ( $M_{\text{parenting}} = 4.43$ ,  $M_{\text{control}} = 3.59$ ,  $p = .015$ ). Furthermore, purchase intentions were higher for individuals with a parenting motive who viewed the child ad relative to the adult ad ( $p = .004$ ).

In study 5, we examined whether attractive models enhance ad attitudes for individuals with a parenting motive when the product featured is associated with parental care (baby carrier). Results revealed no differences in ad attitudes between the attractive and average-looking model conditions for individuals with a parenting motive ( $M_{\text{attractive}} = 5.07$ ,  $M_{\text{average}} = 5.11$ ,  $p = .87$ ).

Consistent with our predictions, individuals with a parenting motivation were less favorable toward advertisements featuring physically attractive sources relative to individuals without a parenting motivation. This effect was driven by a change in perceptions of ad relevance, as parenting motivations led individuals to perceive ads featuring physically attractive sources as less personally relevant. Furthermore, relevance of source and relevance of product were examined. This research contributes to the persuasion literature by providing new insights on when the use of physically attractive models does not enhance consumer attitudes and purchase intentions.

## **Time Effects in Goals and Perception - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Kaitlin Woolley, Cornell University, USA*

### **The Dissimilarity Bias: The Effect of Dissimilarity on Goal Progress Perceptions and Motivation**

Kaitlin Woolley (Cornell University, USA); Marissa Sharif (University of Pennsylvania, USA)

#### **Brief Abstract:**

We identify a dissimilarity bias in goal progress perceptions. When completed and remaining actions for goal attainment are perceived as dissimilar (vs. similar), people categorize their actions into units and anchor their estimates of goal progress on the fraction of units completed rather than actual progress. Consequently, people farther from their goal infer they have made more progress when completed and remaining actions are perceived as dissimilar (vs. similar); however, this pattern reverses when people are closer to their goal. We document consequences of this bias for motivation and persistence on behavior ranging from exercising to studying to debt repayment.

#### **Extended Abstract:**

Goal progress is a key factor in determining consumers' motivation (Kivetz, Urminsky, & Zheng,

2006). For example, gym-goers are more determined to complete their remaining workouts as they get closer to their goal and coffee drinkers buy more coffee as they get closer to a reward in a loyalty program (Heath, Larrick, & Wu, 1999; Nunes and Drèze 2006). The research-to-date has largely focused on the relationship between goal progress and motivation for completed and remaining tasks that are similar. That is, consumers' past and subsequent actions are largely identical, be that completing a series of the same ab exercises or purchasing coffee from the same store (Kivetz et al. 2006; Heath et al., 1999; Wallace & Etkin, 2017).

Yet the activities and products consumers use to attain their goals range in degree of similarity (Kruglanski et al. 2002; Etkin & Ratner, 2012; 2013). For example, in a workout, a gym-goer might complete all upper body workouts or complete first upper body workouts and then cardio workouts. How does the similarity between completed and remaining tasks affect perceptions of goal progress and thus consumers' motivation to complete them?

Six studies (N=5598; three pre-registered) identify a dissimilarity bias in perceptions of goal progress. We predict that perceived dissimilarity between completed and remaining actions leads people to categorize their goal pursuit into two units, anchoring them on the fraction of overall units completed (50%) rather than absolute progress made. As a result, dissimilarity (vs. similarity) between completed and remaining actions leads people to overestimate their progress when they are farther from their goal (completed less than 50%), and underestimate progress when they are closer to their goal (completed more than 50%).

Study 1 (N=198) examined the first half of this prediction: how perceived dissimilarity influences perceived progress estimates at the onset of goal pursuit (low-progress). Students who initially started studying at a library were randomly assigned to focus on how their completed school work was dissimilar (vs. similar) to their remaining work. Students in the dissimilar condition believed they made more progress toward their study goal than those in the similar condition,  $B=9.48$ ,  $p=.044$ . Thus, in the initial stages of goal pursuit, perceived dissimilarity (vs. similarity) between completed and remaining actions increased perceptions of goal progress.

Extending this, Study 2 (N=800) examined how dissimilarity vs. similarity in completed and remaining actions influences progress perceptions towards an exercise goal when far (low-progress) versus close (high-progress) to goal completion. Participants imagined performing a series of upper body and ab workouts, that were framed as dissimilar or similar depending on condition. Participants were further assigned to imagine making less progress (30% of workout completed) or more progress (70% of workout completed). We found the predicted interaction between similarity (similar vs. dissimilar) and actual progress (high vs. low) on goal progress perceptions,  $B=21.73$ ,  $p<.001$  (Figure 1). Under low-progress, perceived dissimilarity (vs. similarity) between workouts increased progress perceptions,  $B=9.69$ ,  $p=.016$ , a pattern that reversed under high-progress,  $B=-13.05$ ,  $p<.001$ . Study 3 (N = 600) replicated this pattern for exercises that differed in their actual similarity (rather than perceptions of similarity; Figure 2). We again found those far from their goal perceived they had made more progress when their exercises actually differed (vs. were the same),  $B=25.39$ ,  $p<.001$ , but those close to their goal perceived they made less progress when their exercises actually differed (vs. were the same),  $B=-11.58$ ,  $p=.004$ .

Studies 4-6 (all pre-registered) examined the downstream consequences of dissimilarity for motivation.

Study 4 (N=800) demonstrated that perceptions of progress differentially influence debt repayment motivation as a function of similarity (similar vs. dissimilar debts). Again, we find the similarity (similar vs. dissimilar)  $\times$  absolute progress (high vs. low) interaction:  $B=.51$ ,  $p<.001$ . At low-progress, dissimilarity (vs. similarity) between debts increased re-payment motivation, a pattern that reversed at high levels of absolute progress.

Study 5 (N=1600) demonstrated how dissimilarity vs. similarity in completed and remaining actions and progress interact to influence both perceptions of progress and actual motivation in an incentive compatible design. Participants completed a series of dissimilar (vs. similar) logic problems, and could quit at either low (vs. high) levels of absolute progress. As predicted, there was a significant similarity  $\times$  progress interaction for progress perceptions,  $B=7.68$ ,  $p=.032$ , and motivation,  $B=.58$ ,  $p=.012$ , such that those in the dissimilar-condition (vs. similar-condition) were more likely to complete the logic exercises at low-progress, and less likely to complete the exercises at high-progress.

Lastly, Study 6 (N=1600) examined how similarity  $\times$  progress jointly determine the likelihood of completing an actual workout. Participants completed a series of dissimilar (vs. similar) exercises, and could quit their workout at either low (vs. high) absolute progress. We replicated the similarity  $\times$  absolute progress interaction on progress perceptions,  $B=-14.50$ ,  $p<.001$ , and motivation,  $B=-.71$ ,  $p=.021$  such that those completing dissimilar exercises felt they made more progress, and were more likely to continue their workout at low levels of progress, but felt they made less progress and were less likely to continue their workout at high progress, relative to those who were completing similar exercises. Indeed, perceptions of progress mediated the effect of similarity on motivation to complete the workout at high-progress,  $B = -.07$ ,  $SE=.03$ , 95% CI = [-.15, -.02], and low-progress,  $B=.05$ ,  $SE=.02$ , 95% CI = [.01, .11]; (moderated-mediation:  $B=-12.74$ ,  $SE=.05$ , 95% CI = [-.23, -.05]).

Overall, we find that consumers' perceptions of goal progress, and hence their motivation, is a function of their absolute progress and the degree of similarity between their activities. At low levels of progress, when completed and remaining tasks were dissimilar (vs. similar), people perceived they made more progress, and were more likely to continue their goal pursuit. However, at high levels of goal progress, this pattern reversed: when completed and remaining tasks were dissimilar (vs. similar) people perceived they made less progress, and were more likely to give up on their goal pursuit. This research thus offers new insights into the literature of categorization and consumer motivation, demonstrating how the dissimilarity between completed and remaining tasks influence goal progress perceptions, and as a result, consumers' goal attainment.

Now You See It, Now You Don't!: How Ephemeral Messages Impact Viewing Behavior  
Yeon Jin Sung (University of Michigan, USA); Aradhna Krishna (University of Michigan, USA); Ryan Elder (Brigham Young University, USA)

**Brief Abstract:**

Ephemeral messages used in social media automatically disappear within a certain amount of time “after they are opened”. Our research shows that such ephemerality impacts “when” consumers open a message. This effect occurs even though ephemerality does not objectively change “until when” consumers can open the message, but only how long the message can be viewed once opened. Feelings of control moderate this effect, with lower (vs. higher) perceived control leading to earlier response from consumers. We also show that ephemerality has negative downstream consequences on attitudes

and memory that arise from reductions in viewing time.

### **Extended Abstract:**

Ephemeral messaging services allow consumers to send messages that disappear within a certain amount of time after they are opened (Bayer et al., 2016; Hofstetter, Ruppell, & John, 2017). This time restriction is different from a more conventional type of time restriction which limits “when” people can open a message (Inman, Peter, & Raghurir, 1997). Here, the time restriction is how long recipients can view the message “after” it is opened – “until when” it can be seen. As an example, while Snapchat allows up to 10 seconds as the viewing time for its disappearing messages, the messages remain on the server for up to 30 days if they are not opened.

Despite the orthogonality of “when” and “for how long” a message can be viewed, we find that ephemerality (“for how long”) impacts consumer decisions about “when” to open a message, such that consumers choose to see ephemeral messages earlier than non-ephemeral messages – behaving as if ephemeral messages have a shorter deadline for being opened. We hypothesize that this is due to reduced feelings of control over ephemeral messages (Atasoy & Morewedge, 2017). We test this process by examining whether the effect is attenuated for those who generally feel low in control and thus already have heightened approach motivations as a means of restoring control (Greenaway et al., 2015).

Six studies are reported. The setting of Studies 1A (N = 154; Lab) and 1B (N = 204; MTurk) was of an online video service website, in which participants were asked which of two movies they would like to watch first. In one condition, Movie A was ephemeral, while Movie B was not as ephemeral (counterbalanced by movie title). Movie A was more likely to be chosen when it was rented (vs. wned; 67.5% vs. 33.8%;  $\chi^2(1) = 17.56, p < .001$ ) in Study 1A, and when it had 24 hours (vs. 72 hours) access as its rental period (i.e., “You have not yet started watching this movie. Once you start, you’ll have access for 24 (72) hours”; 75.8% vs. 57.1%;  $\chi^2(1) = 7.89, p = .005$ ) in Study 1B.

Studies 2 and 3 generalized these findings in a different setting set to mimic a news website with an advertisement banner. Participants were told to read the news and also to click and view the advertisement. They read “Once you click on the advertisement, it will be available to view for 10 seconds (10 minutes) and then will disappear”, in the high (low) ephemerality condition. When they clicked on the banner, participants could see the advertisement as long as they wanted, but within the maximum viewing time. Then, they returned to the news webpage and read news articles. For time data in all studies, we analyze log-latencies (Robinson, 2007) but report mean values in seconds. Study 2A (N = 198; Lab) found that people in the high (vs. low) ephemerality condition clicked on the advertisement earlier (MHigh = 24.12 vs. MLow = 41.78;  $t(196) = -2.91, p = .004$ ). In subsequent studies, we included comprehension check questions before and after participants viewed the website (92.8% correct responses in average).

Study 2B (N = 309; MTurk) replicated Study 2A with the permanent condition where the advertisement did not disappear. The 10-second ad was opened earlier than the 10-minute ad (MHigh = 34.01 vs. MLow = 69.15;  $t(307) = -2.30, p = .022$ ), and the permanent ad (MHigh = 34.01 vs. MPermanent = 48.46;  $t(307) = -2.18, p = .030$ ). There was no difference between the 10-minute and permanent ads (MLow = 69.15 vs. MPermanent = 48.46;  $t(307) = .13, p = .894$ ).

Study 2C (N = 176; Lab) replicated Study 2A using different stimuli. Participants saw a news website where not only the advertisement banner but also the news previews were clickable for full information. Again, participants opened the 10-second (vs. 10-minute) ad earlier (M<sub>High</sub> = 77.63 vs. M<sub>Low</sub> = 124.88;  $t(174) = -3.97, p < .001$ ).

Study 3 (N = 398; MTurk) examined the role of perceived control. Participants first responded to the measure of perceived control (Ma & Kay, 2017). Subsequent procedures were identical to those of Study 2C. A regression on ad opening time showed the main effect of ephemerality (M<sub>High</sub> = 80.41 vs. M<sub>Low</sub> = 125.47;  $b = -.42, t(394) = -3.22, p = .001$ ). A main effect of perceived control indicated that lower perceived control was associated with earlier ad opening ( $b = .19, t(394) = 3.42, p = .001$ ), supporting our hypothesis that feelings of low control trigger approach motivation. Importantly, there was an interaction between ephemerality and control ( $b = -.24, t(394) = -2.90, p = .004$ ). People feeling high (+1SD) control opened the 10-second (vs. 10-minute) ad earlier ( $b = -.80, t(394) = -4.32, p < .001$ ), but people feeling low (-1SD) control did not ( $b = -.04, t(394) = -.22, p = .829$ ).

Conclusion. Results of six studies indicate that people behave as if they cannot separate out the “until when” of time from the “for how long”. Taken together, the results have many implications for time perception theory and for social media managers.

## Translating Goals into Action: The Power of Fresh Start

Rebecca Chae (University of Michigan, USA); Katherine Alicia Burson (University of Michigan, USA)

### **Brief Abstract:**

We investigate the role of “fresh starts” on consumers’ motivation to translate goals into action. While extensive literature has demonstrated a robust goal gradient effect, three studies provide evidence that perceptions of a fresh start (trait and state) are important boundary conditions of the goal gradient effect. Our experiments show that, the more individuals’ believe that they can start afresh, dates that mark a fresh start (e.g. 1st of month) can intensify goal gradient effects while non-meaningful dates can eliminate them.

### **Extended Abstract:**

Extensive literature has demonstrated a goal gradient effect (e.g., Cryder, Loewenstein, and Seltman 2013): Motivation to achieve a goal intensifies near completion (Hull 1932). The effect can be moderated by counting down (Shalev and Morwitz 2012) or highlighting early accumulated progress (Bonezzi, Brendl, and De Angelis 2011). We find that the presence versus absence of temporal thresholds is also a boundary condition for the goal gradient effect.

The “goals as reference points” account (Heath, Larrick, and Wu 1999) shows that people’s goal progress follows the tenets of the value function, which has a prominent s-shape. Nevertheless, this s-shapeness is reduced by taking a third- rather than first-person perspective (Kurt and Inman 2012; Polman 2012). In other words, reducing the affect associated with judgments makes the function less curvy. Aside from changing the affect via self-other manipulations, affect is reduced when imagining an event in the future (Loewenstein 1996; Meyers-Levy and Maheswaran 1992). Thus, we hypothesize that people confronting a goal persistence decision in the future will show little goal gradient effects.

Distance to the future is actually something that is difficult for people to estimate and thus their perceptions of time are malleable. We show that time estimates that cross a temporal threshold (eg, a change in month) obfuscate actual temporal distance. When a difference between two numbers (such as two dates) is perceived as difficult to calculate, people are more likely to think that the two numerical values are closer together than an identical difference that is perceived as easy (Thomas and Morwitz 2009). Thus, estimates of time periods that span a temporal threshold may decrease the perceived length of that time and make the future seem closer than when it is estimated without a temporal threshold. In three studies, we investigate the relationship between temporal thresholds (absence vs. presence) and goal progress on motivation to initiate or complete a goal. We find that goal gradient effects are strong when time to the future bridges a temporal threshold.

First, a pilot attempted to replicate the goal gradient effect in an exercise context about the future that did not involve crossing a temporal threshold. Participants were randomly assigned to either a goal initiation or completion condition. Those in the goal initiation (completion) condition read that the upcoming date would be the first (last) day of a new gym membership period. We measured willingness to attend the workout session on that date. Results revealed no goal gradient effect ( $p = .620$ ). The date framed as the end (vs. beginning) of goal progress did not produce greater willingness to exercise. This suggests that predictions about future goal persistence may not show the typical goal gradient effect on goal progress, perhaps because affect is reduced in predictions about the future. In the next experiment, we tested the extent to which temporal thresholds could lead to foreshortening of time, and thus more affective judgments that would show goal gradient effects.

Study 1 was a 2 (goal progress: initiation, completion) x 2 (temporal threshold: present, absent) between-subjects experiment using the domain of volunteering. Participants imagined it was currently 4 days before a target date. Next, those in the initiation condition imagined that they were yet to begin volunteering and that the date was the start of the new volunteering cycle. Those in the completion condition were asked to imagine that they have already volunteered for three days, and that the date was the end of the cycle. We measured perceived distance to and willingness to volunteer on the target date. An ANOVA revealed a significant effect of temporal threshold on perceived distance ( $F(1, 307) = 5.33, p = .022$ ). As predicted, time was foreshortened when it bridged a temporal threshold relative to when it did not ( $M = 2.29, SD = .94$  versus  $M = 2.56, SD = 1.07$ , respectively). On willingness to volunteer, there was a significant goal gradient effect ( $F(1, 307) = 11.51, p = .001$ ). However, this effect was qualified by a marginally significant interaction ( $F(1, 307) = 3.75, p = .054$ ; see figure). Like the pilot, when the next volunteering date did not bridge a temporal threshold, the degree of goal progress did not affect willingness to participate ( $p = .293$ ). However, when the next volunteering date bridged a temporal threshold, the goal gradient effect persisted ( $p < .001$ ). This moderation suggests the goal gradient effect persisted only when the volunteering date bridged a temporal threshold. In addition, goal progress significantly moderated the mediating role of the perceived distance in the relationship between temporal threshold and willingness to volunteer (PROCESS Model 15;  $b = -.1641, SE = .0954, 95\% CI = [-.3880, -.0162]$ ).

Study 2 was designed to replicate the patterns found in Study 1 while strengthening the manipulation by asking participants about real dates four days away. The 2 (goal progress: initiation, completion) x 2 (temporal threshold: absent, present) between-subjects experiment was collected in three waves. The target dates either bridged a temporal threshold or did not. The rest of the procedure was similar to Study 1. An ANOVA revealed a significant goal gradient effect ( $F(1, 297) = 4.86, p = .028$ ) qualified

by a significant interaction ( $F(1, 297) = 10.86, p = .001$ ). Like Study 1, the effect persisted only when the next volunteering date bridged a temporal threshold.

In short, we find that predictions about goal persistence for the future do not show reliable goal gradient effects. Those effects depend on how distant the future feels to a judge—the less distant, the more likely it is that goal gradient effects appear. This is likely due to the reduced emotion involved in predictions for a future self that reduces the curvature in the value function that underlies goal gradient effects. We are able to reduce perceptions of temporal distance by increasing the difficulty of estimating that distance by inserting a temporal threshold (month change) between the present and future. This foreshortening of time restores the curvature of the value function and goal gradient effects.

## Virtual Reality Experiences Decrease Time Pressure and Increase Patience

Rafay A. Siddiqui (Hong Kong Polytechnic University); Seung Hwan (Mark) Lee (Ryerson University)

### **Brief Abstract:**

As Virtual Reality (VR) becomes more mainstream, it is worthwhile to investigate the downstream consequences of VR experiences. Here, we explore the impact of VR on time perception. Findings from four studies reveal that VR experiences reduce felt time pressure, and thereby increase consumer patience for larger delayed rewards. These findings contribute to the literature on time scarcity and intertemporal choice by introducing VR experiences as a novel antecedent to patience for delayed rewards, and in doing so provide an important insight into how VR experiences can affect consumer decision making.

### **Extended Abstract:**

Consumer access to Virtual Reality (VR) experiences is progressively increasing, as the VR market is expected to surpass \$34 billion by 2023 (Rayome 2018). Due to its 3D, 360-degree digital format, VR is a richer medium of communication than traditional methods (Steuer 1992). It provides its users with sensory breadth by incorporating audio, visual, and haptic channels. Even in basic VR formats, the viewer gains first-person perspective of an artificial 360-degree environment. This enhances media richness (see Daft & Lengel, 1986) as VR is able to transport users to an alternate, virtual environment. Such transportation has been referred to as telepresence, the perception of being in an environment different from one's immediate physical environment (Kim and Biocca 1997). Thus far, the downstream impact of VR experiences on consumer decision-making has only been explored to a limited extent. Here, we make the novel prediction that the increased level of telepresence generated by VR can reduce perceived time pressure and consequently increase patience for delayed rewards.

Time pressure refers to the amount of time individuals perceive they have in their lives to complete tasks. Feelings of time pressure may be overcome when the demands on one's time are less salient, such as when one thinks about the future (Zauberman and Lynch 2003), or when one does not attach economic value to time (DeVoe and Pfeffer 2011). Further, when feelings of stress and anxiety are subdued, perceptions of time pressure may be reduced (Etkin et al., 2015). We propose that the increased sense of telepresence provided by VR reduces perceptions of time pressure. Telepresence removes one from their immediate physical environment, and has been found to reduce the saliency of experienced pain (Wiederhold et al. 2014) and reduce anxiety and stress from experienced events in



the real world (Riva 2005; Pallavicini et al. 2016). Furthermore, telepresence is an antecedent of flow, a state in which individuals experience timelessness and a reduced focus on the passage of time (Csikszentmihalyi 1997; Novak, Hoffman, and Yung 2000). Given these prior findings, the increased sense of telepresence provided by VR should result in a reduced focus on time constraints present in the immediate physical environment. Hence, we predict that VR experiences will reduce perceptions of time pressure.

An important downstream consequence of time pressure is that individuals become impatient (DeVoe and Pfeffer 2011; Etkin et al. 2015). The less time people perceive to have, the less they are willing to wait. Therefore, we also predict that VR experiences will increase patience for delayed rewards in intertemporal choice; reduced time pressure should lead individuals to forgo smaller-sooner rewards and opt for larger-later rewards.

In all studies, the use of Virtual Reality was manipulated by assigning participants to one of two conditions (Virtual Reality -VR; Traditional Visual Media (laptop) – VM). In the VR conditions, participants were asked to view content through the Oculus Rift, which is a headmounted VR headset that allows people to experience 360° environments. Within the Oculus operating system, we used applications that allowed to create live-action VR experiences for participants through immersive cinematic 360° videos, or to create 360° environments within which participants could complete tasks such as solving puzzles. In the VM conditions, participants were given the same content to view, or the same tasks to complete, on a traditional laptop computer. In all studies, the measures were administered using either paper or traditional computers.

In study 1, participants viewed a 360-degree video about Disney Land through either VR or VM. Afterwards, participants completed measures for time pressure adapted from DeVoe and Pfeffer (2011). We found that participants reported feeling significantly lower time pressure in the VR condition ( $p < 0.05$ ).

In study 2, participants were either assigned to watch the same video content as in study 1 or to solve puzzles via VR or VM. Participants subsequently completed time pressure measures as in study 1. We found no interaction, but only a main effect that revealed that participants in the VR condition reported feeling significantly lower time pressure regardless of whether they were asked to watch a video or solve puzzles ( $p < 0.05$ ).

In study 3, participants watched the same video as in study 1 in either VR or VM. They were then given a hypothetical intertemporal choice between receiving a \$100 gift card today versus a \$125 gift card 1 month from today. We found that a larger percentage of participants chose to wait for the larger gift card in the VR condition than in the VM condition ( $p = 0.05$ ). That is, participants in the VR condition exhibited more patience. Further, participants in the VR condition once again reported lower time pressure ( $p < 0.05$ ), and time pressure mediated the effect of VR vs. VM on intertemporal choice.

In study 4, participants saw a video on Machu Picchu in either VR or VM. They were then given an intertemporal choice between two real monetary bonuses. They could either receive \$5 (HKD) immediately, or \$10 (HKD) in 2 weeks. After making their choice, participants completed measures for telepresence adapted from Novak, Hoffman and Yung (2000) and time pressure measures. In the VR condition, participants were more likely to wait for the larger monetary bonus than those in the

VM condition ( $p < 0.01$ ). Further, those in the VR condition also indicated higher telepresence ( $p < 0.01$ ) and lower time pressure ( $p = 0.05$ ). A serial mediation model confirmed that telepresence and time pressure serially mediated the impact of VR vs VM on patience.

Across four studies, we demonstrate that VR experiences (vs. VM) reduce perceptions of time pressure, which in turn causes individuals to become more patient for larger delayed rewards. We also find that the increased sense of telepresence has a mediating effect. These findings have important implications for consumer welfare as we show that not only does VR reduce felt time pressure, but it increases consumer patience by increasing preference for larger delayed outcomes over smaller immediate outcomes.

## **Consumer Expectations about Food, Performance, and Firms' Actions - Competitive Paper Session**

*Sloane (2nd Level)*

*Chair: Nico Heuvinck, IESEG School of Management, France*

### The "Healthy=Lighter" Heuristic

Nico Heuvinck (IESEG School of Management, France); Yi Li (Macquarie Graduate School of Management, Australia); Mario Pandelaere (Virginia Tech, USA)

#### **Brief Abstract:**

A series of five studies provide evidence for a “healthy=lighter” heuristic by showing that people infer food containing healthier ingredients to weigh less than food containing normal or unhealthy ingredients. In the meantime, people also use weight as a cue to signal products’ healthiness: lighter products are perceived as more likely to contain healthier ingredients compared to heavier products. We reveal that the calories estimate underlies this bidirectional relationship between weight and healthiness perception, while ruling out density as an alternative explanation. Furthermore, we demonstrate this heuristic has direct influences on consumers’ product choices, purchase intentions and willingness to pay.

#### **Extended Abstract:**

Prior research suggests that consumers rely mostly on heuristic-based decision making when it comes to food related decisions (Wansink and Chandon 2014). For instance, a “health=expensive” intuition states that consumers associate healthy food with higher prices (Haws et al., 2017). An “unhealthy=tasty” intuition suggests that consumers hold a lay belief that unhealthy food tastes better (Raghunatan et al., 2006). Finally, a “healthy=less filling” intuition states that consumers consider healthy food as less filling/satisfying (Suher et al., 2016). This article adds to this stream of literature by adding a new intuition: consumers infer that healthier food weighs less than unhealthy food. We term it the “healthy=lighter” heuristic.

Consistent with other heuristics, we argue that the healthy-lighter heuristic derives from both internal (i.e., example generation: items such as (burgers/chips) salads/fruits that are (heavier) lighter in calorie content are more likely to come to mind when thinking about (un)healthy food) and external sources (i.e., market communications: food containing less fat often have “light” labels, e.g., Coke light). Although in both sources, heavy/light refers to calorie content of food, rather than the weight. Thus,

two important mechanisms underlie this heuristic. First, the calorie estimation links food healthiness and heaviness/lightness perception. Second, people generalize the metaphorical meaning of heavy and light to their literal meaning on weight. Building on the bidirectional influence of metaphors, we argue that people will also use literal meaning of weight to infer the healthiness of food. Taken together, we predict that people will expect healthier food to weigh less than normal or unhealthy food. In the meantime, people will also consider food that weighs less to be healthier.

In study 1, we showed 251 MTurk panelists two cakes with the same list of ingredients: one traditional chocolate cake containing regular ingredients (e.g., whole milk) and one healthier chocolate cake containing healthy ingredients (e.g., non-fat milk). Participants were randomly assigned to one of the following two conditions: participants saw either the weight of the traditional (healthier) chocolate cake (600 grams) and had to guess the weight of the healthier (traditional) chocolate cake. Results denote that in both conditions, consumer inferred the healthier cake to weigh less than the traditional cake.

Study 2 employed a 2 (healthiness: increasing vs. decreasing) x 4 (percentage: 25% vs. 50% vs. 75% vs. 100%) mixed-factorial design, where the healthiness was manipulated between-subjects and the percentage was manipulated within-subjects. We showed 102 MTurk panelists a recipe of making four servings of vanilla pudding (240 grams and 1440 calories). Among the list of ingredients, in the increasing healthiness (decreasing healthiness) condition, the original recipe uses 2 cups of whole milk (skim milk). We asked participants to guess the calories and weight of the vanilla pudding, if we replaced  $\frac{1}{2}$  cup (25%), 1 cup (50%),  $1\frac{1}{2}$  cup (75%), and 2 cups (100%) of the whole (skim) milk with skim (whole) milk. As expected, in the decreasing (increasing) healthiness condition, increasing the percentage of whole (skim) milk increased (decreases) the estimated weight. Moreover, a mediation test showed that calorie estimates mediate the effect of food healthiness on weight estimates.

In the following studies, we will turn to the other side of the heuristic and test whether people also use weight information to infer the healthiness of the food.

In study 3, 154 MTurk panelists read that Susan was following a recipe to make 300 grams of rice pudding. They were randomly assigned to one of the following two conditions: in the light (heavy) condition, participants read that Susan ended up with 250 (350) grams of rice pudding. After, participants chose between five pairs of ingredients the ones that Susan most likely used. Each pair contained one normal ingredient and one healthy ingredient (e.g., regular vs. organic butter). Results denote that the rice pudding in the light (vs. heavy) condition contained more (vs. less) healthy ingredients which supports that people inferred products lighter in weight as healthier.

In study 4, 50 business students sampled M&M's from two identical cups. They were told that M&M's recently introduced a healthy version and we asked whether they could tell the difference in taste and identify which cup contains the healthy M&M's. In reality, both cups contained identical M&M's but one cup was heavier (250 vs. 175 grams) because of a piece of metal that was added at the bottom, not visible to participants. Participants held both cups in their hands while a research assistant explained the procedure of the study. After receiving the instructions, participants put the cups on a table, started sampling and indicated their guesses, purchase intention, and WTP for a pack of M&M's (300 grams) from each cup respectively. The majority of the participants indicated the lighter cup contained the healthier M&M's. In addition, participants were more inclined to purchase and were willing to pay

more for a pack of M&M's in the lighter cup.

Study 5 employed a 2 (order: order 1 vs. order 2)  $\times$  4 (4 healthiness comparisons between two food items) mixed-factorial design. 153 MTurk panelists had to do four rounds of healthiness comparisons between two food items varying in weights by indicating whether the lighter food item was healthier, both items were equally healthy, or the heavier food item was healthier. The order variable counterbalanced the weights of the items in the pair. We also varied the level of weight difference between two food items in each pair, from 0.5 ounce to 1.5 ounce. After the healthiness comparison task, we provided the calories count of the lighter food item in the pair, and participants had to guess the calories of the heavier food item.

Finally, participants had to indicate the density level of all eight food items. Our results suggest that calorie estimates mediate the weight-healthiness path. In addition, the weight difference moderates this inference: increasing the weight difference between two food items increases the likelihood that the food lighter in weight to be considered as healthier. Finally, the density difference did not mediate the heuristic, ruling it out as an alternative underlying mechanism.

## Put the Cookies in the Jar: Anticipating Food Consumption Decreases Enjoyment of Experiences in the Present

Emily Garbinsky (University of Notre Dame, USA); Anne-Kathrin Klesse (Erasmus University Rotterdam, The Netherlands)

### **Brief Abstract:**

Consumers often experience a delay between choosing food and consuming it. Whereas existing research documents positive consequences for the ultimate consumption of the delayed food, we show in five studies (three in the field) that placing food in front of the consumer during a delay elicits a negative effect on the current consumption experience (such as eating dinner, listening to music, evaluating art, and coloring). We propose that this occurs because the presence of food prompts mental imagery, which subsequently decreases consumer engagement with the current, focal consumption experience. In line with this, we document three boundary conditions.

### **Extended Abstract:**

Consumers often experience a delay between choosing food and consuming it: Diners at a buffet might select a dessert that they take to their table to enjoy after their main dish. Concert attendees might choose a mouth-watering snack that they wait to consume until the show's intermission. Consumers can place the snack in front of them while engaging in the focal activity (e.g., listening to a concert), or they can hide it until the moment of consumption. Delaying the consumption of food positively affects enjoyment of the food once it is consumed, especially when the food is present (vs. absent) during the delay (Nowlis, Mandel, & McCabe, 2004). However, in this research, we show that placing food in front of the consumer during a delay elicits a negative effect on enjoyment of the focal consumption experience.

We suggest that this negative effect occurs because the food's presence prompts mental imagery (MacInnis & Price, 1987; Nowlis et al., 2004), subsequently decreasing engagement with the current consumption experience. Because the degree to which consumers are engaged in an experience positively influences their enjoyment (Alba & Williams, 2013; Higgins & Scholer, 2009), we propose

that the presence (vs. absence) of food will negatively impact enjoyment of the current consumption experience. We suggest three theoretically-driven boundary conditions. First, consuming food in the present (i.e., removing the delay) will render mental imagery unnecessary, thus mitigating the negative effect. Second, increasing engagement with the focal consumption experience—by framing it as work-related rather than fun—will decrease the likelihood of engaging in mental imagery and, thus, reduce the negative effect of the presence (of food) on enjoyment of the focal consumption experience. Finally, framing the delayed food item as functional (rather than tasty) is expected to mitigate the effect because mental imagery is less likely to occur for functional products (Chan & Mukhopadhyay, 2010; MacInnis & Price, 1987).

Five studies (three field studies) utilizing various populations (students and adults), food stimuli (cookies, brownies, muffins, and Kind bars), and focal consumption experiences (eating dinner, listening to music, viewing art, and coloring) demonstrate the generalizability of our effect. Please refer to tables 1 and 2 for details on measurements, methodologies, and results. Table 2 also includes details on two follow-up studies not described in this abstract.

Study 1 provides initial evidence. Students in a dining hall ate dinner in the presence or absence of a dessert, and indicated enjoyment of their dinner. Those who ate in the presence of their dessert enjoyed the meal significantly less ( $M = 5.11$ ,  $SD = .90$ ) than those who ate in the absence of their dessert ( $M = 5.49$ ,  $SD = .99$ ),  $t(145) = 2.23$ ,  $p = .028$ .

Study 2 was conducted at an outdoor concert. Concert attendees participated in exchange for \$1 and a chocolate chip cookie. Depending on condition, participants received the cookie at the beginning of the study, and placed it in front of them while listening to the concert, or they received it at the end of the study. Those who listened to the music in the presence of the cookie enjoyed the music significantly less ( $M = 6.30$ ,  $SD = .90$ ) than those who listened in the absence of the cookie ( $M = 6.60$ ,  $SD = .51$ ),  $t(146) = 2.52$ ,  $p = .013$ .

Study 3 was conducted at an art museum. Participants viewed art with cookies being present or absent. In a third condition, we rendered mental imagery redundant by allowing participants to consume the cookies while viewing the art. Results revealed a main effect on enjoyment of the art,  $F(2, 142) = 3.99$ ,  $p = .021$ . Those who viewed the art in the presence of the cookies (but were not allowed to eat them) enjoyed the art significantly less ( $M = 4.83$ ,  $SD = 1.44$ ) than those who viewed in the absence of the cookies ( $M = 5.42$ ,  $SD = 1.03$ ),  $t(142) = 2.35$ ,  $p = .020$ , as well as those who consumed the cookies while viewing the art ( $M = 5.45$ ,  $SD = 1.78$ ),  $t(142) = 2.51$ ,  $p = .013$ . There was no significant difference in enjoyment between participants that viewed the art in the absence of the cookies, and those that ate the cookies while viewing the art.

Study 4 provided evidence for the driving role of pre-consumption mental imagery. Since individuals devote more attentional resources to utilitarian rather than hedonic tasks (Locke & Latham, 1990), we manipulated the consumption goal of the focal activity (coloring) by framing it as a fun activity, or for increasing creativity at work. We also manipulated whether participants colored in the presence or absence of a cookie. Results revealed the predicted interaction,  $F(1,216) = 3.31$ ,  $p = .070$ . When coloring was perceived as hedonic, those who colored in the presence of the cookie enjoyed coloring significantly less ( $M = 5.60$ ,  $SD = 1.43$ ) than those who colored in its absence ( $M = 6.08$ ,  $SD = .91$ ),  $t(216) = 2.24$ ,  $p = .026$ . When coloring was perceived as work, there was no significant difference.

Study 5 showed that our effect is specific to hedonic food by manipulating the description of the same food (Kind bars), highlighting either its tasty or functional attributes. Participants then colored in the presence or absence of the bar. Results revealed the predicted interaction,  $F(1,216) = 4.27, p = .040$ . When the bar's sensory attributes were emphasized, those who colored in the presence of the bar enjoyed coloring significantly less ( $M = 5.28, SD = 1.53$ ) than those who colored in its absence ( $M = 5.87, SD = 1.21$ ),  $t(216) = 2.49, p = .013$ . When the Kind bar's functional attributes were emphasized, there was no significant difference.

Whereas previous research has demonstrated how delaying the consumption of a product positively impacts enjoyment of that product, we document negative consequences for the consumption experience that occurs during the delay. Our findings suggest that the effects of delaying consumption are more multifaceted than previously documented; this is an important managerial insight for companies frequently utilizing food to improve customer experiences.

## Sensory Placebo Effects: The Role of Sensory Signaling in Enhancing Marketing Placebos and Consumer Outcomes

Dan King (University of Texas Rio Grande Valley); Sumittra Auschaitrakul (University of the Thai Chamber of Commerce)

### **Brief Abstract:**

We use an Interoceptive Sensory Signaling framework to demonstrate "Sensory Placebo Effects," a superior form of placebo responding that occurs when a sensory signal paired with performance expectation is added to a placebo stimulus. We propose that when exteroceptive sensory stimulation is perceived as having interoceptive signal value by the cognitive system (i.e., a sensory placebo administration), people's motor or cognitive performance improve even more than they would if they had received a standard placebo administration. The superiority of sensory placebo effects over regular (non-sensory) placebos is due to encoding and re-activation of placebo responding throughout a sensory-mediated task performance.

### **Extended Abstract:**

We present a view of placebo responding as an interoceptive perception process. We argue that placebo responding can be greatly enhanced by a sensory signaling process, where sensations activate and maintain placebo responding (Pezzulo, 2014).

Study 1 ( $N = 157$ ) had a one factor with three conditions (control vs. standard placebo vs. sensory placebo), between-subjects design. Gym participants were asked to lift a 5 lb. dumbbell twice where the first lift served as a covariate and the second lift served as a performance measure. In between the first and second lifting, we manipulated the presence/absence of placebo information, where participants read the fictitious information that raised their performance expectations. Next, we told participants to apply the powder under their arms (cooling powder: sensory placebo, non-cooling powder: standard placebo) or imagine applying the powder (control). All participants then lifted the dumbbell, drew shapes (i.e., circles and lines) on body sensation maps (Beissner et al., 2015) to physically locate the places where they may have felt energization spots. They completed a sensory signaling scale (e.g., When lifting, I can feel the real-time effect of the powder improving my performance; 7-point scale). An ANCOVA was significant ( $p < .001$ ), where sensory placebo

participants ( $M = 45.19$  seconds) held the weight longer than standard placebo participants ( $M = 38.60$ ,  $p = .001$ ) and control participants ( $M = 32.43$ ,  $p < .001$ ). Sensory signaling and shapes drawn on the body map mediated the effect of type of placebo (standard placebo vs. sensory placebo) on performance because confidence intervals did not include zeros.

Study 2 ( $N = 169$ ) added a cognitive load manipulation to sensory placebo participants (absent vs. present) where sensory placebo-load present participants remembered a 9-digit number. Participants' expectations on product efficacy pre-application did not differ between conditions ( $p > .05$ ). This suggests that the outperformance of both versions of sensory placebo over standard placebo and control condition was attributable to heightened expectations during the sensory-signaling phase of the sensory placebo (i.e., when sensory signals acted on the subject's interoceptive system). An ANCOVA was significant ( $p < .001$ ), such that sensory placebo-load absent participants ( $M = 52.54$  seconds) held the weight as long as sensory placebo-load present participants ( $M = 52.15$ ,  $p > .05$ ), but both sensory placebo conditions outperformed standard placebo ( $M = 44.30$ ,  $p < .05$ ) and control ( $M = 40.77$ ,  $p < .05$ ). Also, sensory placebo-load present participants ( $M = 52.15$ ) held the weight longer than standard placebo ( $p < .05$ ) and control ( $p < .05$ ).

Study 3 ( $N = 168$ ) used maximum vertical jumping as a measure of motor performance and manipulated misattribution of the source of sensation within sensory placebo participants (neutral vs. present). Participants read placebo information about a cream, indicated their level of expectation on product efficacy ( $p > .05$ ), and applied the cream on their legs (i.e., cooling cream: sensory placebo, non-cooling cream: standard placebo, and imagined applying the cream: control). Next, we told sensory placebo-misattribution present participants that the cooling sensation means their muscular capacity is improving. In contrast, we told sensory placebo-misattribution neutral participants that the cooling sensations would not have any effect on their jumping performance. An ANCOVA was significant ( $p < .05$ ): Sensory placebo-positive misattribution participants ( $M = 76.62$ ) jumped higher than sensory placebo-neutral misattribution ( $M = 68.64$ ,  $p < .05$ ), standard placebo ( $M = 70.10$ ,  $p < .05$ ), and control ( $M = 70.98$ ,  $p < .05$ ) participants.

Study 4 ( $N = 214$ ) measured cognitive performance using the word puzzle task (Shiv et al., 2005; Wright et al., 2013) and divergent thinking task (Guilford, 1967). It also manipulated the information presented within sensory placebo condition (taste vs. dissolve). Before solving the puzzle, they read placebo information, rated their expectations of efficacy ( $p > .85$ ), and consumed the tablet based on the condition (i.e., let the tablet slowly dissolve in their mouth: sensory placebo, swallowed the tablet with a glass of water: standard placebo, and imagined taking the tablet with a glass of water: control). We also told sensory placebo-taste participants that the tablet works only when they could taste it; conversely, we told sensory placebo-dissolve participants that the tablet works even after it had dissolved. After ten minutes (when the tablet had dissolved), participants generated ideas for a paper clip. An ANOVA on number of words solved was significant ( $p < .001$ ), such that sensory placebo taste participants ( $M = 12.84$ ) solved as many words as sensory placebo-dissolve participants ( $M = 11.84$ ,  $p > .05$ ), and both sensory placebo conditions solved more words than standard placebo ( $M = 9.71$ ,  $p < .001$ ) and control ( $M = 9.04$ ,  $p < .001$ ) participants. For the paperclip task in which the sensory signal has ceased, there was no difference across conditions ( $p > .05$ ), highlighting the role of real-time sensory-signaling by the interoceptive system.

Study 5 ( $N = 128$ ) tested the effect of sensory placebo on creativity. After rating their level of

expectation ( $p > .05$ ) and undergoing placebo manipulation as in Study 4, participants completed a creativity task where they were asked to design a toy for kids (Yang et al., 2012). Next, participants completed a measure on “felt sensory experience” during the task performance. An ANOVA on the novelty ratings (7-point) was significantly different across conditions ( $p < .05$ ). As predicted, two judges rated the toy designed by sensory placebo participants to be more novel ( $M = 6.95$ ) compared to the toy designed by standard placebo participants ( $M = 6.28$ ,  $p < .05$ ) and control participants ( $M = 5.88$ ,  $p < .05$ ). Moreover, the mediation analysis revealed that sensory (vs. standard) placebo participants felt more realtime sensory stimulation, thereby mediating the increase in creativity [.0008, .2817].

Across five studies, a sensory placebo outperformed both a standard placebo and control conditions. This “sensory placebo effect” appears to be mediated by the real-time sensations of performance improvement, hence re-activating and maintaining performance across time. Our findings contribute to the literature by connecting the novel mechanism of sensory signaling with an empirically demonstrable enhancement of placebo effects.

### Critical Condition: People Only Object to Corporate Experiments If They Object to a Condition

Robert Mislavsky (Johns Hopkins University); Berkeley J Dietvorst (University of Chicago, USA); Uri Simonsohn (ESADE Business School, Spain)

#### **Brief Abstract:**

Why have companies faced a backlash for running experiments? Academics and pundits have argued that it is because the public finds corporate experimentation objectionable. In this paper we investigate “experiment aversion,” finding evidence that, if anything, experiments are rated more highly than the least acceptable policies that they contain. In six studies participants evaluated the acceptability of either corporate policy changes or of experiments testing those policy changes. When all policy changes were deemed acceptable, so was the experiment, even when it involved deception, unequal outcomes, and lack of consent. Experiments are not unpopular, unpopular policies are unpopular.

#### **Extended Abstract:**

In 2014, the Proceedings of the National Academy of Science published an article describing a field experiment where academic authors (Kramer, Guillory, & Hancock, 2014) partnered with Facebook to manipulate the amount of affect-laden content users saw in order to measure emotional contagion. Soon after, OkCupid published a description of experiments they ran on users. Reaction to these experiments was swift and highly negative. Articles describing the backlash reached the front page of the Wall Street Journal and were the most popular/shared articles on several major news outlets. Facebook’s CTO subsequently acknowledged that they were “unprepared” for the reaction and “should have considered non-experimental ways” to conduct this research.

In six studies ( $N=3,271$ ), we present evidence suggesting that the backlash to these experiments was not caused by experimentation itself. We define and test two forms of “experiment aversion” and find no evidence of either. Rather, we find compelling evidence for what we call the “critical condition” hypothesis, where there is no experiment aversion and an experiment’s acceptability is simply a weighted average of the acceptability of policies it implements as treatment arms. Therefore, experiment can only be unacceptable if one of their policies is unacceptable, and, importantly,



experiments are not less acceptable than their least acceptable policies.

In Study 1 (N=505), we test for “absolute” experiment aversion, where all experiments are deemed unacceptable, independent of their policies. Participants evaluated a scenario describing an experiment with either two “good” arms, one “good” and one “bad” arm, or one “good” and one “control” arm. We do not find absolute experiment aversion. Instead, experiments with only acceptable arms are rated positively (good/good: M=5.17 out of 7; good/control: M=5.11,  $p$ s vs. midpoint<.001). Conversely, experiments with an unacceptable arm (good/bad: M=3.35) are rated negatively ( $p$  vs. midpoint<.001). In Study 2 (N=201), we replicate this finding using stimuli describing an experiment similar to that run by Kramer et al. (2014). Thus, we reject absolute experiment aversion.

In Study 3A (N=423), we test “relative” experiment aversion, where an experiment is less acceptable than its policies, either because experimentation is a negative attribute or the underlying policies are less acceptable when part of an experiment. Participants rated either the acceptability of an experiment with two treatment arms or the acceptability of choosing one of two policies (identical to the treatment arms in the experiment condition). For three policy pairs, experiments were more acceptable than their worst policies (good/control: 4.38 vs. 3.94; good/bad: 3.22 vs. 2.38; control/bad: 3.31 vs. 2.95;  $p$ s<.08). In Study 3B (N=247), we replicate this result with a non-MTurk sample of university employees, and in Study 4 (N=608), we again replicate this result with stimuli based on Kramer et al. (2014).

In Studies 3 and 4, however, experiments were less acceptable than the average acceptability of their underlying policies. This may reflect moderate relative experiment aversion or negativity bias, where people give weigh negative attributes more than positive ones. In Study 5 (N=406), we tease these possibilities apart by asking participants to evaluate experiments with two positive policies (providing a 10% discount vs. providing a \$1 credit for every \$10 spent) that are similarly acceptable (thus negativity bias should be absent) and find no evidence of even modest experiment aversion. Participants’ ratings of the experiment (M=5.32) were indistinguishable from their average ratings of the underlying policies (M=5.34;  $p$ =.83).

Finally, Study 6 (N=1,304) tests (and rejects) two potential boundary conditions for our hypothesis. Specifically, we tested if absolute or relative experiment aversion arises when a company’s own customers are evaluating its actions or when a company runs experiments using two negative or objectionable policies. As such, we partnered with Lucid, a market research firm, to recruit regular Amazon customers and asked them about experiments and policies that Amazon could run on their product recommendation system. Second, participants in the experiment condition evaluated experiments with two “positive” changes (e.g., recommending more highly rated items), two “negative” policies (e.g., recommending the most profitable items), or one positive and one negative policy, while those in the policy condition evaluated these same sets of policies, but implemented as standalone changes instead of as an experiment.

We again find no evidence of either absolute or relative experiment aversion. In the positive/positive condition, the experiment was rated a 4.46 out of 7 compared to the worst policy (M=4.22),  $p$ =.05. This was also true in the negative/negative (experiment: 3.63 vs. policy: 2.55,  $p$ <.001) and the negative/positive (experiment: 3.64 vs. policy: 3.01,  $p$ <.001) conditions, showing that even when the company experiments with objectionable policies, there is still no evidence of experiment aversion. See Figure 1.

Taken together, our results support the “critical condition” account of experiment evaluation. Researchers and organizational decision makers should not hesitate to run field experiments using treatment arms that they would otherwise consider implementing as individual policy changes, since experimentation does not make policies more objectionable. Similarly, implementing objectionable policies outside of an experiment will not make them more palatable to the public.

## **Doing Good by Going to this Session: Issues in Prosocial Behavior - Competitive Paper Session**

*Scarborough 3 (Lobby Level)*

*Chair: Bingqing Yin, University of Kansas, USA*

### **The Effect of Pre-Giving Incentives on Perceptions of Charitable Organizations and Donation Behavior**

Bingqing Yin (University of Kansas, USA); Yexin Jessica Li (University of Kansas, USA)

#### **Brief Abstract:**

Charities often include monetary (e.g., coins) and non-monetary (e.g., greeting cards) pre-giving incentives in their donation request letters. Yet little is known about how donors respond to this marketing strategy. In five studies, including a large-scale field study, we demonstrate that low value monetary pre-giving incentives lead to lower donations than either comparable value non-monetary pre-giving incentives or no incentives, and low value non-monetary pre-giving incentives was no more effective than when no incentives are provided. This is because monetary pre-giving incentives evoke exchange norms, which leads the charity to be perceived as less communally oriented, resulting in lower donations.

#### **Extended Abstract:**

A pre-giving incentive (hereafter, PGI) is the provision of a benefit/favor before requesting compliance (e.g., Regan 1971). In the past three years, PGIs such as coins and greeting cards, were included in approximately 40% of the total non-profit mail volume (Paradysz + PM Digital Research 2016). Including PGIs requires resources that are already scarce for many nonprofits. Do the benefits of PGIs justify the costs? Additionally, it is unclear how different types of PGIs (monetary vs. non-monetary) affect donation. Although abundance of research demonstrates the persuasive power of reciprocity (Cialdini, 1993), we show that in certain pre-giving situations, providing gifts or favors before requesting compliance might have no effect or even backfire.

Due to the altruistic nature of the charitable organizations, we propose that people use communal norms when interacting with charities, giving benefits (usually time or money) without expecting comparable (or any) benefits in return. However, the perception of charities as communally oriented can be influenced by the type of PGI enclosed in charity request letters. Empirical research suggests that reminders of money diminish communal motivations (Vohs, Mead, and Goode 2006) and lead people to perceive themselves to be in a businesslike or exchange relationship with others (Jiang, Chen, and Wyer, 2014). This line of research suggests that enclosing low value monetary PGIs evokes exchange norms and leads the charity to be perceived as relatively less communally oriented. In

addition, donors who follow exchange (vs. communal) norms may reciprocate by giving the charity an amount roughly equivalent to what they received. Consequently, we predict that the inclusion of low value monetary PGIs will lead to lower donations than when no incentives are provided. Low value non-monetary PGIs, on the other hand, should not evoke exchange norms. Thus, donors receiving a non-monetary PGI should use communal norms as they do when they receive no incentive. However, because communal norms dictate non-contingent, need-based giving and do not necessitate immediate return of benefits (Aggarwal 2004), a low value non-monetary PGI is unlikely to increase donations.

We tested our predictions in five experiments including a large scale field experiment. In experiment 1 (N=9,000), we partnered with a local charity to examine the effects of monetary (\$.25), non-monetary (a greeting card), and no PGIs on donations in the field. For average donation amount per new donor acquired, PGI type had a significant impact on donation amount ( $F(2, 47) = 10.20, p < .001$ ; in log-transformed values:  $M_{\text{monetary}} = .38, M_{\text{non-monetary}} = 1.42, M_{\text{control}} = 1.56$ ). Monetary PGI led to significantly lower donation compared with non-monetary PGI ( $p = .002$ ) or no PGI ( $p < .001$ ). No donation difference was found between non-monetary and no PGI conditions ( $p = .70$ ). In addition, both monetary PGI and non-monetary PGI conditions resulted in greater net loss (monetary PGI \$.52 vs. no PGI \$.25:  $F(1, 8997) = 9.23, p = .002$ ; nonmonetary PGIs \$.49 vs. no PGI:  $F(1, 8997) = 7.31, p = .007$ ). Extrapolated, inclusion of monetary PGIs (vs. no PGIs) resulted in an additional \$.27 net loss per mailing (\$810 in total). Adding non-monetary PGIs resulted in an additional \$.24 net loss per mailing (\$720 in total).

Experiment 2A (N=175) and 2B (N=132) randomly assigned participants to view charity letters with a monetary PGI (\$.25 in 1A, \$.50 in 1B), a non-monetary PGI (a greeting card in both studies), or no PGI. Participants reported how much they would like to donate to the charity hypothetically in experiment 1A and from their study payment (\$5 in \$1 bills) in experiment 1B. In both studies, people who received monetary incentives donated less than those who received non-monetary PGI or no PGI ( $ps < .05$ ). No differences emerged between the non-monetary PGI and no PGI conditions ( $ps > .30$ ).

Experiment 3 (N=129) examines the mediating role of communal and exchange orientation on donation behavior. Results showed that monetary PGIs elicited significantly less donations compared with no PGIs ( $p = .02$ ) and marginally less donations compared with nonmonetary PGIs ( $p = .08$ ). Monetary PGIs led participants to perceive the charity as less communal than no PGI ( $F(1, 126) = 11.02, p = .001$ ) and non-monetary PGIs ( $F(1, 126) = 4.01, p < .05$ ). No difference was found between the non-monetary and no incentive conditions ( $p > .18$ ). Using PROCESS (model 4; Hayes 2013) with 10,000 bootstrap samples, the effect of monetary PGI and no PGI on donation amount was significantly mediated by the communal perception of the charity (bootstrap CI: 1.76, 8.93). Similarly, the effect of monetary PGI and non-monetary PGI on donation amount was significantly mediated by communal perception (bootstrap CI: .34, 6.27). In other words, monetary incentives (vs. non-monetary or no incentives) led people to perceive the charity as less communal which, in turn, led people to donate less.

Experiment 4 (N= 139) tests the moderating role of PGI value (low \$.25 vs. high \$2.50) on donations. Results indicated a significant interaction between PGI type (Monetary vs. nonmonetary) and PGI value ( $F(1, 135) = 10.30, p = .002$ ). People who received \$.25 donated significantly less than those who received one greeting card ( $M_{\text{monetary}} = \$3.75, M_{\text{non-monetary}} = \$5.59, F(1, 135) = 5.09, p = .03$ ). However, those who received \$2.50 elicited significantly more donations than eight greeting

cards (an equivalent value of \$2.50) ( $M_{\text{monetary}} = \$6.32$ ,  $M_{\text{non-monetary}} = \$4.36$ ,  $F(1, 135) = 5.22$ ,  $p = .02$ ). This moderation effect also suggests that the effect of monetary PGIs on donations cannot simply be explained by the theory that money leads people to be less prosocial, but is consistent with the relationship norms framework. The present work integrates research on reciprocity, relationship norms, and prosocial behavior and develops a framework on how and why different types of PGIs affect donations.

We also extend recent work (Townsend 2017) on how superficial elements of a donation solicitation can influence judgments of the soliciting organization. Practically, our results imply that inclusion of PGIs did not increase (or even dampened) average donations, reduced return on investment, and lowered charity's perception as a communal organization.

## It's Mine, But I'll Help You: How Psychological Ownership Increases Prosocial Behavior Ata Jami (Northwestern University, USA); Maryam Kouchaki (Northwestern University, USA); Francesca Gino (Harvard Business School, USA)

### **Brief Abstract:**

Consumers experience psychological ownership almost every day when they think about their possessions or when they acquire new possessions. Feelings of ownership has positive and negative consequences for individuals and the target of ownership. However, research has overlooked the effect of ownership on consumers' behavior beyond the target of ownership. This research examines how feelings of ownership affect prosocial behavior. We propose and show that psychological ownership triggers changes in one's self-esteem and enhances likelihood of engagement in prosocial behavior. We also show that materialism and mine-me sensitivity as individual differences are moderating the effect of ownership on prosocial behavior.

### **Extended Abstract:**

Feelings of ownership are an important ingredient to individuals' lives given that each of us interacts daily with various material and immaterial objects we own. Ownership satisfies people's need for self-identity, helping them "define themselves, express their self-identity to others, and maintain the continuity of the self across time" (Pierce, Kostova, & Dirks, 2003, 89). Moreover, one's possessions help individuals respect themselves, feel satisfied with themselves, feel they have much to be proud of. As such, possessions can confer a sense of self-esteem.

Despite benefits of psychological ownership to individuals in expressing self-identity and enhancing self-esteem, religious and other writings suggest that materialistic individuals are self-centered and that the overemphasis on material possessions and acquisition are "inherently incompatible with sharing and giving to others" (Richins & Dawson, 1992, 308). In this research, we propose and show that contrary to normative beliefs, psychological ownership does not hinder prosocial behavior; instead, it increases it by enhancing individuals' self-esteem.

Ownership has been examined in a wide range of disciplines, from anthropology, sociology, and psychology to consumer behavior and management. Research on the state of psychological ownership (i.e., "mine-ness") has focused primarily on its roots, how people experience it, and the owner's relationship to the owned entity to make predictions about emotions, cognitions, and behaviors towards the entity (Pierce et al. 2003; Pierce & Jussila, 2011). Psychological ownership has been shown to influence an individual's attitudes, values, and behavior toward the target entity (Peck & Shu, 2009;

Shu & Peck, 2011; Weiss & Johar, 2013). Though insightful, past research has not yet examined how psychological ownership influences cognitions and behaviors unrelated to the owned entity.

Research suggests that psychological ownership can convey a sense of worth, affecting global judgments of one's self-worth (Belk, 1988). In fact, a large body of research has shown a compensatory relationship between self-esteem and materialism, such that low self-esteem increases materialistic tendencies since possessions compensate by providing a sense of worth (Chaplin & John, 2007; Ferraro, Escalas, & Bettman, 2011).

State self-esteem refers to a person's sense of her/his value or worth in the moment, and a boost to self-esteem means that the person feels proud and pleased with oneself. Self-consistency and self-enhancement theories (Epstein, 1973; Swann et al. 1987) predict that in such situations people act prosocially to maintain or enhance self-esteem because positive behavior towards others reinforces a positive sense of self and maintains cognitive consistency. Thus, we expect that psychological ownership (i.e., when people are thinking about the things they own) enhances state self-esteem, which in turn increases subsequent prosocial behavior.

Value of possessions varies across different individuals. Materialism captures "the importance a consumer attaches to worldly possessions" (Belk, 1984, 291). Therefore, we expect individual differences in materialism to be an important moderating factor predicting the effect of psychological ownership on subsequent prosocial behavior. Specifically, we do not expect a boost in one's state self-esteem to happen when ownership is activated for individuals low on materialism because they do not assess their self-esteem strongly by their possessions. As such we do not expect salience of one's possession to increase helping behavior in individuals that are less materialistic.

Central to our argument linking salience of possessions to self-esteem is the contention that individuals regard their possessions as part of themselves. Previous work has identified "mine-me sensitivity" (Weiss & Johar, 2013) as an important individual difference that captures differences in the extent to which individuals associate "mine" with "me." Individuals low in mine-me sensitivity have weaker associations between possessions ("mine") and the self ("me"). For these individuals, the association between objects and the self does not change much based on whether they own the objects or not. When psychological ownership is activated (i.e., when people are thinking about the things they own) individuals use their possessions to determine their state self-esteem. However, because low mine-me sensitivity indicates weaker associations between possessions and self, feelings of ownership should not boost self-esteem compared to those high on mine-me sensitivity, hence, psychological ownership should not predict helping behavior of individuals low on mine-me sensitivity.

We ran seven studies to test the effect of psychological ownership on self-esteem and prosocial behavior and to examine factors moderating this effect (a table summarizing the results of all studies provided at the end). In Study 1A, owners behaved more generously toward partners in a dictator game than did non-owners. In Study 1B, felt ownership, induced by touching an object, increased subsequent helping. In Study 2, we examined the effect of ownership on self-esteem, self-efficacy, and power in a two part study completed within a five-day period. Results show that psychological ownership led to a boost in self-esteem but not in self-efficacy or power. Study 3 tested whether self-esteem mediates the effect of ownership on prosocial behavior. Confirming the mediating role of self-esteem, results show that participants primed with ownership had higher self-esteem and were more likely to help others

compared to those in the control condition. Studies 4 and 5 examined materialism and mine-me sensitivity as individual differences moderating the effect of psychological ownership on prosocial behavior, showing that our proposed effect did not hold for individuals low on materialism or low on mine-me sensitivity. In Study 6, we attenuated the effect of psychological ownership on donation by highlighting the negative attributes of one's possessions.

In this research, we tested a counterintuitive hypothesis, that is, increasing the salience of possessions encourages giving and sharing. We found that psychological ownership boosts self-esteem, which results in greater prosocial behavior towards various beneficiaries. Relying on a psychological perspective of ownership, our paper goes beyond existing work and offers a novel perspective for understanding the positive consequences of psychological ownership. We detail the psychological mechanism and test it in controlled laboratory studies using both a mediation and moderation approach, as well through a variety of manipulations of psychological ownership and different tasks to assess prosocial behavior. We provide fresh insights into the psychology of ownership, an important area of inquiry in the consumer literature.

## Influence of Social Norm Information About Imbalanced Spending of Time Versus Money on Prosocial Spending Intentions: Role of Social Connection and Self-Sufficiency

### *Motivations*

Chien-Wei Lin (SUNY Oneonta); Kalpesh Kaushik Desai (University of Missouri-Kansas City)

### **Brief Abstract:**

Six studies show that social norm information of imbalanced spending of time (vs. money) is more irksome, results in greater corrective action which then enhances happiness with budgeting decisions. Serial mediation analysis reveal that relative influences of competing motivations of social connection and self-sufficiency mediate the above results.

### **Extended Abstract:**

Despite believing that connecting with friends and family provides happiness, people feel they are not connecting enough (McCann, 2013; Schulte, 2015), as confirmed by our pilot study ( $n = 55$ ,  $M = 3.6$  vs. midpoint,  $p < .05$ ) and popular press which suggest that consumers spend less time and money on others in their overall spending (Dunn, Aknin, & Norton, 2008). Taking a cue from prior research on correcting for imbalanced spending on self (Heath & Soll, 1996) and use of social norms to influence behaviors (e.g., Goldstein, Cialdini, & Griskevicius, 2008), we ask would making consumers aware of their imbalanced spending on self versus others encourage them to spend more time and money on others? We acknowledge that consumers naturally spend more on self than on others. By imbalanced spending on self versus others (henceforth referred as imbalanced spending), we mean a consumer spending more on self than on friends and family relative to the similar spending distribution of an average consumer in her age cohort. We contribute to the social norms literature by testing the hypothesis (H1) that use of social norm information about imbalanced spending will make consumers take stronger corrective action of budgeting to spend more on others for time (vs. money). By drawing on the research of resources-evoked motivations (Devoe & House, 2012; Liu & Aaker, 2008), we also test the hypothesis (H2) about the underlying process involving relative influences of competing motivations of social connection (or SC) and self-sufficiency (or SS).

When spending time or money on self versus others, both SC and SS motivations operate together as per social psychology research (Diekmann et al., 1997; Gerbasi & Prentice, 2013). We propose that it is their relative influences that impact spending on others. Specifically, the wider the positive gap between the influences of SC and SS for a resource [i.e., (SC-SS)T vs. (SC-SS)M], the greater the spending of that resource on others. Past research in marketing (Liu & Aaker, 2008; Mogilner, 2010; Vohs, Mead, and Goode 2006) has shown increasing the salience of time motivates socially-connecting behavior (i.e., SCT > SCM) whereas increasing the salience of money motivates less socially-inclined behavior, which reflects greater self-sufficiency (i.e., SST < SSM). Thus, (SC-SS)T should exceed (SC-SS)M resulting in greater unhappiness with imbalanced spending in, greater corrective spending on others in, and greater post corrective increase in happiness with budgeting to spend on others in time versus money condition (H3). Our key dependent variable of corrective action is reallocation (Du & Kamakura, 2008) which refers to the extent to which time/money will be redistributed from overspent categories on self to underspent categories on others across the entire spending distribution. For example, reallocating 9% of total discretionary spending to underspent categories that earlier had received 5% will result in reallocation of  $(9-5)/5 = 80\%$ . We ran six studies to test our three hypotheses.

Study 1 (66 undergraduates) employed a single between-subjects factor of imbalanced spending of money or time. Participants imagined a scenario in which they recently graduated with a \$30,000 job and spent their discretionary money (time) in an imbalanced fashion among different listed categories (see appendix) generated based on prior research and (BLS or) Bureau of Labor Statistics. Next to their imbalanced spending distribution, participants saw the “balanced” BLS spending distribution of an average consumer in their age cohort (see Figure 1 for how imbalanced distribution was generated). Participants reported their happiness with their scenario imbalanced distribution and responded to manipulation checks of how balanced the two distributions were. Results confirmed the “scenario” (vs. BLS) distribution to be more 2 imbalanced. As expected, participants were less happy with imbalanced spending of time than of money (MT = 2.24 vs. MM = 3.75;  $t(64) = -4.43$ ,  $p < .01$ ).

In Study 2, participants (61 undergraduates) in a single factor (time, money) design listed actual percentages of their current spending in different categories employed in Study 1. They were given a chance to reallocate including not reallocating anything. Results showed that without social norms information, participants did not undertake any significant reallocation (combined M = 8% and not significantly different from zero) despite acknowledging their current spending to be imbalanced.

Study 3 (50 students) used similar design, procedure, and stimuli as in Study 1 including providing the balanced BLS spending distribution. Results revealed that participants felt less happy in and reallocated more to the underspent categories for others in time vs. money condition (MT = 806% vs. MM = 151% increase;  $F(1, 48) = 48.36$ ,  $p < .01$ ).

Study 4 (137 students) ruled out the social desirability alternative explanation and confirmed the mediating role of the relative influences of competing motivations. We compared the outcomes between two groups (self vs. friend named Joe/Jane) in a 2 (resource) X 2 (target) between subjects design with same procedure as Study 3. Results revealed insignificant two-way interaction on reallocation and the relative influences of SS and SC motivations mediated reallocation (95% confidence interval [CI] = .66 to 1.89) (see Table 1).

Study 5 (105 students) employed a 2 (resource) X 2 (resource amount) between-subjects design to rule out the “more time, less money” alternative explanation for reallocation results. We doubled participants’ income (\$30,000 vs. 60,000) but reduced the time by half (270 vs. 135 hours). Despite this change, results remained the same (see Table 1).

Study 6 employed a single between-subjects resource factor design with 94 Mturk participants (25-45 age group). The only change entailed participants reporting their post reallocation happiness with revised spending plan. Serial mediation test revealed relative motivations mediating the influence of imbalanced spending on reallocation and the latter acting as the second level mediator influencing the downstream increased post-pre reallocation happiness (95% CI = .02 to .34).

Our findings contribute to prior research in social norms, resources-evoked motivations, budgeting intentions, and consumer welfare. Comparing their spending distribution with others in their age cohort through sites like Mint.com and Bank of Montreal, consumers can become aware of their imbalanced spending and take corrective action to feel more socially connected and happier.

## Where Beauty Meets Ideology: Why Conservatives (But Not Liberals) Lend More Generously to Attractive Borrowers

Rhiannon MacDonnell Mesler (University of Lethbridge, Canada); Bonnie Simpson (Western University, Canada); Jennifer J Argo (University of Alberta, Canada)

### **Brief Abstract:**

In 3 studies, we examine the role of borrower attractiveness and consumer political orientation on lending behavior. Using real microloan campaigns from around the world (study 1), we show that attractiveness significantly predicts campaign success (a main effect of attractiveness is replicated in studies 2 and 3). Studies 2 and 3 test our moderation, finding that only conservatives (vs. liberals) lend more generously to attractive (vs. unattractive) borrowers. We further show (study 3) that this effect is due to attractiveness triggering a heightened status salience among conservatives (vs. liberals), and rule out alternative theoretical accounts.

### **Extended Abstract:**

Research consistently demonstrates that a range of positive attributes, behaviors and outcomes are ascribed to the aesthetically fortunate; being attractive has benefits (e.g., Dion et al. 1972; Eagly et al. 1991). We examine the benefits of beauty in the context of microlending. Microlending involves first-world consumers lending small denominations of money to entrepreneurs (i.e., borrowers) around the world. Borrowers provide simple profiles, including – key to our research – a photograph. We examine whether borrower attractiveness impacts funding success. Given the ‘what is beautiful is good’ stereotype, we expect that highly attractive microloan borrowers will be more successfully funded than less attractive counterparts.

We propose that this effect will be moderated by an enduring and relatively observable consumer characteristic: political orientation (i.e., conservatives vs. liberals). Because attractiveness is associated with heightened perceived status (Dion et al. 1972), and conservative consumers are more sensitive to status differentiation (Ordabayeva & Fernandes 2018), we propose that attractive (vs. unattractive) borrowers will make status differentiation salient for conservatives (vs. liberals) and in turn yield more



generous lending behavior. That is, we predict that attractive (unattractive) borrowers will activate a higher (lower) status mindset in conservative consumers, which will in turn lead them to lend more (less) money. As liberals are much less attuned to status information, we predict no significant difference among liberals in lending behavior between the unattractive and attractive borrowers.

We test this effect in three studies, with a full summary of analyses provided in appendix A. In study 1, using data from real microloan campaigns from around the world, we show that attractiveness significantly predicts campaign success (replicated in studies 2 and 3). Studies 2 and 3 test our moderation, finding that only conservatives lend more generously when the borrower is attractive (vs. unattractive). Varying the borrower images used, microlending platforms (i.e., fictitious in study 2, real in study 3), and the industries in which the borrowers ostensibly own businesses (i.e., retail grocery, study 2; agriculture, study 3) we show (study 3) that this effect is due to a heightened salience of status among conservatives (vs. liberals), and rule out alternative theoretical accounts.

**Study 1.** This study established whether borrower attractiveness influences the likelihood of receiving funding. Data was randomly sampled from all 500,000 microlending campaigns run through Kiva.org between 2005 and 2013, resulting in 5835 successful and 3165 failed campaigns, or about 1.8% of the total campaigns, who were quadruple coded by 1200 MTurk participants for attractiveness ( $IRR=.87$ ). Attractiveness positively predicted success (vs. failure) of real microlending campaigns ( $p<.005$ ). In sum, attractive borrowers increased the probability of a successful campaign.

**Study 2.** Study 2 tested the moderating role of political orientation on lending. One hundred and ten MTurk participants were assigned to a 2(Borrower Attractiveness: Low vs. High) x 2(Political Orientation: Republican [more conservative] vs. Democrat [less conservative]; self-identified) mixed design. The dependent variable was how much of their study payment participants loaned to the borrower in the ad. Attractiveness conditions were developed using facial composite images taken from thousands of attractiveness ratings on HotOrNot.com and presented within an ad ostensibly from Lending.org (a fictional microlending site). Results revealed an interaction of attractiveness and political orientation on lending behavior ( $p<.001$ ). As predicted, conservatives were more generous toward an attractive (versus less attractive) borrower ( $p<.001$ ). Conservatives were also more generous toward the highly attractive borrower than were liberals ( $p=.01$ ), who did not differ in their generosity.

**Study 3.** Study 3 further supports our theorized process, and rules out additional alternatives. Three hundred and twenty-two MTurk participants were randomly assigned to a 2(Borrower Attractiveness: Low vs. High) x 2(Political Orientation: Republican [more conservative] vs. Democrat [less conservative]; self-identified) mixed design. The high attractiveness image was an unaltered attractive photograph; the low attractiveness image was altered to be unattractive (Gonzalez & Loureiro 2014). The dependent variable was how much of their study payment participants loaned to the individual in the ad via Kiva.org, using attitudes about Kiva as a covariate. We used Process model 7 (Hayes 2018) to test the overall model, first examining status salience (Pratto et al. 1994) as the dependent variable ( $p<.001$ ). A positive main effect of political orientation emerged ( $p<.001$ ) such that conservatives reported higher levels of status salience. The predicted interaction of attractiveness and political orientation was marginally significant ( $p=.06$ ). While liberals reported similar levels of status salience regardless of borrower attractiveness ( $p=.52$ ), conservatives who viewed the highly attractive borrower reported higher status salience ( $p=.01$ ). The model then predicted lending ( $p=.002$ ). While a main effect of attractiveness emerged ( $p=.05$ ) as expected, the mediator, status salience, also positively

predicted loan amount ( $p=.01$ ). The conditional indirect effect of attractiveness to lending behavior via status salience was significant for those who were more (but not less) conservative.

To rule out alternative processes, we re-ran our moderated mediation analysis including each of: perceived morality (Samper et al 2018), similarity to self, sense of deservingness (both as a single item and as the Lipkus 1991 BJW scale), and physiognomic beliefs (Suzuk, et al 2017) as parallel mediators. Again, a positive main effect of political orientation emerged ( $p<.001$ ) such that conservatives reported higher levels of status salience, and the interaction of attractiveness and political orientation was again marginally significant in predicting status salience ( $p=.06$ ). The interaction did not predict any other potential mediators ( $p's > .37$ ). The model next examined the mediator to loan amount pathway. A main effect of attractiveness again emerged ( $p=.03$ ), and the effect of status salience on loan amount remained significant ( $p=.03$ ). Consistent with our theorizing, the only significant indirect effect in the model was within the attractiveness to loan amount pathway via status salience for those who were more (but not less) conservative.

Discussion. This paper extends the literatures on prosocial consumer behavior generally, and micro-lending specifically, to include elements of the borrower's appearance (i.e., their attractiveness; study 1). We further incorporate political orientation, finding that conservative consumers were more generous toward highly attractive borrowers (studies 2 and 3) and that this is due to heightened status salience (study 3).

## **Financial Scarcity and its Effects on Affect, Cognition, and Choice - Symposium**

### *Scarborough 4 (Lobby Level)*

In America alone, some estimates suggest that 95 million individuals - almost one in three - live close to poverty (defined as living within 200% of the poverty line; US Census Bureau, 2016). While much research has examined whether money makes people happy (e.g. Kahneman & Deaton, 2010), it is only more recently that consumer researchers have begun to ask what other psychological effects financial scarcity may have. A growing body of literature suggests that scarcity can have a number of psychological effects, not only for those in objective scarcity, but even relative scarcity (e.g. Shah, Mullainathan, & Shafir, 2012). Despite increasing interest in this research topic, there are still many open questions regarding the cognitive and affective consequences of scarcity. What are the effects of childhood scarcity, and how do they carry on into adult well-being and decisions? How does scarcity change the ways that individuals view and experience well-being? How does scarcity shift preferences and decision-making? The current session aims to shed light on these questions. Four papers investigate the cognitive and affective consequences of financial scarcity. Papers 1 and 2 examine the effect of childhood financial scarcity on adulthood well-being and decision-making. Whillans et. al. show across four studies that individuals who grew up in communities with higher income inequality, a driver of subjective scarcity, are more likely to base their self-esteem on financial success, which ultimately leads to lower well-being. Two additional experiments reveal the role of social comparisons in this process. In Paper 2, Hamilton, Thompson, and Banerji find that decision makers socialized in low (vs. high) socioeconomic status environments (i.e. who experience childhood financial scarcity) exhibit more resilience in response to choice restriction, including greater persistence in waiting for an initial choice after temporary restrictions, and greater flexibility in shifting preferences away from the initial choice after permanent restrictions, across three studies. Papers 3 and 4 explore the adaptive ways that adults deal with financial scarcity, by finding ways to transcend their present circumstances. In Paper 3, Sharma, Tully, and Appel find that financial scarcity increases consumers' desire to believe in the extraordinary -

specifically, superheroes - as a means of coping with the threat of financial struggles, using large datasets and lab experiments. In Paper 4, Catapano, Quoidbach, Mogilner, and Aaker find that individuals experiencing objective or subjective financial scarcity rely more on meaning as an important source of happiness, using both large-scale datasets spanning 500,000+ individuals worldwide, and a preregistered experiment manipulating feelings of financial scarcity. Together, these papers shed further light on the cognitive and affective consequences of financial scarcity, whether in childhood or adulthood, and how these consequences can sometimes be adaptive for individuals. We believe this session will facilitate discussions and collaborations that can generate valuable insights for researchers, marketers, and policy makers who aim to help low income consumers. We expect this session to appeal to a broad audience, including researchers interested in financial scarcity, well-being, choice, and resilience.

*Chair: Rhia Catapano, Stanford University, USA*

### Income Inequality in Childhood Predicts Financial Contingency of Self-Worth and Well-Being in Adulthood

Ashley Whillans (Harvard Business School, USA); Lora E Park (University at Buffalo, The State University of New York); Han Young Jung (University at Buffalo, The State University of New York); Kristen Schultz Lee (University at Buffalo, The State University of New York); Deborah E. Ward (University at Buffalo, The State University of New York); Kristin Naragon-Gainey (University at Buffalo, The State University of New York); Paul K. Piff (University of California Irvine, USA)

#### **Brief Abstract:**

Can exposure to income inequality during childhood predict happiness decades later? Across 4 studies, adults who grew up in more unequal US counties were more likely to base their current self-esteem on financial success, undermining well-being. Social comparisons played a role in this process. Participants who received feedback indicating that their income was lower (vs. higher) than others (Study 5), or made more financial comparisons in daily life (Study 6) felt more disadvantaged and, in turn, based their self-esteem more on financial success, lowering well-being. Together, this work advances understanding of how early experiences of inequality shape self-worth and well-being.

### Low Childhood Socioeconomic Status Predicts Resilience in Response to Choice Restriction

Deborah V. Thompson (Georgetown University, USA); Rebecca Hamilton (Georgetown University, USA); Ishani Banerji (University of Texas at San Antonio, USA)

#### **Brief Abstract:**

We examine how individuals with different levels of childhood socioeconomic status respond to choice restriction. Building on prior work showing that perceived agency differs by socioeconomic status, we hypothesize that decision makers socialized in low (vs. high) socioeconomic status environments will exhibit more resilience in response to choice restriction. In three studies, lower childhood socioeconomic status predicted greater persistence in waiting for an initial choice when the restriction was temporary and greater flexibility in shifting preferences away from the initial choice when the restriction was permanent.

## Seeking the Extraordinary: Financial Well-being and Interest in Superheroes

Eesha Sharma (Dartmouth College, USA); Stephanie M. Tully (University of Southern California, USA); Gil Appel (University of Southern California, USA)

### **Brief Abstract:**

Financial well-being is fundamental to people's lives and overall well-being. Despite its importance, research is just beginning to uncover its effects on consumer preferences. The current work proposes that lower financial well-being increases consumers' desire to believe in the extraordinary as a means of coping with the threat of financial struggles. We examine this by exploring how financial well-being impacts interest in superheroes-arguably the most prototypical and mainstream symbol of "the extraordinary" in consumers' lives. Google search trends, Facebook activity, and controlled lab studies demonstrate that lower financial well-being increases relative interest in superheroes versus other genres.

## Wealth Shapes the Link Between Meaning and Happiness

Rhia Catapano (Stanford University, USA); Jordi Quoidbach (ESADE Business School, Spain); Cassie Mogilner (University of California Los Angeles, USA); Jennifer Aaker (Stanford University, USA)

### **Brief Abstract:**

Does wealth shape the nature of happiness? Across three large-scale datasets spanning 500,000+ individuals across 123 countries, and a preregistered experiment, we examined the relationship between meaning and happiness for individuals at different levels of wealth. Whether based on objective (Studies 1 and 2) or subjective wealth (Studies 3 and 4), we found that meaning is a more important source of happiness for the poor than for the wealthy, an effect that was replicated when financial scarcity was manipulated (Study 4). Collectively, these results suggest meaning and happiness tend to go hand in hand, particularly among those with scarce resources.

## **Working Paper Session**

### **1. Advertising, Communication, and Persuasion - Working Paper Session**

*Harborside (River Street Level)*

#### 1.1 If You Work It, Flaunt It: Conspicuous Displays of Exercise Efforts Increase Mate Value

Jolien Vandenbroele (Ghent University, Belgium); Anneleen Van Kerckhove (Ghent University, Belgium); Maggie Geuens (Ghent University, Belgium)

### **Brief Abstract:**

Why do people love to share their running routes on social media? This paper proposes that conspicuous displays of exercise efforts are a self-promotion tactic that increase mate value. In a first study we show that the signal is perceived as an indicator of health, which establishes a human mate preference. Because of higher inferred healthiness, senders are attributed a higher mate value. In line with this theorizing, we demonstrate in a second study that activating a mating motive increases

senders' desire to ensure that workout posts (but not non-workout posts) are noticed by potential mates.

## 1.2 Mating Motives and Arrogant Advertising

Jonathan Hasford (University of Central Florida, USA); Aysu Senyuz (University of Central Florida, USA)

### **Brief Abstract:**

While arrogance is widely considered to be a negative personality trait, the authors explore when the use of arrogance in persuasive appeals can enhance consumer attitudes. In 2 studies, the authors demonstrate that individuals with a relationship formation motive have more favorable attitudes and higher purchase intentions towards products and brands that emphasize arrogance in their marketing communications. This effect emerges from an enhanced acceptability of signaling one's status during relationship formation that is not observed when individuals possess other relationship motives (e.g. relationship maintenance) or when relationship motives are not salient.

## 1.3 Algorithm Attraction Versus Aversion: The Role of Self-Efficacy of the Decision Maker.

Gizem Yalcin (Erasmus University Rotterdam, The Netherlands); Anne-Kathrin Klesse (Erasmus University Rotterdam, The Netherlands); Darren W. Dahl (University of British Columbia, Canada)

### **Brief Abstract:**

Nowadays algorithms are used to generate recommendations in numerous areas, including those that are pure matter of taste. Across three studies and in two domains (e.g., brand names, travel routes), we demonstrate that consumers value the same recommendation or service differently depending on the framing of its recommender—an algorithm versus human expert—and their own perceived level of expertise: individuals who perceive themselves as possessing expertise (versus lacking expertise) in the focal domain are likely to value a recommendation more when it is framed to be generated by an algorithm (versus a human expert).

## 1.4 How Written Customer Feedback Influences the Feedbacking Customers' Evaluations, Attitudes and Intentions

Matthias Fuchs (University of St. Gallen, Switzerland)

### **Brief Abstract:**

Does the way customer feedback is measured influence customers' evaluations of the consumption experience as well as attitudes and intentions towards the seller? Evidence from my experimental study shows that written customer feedback causes participants to dampen their evaluations, increase their likelihood to broadcast their experience and lead them to perceive a stronger tie to the seller. This work has broader impacts for the theory of mere measurement, research concerning customer feedback, and for practitioners collecting customer feedback.

## 1.5 Don't Talk, Text: Modality in Consumer Interactions with Human versus AI Agents

Claudia Iglesias (Wilfrid Laurier University, Canada); Grant Packard (York University, Canada)

**Brief Abstract:**

This research examines when and why consumers might trust to divulge their personal information to AI agents (e.g., Alexa, customer service chatbots) more than human agents. We predict and find that while human agents are more persuasive in voice interactions, AI agents can be superior to humans in text-based conversations. Source credibility perceptions drive the effects of communication modality (textual vs. vocal speech) on preference to share personal information with an AI versus human agent.

### 1.6 A Cause for Contagion: The Impact Contagious Beliefs on Cause Marketing Effectiveness

Kirsten Cowan (NEOMA); Katina Kulow (University of Louisville); Mina Kwon (University of Louisville)

**Brief Abstract:**

The current research examines the duality of cause logos, specifically how negative thoughts elicited by cause logos (e.g. fears or concerns associated with the cause) undermine cause marketing effectiveness despite their seemingly positive nature as a result of beliefs of product contamination. Our findings support that inclusion of cause logos on products result in decreased evaluations due to a transfer of negative essence from the cause logo to the product, especially for consumers with contagion beliefs.

### 1.7 How Loneliness Affects Preferences for Social Information

Youjung Jun (Columbia University, USA); Rachel Meng (Columbia University, USA)

**Brief Abstract:**

Despite the prevalence of social media and the ease of interpersonal communications, loneliness persists in modern society. This research explores the influence of loneliness on consumers' preference for social information. Lonelier consumers evaluated the same products more positively when advertised on social media platforms (e.g., Instagram) than nonsocial ones. This may be linked to a greater reliance on social media in general, leading them to spend more time chatting with others on social media and to feel more disappointed when few people have reacted to their posts.

### 1.8 Perceived Ownership and Online Shopping Repositories

Ashley Angulo (Carnegie Mellon University, USA); Helen Colby (Indiana University, USA)

**Brief Abstract:**

Consumers indicate their purchase intentions in online retail marketplaces using an array of different systems ranging in the level of commitment. In addition to the icon of the repository (e.g. cart vs. bag), online marketplaces vary in the amount of possessive language they use to describe the icon (e.g. your cart vs. the cart vs. name's cart). Across three studies we find that both the icon of the repository and the possessive language used to describe it have a significant impact on consumer perceived ownership

and subsequent purchase intentions.

1.9 The Effects of Ad Format and Ad Category On Branding: Insights from Neuroscience  
Han Chen (Temple University, USA); Vinod Venkatraman (Temple University, USA);  
Angelika Dimoka (Temple University, USA); Paul Pavlou (Temple University, USA)

**Brief Abstract:**

Companies devote a significant portion of marketing budgets on advertisements that seek to keep their brands at the front of consumers' mind. In the current research, we sought to elucidate the relative effectiveness of ad format (print versus digital) and ad category (functional, emotional, and metaphorical) on key measures of branding (e.g., brand recall, brand recognition and brand attitudes) using a multi-methodological approach (eye-tracking, fMRI, and behavioral studies). We demonstrate that print ads outperformed digital ads, and metaphorical ads outperformed functional and emotional ads across a variety of brand measures with significant implications for brand marketers.

1.10 Strength in Differences, Not Similarities: The Effect of Incongruity on Social  
Media *Communications*

Laura Boman (University of Central Florida, USA); GANGA URUMUTTA HEWAGE  
(University of Central Florida, USA); Jonathan Hasford (University of Central Florida,  
USA)

**Brief Abstract:**

Despite their prevalence in social media, research on the effects of emojis on brand evaluations remains limited. In three studies, we demonstrate that when a brand uses an emoji skin tone that is incongruent with its perceived targeted audience, brand evaluations and purchase intentions are increased. Perceived inclusion underlies the effect of emoji color on evaluations. We also show that promoting a tweet can reverse this effect. Our findings contribute to research on advertising, social media, and moral foundations theory. Additionally, we provide practical insights for managers in the use of emojis on social media.

1.11 This Paper is Not for Everyone: Framing, Perceived Exclusivity and the Self-Brand  
Connection

Karen Wallach (Emory University, USA); Ryan Hamilton (Emory University, USA);  
Morgan Ward (Emory University, USA)

**Brief Abstract:**

We find that consumers respond more favorably to communications framed to exclude non-relevant others than they will to otherwise equivalent ads framed to include themselves. We attribute this more favorable assessment to an increased self-brand connection, which mediates the increased purchase intent.

1.12 Smile or Not? It Depends on the Status

Meng Liu (University of Cincinnati, USA); Ruomeng Wu (University of Cincinnati,

USA); Frank R Kardes (University of Cincinnati, USA)

**Brief Abstract:**

Smiles are widely believed to result in positive consequences. This research demonstrates that smile only leads to favorable impressions when it is associated with a low-status resource; it has no positive impacts when associated with a high-status resource. A person/emoji displaying a broad smile, compared to a slight one, is perceived as more confident and thus more favorable. The effects emerge only when the person/emoji has a high social status or is associated with a high-status brand. Findings of this research have important managerial implications.

## 2. Judgment, Cognition, and Choice - Working Paper Session

*Harborside (River Street Level)*

### 2.1 Do Maximizers Maximize Across Domains? Evidence that Maximizing Transcends Decisions

Michail D. Kokkoris (WU Vienna University of Economics and Business)

**Brief Abstract:**

Do maximizers maximize across decision domains? The current research provides a direct test of an assumption underlying the consumer decision-making literature on maximizing by examining the association between trait maximizing, measured with a content-free scale, and domain-specific maximizing, measured in a wide range of decisions (consumer goods, services and experiences, life decisions). Results of a study at two time points (Study 1) and a high-powered pre-registered cross-sectional replication (Study 2) showed that trait maximizing was associated with higher maximizing tendencies across a wide range of decision domains, although less so in experiential domains.

### 2.2 Attitudinal Valence Framing on Choice Confidence and Willingness to Pay

Daniel Rovenpor (Ohio State University, USA); Jacob Teeny (Ohio State University, USA); Richard Petty (Ohio State University, USA)

**Brief Abstract:**

Building on the framing effects literature, we introduce valence framing to marketing research, where we examine how basing one's preference (e.g., preferring iPhones over Android phones) in terms of opposition (being anti-Android) versus support (being pro-iPhone) can produce different consequences. Specifically, across two studies we show that basing one's preference on opposition (vs. support) results in greater choice confidence and higher willingness to pay for the preferred product. With this work, we also rule out a potential confound in previous valence framing studies by methodologically matching the evaluative extremity of the non-preferred option to that of the preferred one.

### 2.3 Consumer Overinvestment in Capacity

Adrian Ryan Camilleri (University of Technology Sydney); Samuel A. Swift (Bowery Farming); Richard P. Larrick (Duke University, USA)



**Brief Abstract:**

Consumers often invest in more capacity than they need: they buy homes with too many rooms, cars with too many seats, and more food than they can eat. Numerous negative financial and environmental consequences arise due to over-investment in capacity. We develop a novel game capturing many of the elements associated with a consumer's capacity purchase decision. Observations from our game demonstrate that people do over-invest in capacity and, as a result, fail to maximize their theoretical profit level. The degree of capacity over-investment depends on the actual as well as the perceived shape of the demand distribution.

## 2.4 Learning From Your Mistakes: Can Elderly Consumers Outperform Younger Consumers in Unfamiliar Product Contexts?

Ashley Goerke (Independence Blue Cross); Eric Eisenstein (Temple University, USA); Maureen Morrin (Temple University, USA); Ning Ye (Temple University, USA); Ayalla Ruvio (Michigan State University, USA)

**Brief Abstract:**

In this research, we investigate the effects of age on experiential learning in a simulated market. We find that although older consumers initially exhibit decreased performance that is consistent with popular conceptions of elderly cognitive decline, eventually they outperform their younger counterparts.

## 2.5 It Must Be Luck! The Impact of Superstitious Events on Memory

Kara Bentley (Chapman University); Katina Kulow (University of Louisville); Priyali Rajagopal (University of North Texas)

**Brief Abstract:**

In the current research we argue that the perceived influence of superstitious agents, such as luck or karma, during a consumption experience can lead to weaker memories of the experience, particularly for people who prescribe to such beliefs. Further, we argue that this effects occurs because the perceived presence of superstitious agents can lead to an increased understanding of the experience itself. Lastly, we argue that this effect has important implications as past research has shown a strong correlation between memory strength and evaluations of an experience. Thus, weaker memories could further lead to lower evaluations of a consumption experience.

## 2.6 What??!! I Cannot Get It from You??!! I Will Get It from Your Competitor Instead! When Product Scarcity Leads to Anger and Brand Switching

Alessandro Biraglia (Leeds University Business School); Bryan Usrey (University of East Anglia)

**Brief Abstract:**

Brands often use scarcity promotions to increase sales. However, little is known regarding what happens when consumers do not get a scarce product. In four studies we show how consumers exposed to scarce promotions (but failing to get the desired product) show higher intentions to switch to a competitor brand. The effect is mediated by the anger consumers feel by not getting the product.

## 2.7 Service Robots: Boon or Bane?

Pavan Munaganti (Washington State University, USA); Babu John Mariadoss (Washington State University, USA); Andrew Perkins (Washington State University, USA)

### **Brief Abstract:**

Rapidly evolving technology is steadily altering the servicescape. On the one hand, organizations are either replacing or substituting human frontline employees with automated service robots, while on the other hand, customers are having to acclimate themselves with non-human interactions. Two studies suggest that robot (vs. human) frontline employees elicit lower levels of perceived warmth amongst customers, which then results in lower levels of perceived trustworthiness, and ultimately in diminished customer service experience.

## 2.8 Patterns, Essence, and Predictability: A Psychological Essentialism Account of Aged Objects

Nathanael S. Martin (University of Cincinnati, USA); Noah VanBergen (University of Cincinnati, USA)

### **Brief Abstract:**

Consumers place great value on predictability and control. The present research uses this launching point to investigate consumers' valuation of objects whose history may involve distinct patterns. As "patterns" are discernible regularities that offer predictability, we study both how consumers value objects with a more or less patterned history, and how preferences for older (vs. newer) objects are affected by the extent to which predicting patterns is important. Our conceptualization is based on drawing parallels between psychological essentialism and the concept of patterns. Two studies offer initial support.

## 2.9 When People Prefer Ambivalent Products—Examining the “Too Good to be True” Effect

Geoffrey Royce Oates Durso (Vanderbilt University, USA); Robert W. Smith (Ohio State University, USA)

### **Brief Abstract:**

Consumers are averse to ambivalent products—including, for instance, products which perform well on one dimension but comparably poorly on another. At the same time, consumer life is full of tradeoffs—unhealthy food is tastier, higher-quality products are more expensive, and bigger and faster vehicles lack fuel efficiency. We illuminate this inconsistency by demonstrating that category experts, who best understand the trade-offs across dimensions within a product category, actually have a lower willingness to purchase univalently positive products, which seem too good to be true. Ultimately, the most profitable and influential customers (category experts) are also the most skeptical.

## 2.10 Party Over Product: Do People Use Political Cues When Choosing Consumption Experiences?

Justin Pomerance (University of Colorado, USA); Leaf Van Boven (University of Colorado, USA)

### **Brief Abstract:**

Today's marketplace is becoming increasingly politicized, as evidenced by more and more firms publicly taking sides on various political issues. This working paper investigates how consumers respond to the presence of political information when judging and choosing consumption experiences. Specifically, we test whether people prefer consumption experiences that match their partisanship, exercising a political-match heuristic when making choices for themselves and for others. Three studies demonstrate (i) that people have a slight preference for consumption experiences that match their political preferences, and (ii) that people believe others have a strong preference for consumption experiences that match their political preferences.

## 2.11 Fun versus Boring: Asymmetry in Perceived Spending Levels

Therese Louie (San Jose State University, USA); Marissa Yoshie Hatsume Nishijima (San Jose State University, USA)

### **Brief Abstract:**

In terms of the expense, spending \$50 a week for commuting and another \$50 for weekly happy hour should be perceived equally. Yet, it is proposed that consumers overestimate their level of spending on necessities, and underestimate their degree of nonessential purchasing. Participants made estimates for their spending in essential categories such as shelter and transportation, as well as for nonessential categories such as recreation. They then recorded their expenses for three weeks. Preliminary results show stronger support for the overestimation of necessities than for the underestimation of nonessentials.

## 2.12 Influence of Product Spacing on Consumer Choice in Crowded Assortments

Ana Scekcic (HEC Paris, France); Selin Atalay (Frankfurt School of Finance and Management, Germany); Cathy Liu Yang (HEC Paris, France); Peter Ebbes (HEC Paris, France)

### **Brief Abstract:**

We explore the influence of assortment size and of spacing between products on consumer choice. Choosing a product from a large (i.e., crowded) assortment is not easy. We investigate whether the choice difficulty in large assortments is due, in part, to a visual overload, and whether it can be reduced by manipulating the visual elements of the assortment. We provide initial evidence that, in crowded assortments, distancing the products on the shelf from one another leads to greater perceived variety in the assortment, and to a choice experience perceived as easier.

## 2.13 Who Likes Secondhand Goods?

Meng Liu (University of Cincinnati, USA); Ruomeng Wu (University of Cincinnati, USA); Frank R Kardes (University of Cincinnati, USA)

**Brief Abstract:**

The current research examines the relation between one's beliefs about virginity – the degree to which they believe virginity is important – and preference for new versus used products and its underlying process. Four studies show that consumers who believe virginity is important prefer new to used products because they perceive the purity of a product as more important than its price. Virginity beliefs also vary as a function of culture, resulting in consistent cultural differences. Our findings offer novel insight into virginity beliefs, their impacts on preference and choice, and the potential for differentiated strategies and predictions of different cultural populations.

### **3. Affect, Aesthetics, and Sensory Marketing - Working Paper Session**

*Harborside (River Street Level)*

#### **3.1 Product Reflections in Ad Frames and Consumer Brand Credibility Perceptions**

Nazuk Sharma (Fairfield University); Marisabel Romero (Colorado State University)

**Brief Abstract:**

Visual art, experimental psychology, and vision research streams document that consumers hold a general sense of uncertainty regarding object reflections. Yet, in marketing, the impact of incorporating product reflections in advertisements has not been examined. The current findings reveal that the presence (vs. absence) of product reflections has negative implications for brand credibility, which translates into lower purchase intentions. Product reflections lower brand credibility by reducing perceived truthfulness of the information presented. These findings can guide marketers in their decisions to use product reflections in brand advertising appropriately instead of simply relying on their aesthetic dispositions.

#### **3.2 Tackling Over-Consumption: How Proximal Depictions of Unhealthy Food Products Influence the Consumption Behavior**

Sumit Malik (IE Business School, IE University, Spain); Ayse Eda (IE Business School, IE University, Spain); Kriti Jain (IE Business School, IE University, Spain)

**Brief Abstract:**

Exposure to food pictures has been shown to influence an individual's taste perception, product liking and purchase intentions. We extend this literature by exploring the effect of food depictions that vary on spatial distance within an ad visual. Our research shows that proximal depiction of unhealthy (but not healthy) food products can increase an individual's desire to eat upon one-time exposure to the ad picture. However, multiple exposure to similar depictions might reverse this effect due to satiation. This effect can be explained by the higher perceptions of tastiness evoked by proximal depictions of unhealthy food products.

#### **3.3 Affective Debriefing in Experimental Consumer Psychology Research Employing Deception**

Claudiu Dimofte (San Diego State, USA)

**Brief Abstract:**

Conventional experimental debriefing reveals to study participants the true nature of the presented claims, discrediting study-induced impressions. Debriefing is critical when actual brand names are employed in studies that manipulate consumers' related perceptions, with the potential to impact both consumer and brand welfare. Several studies show that conventional debriefing (i.e., cognitive invalidation) is generally inadequate as it cannot undo experimentally-induced false beliefs. Affective debriefing (i.e., affective invalidation) is offered as an alternative that several studies show is superior at restoring respondents' pre-study perceptions. It entails providing study participants post-hoc with stimuli-related information, but of opposite valence.

### 3.4 Color-Diversity Appeal Effects on Consumer Emotion and Attitudinal Responses

Hsuan-Yi Chou (National Sun Yat-sen University); Xing-Yu (Marcos) Chu (Nanjing University); Yi-Wen Tzau (National Sun Yat-sen University)

**Brief Abstract:**

Many companies have produced different-color versions of the same product to attract a wider consumer base. However, associated product ads often display either just one of the colors or a wide range of available colors. The effect of color-diversity appeal in advertising is under-researched. With two experiments, this study demonstrates the favorable effect of color-diversity appeal of advertised products on consumers' pleasure emotion, arousal emotion, ad attitude, product attitude, and purchase intention. Building on the FCB model, it also shows how consumer product involvement and thinking style (rational/emotional) moderate the color-diversity effect.

### 3.5 Matching the Ad to the Mood: The Effects of Mood States and Message Appeals on Information Processing and Advertising Persuasiveness

Jie(Doreen) Shen (University of Illinois at Urbana-Champaign, USA)

**Brief Abstract:**

This study investigates how individuals' mood state influences their evaluation of ads in different message appeals. A 2 by 2 factorial experiments were conducted to examine how positive/negative mood states and experiential/utilitarian ad appeals influence participants' information processing, attitudes toward the ad, and purchasing intentions. The results showed significant interaction effects between mood states and message appeals: participants who were in a positive mood preferred experiential ads, whereas participants who were in a negative mood preferred utilitarian ads.

### 3.6 The Effect of Feeling Powerful on Consumers' Preference for Cold/Warm Products

Sheng Bi (Washington State University, USA); Andrew Perkins (Washington State University, USA)

**Brief Abstract:**

This research examines the effect of feeling powerful on consumers' preference for cold versus warm products. Across four studies, we show that feeling powerful increases individuals' preference for cold temperature products or experiences than warm products or experiences. Specially, we suggest feeling powerful strengthens individuals' motivation to keep social distance, which increases their preference

for cold products than warm products. The present paper takes a different approach, examining the effects of power through the lens of embodied cognition. Theoretical and managerial contributions are discussed.

### 3.7 Materialism, Emotion and Disposal: Examining the Duality of The Good and The Evil Jessica Keech (Franklin and Marshall College); Jeffrey Podoshen (Franklin and Marshall College)

#### **Brief Abstract:**

This research explores the role consumer emotions play in the act of disposing of products and investigates whether materialists experience heightened emotional reactions in comparison to less materialistic consumers. In an exploratory study, we find that high materialistic consumers, in comparison to low materialistic consumers, experience more positive emotions, such as content, when thinking about disposing of an important possession rather than the actual act of disposing of the product. The findings have implications for consumer behavior literature as we seek to further understand both the good and evil sides of materialism.

### 3.8 Introverted yet Creative: Clothe Your Minds with Hidden Uniqueness San Young Hwang (Korea University, Korea); Nara Youn (Hongik University)

#### **Brief Abstract:**

This research proposes that wearing unique fashion can heighten an individual's creativity only when social identity of the wearer fits the symbolic meanings of the clothes in the context. Specifically, wearers' dispositional extraverted or introverted tendency is demonstrated to moderate the effect of the uniqueness type (blunt vs. hidden) of clothing on their creativity. Through four studies, we show that introverts (vs. extraverts)' creativity is enhanced when they are wearing clothing with hidden (vs. blunt) uniqueness because it induces feelings of revealing their uniqueness to themselves only (vs. to others).

### 3.9 Schadenfreude: How Wrong Choices Cause Joyful Reactions to Brand Failures Maximilian Gerrath (Leeds University Business School); J. Joško Brakus (Leeds University Business School)

#### **Brief Abstract:**

We conducted three experiments to examine why consumer feel and express joy if another brand fails—a phenomenon we refer to as brand-related schadenfreude. While prior brand failure literature found that schadenfreude is mostly caused by intergroup rivalries, we show that mere choice feedback may be sufficient to cause such a strong emotional reaction. Specifically, we show that consumers express their schadenfreude—for example by reacting with a HAHA emoji to an article about another brand's failure—to reaffirm their self-concepts threatened by negative choice feedback. Finally, we test the moderating roles of choice popularity, narcissism and self-affirmation.

### 3.10 The Effect of Artificially Limited Access to Product Features on Consumer Brand Attitude

Wiebke Lueders (University of St. Gallen, Switzerland); Tobias Schlager (HEC Lausanne, Switzerland)

**Brief Abstract:**

We investigate the effect of “digitally locked features” (DLF), which entails a physical product in which the company integrates features that consumers can digitally unlock and access after having made the purchase. We propose that this way of accessing features activates perceptions of a manipulative threat and thus feelings of anger, eventually harming brand attitude. Three experiments show that DLF harms brand attitude (Study 1) and that perceived manipulative intent and anger mediate this effect (Study 2); yet highlighting the manufacturer’s investment or framing DLF as “opportunity” can attenuate the effect (Study 3).

### 3.11 Skills Make You Happy: The Influence of Skill Based Activities on Consumer Well-Being

Max Alberhasky (University of Texas at Austin, USA); Rajagopal Raghunathan (University of Texas at Austin, USA)

**Brief Abstract:**

This project demonstrates that activities which are highly-skill based, defined as activities where ability increases with practice over time, contribute more to well-being compared to activities which are low-skill based. Consumers often spend the majority of their leisure time watching television, listening to music, web surfing, and using social media – all activities which can be considered low-skill based. However, consumers identify high-skill based activities as making them happier and providing more meaning to their lives. Despite this realization, consumers are more likely to choose to engage in low-skill based activities, a paradox in choice that directly sacrifices happiness.

### 3.12 For the Love of Money: Payment Format and the Joy of Receipt

Deborah Abrams (Georgia Tech, USA); Samuel Bond (Georgia Tech, USA)

**Brief Abstract:**

This research provides evidence for the “joy of receipt,” a construct related to but conceptually distinct from the pain of payment. We define joy of receipt as a positive, affective reaction that consumers experience when receiving money. Results of an initial investigation suggest that consumers experience joy of receipt, that this joy is greater for cash than less transparent payment formats, and that it influences satisfaction and related downstream variables.

### 3.13 That’s Bitter! Culture Specific Effects of Gustatory Experience on Judgments of Fairness and Advancement

Jialiang Xu (University of Manitoba, Canada); Fang Wan (University of Manitoba, Canada); Norbert Schwarz (University of Southern California, USA)

**Brief Abstract:**

In English, unfair treatment and social injustice are often described as “bitter” experiences, but in Chinese “eating bitterness” means endurance in hardship. Three studies show that incidental bitter tastes influence fairness judgments for Canadian but not Chinese, and endurance judgments for Chinese but not Canadian, participants.

- 3.14 In-Group Embarrassment: When and why people compensate for others' misbehavior  
Julia von Schuckmann (ESADE Business School, Spain); Lucia Salmonsom Guimaraes Barros (Universidade Federal de Sao Paulo, Brazil); Marco Bertini (ESADE Business School, Spain); Grant Edward Donnelly (Ohio State University, USA)

**Brief Abstract:**

Vicarious guilt refers to circumstances in which a person who is not the agent of a wrongdoing experiences this emotion. It happens when the wrongdoer and the perceiver have interpersonal interdependence. We propose that perceived interpersonal interdependence depends on the distinctiveness of the context. In a series of two experiments, we found that that being in an outgroup [ingroup] circumstance increases [decreases] perceived interdependence, can lead one to feel more [less] responsible for the behavior of others and try to repair more [less] the relationship damage through apologizing and consumption activities.

#### 4. Self, Sociality, and Word of Mouth - Working Paper Session

*Harborside (River Street Level)*

- 4.1 Need to Evaluate as a Predictor of Sharing and Seeking Online Recommendations  
Mengran Xu (Ohio State University, USA); Rebecca Reczek (Ohio State University, USA); Richard Petty (Ohio State University, USA)

**Brief Abstract:**

In this research we characterize who is likely to engage in two types of online word of mouth as a function of their need to evaluate, an individual difference measure consisting of two motives, the need to express attitudes and the need to acquire information in order to have attitudes. We demonstrate that consumers with a high need to express are more likely to make recommendations and consumers with a high need for learning are more likely to ask for recommendations. We further demonstrate that these motivations have interactive effects when the specific WOM behavior is relevant to multiple goals.

- 4.2 Hiding in the Crowd: Secrecy Instigates in Consumers A Desire to Avoid Non-Conformity

Dongjin He (Hong Kong Polytechnic University); Yuwei Jiang (Hong Kong Polytechnic University); Gerald Gorn (Hong Kong Polytechnic University)

**Brief Abstract:**

This research investigates how the experience of secrecy affects their consumption behavior. Three studies reveal that when people are keeping secrets, and the secrets are salient in their minds, it instigates a tendency for them to avoid non-conformity in the consumption choices they make. It



shows that the effect is driven by the desire to avoid social attention—a desire induced by the thoughts and feelings induced by the secret(s). Furthermore, the effect of secrecy on consumer non-conformity is moderated by the amount of attention consumers sense that others pay to them and their perceived self-control capacity.

#### 4.3 The Haves and the Have Nots: The Influence of Subjective Social Class on Consumer Goals

Erick M Mas (University of North Texas); Blair Kidwell (1970); Aparna Labroo (Northwestern University, USA)

**Brief Abstract:**

The authors examine how social class influences consumer decision making within the context of hedonic and utilitarian consumption goals. Findings indicate that lower class consumers prefer utilitarian, while higher class consumers prefer hedonic choices. These effects are explained by differences between high and low-class consumers in accumulated cultural capital. Importantly, the effect of social class through cultural capital is shown to influence consumer choice beyond the influence of economic resources.

#### 4.4 Paying to Be Social? How Materialism Shapes Social Life Spending

William Ding (Washington State University, USA); Dave Sprott (Washington State University, USA); Andrew Perkins (Washington State University, USA)

**Brief Abstract:**

While extant research suggests materialists are asocial, our investigation reveals a more dynamic and complete picture regarding how materialists navigate social life. Specifically, the current research identifies conditions under which materialists are willing to spend more (or less) on friends than nonmaterialists, and explains the underlying reasoning behind this phenomenon.

#### 4.5 What is Yours Looks Like Mine: Extended Psychological Ownership in Consumer Possessions

Yunzhijun Yu (Simon Fraser University, Canada); Brent McFerran (Simon Fraser University, Canada)

**Brief Abstract:**

We document the existence and consequences of extended psychological ownership, which we define as the perception of an individual that an object is his/hers, because the object merely mirrors the physical features of another object that is actually owned by this individual. Across two studies, we demonstrate that when individuals see a car that looks the same as their own car, they experience a substantial amount of psychological ownership toward the same-looking car, despite retaining with awareness that they do not have actual physical ownership of that car. Keywords: psychological ownership, physical appearance, similarity

#### 4.6 Dissimilarities Loom Larger than Similarities in Social Perception

Claudiu Dimofte (San Diego State, USA)

**Brief Abstract:**

The various social identities that the self-concept accommodates imply that individuals will simultaneously be members of multiple social groups. We show that others' membership in a negatively perceived group is given more weight than their concurrent belonging to a more positively perceived group. In a consumer context, we find that users of a rival brand are perceived negatively despite their similarity on a more relevant dimension. This effect is mediated by risk perceptions and moderated by regulatory focus.

#### 4.7 Consumer Incivility: A Control Restoration Mechanism

Gurbir Singh (Indian Institute of Management, Indore); Abhishek Mishra (Indian Institute of Management, Indore); Sanjeev Tripathi (Indian Institute of Management, Indore); Shruti Tewari (Indian Institute of Management, Indore)

**Brief Abstract:**

Consumers showcasing uncivil behavior towards frontline employees is a routine sight. In this paper, we argue that consumers engage into uncivil behavior when they lack control. This behavior is driven by their desire to see structure and hierarchy in their social relationships. Consumers consider themselves to hold a higher status than employees. The need for hierarchy makes control deprived consumers perceive more service failures and they react to such failures with incivility. Our initial experiments lend support to our arguments and we intend to further explore the impact of power distance belief and presence of others on this relationship.

#### 4.8 You Didn't Take My Advice? Examining Social and Product-Related Outcomes of Rejected Recommendations

Matthew J Hall (University of Nebraska); Jamie D Hyodo (University of Nebraska-Lincoln); Kirk Kristofferson (Ivey Business School)

**Brief Abstract:**

Considerable research examines why consumers engage in word-of-mouth or use WOM in their decision-making. In the present research, we move beyond this individualistic perspective to consider WOM outcomes in the recommendation dyad. Specifically, we examine instances in which consumers ignore the recommendations of others to demonstrate that such rejected recommendations can negatively affect recommender evaluations of both the recommendee and the recommended product. We further show that recommender confidence moderates the effect of rejection on subsequent product evaluations. Lastly, we outline planned future studies to identify additional moderators of these effects.

#### 4.9 The Beautified Me is Me: How Interdependence Increase Beauty App Use Intention

Qin Wang (Arizona State University, USA); Andrea C. Morales (Arizona State University, USA); Adriana Samper (Arizona State University, USA)

**Brief Abstract:**

This research investigates why consumers use photo-editing beauty apps and which consumers are more likely to do so. Two studies show that interdependents (vs. independents) are more likely to use

beauty apps to edit their photographs under joint evaluation mode (i.e., when they see both the unedited and beautified photo together), because the salient discrepancy between the two photos leads interdependents to see larger overlap between the beautified (edited) photo and their true self, while independents see smaller self-overlap. However, consumers are equally likely to use beauty apps under separate evaluation mode (i.e., when they only see the beautified photo).

#### 4.10 Pass It On: Word-of-Mouth Transmission and the Need to Self-Enhance

Ashleigh E Powell (RMIT University, Australia); Adrian Ryan Camilleri (University of Technology Sydney); Constantino Stavros (RMIT University, Australia); Angela R. Dobele (RMIT University, Australia)

##### **Brief Abstract:**

This research explores the psychological and contextual drivers of transmission (passing on a pre-existing message) through three experiments. Results demonstrated that the need to self-enhance moderated the positive relationship between emotional arousal and the likelihood to transmit. The effect of the need to self-enhance on likelihood to transmit was mediated by perceptions of social benefit relative to risk. Broadcasting, transmitting to weak ties, and via asynchronous communication were perceived to be riskier and less beneficial than narrowcasting, transmitting to strong ties, and via synchronous communication. This research has theoretical and practical implications for understanding transmission behaviour and digital campaign design.

#### 4.11 False Positives: How Double-Sided Review Systems Affect Consumers' Rating Valence

Bryan Usrey (University of East Anglia); Antje Graul (Utah State University)

##### **Brief Abstract:**

With the growth of peer-to-peer sharing services a new review system has emerged. While traditional service reviews often see the consumer review the provider, this new system allows for both parties (i.e. the provider and the consumer) to review the other. Drawing on reciprocity literature, we posit that such a system may lead to false positives. In three experimental studies, we find that double sided review systems enhance review valence through the mediating mechanism of "pre-ciprocity". Additionally, we find that this effect is enhanced when the review is private, as opposed to public.

#### 4.12 Social Class Differences in Attribution of Stability of Product-Harm Crises

Andy H. Ng (Sabanci University)

##### **Brief Abstract:**

Product-harm crises are detrimental to firms. The goal of the present research is to examine one consumer demographic variable – social class – as a novel predictor of attribution of stability of product-harm crises. Results showed that participants with a working (vs. middle) class background (Study 1) and participants whose subjective social class was temporarily decreased (vs. increased) (Study 2) were less likely to attribute stability to a company's product harm crisis, suggesting that firms need to devote more effort in reactive public relations after a product-harm crisis in states where the proportion of middle-class individuals is high (vs. low).

#### 4.13 Loneliness and Consumption Choices: The Moderating Role of Self-Expression Kshitij Bhoumik (Texas Tech University)

**Brief Abstract:**

This research seeks to explain how the need to express oneself affects the consumption choices of lonely people. Consumers, especially in western cultures, often use the marketplace to express their individuality and prefer brands and products that match their self-concept. But how is an individual's choice affected if he or she is going through the feeling of loneliness? Might a feeling of loneliness alter the choices an individual makes in the marketplace? This research expands the past research to suggest that after engaging in an act of self-expression lonely people make unique choices, otherwise lonely people make choices that are conforming to other people.

#### 4.14 The Effect of Social Crowding on Consumer Preferences for Personalization Bingyan Hu (University of Iowa, USA); Jing Wang (University of Iowa, USA)

**Brief Abstract:**

Consumers are frequently exposed to social crowding, yet little is known about how feeling crowded affects consumer preferences. In this project, we examine how social crowding influences consumer preferences for personalization (e.g. customized products/services, personalized online recommendation, and individualized communication). We find that social crowding decreases consumers' preferences for personalization (studies 1 and 2). We also demonstrate that the effect is moderated by consumers' interpersonal trust (study 3) and propose self-awareness as a mediator (planned study 4). Our research contributes to the literature on the consequences of social crowding and the antecedents of consumer personalization preferences.

### 5. Branding - Working Paper Session

*Harborside (River Street Level)*

#### 5.1 How Writing with Promotional Pens Affects Reactions to the Promoted Brand Eva Marckhgott (WU Vienna University of Economics and Business); Bernadette Kamleitner (WU Vienna)

**Brief Abstract:**

Even if they use it, most consumers devote limited attention to promotional merchandise. In two laboratory experiments, we show that even incidental encounters with promotional merchandise (branded pens) can affect reactions to the promoted brand, specifically brand attitude, preference, willingness to pay and purchase intention. Notably, the effect only holds for unfamiliar brands, towards which consumers have not yet formed an attitude. Moreover, we find that at similar level of exposure, promotional merchandise outperforms billboards.

#### 5.2 Should I Stay or Should I Go: When Our Companies Have Eyes for Other Consumers Na Ri Yoon (Indiana University, USA); Jenny Olson (Indiana University); Adam Duhachek (Indiana University, USA)

**Brief Abstract:**

Our research examines how consumers' dispositional attachment styles influence the likelihood of switching as a function of the types of incentives companies offer (e.g., promotional offers). Higher attachment avoidance (i.e., a fear of interpersonal dependency) is associated with greater switching. Consumers with higher attachment anxiety exhibit greater switching when 1) firms incentivize new customers with exclusive benefits and 2) the threatened relationship is longer in duration. While avoidant consumers feel less committed to companies more generally, anxious consumers feel greater betrayal when their company "has eyes for others" in the form of differential incentives.

### 5.3 Brand Perceptions and Consumer Support in the Face of a Transgression: Warmth Over Competence

Summer Hyoyeon Kim (University of Kansas, USA); Yexin Jessica Li (University of Kansas, USA); Jenny Olson (Indiana University); Shailendra Jain (University of Washington, USA)

**Brief Abstract:**

We examined the role of brand perception in consumer judgment and support following a brand transgression. Consumers blame warm brands less for the same product failure. They are also more likely to support warm brands (vs. competent brands) following a moral transgression. We explain this link through the process of moral decoupling. Individuals who are able to separate judgments of performance from judgments of morality indicated a higher likelihood of supporting the warm brand even after various transgression types.

### 5.4 How Shared Brand Use Influences Brand Variety Seeking in Romantic Relationships

Selcan Kara (University of Massachusetts Dartmouth); Anna Vredevelde (Berry College, USA)

**Brief Abstract:**

This research examines consumers' shared brand use, brand preference similarity, and purposeful brand variety seeking as part of romantic relationships. Findings contribute to extant work on shared brand use and variety seeking by illustrating how romantic relationship partners engage in shared brand use and purposeful brand variety seeking as a part of their relationships and how such brand engagement is influenced by relationship satisfaction.

### 5.5 Reward and Punishment for Brand Politicization: The Development of a Scale to Measure a Consumer's Disposition to React When Brands Take on Socio-Political Positions

Omar Khan (Morgan State University); Michael Callow (Morgan State University)

**Brief Abstract:**

Many societies have become increasingly polarized on an array of socio-political issues. Corporations are finding it difficult to remain apolitical and are confronted with the quandary of picking sides. This study examines the consumer's predisposition to react to corporations that take a socio-political position. The Consumer Reaction to Brand Politicization scale is conceptualized as a multidimensional

construct. It is presented as a subset of political activism and differs from consumer advocacy in that it focuses on the consumer's disposition to react to brand politicization. A face validity test and a pilot study are run to test the scale's psychometric properties.

## 5.6 Inspire to Purchase: How a Lack of Control Drive Preferences for Underdog Positioning

Yangyi Tang (Hong Kong Baptist University); Alex S.L. Tsang (Hong Kong Baptist University)

### **Brief Abstract:**

Previous research has suggested that underdog positioning may elicit consumers' favorable responses toward the focal brand, but it is still unclear under which condition it is more effective. In this paper, we demonstrate that consumers prefer brands that were positioned as underdogs when feelings of control are low. Moreover, such effect was found to be mediated by perceived inspiration. We also identify locus of control as a moderator, finding that externals are more likely to be inspired by underdog positioning than internals when feelings of control are low.

## 5.7 Buy Local? The Perceived Trustworthiness of Local Versus National Brands

Katie Spangenberg (University of Washington, USA); Ann Schlosser (University of Washington, USA)

### **Brief Abstract:**

Although most definitions of national brands and local brands are based on geographic coverage, we propose and find across six studies that consumer associations extend beyond geography to affect safety perceptions and trustworthiness beliefs. Specifically, local brands are perceived to be family-owned, thereby increasing perceptions of safety. In addition, local brands are seen as family-owned and community-oriented, thereby increasing trustworthiness beliefs of benevolence. In contrast, national brands are seen as larger, increasing trustworthiness beliefs of competence. Further, activating specific dimensions of trust (e.g., benevolence, competence) differentially affects preferences for and purchase intentions of local (vs. national) brands.

## 5.8 Romance Creations: Effects of Romantic Fantasy on Psychological Ownership and Consumption Behaviour

Yunzhijun Yu (Simon Fraser University, Canada); Lily Lin (Simon Fraser University, Canada)

### **Brief Abstract:**

The current research examines the effects of fantasy on consumers' psychological ownership and consumption behaviors. In five studies, we show that consumers who romantically fantasize about a celebrity were more willing to engage in fandom behavior and purchase products associated with the celebrity. We also find that the positive effects of romantic fantasy is mediated through an induced feeling of psychological ownership toward that celebrity. Furthermore, we show that this fantasy effect is mitigated when the celebrities' actions violate the consumers' fantasies. Finally, theoretical implications in the literature of fantasy and psychological ownership, and marketing implications are

discussed.

### 5.9 Do Brands Influence Our Personality? The Impact of Luxury Brand Consumption on Narcissistic Self-Regulation

Marek Gorny (University of St. Gallen, Switzerland); Emanuel de Bellis (University of St. Gallen, Switzerland)

#### **Brief Abstract:**

Whereas antecedents of brand consumption are well understood, less is known about the influence of brand consumption on consumers. In this work, we investigate how luxury brand consumption affects consumers' narcissistic self-regulation. Drawing from research on marketing and personality psychology, we hypothesize that luxury brand consumption triggers an agentic value orientation and ultimately narcissistic self-regulation. Initial evidence shows that luxury (vs. regular) brand consumption strengthens consumers' agentic value orientation but only for entity (vs. incremental) theorists, who incorporate brand associations in their self. Furthermore, we find that narcissistic rivalry increases with luxury brand consumption for men but not for women.

### 5.10 Brand Humanization: Applying Two Dimensions of Humanness to Brands

Mycah L Harrold (Washington State University, USA); Andrew Perkins (Washington State University, USA)

#### **Brief Abstract:**

The current research defines a novel measure of brand humanness that, unlike past measures of anthropomorphism, is easily applied to a variety of research paradigms and marketing contexts. We situate brand humanness along two independent dimensions used in previous social psychology research: emotions descriptive of basic human nature and those that describe ways in which humans are unique from other species. We have identified a subset of emotion words that consumers find highly applicable to brands and are currently working to refine the list into a useable measure.

### 5.11 Keep It Simple (Sometimes): Consumer Perceptions of Brand Simplicity and Risk

Nicholas E Light (University of Colorado, USA); Philip Fernbach (University of Colorado, USA)

#### **Brief Abstract:**

Simplicity is a common modern branding strategy. However, we argue that there may be significant consequences of simple branding. This work contributes to the literatures on branding, risk, and understanding by examining a previously unexplored phenomenon whereby consumers feel that other aspects of a company should be simple due to simplicity of branding. Across two studies, we show that: (1) consumers use branding simplicity as a cue to the simplicity of other aspects of a company; (2) this leads to decreased perceptions of risk for "simpler" brands, which (3) makes consumers more upset by product failures (vs. "complex" brands).

### 5.12 Corporate Social Responsibility and Negative Word-of-Mouth: The Role of Perceived Hypocrisy

Argiro Kliamenakis (Concordia University, Canada); H. Onur Bodur (Concordia University, Canada)

**Brief Abstract:**

This research examines circumstances under which a positive CSR reputation amplifies negative consumer responses to firm crises. We find that a positive CSR reputation shields firms from negative consumer responses only in the case of performance-related crises. For values-related crises, a positive CSR reputation is shown to amplify negative responses, by increasing perceptions of hypocrisy, subsequently increasing consumers' likelihood to retaliate through negative word-of-mouth. Although a positive CSR reputation becomes a liability for firms experiencing values-related crises, it may still offer a shielding effect, but only for ambiguous crises (i.e. crises that may or may not constitute transgressions).

5.13 When Branding Strategies Do Not Shield Sub-Brands from Negative Publicity: The Role of Consumers' Cognitive Styles

Rebecca Chae (University of Michigan, USA)

**Brief Abstract:**

Marketers often employ distinct branding strategies with different brand names for their products. When consumers encounter negative publicity about one of the brands, how are perceptions of other brands affected? How does the consumer's cognitive style influence judgments about the brands? In particular, we examine the effects of consumers' analytic versus holistic thinking styles on the degree of similarity between evaluations of two sub-brands. Across four studies, we show that holistic (vs. analytic) thinkers are more likely to provide evaluations of a sub-brand that are similar to another sub-brand plagued by negative publicity, unless differences between sub-brands are made salient.

**6. Well-Being, Health, and Prosocial Behavior - Working Paper Session**

*Harborside (River Street Level)*

6.1 Pronouns in Fundraising Appeals – The Impact of I vs. S/He on Donations

Amir Sepehri (Western University, Canada); Rod Duclos (Western University, Canada); Hamid Elahi (Western University, Canada)

**Brief Abstract:**

Donors evaluate online fundraisings partly on their linguistic characteristics. Extending prior research showing negative (positive) emotions increase (decrease) donations, we show 1) self-related (other-related) pronouns result in lower (higher) donations, and 2) the negative (positive) effect of self-related (other-related) pronouns is stronger when negative (positive) emotions increase.

6.2 Shaping Preferences for Public Versus Private Recognition Through Scarcity

Carina Thürridl (WU Vienna); Bernadette Kamleitner (WU Vienna)

**Brief Abstract:**

Public (e.g., public display of a name) and private (e.g., personal thank you) recognition are often used



to stimulate collective funding behavior in contexts such as charitable giving and crowdfunding. While public recognition is generally more effective, private recognition is more popular. As a result, this research investigates ways to increase the appeal of public recognition in contexts where people are faced with a choice. It finds that the appeal of public but not private recognition increases, when its supply is limited. Promising public recognition only a selected few may thus be a simple, cost-effective strategy to increase much-needed funds.

### 6.3 Consumers' Perceptions of Weight Loss Food Programs

Sukriye Sinem Atakan (Cornell University, USA); Alison B. Shields (Ithaca College)

#### **Brief Abstract:**

Three studies reveal that, within the context of healthy food consumption and weight loss, consumers differentiate among food programs (i.e., meal-kit delivery, counting calories, prepackaged meals) on at least eight dimensions: involvement, choice/flexibility, education, consumption monitoring/accountability, ingredient quality, taste, healthiness of food, and its impact on mental health. Furthermore, findings highlight the structural differences among the food programs in terms of food preparation (cooking vs. ready-to-eat) and consumption (calorie/fat counting vs. mindfulness) practices. Food preparation impacts program effectiveness perceptions through education and control. Mindful consumption impacts effectiveness perceptions through education whereas calorie/fat counting affects perceptions through control over consumption.

### 6.4 Does Imagining Seeing Bad Make You Not Do Good? The Effect of Identity-Based Factors on Consumer Response to Cause Related Marketing Offers

Katina Kulow (University of Louisville); Mina Kwon (University of Louisville); Michael Barone (University of Louisville)

#### **Brief Abstract:**

Can imagining witnessing a moral transgression by another consumer affect responses to cause marketing (CM) offers? Across three experiments, we demonstrate that, based on the particular dimensions of consumer identity situationally activated during decision making, consumers may respond less or more favorably to such CM offers.

### 6.5 Accumulative Efficacy Belief and Brand Switching for Nutrition Facilitators Versus Supplements

Xue Wang (University of Hong Kong); He (Michael) Jia (University of Hong Kong)

#### **Brief Abstract:**

Across two studies, we show that consumers are less likely to switch to another brand when they are taking nutrition facilitators than when they are taking nutrition supplements. Consumers believe that the efficacy of nutrition facilitators will increase over time, whereas the efficacy of nutrition supplements will not increase over time. Such an accumulative efficacy belief mediates the inhibiting effect of nutrition facilitators (vs. nutrition supplements) on consumers' brand switching behavior.

## 6.6 Consumer Memorialization and Philanthropy Sara Joanna Penner (University of Winnipeg)

### **Brief Abstract:**

Is it good or evil to promote consumer memorialization within the charitable industry? If you walk through a park or the grounds of charity you would be hard pressed not to find a rock, bench or tree honouring someone who passed away. Why are people making these gifts while grieving? This research shows that permanent memorials are helping the donors in the grieving process. People use these gifts as a symbolic way to create a continued bond with the deceased and visiting these memorials is important for protecting their memories.

## 6.7 Not All Dieters Are the Same: Development of the Moderation Tendency Scale Yi Xie (Arizona State University, USA); Naomi Mandel (Arizona State University); Meryl P Gardner (University of Delaware, USA)

### **Brief Abstract:**

Dieters are not all the same. They fall into two main types: Abstainers, who try to avoid certain temptations entirely, and moderators, who allow “everything in moderation.” We develop and validate a new scale that measures lay theories about abstinence vs. moderation. We also examine whether these implicit self-theories affect dieters’ attitude towards products advertisements. Our findings indicate that moderation beliefs were significant in explaining the attitudes towards the ads - abstainers have more favorable attitudes towards the abstention ads, and moderators have more favorable attitudes towards the moderation ads.

## 6.8 The Bright Side of the American Dream: Social Mobility Beliefs Mitigate the Negative Association between Financial Contingency of Self-Worth and Well-Being Han Young Jung (University at Buffalo, The State University of New York); Lora E Park (University at Buffalo, The State University of New York); Jennifer Weng (University at Buffalo, The State University of New York); Deborah E. Ward (University at Buffalo, The State University of New York); Paul K. Piff (University of California Irvine, USA)

### **Brief Abstract:**

People who base their self-esteem on financial success, or have financially contingent self-worth (Financial CSW), experience lower well-being (Park, Ward, & Naragon-Gainey, 2017). In the current research (N=229), we examined whether a belief in social mobility – a belief that members in society are able to move up the economic ladder – would weaken the association between basing self-worth on financial success and lower well-being. Results showed that for participants who endorsed higher social mobility beliefs, the negative relationship between Financial CSW and well-being was attenuated. In addition, among participants with higher Financial CSW, stronger belief in social mobility predicted greater well-being.

## 6.9 Safe by Comparison: The Unintended Consequences of Cigarette Pack Graphic Health Warnings on E-cigarette Purchases

Kamal Ahmmad (Washington State University, USA); Christopher Berry (Colorado State University); Elizabeth Howlett (Washington State University, USA)

**Brief Abstract:**

Graphic warnings on cigarette packaging are used to discourage smoking. E-cigarettes are heavily promoted as a “healthier” alternative to combustible cigarettes. The purpose of this research is to examine how the use of graphic warnings on cigarettes can bias evaluations of e-cigarettes. Two studies have been conducted and results show that the effects of the fear elicited by graphic warnings on e-cigarette purchase intentions is mediated by perceived product efficacy. Furthermore, the mediating effect is moderated by smoking status, that is, whether the consumer is a smoker or someone who both smokes and already uses e-cigarettes.

#### 6.10 Genetic Associations with Prosocial Behavior; Social Reward Processing Genes and Charitable Giving

Steven D Shaw (University of Michigan, USA); Carolyn Yoon (University of Michigan, USA)

**Brief Abstract:**

Genetic associations can deepen our understanding of complex behaviors studied in consumer psychology. This study examines single-nucleotide polymorphism (SNP) associations with prosocial behavior by using genetic and charitable donation data from a national representative longitudinal study. Using a sample of ~15,000, we tested the hypothesis that SNPs in genes in the brain’s social reward processing system (e.g., COMT and OXTR) would be associated with prosocial traits and tendencies. Initial replication attempts of previous, but underpowered, genetic associations with prosociality produced mixed results. After controlling for environmental influences (population stratification, sex, income), we identify candidate SNP associations with charitable donation tendencies.

#### 6.11 The Influence of Textual Elements on the Financial Performance of Donation Appeals

Ekaterina Napolova (University of Technology Sydney); Valeria Noguti (University of Technology Sydney); Francois Carrillat (University of Technology Sydney)

**Brief Abstract:**

While the importance of storytelling in charity appeals has been stressed by several scholars, the question of how the story should be told received limited attention in the academic literature. The present research aims to fill this gap and investigate how language elements used in donation appeals can contribute to the success of these appeals. Specifically, we explore whether the use of personal pronouns as well as more complex language to construct a story has an effect on the financial performance of donation appeals.

#### 6.12 Conservatives’ Revealed Preferences Toward Self-Improvement Products

Rhiannon MacDonnell Mesler (University of Lethbridge, Canada); Katharine Howie (University of Lethbridge)

**Brief Abstract:**

We examine conservatives' revealed preferences for self-improvement products across three studies by varying self-improvement context (i.e., health and education), means of assessing political orientation (i.e., measured in studies 1 and 3; self-identified in study 2), and by using behavioral (study 1), choice (study 2) and willingness to pay (study 3) dependent variables. We reveal that conservatives are less likely to pursue (study 1) or choose (study 2) self-improvement products; however, conservatives had a higher willingness to pay for self-improvement products than did liberals (study 3), which was mediated by heightened personal growth intentions. Implications and future research are then discussed.

### 6.13 Healthcare Outcomes are Influenced by Price and Free Choice: How Variations in Placebo and Nocebo Effects are Mediated by Trust

Hyerin Han (University of Minnesota, USA); Akshay Rao (University of Minnesota, USA)

**Brief Abstract:**

Product performance, particularly in the healthcare space, can be enhanced when the price of the medical intervention is perceived to be high, because of its perceived efficacy (the placebo effect). Simultaneously, expectations of adverse side effects can also be enhanced, for the same reason (the nocebo effect). Our inquiry is focused on factors that impact these two outcomes. We vary the consumer's ability to choose the healthcare provider (free choice versus limited choice) and observe that the effect is stronger under free choice, because the consumer's trust in providers is lower when their choice is limited.

## 7. Engagement, Motivation, and Goals - Working Paper Session

*Harborside (River Street Level)*

### 7.1 Deconstructing In-Store Shopping Behavior: How Perceived Savings Impact Unplanned Purchases

Lina Xu (New Mexico State University, USA); Mihai Niculescu (New Mexico State University, USA)

**Brief Abstract:**

Drawing on mental accounting theory, we suggest that shoppers keep track of not only total spending but also perceived savings over the course of their shopping journey. To ensure staying within the mental budget, shoppers incorporate cumulative perceived savings into in-store slack to provide room for unplanned purchases, while being exposed to various in-store stimuli. A new theoretical framework is presented to explain the counterbalance of self-regulation and cuing theory that are shaping in-store shopping behavior synchronously.

### 7.2 Choice Settings, Choice-related Goals Activation and Product Evaluation

Na Xiao (Laurentian University, Canada)

**Brief Abstract:**

This research examines the role of choice-settings in activating choice-related goals and influencing product evaluation. The results of four experiments demonstrate that choice settings (as opposed to non-choice settings) activate choice-related goals (e.g., simplify choice, enjoy the choice-process). These goals, in turn, influence how attributes are weighed in product evaluation and choice. When choice-related goal activation increases, the interaction between choice settings and enhanced attribute levels results in more favourable product evaluation of a less dominant choice-option. Choice-related goals explain preference and choice changes that occurs when alternatives are compared individually versus simultaneously.

### 7.3 Borrowing Others' Progress: When Does Group Goal Progress Influence Motivation to Pursue Personal Goals?

Katina Kulow (University of Louisville); Thomas Kramer (University of California Riverside, USA); Kara Bentley (Chapman University)

**Brief Abstract:**

This research examines the conditions under which the knowledge of collective goal progress of others, on seemingly unrelated goals, can derail personal goal pursuit through the experience of vicarious goal progress. We find that consumers who are aware of awareness of others' progress versus achievement of a separate, unrelated goal result in a decrease in motivation in personal goal pursuit, particularly in situations where they highly identify with the other individuals pursuing the unrelated goal.

### 7.4 You Run When Time Flies: Perceived Speed of Time as a Cue to Self-Speed

N. Alican Mecit (HEC Paris, France); L. J. Shrum (HEC Paris, France); Tina M. Lowrey (HEC Paris, France)

**Brief Abstract:**

We propose that the perceived speed of time operates as a cue that people rely on to adjust their speed in subsequent tasks. In three studies, we show that when time is perceived to have passed quickly, people who conceptualize themselves as moving through time are more likely to speed up, and thus suffer from cognitive trade-offs, such as accuracy problems and impulsivity, compared to those who represent themselves as stationary agents on a moving timeline. We further show that the speed adjustment happens because the modern Western culture reinforces the "time is a limited resource" metaphor.

### 7.5 Mental Imagery as Driver of Consumer Desire

Evelynn Regine Devos (Ghent University, Belgium); Mario Pandelaere (Virginia Tech, USA); Anneleen Van Kerckhove (Ghent University, Belgium)

**Brief Abstract:**

Desire is an intense emotional state a consumer experiences toward objects and is a motivating force accounting for much of consumption. Whilst desire has been conceptually well explored within the consumer behavior literature, it remains unclear what exactly causes it. This paper demonstrates that

imagined consumption increases subsequent desire for the imagined product and thereby identifies mental consumption as a driver of consumer desire. More specifically, we show that people who imagined consuming a food product (vs. those who formed control images) subsequently perceived it as bigger and explicitly indicated to desire the food more.

#### 7.6 Conceptualizing Engagement in a Digital World; An Organizing Framework for *Engagement Strategies*

Steven D Shaw (University of Michigan, USA); Blake Wagner III (University of Michigan, USA); Inbal Nahum-Shani (University of Michigan, USA); Carolyn Yoon (University of Michigan, USA)

**Brief Abstract:**

Despite the best efforts of marketing communications, user engagement dwindles over time. In a digital setting, with continuous and competing demands on users' time and attention, the inability to retain user engagement is a widespread issue and retaining engagement requires an understanding of the psychological mechanisms underlying engagement, and modern experimental techniques/statistical methods. This paper reviews factors that influence user engagement, and presents a conceptual framework for hypothesizing and optimizing the use of engagement strategies in real-world settings. We propose that affective-cognitive processes (automatic versus conscious) and motivation (intrinsic versus extrinsic) are two key dimensions that should be considered when implementing an engagement strategy.

#### 7.7 Does Perceived Financial Well-Being Affect Willingness to Participate in a Community-Based Debt Reduction Program?

Michael Moorhouse (Western University, Canada); Miranda Goode (Western University, Canada); June Cotte (Western University, Canada); Jennifer Widney (Financial Fundamentals)

**Brief Abstract:**

Consumer debt levels are rising in North America with dramatic effects on families and the economy. Courses to help individuals manage debt are available, but people often quit before realizing all of the benefits. In this investigation, we explore the effect of perceived financial well-being on progression in a course designed to help individuals reduce debt. We find that individuals who are less stressed about their finances and feel more secure about their financial future, despite carrying an average consumer debt load of \$74,000, are more likely to report greater life satisfaction, and to quit a community-centered debt reduction course.

#### 7.8 The Influence of Pet-Ownership on Consumer Behavior

Lei Jia (Ohio State University, USA); Xiaojing Yang (University of Wisconsin - Milwaukee, USA); Yuwei Jiang (Hong Kong Polytechnic University)

**Brief Abstract:**

Across four studies, we show that pet ownership influence consumers' regulatory focus such that dog (vs. cat) owners are more promotion- (vs. prevention-) oriented. Their different regulatory orientations

can carry over to influence their financial decisions, attitudes toward ads, and purchase intentions.

### 7.9 To Make New Year's Resolutions Stick: Focusing on Subordinate as Well as Superordinate Goals

Claude Messner (University of Bern); Bettina Hoehli (University of Bern); Adrian Bruegger (University of Bern)

#### **Brief Abstract:**

New Year's resolutions are often tackled with great motivation, but abandoned again after only a few weeks. We argue that when setting broad New Year's resolutions such as "living a healthier life", focusing on superordinate goals could inhibit the abandonment of the resolution at an early stage and help maintain the behavior over time. Our results show that after three months, people are more motivated to continue to pursue their New Year's resolutions if they focus on both a superordinate and a subordinate goal than if they focus on either of them alone.

### 7.10 United We Stand: The Effect of Sale Proneness and Price Categorization on Consumers' Shopping Experiences

Yong Kyu Lee (York College (CUNY))

#### **Brief Abstract:**

This research investigates whether differences in the manner in which individuals pursue deals (high vs. low sale proneness) lead to different perceived evaluations toward the product assortment as a function of how the product assortment is displayed. The finding shows that consumers with high (vs. low) sale proneness are more likely to have positive evaluations toward the product assortment when discounted products are categorized as a deal and displayed separately from regular-priced products compared when discounted ones are mixed and displayed with regular-priced products. In addition, this effect is mediated by consumers' perceived value for money.

### 7.11 When Providing Better Services Leads to Complaints

Koji Matsushita (Chuo University); Haiyang Yang (Johns Hopkins Carey Business School); Kaichi Saito (Meiji Gakuin University); Haruko Tsuchihashi (Aoyama Gakuin University)

#### **Brief Abstract:**

When might providing better services lead to complaints? We propose and show that, in group-consumption contexts, complaint behaviors are driven by consumers' individual consumption goal and their relationship goal. Receiving services superior to that of other group members may hamper fulfillment of the latter goal, because the service differences lead to intra-group social comparison. Thus, when consumers receive service superior to that of other group members, they may experience negative emotions such as guilt, increasing the likelihood of complaint.

### 7.12 Working Hard to Take the Easy Way Out: The Role of Need for Closure in the Emergence of Epistemic Delayed Gratification

Ashley Otto (Baylor University); Joshua John Clarkson (University of Cincinnati, USA); Nathanael S. Martin (University of Cincinnati, USA)

**Brief Abstract:**

The present research tests the hypothesis that consumers engage in epistemic delayed gratification by intentionally investing upfront effort in decisions to strategically ease future decision-making. Three experiments demonstrate that: (i) consumers who find decision-making aversive (those high in need for cognitive closure) invest greater effort into novel decisions, (ii) such upfront effort investment only occurs when the knowledge gained generalizes to future decision-making, and (iii) this effort strategically eases future decision-making. Consequently, this research provides an initial foray into the processes underlying individuals' propensity to epistemically delay gratification and the role of cognitive closure in facilitating these processes.

## **SATURDAY, MARCH, 2**

### **Session 5**

#### **Inherently Moral or Immoral: New Perspectives on the Complex Interplay between Branding and Morality - Symposium**

##### *Verlst (2nd Level)*

In the wake of a recent string of corporate scandals (United, Volkswagen, Uber) and a surge of academic interest in morality in the marketplace (Campbell & Winterich, 2018), researchers have brought moral attitudes, judgments, and behaviors back to the forefront in understanding consumer reactions to brands. Capitalizing on this tradition, our session puts forward cutting-edge research into the interplay between branding and morality. Each of the four included papers address the following research question: how can research on marketplace morality and immorality inform the study of brands in general and consumer evaluations of and reactions to brands in particular?

*Chair: Mansur Khamitov, Nanyang Technological University, Singapore*

##### **Brand's Moral Character Prevails in Brand Evaluations**

Mansur Khamitov (Nanyang Technological University, Singapore); Rod Duclos (Western University, Canada)

**Brief Abstract:**

What sorts of trait information do people most care about when forming brand evaluations? Extant brand relationships research suggests "warmth" should be utterly important when evaluating brands. Yet, some psychological research on morality suggests information about brands' specifically moral traits—their moral "character"—may be a primary dimension. Although warmth and character are sometimes construed interchangeably in the interpersonal domain, we argue they are separable in the consumption domain. More importantly, we show that across a wide variety of contexts, character is likely more important than warmth in brand evaluation formation.

##### **Rejecting Moralized Products: Moral Identity as a Predictor of Reactance to "Vegetarian" and "Sustainable" Labels**



Rishad Habib (University of British Columbia, Canada); Yann Cornil (University of British Columbia, Canada); Karl Aquino (University of British Columbia, Canada)

**Brief Abstract:**

How do non-vegetarians react to food labeled “vegetarian”? How do global warming skeptics react to travel being labeled “sustainable”? We argue that such labels have become moralized and exert pressure on consumers to conform. In three studies, we both measure and manipulate moral identity and show that these labels trigger reactance among consumers high, but not low in moral identity that leads them to reject such products. The research suggests that marketers should consider negative effects arising from moral reactance when deciding to place such labels.

Corporate Social Responsibility (CSR) Initiatives, PR Crises and Role of Responsibility in Corporate Evaluations

Emine Mavi (Koc University, Turkey); Zeynep Gürhan-Canli (Koc University, Turkey); Tarcan Kumkale (Kadir Has University)

**Brief Abstract:**

In CSR literature, there is the general idea that CSR protects against product harm crises or other negative information. We argue that this happens only when the responsibility is ambiguous, and not in cases of intentional wrongdoing. Applying Triangle Model of Responsibility to CSR domain, we discuss the role of responsibility in making predictions about outcomes in case of negative situations. The results suggest that company evaluations depend on nature of the crisis, the interaction between type of company and nature of the crisis, and the intentions of the company relating to the negative outcome.

Crime and Punishment through the Political Lens: How Liberals Forgive, and Conservatives Punish Ethical Brand Users

Thomas Allard (Nanyang Technological University, Singapore); Brent McFerran (Simon Fraser University, Canada)

**Brief Abstract:**

We propose that political orientation moderates desire for punishment toward users of ethical (vs. conventional) brands committing moral transgressions. That is, liberals (conservatives) punish ethical brand users committing moral transgressions less (more) than conventional brands users. Stereotyping of the transgressor drives such responses. Importantly, these effects occur for moral transgressions unrelated to the ethical properties of the brands. Such responses to moral transgressions are driven by a stereotyping of the transgressor, which affects his/her perceived moral character. We discuss implications for a better understanding of marketplace stereotyping and attribution formation and for maximizing the effectiveness of ethical product branding.

**Retailing in a Consumer World - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Fuad Shennib, Stanford University, USA*

## Preference Reversals Between Digital and Physical Goods

Fuad Shennib (Stanford University, USA); Rhia Catapano (Stanford University, USA); Jonathan Levav (Stanford University, USA)

### **Brief Abstract:**

Increasingly, facets of modern life have moved from the physical to the digital, ranging from photographs, to media, to social interactions. However, previous work suggests that despite the many advantages of digital goods, people remain willing to pay more for physical goods. We extend this work, and find a preference reversal by which individuals are indeed WTP more for physical goods, but are more likely to select digital goods in choice paradigms. This occurs across different goods (Study 1), in incentive-compatible contexts (Study 2), and is not driven by the salience of money (Study 3). Practical and theoretical implications are discussed.

## Appreciation of Creativity: Unintended Consequences of Thematic Versus Taxonomic Product Organizations

TzuShuo Ryan Wang (University of Minnesota, USA); Barbara Loken (University of Minnesota, USA); Alison Jing Xu (University of Minnesota, USA)

### **Brief Abstract:**

Three experiments reveal that thematic (but not taxonomic) product assortments can trigger a relational processing mindset, and this mindset can carry over and boosts appreciation of creative products and ads encountered later in unrelated contexts. However, this effect emerged only among participants possessing a chronic interdependent (versus independent) self-construal, who are more inclined to process information relationally. It suggests that retailers can use thematic product assortments to increase consumers' appreciation and possible purchase of frequently highly profitable innovative, novel, or otherwise creative products that may be featured elsewhere in the retail venue.

## Lower Is Stronger: The Impact of Low Prices and Affect on Reference Price Formation

Helen Colby (Indiana University, USA); Meng Li (University of Colorado, Denver)

### **Brief Abstract:**

This research demonstrates that low prices have a significantly larger impact on consumer reference prices than high prices that are equidistant from the experienced price mean. In five studies we find this effect across a wide variety of consumer goods (cameras, televisions, scooters, and produce) at three mean price magnitudes (\$4, \$400, and \$4,000) and with both more and less numerate consumers. We also demonstrate that low and high prices cause differential affective responses both in magnitude and in direction, and that this differential affective response mediates the effect of low versus high prices on reference price formation.

## The Downside of Product Bundle Customization

Jennifer Seokhwa Hong (New York University, USA); Andrea Bonezzi (Northeastern University, USA); Tom Meyvis (New York University, USA)

**Brief Abstract:**

Contrary to the general belief that customization yields benefits to both consumers and companies, current research documents a novel, downside of customization in the context of product bundling. We show that consumers evaluate self-customized bundles less favorably than store-generated bundles. Seven studies show that this effect manifests in different types of evaluative and behavioral measures. We further show that the downside effect of bundle customization is attenuated when consumers are highly knowledgeable about the product category at hand, tend to satisfice, and do not require synergy among bundled items.

**Judgment and Decision Biases in the Signaling of Virtue - Symposium**

*Vernon (2nd Level)*

We examine how classic judgment and decision heuristics and biases be leveraged by consumers to signal virtue to others and to themselves. Two papers examine how the structure of choice affects perceptions of virtue (streaks of choices, Silverman, Barasch, and Small; framing of choice, Besharat, Romero, and Haws), and two papers examine how consumers themselves can manipulate their choice contexts to reflect virtue (strategic ignorance, Woolley and Risen; using outcome bias, Lin, Zlatev, and Miller). We show how classic psychological effects can be used to encourage virtuous behavior, but also how they can be misused to justify vice behavior.

*Chair: Stephanie Lin, Singapore Management University, Singapore*

**Hot Streak! Consumer Inferences and Predictions about Sticking to Long-Term Goals**

Jackie Silverman (University of Pennsylvania, USA); Alixandra Barasch (New York University, USA); Deborah Small (University of Pennsylvania, USA)

**Brief Abstract:**

In five studies (N=1,834), we examine how predictions regarding an individual's likelihood of sticking to their goal (i.e., choosing "virtue") are affected by that individual's recent pattern of behavior. We show that a recent streak of goal-consistent behavior increases the predicted likelihood that the individual will persist, compared to a variety of other patterns and when holding constant the rate of behavior. This effect is due to a higher perceived level of commitment following a recent streak. In turn, people are less likely to recommend the use of a restrictive goal pursuit strategy, like a commitment device, after a streak.

**When More Is Less: How Rejecting (vs. Selecting) Food Ingredients Leads to Underestimation of Calories**

Ali Besharat (University of Denver, USA); Marisabel Romero (Colorado State University); Kelly Haws (Vanderbilt University, USA)

**Brief Abstract:**

Integrating research on decision frames and nutritional evaluation, the authors propose and demonstrate that rejecting (vs. selecting) ingredients increases consumers' perception that they are exhibiting greater restraint, which ironically leads to an underestimation of calories. Furthermore, this effect is accentuated with an unhealthy (vs. healthy) ingredient selection. This research has important implications for consumers managing their weight. Further, it provides insights to managers on how to

use customization strategies to manage health perceptions of the products they offer, an important topic in light of the rising obesity epidemic.

### Examining Whether Strategic Ignorance is Consciously (or Unconsciously) Pursued Kaitlin Woolley (Cornell University, USA); Jane Risen (University of Chicago, USA)

**Brief Abstract:**

Challenging the assumption that information avoidance is a conscious choice (i.e., strategic, willful, or deliberate ignorance), five studies demonstrate avoidance can operate as a hidden motive (N=2812). Consumers avoid threatening information about vice (calorie content; consequences of sunbathing) more when they “have cover” and can attribute avoidance to another product feature, than when they do not. Verifying our proposed process, the effect of cover on avoidance attenuates when intrapersonal conflict is reduced, whether by reducing the should-preference to receive information or the want-preference to avoid it. Finally, we demonstrate financial consequences of these results for marketers and consumers.

### It Wouldn't Have Mattered Anyway: When Overdetermined Outcomes Stephanie Lin (Singapore Management University, Singapore); Julian Zlatev (Harvard Business School, USA); Dale Miller (Stanford University, USA)

**Brief Abstract:**

In five studies, we examine overdetermined outcomes, or outcomes that would have occurred even had the actor not acted. We find that when people make vice decisions (e.g., deciding not to go to the gym), they seek to determine whether the outcome of those decisions were overdetermined (e.g., check whether the gym was closed). We find this behavior is biased, as people use overdetermined outcomes in evaluating their own, but not others' behavior. Furthermore, people seem aware that their reliance on this tactic is biased. Our research contributes to literature on vice-virtue, justification, outcome bias, and self-aware bias.

## Language and Word-of-Mouth - Competitive Paper Session

*Sloane (2nd Level)*

*Chair: Grant Packard, York University, Canada*

### How Second Person Pronouns Engage Audiences

Grant Packard (York University, Canada); Jonah Berger (University of Pennsylvania, USA)

**Brief Abstract:**

Does invoking “you” in cultural products impact audience engagement? Textual analysis of thousands of songs, as well as experiments, demonstrate that songs that mention “you” more often are liked more. Further, through both mediation and moderation, we show that rather than being narratively transported as the protagonist of a story, or by a sense that the singer is directly calling out to the listener, “you” pronouns can engage audiences by inducing a feeling of social attachment, offering audiences the experience of connecting with someone in their own life through the song's lyrics.

### **Extended Abstract:**

What makes cultural products popular? Could products that literally speak to “you” be more engaging? Academics have long been interested in whether the use of second person pronouns (e.g., you, your, and yours) shapes audience involvement (Pennebaker 2011). While some have argued that this small category of words seems to enhance engagement (e.g., increasing likes of online posts, Cruz et al. 2017), other work has found little impact of second person pronouns on listeners (Packard et al. 2018).

We predict that “you” pronouns can enhance engagement with listeners. Importantly, however, rather than being narratively transported (Escalas 2007) as the driver of a story or by making them the focal subject or actor (e.g., “You’re driving down the street...”) as described in research on self-referencing (Burnkrant & Unnava 1995; Meyers-Levy & Peracchio 1996), we propose that “you” pronouns engage audiences by inducing a feeling of social attachment (Hazan & Shaver 1990). In short, “you” pronouns could work by evoking a “you” other than the listener: a person to whom the listener could imagine singing or speaking the words in their own life. We test this proposition—that other-activation underlies the positive impact of “you” pronouns—through two main predictions.

First, from a linguistic perspective, other-activating “you” use should occur when this pronoun is presented as the object of a protagonist’s thoughts or actions (“I love you”) rather than as a self-referencing protagonist who may make assertions or demands of an other (“You love me”). Second, if other-activation drives the engagement benefit of “you” pronouns, this relationship will be mediated by second person pronouns’ ability to evoke an other to whom the listener is socially attached in their own life (Hazan & Shaver 1990).

Three studies using field data and lab experiments test these predictions.

Study 1 examined a dataset of 4,200 song rankings from the Billboard charts across 1,879 songs. We then captured each song’s lyrics and covariates (e.g., artist name, radio airplay). The lyrics were processed to identify all instances of second person pronouns. Judges coded whether each “you” word’s situated use that more consistent with other-activating (object case) or self-referencing (subject case). Results indicate that the more “you” pronouns that appear in a song, the more successful that song is (reverse-coded rank  $b = .19$ ,  $t = 3.35$ ,  $p < .001$ ; Table 1, model 1). This result was robust to a variety of controls (Table 1, model 2). Songs were more successful the more they mentioned “you” as the focus of someone’s attention (other-activating;  $b = .1$ ,  $t = 3.08$ ,  $p = .002$ ). The number of “you” pronouns that invoked the audience as the actor (self-referencing) or that were unassigned, however, had no effect ( $ts < 1.48$ ,  $ps > .14$ ; Table 1, models 3 and 4).

Study 2 asked 200 participants to report any song they had heard recently, and their attitude towards it. We then measured other-activation (e.g., “Do the lyrics make you think about someone you know?”). Lastly, we collected measures for alternative explanations. We obtained the lyrics for each of the participant-reported songs to generate “you” pronoun statistics for each. Judges coded each “you” use as more consistent with other-activating or self-referencing. Regression analysis revealed that songs that contain more “you” pronouns are liked more ( $b = .06$ ,  $t = 2.63$ ,  $p = .009$ ). This relationship was mediated by the song’s ability to evoke another person in the participant’s own life (indirect effect =  $.003$ , 95% CI [ $.0011$ ,  $.0065$ ]). Neither a perceived connection with the singer nor seeing into the singer’s personal life mediated the relationship, casting doubt on these alternatives. Replicating the field data results, the impact of “you” pronouns was driven by the number of uses judged to be other-

activating ( $b = .01$ ,  $t = 3.37$ ,  $p < .001$ ), but not by those judged as self-referencing ( $b = -.0009$ ,  $t = -.80$ ,  $p = .43$ ).

Study 3 sought to replicate the main effect of “you” pronouns by manipulating this pronoun’s use in experimenter-controlled lyrics, and test for moderation of the effect by the extent to which the song’s content evokes an other in the listener’s life.

Participants ( $N = 309$ ) who were involved in a romantic relationship were primed to think about their partner using a thought listing exercise, and then indicated their attitude towards this person. Participants were then presented with one of three versions of a love song featuring one of either “you,” “s/he” or “it/that” pronouns (e.g. “Nothing can take [your, her (or his), its] place”).

Corroborating prior results, the version of the song with “you” pronouns was liked significantly more than the “s/he” version ( $F(1, 306) = 10.54$ ,  $p = .001$ ) and the “it/that” version ( $F(1, 306) = 4.51$ ,  $p = .03$ ). As in prior studies, the appeal of the song with “you” pronouns was driven by the song’s activation of another person from their own life (indirect effect you vs. it/that = .15, 95% CI [.02, .29]; indirect effect you vs. s/he = .19, 95% CI [.05, .34])

In conclusion, this research demonstrates how language helps shape culture. While speakers and listeners may give second person pronouns little conscious attention, these seemingly innocuous words actually play an important role in the popularity of narrative arts. Given burgeoning work on the psychological foundations of culture (Kashima 2008; Schaller & Crandall 2004), we hope this will encourage more researchers to examine the intersection of these important topics.

## The Positivity Problem: Using Mass-Scale Emotionality to Predict Marketplace Success

Matthew D Rocklage (Northwestern University, USA); Derek Rucker (Northwestern University, USA); Loran Nordgren (Northwestern University, USA)

### **Brief Abstract:**

Consumer positivity can be an inconsistent signal of marketplace success – the positivity of online reviews does not appear to predict product quality (de Langhe et al. 2016) and establishments with positive reviews often fail. To address this “positivity problem,” we suggest the examination of an alternative metric: emotionality. Using mass-scale real-world data, we demonstrate across restaurant table reservations, Super Bowl advertisements, and movies that whereas the positivity of consumers’ opinions provides an unreliable indicator of future success, the emotionality of consumers’ language provides a diagnostic signal.

### **Extended Abstract:**

Marketers often place a premium on both the measurement and maximization of consumers’ positivity on social media and online reviews. The valence of consumers’ reactions has been used to predict everything from purchasing behavior to the spread of word of mouth. Indeed, researchers across both behavioral and computer sciences have begun to measure mass-scale positivity (“sentiment”) using online chatter and star ratings to predict movie box office revenue and book sales (Asur & Huberman, 2010; Chevalier & Mayzlin, 2006). Despite these successes, striking instances exist where positivity has been an inadequate predictor of success. For instance, positivity has shown little relation to a product’s overall quality (de Langhe et al., 2016). Moreover, relying on online positivity is

problematic as the average Amazon.com star rating is a 4.2 out of 5.0 with well over half of the reviews being 5-star ratings (Woolf, 2017; McAuley et al., 2015). Thus, there is a positivity problem whereby valence provides a limited signal of consumer sentiment.

Given this positivity problem, how can objects of similar positivity be meaningfully distinguished? Drawing on theories from the attitudes and affective science literatures, we propose that the emotion behind consumers' evaluations offers a diagnostic signal. Indeed, research indicates that emotion provides a strong signal both to the individual and to others (Pham, Cohen, Pracejus, & Hughes, 2001; Frijda & Mesquita, 1994). We demonstrate this emotionality can be measured on a massive scale via consumers' language as quantified by the Evaluative Lexicon (EL; Rocklage, Rucker, & Nordgren, 2018; [www.evaluativelexicon.com](http://www.evaluativelexicon.com)) and used to predict marketplace success across a wide range of items from advertisements to restaurants to movies.

In Study 1, we investigated whether emotionality signaled the future success of restaurants via the average number of daily table reservations made at that restaurant across a two-month period. Specifically, we followed all 1,139 restaurants in Chicago, Illinois that were also on OpenTable.com and recorded the number of reservations made each day ( $n_{\text{reservations}} = 1.30$  million). We also obtained the first 20 reviews for each restaurant on Yelp.com and averaged the positivity and emotionality of their text (results also hold when using 10 or 30 reviews). As a second measure of positivity, we included the average star rating from these reviews.

We found that star ratings were not predictive of table reservations, but that the positivity of the text was. Most importantly, over-and-above these effects we found that greater emotionality of the first 20 reviews predicted more table reservations. These results held controlling for the year when the restaurant first opened as well as the kind of restaurant (e.g., American, Indian).

In Study 2, we predicted the success of Super Bowl advertisements across two Super Bowls (2016 and 2017) via the number of new Facebook followers a company accrued each day in the two weeks following each Super Bowl ( $n_{\text{companies}} = 67$ ;  $n_{\text{commercials}} = 94$ ). To measure positivity and emotionality toward each commercial, we obtained all real-time tweets that occurred on the day of the two separate Super Bowls that mentioned the name of the company, a reference to the Super Bowl or a commercial, and an evaluation of the commercial as indicated by the EL ( $n_{\text{tweets}} = 187,206$ ). We then used the EL to quantify the average positivity and emotionality expressed toward each commercial across the tweets. Given that each company has only a single Facebook page, we analyzed the data at the level of each company by averaging across that company's commercials for each Super Bowl.

To predict the average number of daily new followers (log transformed), we used average positivity and emotionality as predictors. We also used USA Today's Ad Meter survey as a second measure of positivity, which scores each advertisement based on a large sample of respondents (1: poor; 10: excellent). Finally, we controlled for the average daily followers each company accrued in the lead-up to each Super Bowl (log transformed) to ensure that we assessed the change in daily followers.

Using a regression model, the USA Today survey did not predict brand followers and the average positivity of the tweets was, if anything, a negative predictor. However, over-and-above these effects, the greater the average emotionality of the tweets, the more followers a company accrued over the next two weeks. These results held across both Super Bowls and above-and-beyond the total number of

tweets about each commercial as well as the number of positive (vs. negative) tweets.

In Study 3, we predicted movie success based on the final box office revenue a movie made. We obtained all US feature films on IMDb.com that also provided the box office revenue for that movie ( $n = 3,784$ ) and used the first 20 reviews to quantify positivity and emotionality. We found that star ratings were negatively predictive of box office revenue (log transformed), but that the positivity of the text was in the positive direction. Most importantly, however, over-and-above these effects, greater emotionality predicted greater box office revenue. These results held controlling for movie budget, release year, movie length, and across genres (e.g., action, romance).

Whereas consumer positivity tended to be a skewed and inconsistent predictor, the emotionality of consumers' language provided a signal of future marketplace success. These results build on theories from the attitudes literature proposing that the basis of individuals' evaluations matters (e.g., emotional vs. unemotional) and affective science demonstrating that emotionality provides an impactful signal to both individuals and others. We show that emotionality can be captured on a massive scale via natural language and is an important predictor of future marketplace success.

## When Sharing Isn't Caring: The Influence of Seeking the Best on Sharing Favorable Word of Mouth About Unsatisfactory Purchases

Nicholas Olson (Texas A&M University, USA); Rohini Ahluwalia (University of Minnesota, USA)

### **Brief Abstract:**

Whereas past research generally finds that negative purchase experiences tend to elicit negative (rather than positive) word of mouth, we find that a goal of attaining the best, or maximizing, alters this tendency. We show that maximizing enhances consumers' propensity to share favorable word of mouth about unsatisfactory purchases, in an effort to persuade others to make the same bad purchases, and thereby turn their own objectively poor outcomes into relatively better ones. We further demonstrate this behavior is particularly prevalent when sharing with psychologically close (vs. distant) others, as close others are especially relevant to relative standing.

### **Extended Abstract:**

Past word of mouth (WOM) research typically finds that, if consumers share WOM with others, it tends to be consistent with actual perceptions (Berger, 2014). Thus, a negative consumption experience, such as an unsatisfactory purchase, tends to elicit negative (vs. positive) WOM. In our work, we consider when the opposite may be true. Specifically, we examine the possibility that a goal of attaining the best, or maximizing, enhances consumers' tendency to share favorable WOM about unsatisfactory purchases.

Prior research demonstrates that when consumers have a goal of attaining the best, they are concerned with not only getting the best, but also being best relative to others (Weaver et al., 2015). When those seeking the best, or maximizers, make an unsatisfying purchase, it signals that they have failed to attain an objectively optimal outcome, which elicits strong negative feelings (e.g., regret; Schwartz et al., 2002). However, their objectively poor decision can still be relatively good if others make the same poor decision, which can be encouraged by speaking favorably about the bad purchase (Berger, 2014). Extending this notion, we propose that maximizers (vs. non-maximizers) will be more likely to share



favorable WOM about their unsatisfactory purchase, because they want others to make the same poor decision to enhance the relative standing of and subsequent feelings toward their own outcome.

We further posit that maximizers will only exhibit this behavior when sharing WOM with psychologically close (vs. distant) others, as close others are a more consequential source of comparison (Tesser, 1988), making their outcomes especially important in determining the relative standing of consumers' own choices. Finally, we consider the downstream consequences of maximizers' conduct, proposing that when they successfully persuade others to make their same poor purchase, they will feel better about their own purchase, but will also experience heightened feelings of guilt because of their deceptive behavior (Hoffman, 1982). We tested and found support for our predictions in five studies.

In study 1, participants recalled a past unsatisfactory purchase, then listed either a close friend (close other) or acquaintance (distant other). All participants then reported their likelihood of recommending their purchase (sharing favorable WOM) to the other. They also indicated how much better they expected to feel about their own purchase if the other made the same purchase. Finally, after a filler task, participants reported chronic maximizing tendencies (Diab et al., 2008).

Supporting our predictions, maximizing had no effect on word of mouth in the distant other condition ( $\beta = .06$ ,  $t = .53$ ,  $p = \text{NS}$ ). However, in the close other condition, it enhanced the tendency to share favorable word of mouth about unsatisfying purchases ( $\beta = .34$ ,  $t = 2.83$ ,  $p < .01$ ). Moreover, this effect was mediated by maximizers' heightened expectations that they would feel better about their own purchase if close (but not if distant) others made the same purchase (95% CI = .0087 to .0649).

Study 2 manipulated maximizing via an essay task, then asked participants to imagine three scenarios in which an unsatisfactory purchase was either completed or merely considered. After imagining each scenario, participants listed a close other and reported their likelihood of recommending and saying good things about their purchase (favorable WOM) to that other (7-pt scales). Consistent with expectations, when the purchases were completed, participants in the maximizing condition were more likely to share favorable WOM ( $M = 4.36$ ) than those in the non-maximizing condition ( $M = 3.68$ ;  $p < .05$ ). However, this effect was unexpectedly reversed when the purchases were merely considered, as participants in the maximizing condition were marginally less likely to share favorable WOM ( $M = 3.04$ ) than those in the non-maximizing condition ( $M = 3.71$ ;  $p = .07$ ).

Study 3 was similar to study 1, but after listing a close other and indicating their likelihood of saying good things and encouraging the other to make their same unsatisfying purchase (favorable WOM), they also reported their concern with enhancing the relative standing of their purchase, and how much better they expected to feel about their own purchase if the other made the same purchase. As predicted, maximizing promoted the tendency to share favorable WOM about unsatisfying purchases ( $\beta = .11$ ,  $t = 1.94$ ,  $p < .05$ ), and this effect was mediated by maximizers' heightened concern with enhanced relative standing, which led them to believe they would feel better about their purchase if a close other made the same purchase (indirect effect = .019, 95% CI = .0015 to .0436).

Study 4 replicated past studies in an actual choice context, and considered the downstream consequences of maximizers' behavior. Participants (students) reported chronic maximizing tendencies, then completed a pen task in which they chose a pen from two options, learned their

chosen pen was supposedly inferior (unsatisfying), and then anonymously shared WOM (how favorable their own pen was) with a purported fellow student, who would later choose from the same assortment, and whose choice would be revealed. Participants also indicated their expected decision regret if the fellow student chose the same pen. Supporting predictions, maximizing enhanced the tendency to share favorable WOM ( $\beta = .33$ ,  $t = 2.52$ ,  $p < .05$ ), because maximizers expected their decision regret would be reduced if the fellow student chose their pen (indirect effect = .095, 95% CI = .0026 to .2830). Following a 10-minute delay, participants learned the fellow student had supposedly chosen their pen, and they indicated their actual choice regret, as well as current feelings of guilt. While maximizers' choice regret was diminished following this information ( $\beta = -.36$ ,  $t = -2.75$ ,  $p < .01$ ), their guilt was enhanced ( $\beta = .28$ ,  $t = 2.07$ ,  $p < .05$ ).

Study 5 was identical to study 4, except it manipulated whether the purported fellow student would choose between participants' pen and a superior or an inferior alternative. In the former condition, maximizing's positive effect on WOM was replicated ( $\beta = .37$ ,  $t = 3.06$ ,  $p < .01$ ), but in the latter condition, it was attenuated ( $\beta = .007$ ,  $t = .05$ ,  $p = \text{NS}$ ).

## When Products Come Alive: Applying Interpersonal Communication Norm to Word-of-Mouth Transmission for Anthropomorphized Products

Fangyuan Chen (Hong Kong Polytechnic University); Jianqing (Frank) Zheng (University of Texas at Austin, USA); Jaideep Sengupta (Hong Kong University of Science and Technology)

### **Brief Abstract:**

Information sharing among consumers through word of mouth (WOM) is both prevalent and persuasive. Meanwhile, it is not rare to see products portrayed in the human-like way in modern marketing practices. This research examines how product anthropomorphism impacts the way consumers talk about them. Four studies show that anthropomorphism increases consumers' WOM positivity. Such effect is independent of product attitude. Rather, this likely to occur because consumers apply the human-based communication rule of "one should spread good words (not spread negative words) of other persons" when constructing WOM for anthropomorphized products.

### **Extended Abstract:**

Consumers often engage in word of mouth (WOM)—that is, sharing information, news, and evaluations of their purchase with other consumers (Berger, 2014; Westbrook, 1987). While recent research has begun to look at why people share WOM (i.e., the underlying motivations) and the factors shaping these motivations (Berger, 2014; Barasch & Berger, 2014; Shen & Sengupta, 2018), the present research takes a novel perspective and examine the impact of product anthropomorphism on consumer WOM.

Anthropomorphism refers to a tendency of seeing humans in non-human forms (Epley, Waytz, & Cacioppo, 2007; Waytz et al., 2010). It is commonly seen in marketing practices nowadays. Recent years have witnessed a growing interest in this field (Aggarwal & McGill, 2011; Epley et al., 2007; Kim & McGill, 2011; Puzakova & Aggarwal, 2018).

How would product anthropomorphism influence consumer word-of-mouth? While previous research

shows that anthropomorphism sometimes lead to an increase in product evaluation, which may consequently lead to more positive WOM, we argue and find that anthropomorphizing products increase WOM positivity by activating specific social communication norms that are in favor of positive WOM transmission. A great deal of research demonstrates that people often apply social norms (for people) in their interaction with anthropomorphized objects: People treat anthropomorphized objects as social entities (rather than mere objects) (Aggarwal & McGill, 2011); use the same neural regions that are associated with person judgement to judge anthropomorphized objects (Castelli et al., 2000); and apply human-specific stereotype of beliefs to judge anthropomorphized products (e.g., “beautiful is good”, Wan et al., 2017; “a person is an integrated entity rather than a bundle of attributes” Huang et al., 2018).

Applied these insights to communication context, this account suggests that when talking about an anthropomorphized product, people should follow the same communication norm or rule as when they talk about a person. A particularly relevant norm to the present research is that one should spread good words (not spread bad words) of other persons (Peters and Kashima, 2015; Farley, 2011; Wyer et al., 1994). Built on these insights, we argue that product anthropomorphism should increase the overall positivity of consumer word of mouth. Our theorizing also lays out possible boundary conditions under which the proposed effect might diminish. That is, if the increased WOM positivity is indeed driven by the concern that talking negatively (positively) of another person will degrade (upgrade) one’s image in the eyes of the WOM recipient, then, when this concerns is experimentally reduced—for example, when consumers are talking anonymously (vs. non-anonymously), the proposed effect should be attenuated or eliminated.

Four studies provided converging evidence for our theorization. Study 1 demonstrated the basic effect through a 2-condition (anthropomorphism of the WOM target: yes vs. no) between subjects design. participants first completed a product evaluation study in which they were introduced to a pair of sunglasses, described either in humanized or neutral, non-humanized language (Aggarwal & McGill, 2012). After examining the product, participants were told to share their opinions on an online discussion forum. Key dependent variable measured consumers’ likelihood of transmitting positive vs. negative WOM (adapted from Zhang et al. 2014). Results indicated that anthropomorphism significantly increased consumers’ likelihood to transmit positive WOM relative to negative WOM,  $p = .006$ , even after controlling for attitudes towards different version of sunglasses.

Study 2 replicated the previously observed effect using a different anthropomorphism manipulation (having participants rate on scales anchored with human-related personality traits) and a different dependent measure (intention to retweet a negative piece of news). Results indicated that consumers were less likely to retweet negative information of a product when it was anthropomorphized (vs. not), independent of their attitudes.

Study 3 tested a boundary condition for our effect: WOM communication medium anonymity, with a 2 (anthropomorphism of the WOM target: yes vs. no)  $\times$  2 (self-presentation concern: high/talking non-anonymously vs. low/talking anonymously) between-subjects design. After the same product evaluation task used in study 1, participants were told to share their opinions on a fictitious discussion forum. Anonymity/identifiability was manipulated through telling participants that their personal information was disclosed to other users vs. not (Chen & Berger, 2013). Past research found that self-presentation concerns were minimized when the WOM communication medium is non-identifiable

(i.e., anonymous). We found the hypothesized 2-way interaction,  $F(1, 281) = 3.39, p = .07$ . For anthropomorphized product, participants were more willing to share positive WOM relative to negative WOM if they are sharing non-anonymously than if they are sharing anonymously, ( $p = .008$ ), whereas for non-anthropomorphized product, no such difference was observed across conditions ( $F < 1$ ). These findings support the proposed mechanism that anthropomorphism increased positive WOM transmission likelihood due to a concern to look good in others' eyes.

Lastly, study 4 identified a downstream consequence of the observed effect using a 2 (anthropomorphism of the WOM target: yes vs. no)  $\times$  2 (valence of WOM: positive vs. negative) between-subjects design. Instead of being a WOM transmitter, participants acted as WOM recipients in this study. They were asked to form an impression of a future co-worker based on his/her recent postings on Facebook. In all conditions, the co-worker posted a recently launched Louis Vuitton iPad flapcase and provided his/her comments. Half the time the sharer talked positively of the product, while the other half the time they talked negatively of the product. Anthropomorphism was manipulated as in previous studies through verbal cues. Results showed that recipients' overall impression of the WOM transmitter was affected by the interaction of anthropomorphism and WOM valence,  $F(1, 138) = 5.80, p = .02$ . When the product being talked about was anthropomorphized, recipients viewed the sharer more favorably when he shared positive (vs. negative) comments on the product. Conversely, when the product being talked about was non-anthropomorphized, whether the transmitter talked positively or negatively of the product made no difference in recipient's impression of the transmitter.

In summary, this research contributes to the anthropomorphism literature by identifying a novel impact of product anthropomorphism on WOM. It also adds to our knowledge of how social communication norm shapes product communication.

## **(Over)Predicting and (Over) Inferring Others' Choices and Values - Symposium**

### *Scarborough 3 (Lobby Level)*

People often make inferences about others' attitudes and preferences. Previous research has explored how people make such inferences based on our beliefs about others and salient social cues. The goal of this session is to highlight recent advances in our understanding of people's beliefs about others and under which conditions their social judgments and predictions err. Four papers feature a set of empirical regularities that consistently show that people often hold inaccurate beliefs about others' values, choices, and motives. Jung, Moon, and Nelson report that people are often biased about others' preferences for goods. In particular, they find that people think that others prefer goods more than they themselves do. In turn, people's biases about others' preferences can produce paradoxical beliefs about others' valuation: People believe both that others who enjoy a good the same amount would pay more for the good, but also that others who would pay the same amount for a good would enjoy the good more. Reit and Critcher provide evidence that when predicting whether others will choose A over B, people can be led astray by a commonness heuristic—their intuitive sense of the commonness of A compared to B. The commonness heuristic can give rise to a forecasting bias whereby people overestimate others' interest in choosing commonplace but bland items over rarer but exciting ones. The authors further outline when and why we are more likely to rely upon the commonness heuristic and provide evidence that use of the heuristic can extend to costly decisions such as pricing. Okutur and Berman find that when people compare their resources to that of others, they consider their own constraints but tend to neglect those for others. This differential attention to constraints leads people to believe that similar others relatively save more, spend

more, and have more available time. Consequently, people estimate that others, who are subject to the same constraints, are able to do more with their money and time than they themselves can. Li and Hsee demonstrate that people predict that others are more willing to befriend them if they use expensive items and appear rich, but in reality, others are more willing to befriend those who do not. This self-other discrepancy occurs because people misconstrue others' purpose of friend-making. In particular, people overestimate the extent to which choosers care about the utilitarian aspect in friend making (i.e., how useful the friend is if one is in need) relative to the hedonic aspect (i.e., how comfortable one would feel around the friend). Together, these papers offer new insights into people's beliefs about others. Given the theoretical contributions and practical applications of the four papers, we expect this session to appeal to a broad audience in the fields of consumer behavior, judgment and decision-making, and social cognitive psychology.

*Chairs: Alice Moon, University of Pennsylvania, USA; Minah Jung, New York University, USA*

### Self-Other Biases in the Perception of Values and Preferences

Alice Moon (University of Pennsylvania, USA); Minah Jung (New York University, USA); Leif D. Nelson (University of California Berkeley, USA)

#### **Brief Abstract:**

People believe that others will pay more for goods than they themselves would. We find that this phenomenon extends more broadly to beliefs about others' preferences. Specifically, people also believe that others will enjoy goods more than they would. Notably, these effects ultimately produce paradoxical beliefs about others' valuation of products: people believe both that others who enjoy a good the same amount would pay more for the good, but also that others who would pay the same amount for a good would enjoy the good more. We discuss possible explanations (e.g., scale distortion, reference group).

### The Commonness Fallacy: Commonly Chosen Options Have Less Choice Appeal Than People Think

Clayton R Critcher (University of California Berkeley, USA); Emily Reit (Stanford University, USA)

#### **Brief Abstract:**

In forecasting what others will choose, people are led astray by the perceived prevalence of options. This leads people to overestimate the popularity of commonplace items (e.g., vanilla ice cream) over rarer ones (e.g., tiramasu). Given common items are often chosen merely because they are frequently offered, not because they are preferred (tiramisu is rarely offered as a dessert), commonness is not necessarily diagnostic of future choice. Six studies document the fallacy, trace its origins, identify when it occurs, and document a strategic pricing error it produces.

### Comparative Resource Deprivation: Evidence for Insensitivity to the Budgetary Constraints of Others

Nazli Gurdamar Okutur (London Business School, UK); Jonathan Z Berman (London Business School, UK)

**Brief Abstract:**

How do consumers compare their available resources to others? We argue that an availability bias in attention towards constraints causes consumers to believe that similar others save more, spend more, and have more available time than they do. While most people are aware of the limits on their money and time, and the tradeoffs they have to make, they tend to neglect resource tradeoffs in others. As a result, people estimate that others are able to do more with their time and money than they can.

**People Overpredict the Benefit of Using Expensive Items and Appearing Rich in Friend-Making**

Xilin Li (University of Chicago, USA); Christopher Hsee (University of Chicago, USA)

**Brief Abstract:**

Through four studies involving multiple settings (scenario, lab and field), we find that people overpredict the benefit of using expensive items and appearing rich in making friends. Specifically, friend choosers are more willing to befriend those who do not use expensive items, but friend candidates (those the friend choosers may befriend) mistakenly predict that the friend choosers are more willing to befriend them if they use expensive items and appear rich. This chooser-candidate discrepancy occurs because people misconstrue others' purpose of friend-making.

**Small Self in Big Social Environment - Competitive Paper Session**

*Scarborough 4 (Lobby Level)*

*Chair: Dan King, University of Texas Rio Grande Valley*

**How Do Consumers Evaluate Products in Peer-to-Peer Markets? The Role of Depth of Disclosure and Self-Construal**

Sumitra Auschaitrakul (University of the Thai Chamber of Commerce); Ashesh Mukherjee (McGill University, Canada); Dan King (University of Texas Rio Grande Valley)

**Brief Abstract:**

Sellers in peer-to-peer markets often share personal information that varies on depth of disclosure, i.e., degree of intimacy. We show that depth of disclosure has a positive effect on product evaluation when potential buyers have an interdependent self-construal but this effect is eliminated when self-construal is independent. We also show that this interaction is driven by a fit-elaboration mechanism, such that the positive effect of depth of disclosure in the interdependent self-construal condition is mediated by message elaboration. Finally, we show that depth of disclosure has a negative effect on product evaluation when the salience of persuasion knowledge is high.

**Extended Abstract:**

Peer-to-peer (P-to-P) markets are platforms where individual sellers offer products and services to individual buyers in exchange for compensation. We focus on P-to-P markets for services that involve personal interaction between buyers and sellers such as accommodation (e.g., Airbnb Accommodation, Homeaway), meals (e.g., Eatwith, Travellingspoon), or experiences (e.g., Airbnb Experiences, Vayable). Sellers in such P-to-P markets often share personal information that varies on depth of

disclosure, i.e., degree of intimacy (Collins & Miller, 1994; Moon, 2000). For example, sellers sometimes disclose less intimate information such as hometown or occupation; at other times, sellers disclose more intimate information such as personal aspirations and social relationships.

Our central proposition is that depth of disclosure by sellers interacts with buyer self-construal to influence product evaluation, where self-construal refers to the perception of being connected or separate from others (Duclos & Barasch, 2014; Markus & Kitayama, 1991). We show across four studies in the lab and field that greater depth of disclosure increases product evaluation when self-construal is interdependent, but this effect is eliminated when self-construal is independent. Consistent with our theoretical framework of fit-elaboration, we show that the interaction of depth of disclosure and self-construal is mediated by message elaboration. Finally, we show that depth of disclosure can have a negative effect on product evaluation when salience of persuasion knowledge is high. These results contribute to the literature by identifying self-construal as a moderator, message elaboration as a mediator, and salience of persuasion knowledge as a boundary condition of the positive effect of depth of disclosure on product evaluation.

Study 1 was a 2 (self-construal) x 2 (depth of disclosure) between-subjects ANOVA with 200 participants from Mturk. Participants evaluated a fictional e-commerce website similar to the real P-to-P website Eatwith. In the independent self-construal condition, the website was called SimplicityEat; showed one person; and used text designed to prime the independent self. The website in the interdependent self-construal condition was called TogetherEat; showed a group of people; and used text that primed the interdependent self. We verified this manipulation in a pretest where 60 Mturk participants viewed the website and responded to a validated scale for self-construal (Hamilton & Biehal, 2005). We manipulated depth of disclosure in an ad posted on this website, by varying the intimacy of information about a host offering a home-cooked meal (Cozby, 1972; Moon, 2000). We verified this manipulation in a pretest where 100 Mturk participants viewed the ad and responded to a validated scale for perceived intimacy (Bazarova, 2012; Moon, 2000). Finally, participants responded to an item measuring purchase intent: "If you were looking to book a meal online, how likely is it that you would book the meal described in the ad?" (1 = not likely at all, 100 = very likely). Consistent with prediction, ANOVA revealed a significant interaction ( $p = .034$ ). When self-construal was interdependent, purchase intent was higher when depth of disclosure was high ( $M_{\text{high depth}} = 63.11$ ) versus low ( $M_{\text{low depth}} = 50.75$ ,  $p = .028$ ); when self-construal was independent, there was no difference in purchase intent between high ( $M_{\text{high depth}} = 51.55$ ) and low depth of disclosure ( $M_{\text{low depth}} = 56.02$ ,  $p > .42$ ).

Study 2 replicated the interaction in a field setting. We randomly selected ads from Airbnb experiences and used coders to measure seller depth of disclosure (1 = low depth, 2 = high depth) and customer gender (1 = male, 2 = female). We used customer gender as a proxy for self-construal because prior research suggests that men are generally independent while women are interdependent (Cross & Madson, 1997). We measured product evaluation through sentiment analysis of reviews for each ad using Lexalytics ([www.lexalytics.com](http://www.lexalytics.com)). Controlling for review length, ANCOVA revealed a marginally significant interaction ( $p = .065$ ). When self-construal was interdependent, review sentiment was higher when depth of disclosure was high ( $M_{\text{high depth}} = .71$ ) versus low ( $M_{\text{low depth}} = .62$ ,  $p = .049$ ). In contrast, there was no difference between high depth of disclosure ( $M_{\text{high depth}} = .58$ ) and low depth of disclosure ( $M_{\text{low depth}} = .61$ ,  $p > .47$ ) when self-construal was independent.

Study 3 tested the underlying fit-elaboration mechanism. This study was a 2 (self-construal) x 2 (depth of disclosure) between-subjects ANOVA with 195 student participants. We manipulated self-construal by asking participants watch videos and unscramble words related to either independent or interdependent self-construal (Mandel, 2003). We manipulated depth of disclosure in an ad from a host offering a room on a website called “StayWithLocal” modeled on Airbnb Accommodation. We measured product evaluation with a two-item scale ( $r = .74$ ) and message elaboration with a four-item scale ( $\alpha = .87$ ) validated in past research. Replicating our previous results, ANOVA revealed a significant interaction ( $p = .013$ ) with a positive effect of depth of disclosure on product evaluation in interdependent but not in the independent self-construal condition. Moderated mediation analysis using Model 7 (Hayes, 2012) supported the fit-elaboration mechanism since the conditional indirect effect of depth of disclosure on product evaluation through message elaboration was significant when selfconstrual was interdependent (95% CI, .15, .98) but not independent (95% CI, -.48, .28).

Study 4 showed that depth of disclosure can have a negative effect on product evaluation when salience of persuasion knowledge is high. This study was a 2 (depth of disclosure) x 2 (salience of persuasion knowledge) between-subjects ANOVA with 246 participants from Mturk; all participants were in the independent self-construal condition. We first induced independent self-construal with a short story where participants counted the number of singular pronouns. Next, we manipulated persuasion knowledge with a persuasion-based writing task validated in past research (Campbell & Kirmani, 2000). Finally, participants viewed an ad for a walking tour on a fictional P-to-P website modeled on Airbnb Experiences that manipulated depth of disclosure and thereafter indicated their purchase intent. ANOVA revealed a significant interaction ( $p = .041$ ) such that depth of disclosure had a negative effect in the high salience of persuasion knowledge but not in the low salience of persuasion knowledge condition.

## Sharing Like a Boss: How a Consumer’s Position in the Hierarchy Influences Word of Mouth Valence

Christilene du Plessis (Singapore Management University, Singapore); Michael Schaerer (Singapore Management University, Singapore); David Dubois (INSEAD, France)

### **Brief Abstract:**

We examine how a novel audience characteristic - a consumer’s relative rank in a social hierarchy - affects the Word-of-Mouth (WOM) they share with others. Five studies using different participant samples, hierarchy manipulations, and product categories demonstrate that consumers who are higher (vs. equal or lower) in rank than the recipient of their message share fewer positive messages because they are less motivated to affiliate with the recipient. This is important because we also show that consumers receiving messages from higher-rank senders exhibit lower information seeking, product attitudes, and willingness to pay because of less positive WOM.

### **Extended Abstract:**

WOM is crucial because brand success often depends on the type of information people share. Particularly relevant to marketers is understanding what causes consumers to share positive or negative information, as WOM valence plays a crucial role in the success of products and services (Chevalier & Mayzlin, 2006). One important factor that shapes WOM valence is with whom consumer are



communicating (Berger, 2014). Empirical research has established two important audience characteristics that affect WOM valence: tie strength and audience size. Past research shows that people share more positive information when communicating with strangers than with friends (Dubois, Bonezzi, & De Angelis, 2016; Chen, 2017) as well as with larger (vs. smaller) audiences (Barasch & Berger, 2014).

Although tie strength and audience size are important, we propose a third dimension that can explain when consumers share more positive or negative information: the hierarchical relationship between WOM senders and recipients. Social hierarchies, defined as “an implicit or explicit rank order of individuals [...] with respect to a valued social dimension” (Magee & Galinsky 2008, p. 354), permeate almost every aspect of society, and, as a result, people often share WOM with individuals that occupy higher or lower relative rank. Indeed, in a survey of 255 working adults, we found that 90.2% regularly engage in WOM at work – an inherently hierarchical environment. Given the prevalence of WOM in hierarchies, we investigate whether, when and why the hierarchical relationship between a WOM sender and recipient influences WOM valence.

We propose that consumers share less positive messages with lower (vs. equal or higher) rank recipients. Because higher-ranked people have an increased ability to control their own and others’ outcomes, they are less dependent on others (Fiske, 1993). Consequently, high-ranked people have lower desire to affiliate with those below them in the hierarchy (Lammers, Galinsky, Gordijn, & Otten, 2012) and may even actively engage in distancing behaviors (Earle, Giuliano, and Archer 1983). Since sharing positive information facilitates interpersonal closeness (Brissette, Scheier, & Carver, 2002), and people share positive information to foster social connections (Bell, 1978), we predict that senders will share less positive WOM with recipients who are lower (vs. equal or higher) in rank.

In Study 1 (n=393), participants watched an animated short film and either wrote down their thoughts about the film (baseline condition), or what they would say about it to their peer (equal-rank condition), supervisor (low-rank condition), or subordinate (high-rank condition). We created a positivity index by subtracting the number of negative attributes Hierarchical Rank and WOM Valence from the number of positive attributes. Participants in the high-rank condition sent less positive messages (M=.82, SD=2.15) than participants with low rank (M=1.54, SD=2.14),  $F(1,391)=4.55$ ,  $p<.05$ ), baseline participants (M=1.58, SD=2.82,  $F(1,391)=5.19$ ,  $p<.05$ ), and participants in the peer condition (M=1.68, SD=2.27,  $F(1,391)=6.32$ ,  $p=.01$ ).

Study 2 tested the consequences for message reception. In Part 1, participants (n=35) read a description of car and wrote a message about it to a colleague ranked lower (vs. higher) to them in their team. In Part 2, participants (n=358) read one of the messages from Part 1 and indicated how much they would pay, how willing they are to buy, their intention to inspect and their attitudes towards (=96) the car. They also indicated their intention to contact the seller. Multi-level mediation analyses with sender rank as independent variable (1=higher-rank sender, -1=lower-rank sender), and WOM valence as mediator, revealed a significant and negative indirect effect of sender rank on recipients’ willingness to pay (ab=-.32, S.E=.17, 95% LLCI=-.73, ULCI=-.08), willingness to buy (ab=-.40, S.E=.19, 95% LLCI=-.81, ULCI=-.11), intention to inspect (ab=-.38, S.E=.19, 95% LLCI=-.77, ULCI=-.08), intention to contact seller (ab=-.35, S.E=.17, 95% LLCI=-.73, ULCI=-.08) and product attitudes (ab=-.39, S.E=.17, 95% LLCI=-.75, ULCI=-.12), through WOM valence.

Study 3 tested our proposed mechanism in a competing mediation model. Participants ( $n=203$ ) were randomly assigned to a high or low rank condition. We also measured need for affiliation ( $\alpha=.85$ ), felt responsibility toward interaction partner ( $\alpha=.91$ ), and role expectations ( $r=.44$ ,  $p<.001$ ). Replicating previous studies, participants in the high-rank condition ( $M=.55$ ,  $SD=2.26$ ) wrote less positive messages than participants in the low-rank condition ( $M = 1.19$ ,  $SD=2.03$ ),  $t(201)=2.15$ ,  $p<.05$ ). Importantly, the competing mediation revealed a significant indirect effect through need for affiliation ( $ab=-.11$ ,  $SE=.05$ , 95% LLCI $=-.24$ , 95% ULCI $=-.03$ ), but not through responsibility ( $ab=.003$ ,  $SE=.02$ , 95% LLCI $=-.02$ , 95% ULCI $=.06$ ), or role expectations ( $ab=.003$ ,  $SE=.03$ , 95% LLCI $=-.05$ , 95% ULCI $=.06$ ).

In Studies 4-5 we provide additional process evidence by manipulating need for affiliation. In Study 4, participants ( $n=472$ ) watched a short film and wrote down what they would say about it to their supervisor (low-rank condition) or subordinate (high-rank condition). A third condition was included in which participants were instructed to write a message to their subordinate but were told that the goal of writing their message was to bond with the recipient (high-rank + affiliation motive condition). Participants in the high-rank condition wrote less positive messages ( $M=.93$ ,  $SD=1.99$ ) than participants in the low-rank condition ( $M=1.47$ ,  $SD=1.90$ ),  $F(2,469)=6.72$ ,  $p<.01$ ), but not when their affiliation motive was activated ( $M=1.65$ ,  $SD=1.66$ ),  $F(2,469)=.80$ ,  $p=.37$ ). There was no difference in message positivity between the low-rank and the high-rank + affiliation conditions,  $F(1,310)=0.86$ ,  $p=.35$ .

In Study 5, we varied need for affiliation by manipulating whether senders expect to interact with the recipient in the future. In interactions where people expect to depend upon one another in the future (vs. not), the need to affiliate increases (Danheiser & Graziano, 1982). Participants ( $n=394$ ) again watched an animated short and were then randomly assigned to a 2(rank: lower, higher) x 2(expect future interaction: no, yes) between-subjects design. Supporting our hypothesis, when senders did not expect to interact with the message recipient in the future, those with higher rank sent less positive messages ( $M=.41$ ,  $SD=1.91$ ) than those with lower rank ( $M=1.12$ ,  $SD=2.13$ ,  $F(1,393)=5.54$ ,  $p<.05$ ). When senders expected to interact with the message recipient in the future, there was no difference in WOM valence,  $F(1,393)=.04$ ,  $p=.84$ .

Jointly, these studies contribute by identifying a novel sender characteristic that influences WOM content (hierarchical rank) and suggest that the need for affiliation is a key driver of positive WOM.

## A Shortcut to Self-Production: How Indie Brands Make Us Feel Grounded

Isabel Eichinger (WU Vienna University of Economics and Business); Martin Schreier (Vienna University of Business and Economics); Stijn van Osselaer (Cornell University, USA)

### **Brief Abstract:**

Across seven studies, we test the hypothesis that indie products provide consumers with a sense of groundedness. We show that the feeling of groundedness—a feeling of deep emotional rootedness and entrenchment due to being metaphorically connected to, and embedded in, one’s social, historical, and physical environment—explains, at least in part, the attractiveness to consumers of indie products (relative to industrial products). We document this process through mediation, moderation, and moderated mediation and provide evidence that indie products afford a feeling of groundedness

because they resemble, and provide a substitute for, self-production. Finally, we outline theoretical and managerial implications.

### **Extended Abstract:**

#### **Background & Research Question**

In categories ranging from food and drink to personal-care products and clothing, we see more and more “indie” products. These are products that are produced by small, independent craft businesses, often using traditional, non-industrialized production methods. Given that the technical quality of such indie products is not necessarily better than that of mass-market products, and that their prices tend to be relatively high, it is important to understand what underlying factors drive consumers’ willingness to pay extra for such indie products. Consumers may prefer indie products out of the perception that these are more unique or of higher quality (Fuchs, Schreier, and van Osselaer 2015), out of an empathic desire to support the product’s makers (Paharia, Keinan, Avery, and Schor 2010), the desire to acquire or gift the artisanal love embodied in a handmade product (Fuchs, Schreier, and van Osselaer 2015), or to signal resistance to the industrialized mainstream (Paharia, Avery, and Keinan 2014). In this research, we argue there is another important benefit that drives consumer preference for indie products – the feeling of groundedness afforded by the purchase and consumption of indie products.

We venture that people have an intrinsic need to feel grounded, where the feeling of groundedness refers to a situation in which one feels metaphorically “connected” to one’s environment, a feeling of deep emotional rootedness and entrenchment (e.g., “I feel deeprooted and entrenched”). It includes connectedness to the physical environment surrounding the person as well as connectedness to people in that environment.

To explain how indie products provide consumers with the feeling of groundedness, we argue that indie products function as a psychological shortcut to self-production (Mochon, Norton, and Ariely 2012). While self-production describes making, preparing, or assembling products oneself, feelings of self-production describe a situation in which it feels as if one had been involved in the product’s production process, independent of whether or not one was actually involved. Indie brands, with their small-scaled production and the related craft nature of their products, get close to self-production, such that consumers can experience vicarious feelings of self-production when buying or consuming indie products.

#### **Methodological Overview**

We test our hypotheses across seven experimental studies in lab, online, and field-type settings (total  $n = 2,107$ ). An overview of experimental setups and statistical results can be found in Table 1. The studies a) establish the shortcut of indie products to feelings of groundedness via feelings of self-production and b) demonstrate that the effect of indie products (vs. mass-market industrial products) on product attractiveness (captured by purchase intent and consumers’ willingness-to-pay) is mediated by the feeling of groundedness afforded by those products.

**Focal measures.** Feelings of groundedness are captured on a seven-point scale using six items (e.g., I feel deep-rooted and entrenched) including one pictorial item (see Figure 1) ( $\alpha > .88$ ). Feelings of self-production are measured on a seven point scale using three items (e.g., I have a bit the feeling that I “made the product myself”) ( $\alpha > .94$ ).

## Major Findings

Studies 1A-1C demonstrate that indie products afford stronger feelings of groundedness compared to mass-market industrial products, and that this effect is mediated by feelings of self-production. Study 2 shows that the effect of indie products on feelings of groundedness (through feelings of self-production) is driven mostly by the indie product's brand story in terms of its small scale production methods and independence rather than by product packaging alone. Study 3 tests some downstream consequences of the feelings of groundedness on consumers. Using an incentive-compatible elicitation method (Becker, DeGroot, & Marschak 1964) implemented at a nationally representative consumer sample, we find that consumers are willing to pay approximately 60 percent more for a bar of soap if portrayed as being produced by an indie versus industrial firm. This effect is particularly pronounced among consumers to whom the underlying product category is more versus less important. Critically, this moderation is mediated by feelings of groundedness. Study 4 extends these findings by providing causal evidence on the groundedness-product attractiveness link. We find that indie versus industrial products get more attractive to consumers if their consumption goal is versus is not aligned with their need for groundedness. Similarly, Study 5 provides causal evidence for the link between feelings of self-production and both groundedness and product attractiveness. Indie versus industrial products get more attractive when consumers have a high (versus low) need for feelings of self-production, and this link is only mediated by groundedness if the need for self-production feelings is high. In Study 5, we also address alternative explanations for the popularity of indie products and find that groundedness explains purchase intent over and above quality, uniqueness and love conveyed by the product. Statistical results of the studies are provided in Table 1.

This work makes several contributions. First, it introduces feelings of groundedness as an important driver of consumer behavior. Second, it provides one explanation, as a shortcut for self-production leading to feelings of groundedness, for the popularity of indie products. Third, it shows that consumers display a significant and substantial increase in willingness to pay (in our study, 60 percent) for indie products compared to mass-market industrial products, and that this effect is mediated by feelings of groundedness. Fourth, our work suggests practical implications for the marketing of indie and non-indie products, such as positioning indie products as similar to self-produced ones, and targeting consumer segments that are particularly uprooted and to whom shortcutting to groundedness is therefore particularly attractive. Last, our research adds to the self-production literature (e.g., Kaiser, Schreier, & Janiszewski 2017; Moreau, Bonney, & Herd 2011) by pointing out a novel psychological benefit of, and thereby potential motivation for, self-production.

## How does Religion Affect Consumer Response to Failure and Recovery by Firms?

Jamie D Hyodo (University of Nebraska-Lincoln); Lisa Bolton (Pennsylvania State University, USA)

### **Brief Abstract:**

The present research proposes that failure and subsequent firm recovery efforts represent a domain that may be particularly sensitive to religion. We theorize religion salience will drive more positive response to recovery. This effect is due to heightened forgiveness, a value held by many major world religions, which is triggered by signals of repentance. Across five studies, we extend our theorizing to the moderating roles of religiosity, recovery content and generalize across several major religions.

### **Extended Abstract:**

Religion may become salient to consumers for a variety of reasons: religious holidays are frequently co-opted by the marketplace, many consumers have religious backgrounds, for-profit and non-profit organizations may espouse religious values or have religious affiliations, and brands may also overtly signal religious positioning. As marketplace separation of secular and sacred decreases (e.g., McAlexander et al. 2014), we ask: how might religion influence consumer behavior in the marketplace? The present research proposes that failure and recovery at the product, service, brand, or company level (e.g., Aaker, Fournier, and Brasel 2004; Zeithaml, Berry, and Parasuraman 1996) represent a domain that may be particularly sensitive to religion. Specifically, we investigate whether the salience of religion (cf. Schumann et al. 2014; Randolph-Seng and Nielsen 2007; Shariff and Norenzayan 2007) alters consumer response to failure and recovery. We theorize that religion salience will drive a more positive response to failure in the presence, but not absence, of recovery, due to heightened forgiveness, a religious value held by most major world religions (Rye et al. 2000).

In the failure and recovery domain, identified recovery tactics include apology, explanation, and compensation, among others. Broadly, these take two forms: financial and socio-emotional (Smith and Bolton 1998). From a religious standpoint, we argue that socioemotional recovery (implying remorse and repentance) may be more likely to prompt forgiveness than would financial recovery (which may even result in reactance when religion is salient).

Together, we therefore hypothesize that:

H1: Consumers for whom religion is salient (vs. not) will respond more favorably toward firms following failure—if accompanied by recovery.

H2: The joint effects of religion salience and recovery will be mediated by forgiveness.

H3: When religion is made salient either chronically (via religiosity) or situationally, then consumers will respond more favorably toward firms following failure—if accompanied by recovery.

H4: Consumers for whom religion is made salient (vs. not) will respond more favorably to failure—if accompanied by recovery in the form of an apology (but not compensation).

### **EXPERIMENTAL RESULTS**

Across five studies, we demonstrate that religion salience promotes greater consumer satisfaction and intentions with an organization following an organizational failure. Studies 1A and 1B use a sentence unscramble task to induce religion salience (Randolph-Seng and Nielsen 2007). Study 1A employs a pre-/post- design to show that religion salience improves consumer response following, but not preceding, an apology from a restaurant manager. Study 1B replicates this finding between-subjects in the context of fan reaction to an athlete's poor performance in an important game.

Study 2 used a 2 (religion salience) x 2 (recovery) design wherein religion salience was manipulated by participants indicating religious affiliation and strength of religious belief prior to vs. after reading a scenario about a controversial advertising campaign that the company CMO apologized for/not. Felt forgiveness was recorded alongside satisfaction and intentions and was found to mediate the observed interaction.

Study 3 replicated study 2, but additionally purposely sampled from four major religious affiliations using a panel to test the moderating roles of religious affiliation and religiosity. Religiosity was found

to moderate the effects of religion salience—religion salience more strongly affects consumers of lower religiosity (and thereby lower chronic religion salience). Religious affiliation, however, did not moderate this effect—the effect is therefor robust across religious affiliation.

Study 4 was designed to test the moderating role of recovery content, as well as whether religion salience could be instantiated by marketing media. Participants first saw a religiously themed restaurant advertisement, then read a similar scenario to study 1, with financial and socio-emotional recovery content manipulated between-subjects. This study demonstrated an interaction between religion salience and socio-emotional content, but not salience and financial content, supporting H5. Participants for whom religion was salient responded more negatively to low socio-emotional content and more positively to high socio-emotional content. Study 4 also found mediation by forgiveness.

## GENERAL DISCUSSION

Across five studies, we demonstrate that religion salience (whether situationally-induced or chronic) promotes more favorable responses to recovery following organizational failure. We replicate this effect across restaurant, sport, and brand failures, and contribute to the psychology of religion literature by demonstrating consistent results across a wide variety of religion manipulations (sentence unscramble, demographic report, print ads, and religiosity). Notably, this effect is driven by heightened feelings of forgiveness. We also demonstrate that consumers for whom religion is salient are especially sensitive to the socio-emotional content of a recovery effort, especially perceived apology sincerity. In the absence of recovery, a religious mindset does not affect consumer response (such as reduced satisfaction with a brand failure)—pointing to the role of forgiveness prompted by firm recovery efforts.

## Session 6

### Does Temporal Delay Make You a Better or Worse Person? - Competitive Paper Session

*Verlst (2nd Level)*

*Chair: Chun-Tuan Chang, National Sun Yat-sen University*

Short or Long? The Right Combination of Time Duration, Cause Type, and Product Type in Cause-Related Marketing

Chun-Tuan Chang (National Sun Yat-sen University); Xing-Yu (Marcos) Chu (Nanjing University); I-Ting Tsai (National Sun Yat-sen University); Ming-Tsung Kung (National Sun Yat-sen University); Dickson Tok (Nanjing University)

#### **Brief Abstract:**

In cause-related marketing (CRM) campaigns, we propose that the decision of time duration should depend on cause type and product type. Results from three studies show that a long time duration works when pairing a utilitarian product with a primary cause or a hedonic product with a secondary cause. A short time duration is advantageous for a hedonic product with a primary cause. Consumer attributions regarding the company's motives for making the donation provide process-level evidence to explain why people favor certain combinations above. Companies can leverage their CRM with long or short time duration subject to their product-cause bundles

**Extended abstract:**

Cause-related marketing (CRM) is a common form of such activity which involves a company's promise to donate a certain amount of money to a non-profit organization or a social cause when customers purchase its products/services (Varadarajan and Menon 1988). Previous CRM research has been devoted mostly to money-related factors (e.g., the donation magnitude and donation framing) (Chang 2008; Grau, Garretson, and Pirsch 2007). The CRM research on time-related factors remains less explored. Researchers suggest that a longer amount of time devoted to the cause reveals an impact of CRM campaigns on more spending on a product or service (Brink, Odekeren-Schröder, and Pauwels 2006; Drumwright 1996; Varadarajan and Menon 1988; Webb and Mohr 1998). However, some companies are found to support causes over a short period of time. Despite the emergence of short-term CRM campaigns, few studies have compared how those campaigns differ from long-term campaigns in terms of consumers' product evaluations and perceptions of the company

We propose the type of cause being promoted as a moderator. A cause can support primary needs (life necessities) or secondary needs (quality of life) (Vanhamme et al. 2012). Causes that address primary needs support such things as community health, safety, and other human needs and desires, while causes dealing with secondary needs focus on community service, the environment, employment, and economic development (Kotler and Lee 2005). The second moderator proposed in this research will be product type. CRM has been shown to be more effective when promoting hedonic (as opposed to utilitarian products) products because of affect-based complementarity (Strahilevitz and Myers 1998), in which guilt emotions stimulated by hedonic products are countered or complemented by the feelings inspired by donating to charity. A primary cause induces a greater affective reaction from consumers than does a cause that addresses secondary needs ("secondary cause"). The guilt associated with hedonic consumption may augment consumers' affective responses to a primary cause.

In the current research, we are not interested in the isolated effects of time duration and cause type on consumer perceptions. As consumer purchase decisions are context-based, we propose that consumer responses to a product with a cause rely on three cues: time duration, product type, and cause type. Attributed company motives can thus be used by consumers to determine whether they would like to participate in a CRM campaign.

In Study 1, a 2 (time duration: short vs. long) x 2 (product type: utilitarian vs. hedonic) x 2 (cause type: primary vs. secondary) between-subjects design was conducted. Vitamin supplement and chocolate ice cream were selected to represent utilitarian and hedonic products with a fictitious name "Highland" respectively. One year and two weeks were used to represent the long and short time durations of a CRM campaign. Emergency senior shelter and Senior citizen adult education program were used as a primary and secondary cause respectively. These results suggest that a long duration works under two conditions: (1) a utilitarian product with a primary cause, or (2) a hedonic product with a secondary cause. In contrast, a short time duration becomes more effective when a hedonic product is promoted with a primary cause.

In Study 2, the experimental design was the same as that in Study 1, but conducted with different manipulations of time duration, cause type and product type. Through a pre-test, mineral water and sparkling juice were selected to represent utilitarian and hedonic products. Fourth months and a week were used to represent the long and short time durations of a CRM campaign, respectively. Child

hunger and children's talent development were used as a primary and secondary cause respectively with a fictitious non-profit "HOPE." The results based on the same food category (i.e., drinks) replicated those of Study 1 that the effectiveness of time duration depends on product type and cause type.

Similar to Studies 1 and 2, Study 3 was conducted in a field setting. To avoid different perceptions from numbers, six months and six days were used to serve as the long and short time durations of a CRM campaign, respectively. Hand wash was chosen to be framed as either a hedonic or utilitarian product with a fictitious brand name "Trenna." Consumers were provided with an opportunity to buy a hand wash with a cause. The results replicated those of Studies 1 and 2. Attributed company motives were tested as the mechanism behind the proposed hypotheses. Study 3 enhanced validity and reliability of the interaction effects of time duration, product type, and cause type.

Our findings make several theoretical contributions. First, this study makes important contributions to the extant CRM literature by considering the time factor. Second, going beyond simple demonstrations of how short and long durations affect CRM effectiveness, this research clarifies the conditions under which each time duration is likely to be effective. We do so by considering two factors which influence CRM success: product type and cause type. Third, the current research also adds to the literature on sponsorship. Examination of these advertising cues adds to our understanding of sponsorship effects.

This research has important managerial implications for marketers. Companies planning to engage in CRM may choose the time duration of a campaign. If a company decides to implement tactical CRM on a short-term basis, the company should pair a hedonic product with a primary cause. The non-profit sector and social marketers can also benefit from our research. The findings provide specific guidelines to help non-profits maximize the impacts of cause-brand alliances, based on time duration, product type and cause type.

## How Temporal Separation in Budgeting Affects Spending Behavior

Yuna Choe (Texas A&M University, USA); Christina Kan (Texas A&M University, USA)

### **Brief Abstract:**

Across four studies, we explore how temporal separation between budget setting and actual purchase affects spending behavior. We show that as the temporal separation increases, people are increasingly likely to overspend their budget, and this effect is driven by adaptation of the hedonic impact associated with the budget.

### **Extended Abstract:**

Consumers often set a mental budget for themselves before shopping in an effort to control their spending. Because mental budgets are set in advance of purchase opportunities, there is typically some amount of temporal separation between the moment that a budget is set and the moment that a purchase is made. We suggest that consumers become increasingly likely to overspend the budgeted amount as temporal separation in budgeting increases.

One possible underlying reason for this effect is a diminished pain of payment associated with the budgeted money. Prior research demonstrates that people gradually adapt to the hedonic cost, or pain,



of a purchase over time (Gourville & Soman, 1998). Consumers first open a mental account for a purchase, and as time passes since the payment was made, they slowly incorporate the payment into their status quo, reducing pain of paying (Soman, 2001). While pain of paying is typically explored in the context of actual spending (e.g., Shah et al., 2015, Soster et al., 2014), people may also experience similar feelings when making the decision to spend money and budgeting for an upcoming purchase. Simply earmarking money can result in the sense of spending (Webb & Spiller, 2014), showing that budgeting may produce a similar experience to spending. We suggest that after people set a budget for a purchase, they begin to adapt to the cost of that decision. As this adaptation increases over time, the pain associated with the decision lessens, in turn increasing the likelihood to overspend when the actual purchase occurs.

In study 1, we designed a two-phase experiment where participants experienced actual time separation between budget setting (phase 1) and a subsequent choice decision (phase 2) for a graduation ring. Participants (N=89) were assigned to experience either an eight- or one-week temporal separation. Overspending was calculated by subtracting the amount budgeted from the amount to be spent. Participants in the eight-week separation showed significantly greater likelihood to overspend ( $M=55.12$ ) than those in the one-week separation ( $M=-2.83$ ;  $p=.056$ ), supporting our proposed hypothesis.

In study 2, we replicated the finding in study 1 using a scenario. Participants (N=248) imagined that they had budgeted \$200 for a tablet PC either one-day, one-week, one-month, or six-months ago. Next, they indicated how likely they would be to spend \$250, instead of their \$200 budget, for the tablet PC to purchase a premium version as a measure for overspending. As hypothesized, the likelihood of overspending significantly rises as the temporal separation increases ( $b=.22$ ,  $p=.02$ ). Studies 3-6 were designed to investigate the proposed process, while ruling out plausible boundary conditions. In study 3, we reasoned that the effect of temporal separation would be stronger for hedonic than utilitarian purchases because hedonic purchases generally induce greater pain of paying (Kivetz & Simonson, 2002). Adopting the scenario used in study 2, participants (N=354) imagined setting aside \$300 either two-months or one-week ago for a tablet PC that provided either hedonic or utilitarian benefits. Overspending was measured as willingness to buy a premium version of the tablet for \$330. We found a significant interaction between the temporal separation and the product type ( $p=.051$ ); greater temporal separation increased overspending for people who budgeted for a hedonically-framed tablet ( $M_{one-week}=5.10$  vs.  $M_{two-months}=5.61$ ;  $p=.03$ ), but not for people who budgeted for a utilitarian-framed tablet ( $M_{oneweek}=5.59$  vs.  $M_{two-months}=5.46$ ;  $p=.50$ ).

In study 4, we hypothesized that the effect of temporal separation would be stronger for money than time because people experience more pain when paying with money than time. Participants (N=289) imagined budgeting \$300 or 30 hours to acquire a concert ticket. We asked participants their feelings of pain on a scale and asked to report willingness to overspend by paying \$350 or working 35 hours for a premium pass. We found a significant interaction between temporal separation and resource type on likelihood of overspending ( $p=.04$ ). The mediation analysis revealed that greater temporal separation resulted in the increase in likelihood to purchase the premium pass through lower pain of paying for people who budgeted money ( $b=.15$ , 95% CI: [.03, .37]), but not for people who budgeted time ( $b=.04$ , 95% CI: [-.04, .16]).

For study 5, we predicted that the effect of temporal separation would be stronger for tightwads than

spendthrifts because tightwads generally experience more pain in spending. Participants (N=169) read the same scenario used in study 2, and we measured pain and their tendency to feel pain in spending money using tightwads-spendthrift scale (TW-ST; Rick, Cryder, & Loewenstein, 2008) and using our pain measure. We found a significant interaction between temporal separation and TW-ST score on overspending ( $p = .02$ ). The mediation analysis revealed that greater temporal separation increased overspending through lower pain of paying for tightwads ( $b = .71$ , 95% CI: [.36, 1.21]), but the effect becomes weaker for spendthrifts ( $b = .30$ , 95% CI: [.03, .66]).

Finally, study 6 tested whether prolonging the budget decision through deliberation during temporal separation would weaken the effect of temporal separation on overspending by reducing the adaptation of hedonic cost. Participants (N=211) first earned credits to purchase films to watch in a lab session and then set a budget for their film purchase. We manipulated temporal separation by having them wait for 5 or 20 minutes between film budgeting and purchase. To manipulate budget deliberation, participants either engaged in an unrelated task or were asked to repeatedly reconsider the film options and adjust their budget as necessary. After the wait period elapsed, participants reported pain and purchased films using their credits. We calculated the difference between credits budgeted and credits spent to measure overspending. We found a significant interaction between temporal separation and budget deliberation on overspending ( $p = .05$ ). The mediation analysis revealed a marginally significant conditional indirect effect: greater temporal separation increased overspending through pain among nondeliberators ( $b = .47$ , 90% CI: [.01, 1.69]) but not among deliberators ( $b = -.33$ , 90% CI: [-1.46, .04]).

Together, we found that as the temporal separation between budget setting and actual purchase increases, people are increasingly likely to overspend their budget. These results provide evidence of an unintended side effect of greater temporal separation in budgeting.

## The Good and Bad of a Delayed Indulgence: The Role of Perceived Self-Control and Purchase Satisfaction

Argiro Kliamenakis (Concordia University, Canada); Kamila Sobol (Concordia University, Canada)

### **Brief Abstract:**

In the current paper we demonstrate that a delay in indulgence allows consumers to retain their subjective assessment of self-control despite the fact that a goal violation has ensued. In particular, findings show that the mere act of delaying an indulgent purchase can evoke the same level of perceived self-control as not indulging at all – a level that is higher than in instances of immediate indulgence. Paradoxically, the bolstered perceptions of self-control resulting from a delayed indulgence, subsequently reduce purchase satisfaction.

### **Extended Abstract:**

Imagine a consumer is faced with the opportunity to make an indulgent purchase, such as a very expensive, albeit unnecessary, pair of shoes. Knowing that this purchase would be detrimental to their savings goal, the consumer may seek to justify it. If no justification is readily available, the consumer might choose to practice self-restraint. But what if, after a week, the consumer decides to follow through with the purchase? How will the act of postponing the indulgence influence the consumer's self-perception, as well as their purchase satisfaction?

This paper demonstrates that, in the event of a goal transgression, perception of self-control is contingent upon the elapsed time between the initial opportunity to indulge and the actual act of indulging. Notably, we show that the mere act of delaying an indulgent purchase can evoke the same level of perceived self-control as not indulging at all – a level that is higher than in instances of immediate indulgence. Paradoxically, our findings also reveal that bolstered perceptions of self-control resulting from a delayed indulgence, subsequently reduce purchase satisfaction.

Prior research demonstrates that exposure to indulgent purchases give rise to conflicting goal demands (i.e. indulgence vs. self-control), resulting in goal compliance or goal failure. While goal compliance enhances psychological well-being (Brunstein, 1993), goal failure gives rise to feelings of shame (Smiley et al., 2016), guilt (McGonigal, 2011), and negative psychological well-being (Jones et al., 2009). To avoid these negative consequences of goal transgressions, people often engage in motivated reasoning (e.g. Xu & Schwarz, 2009), which offers the utility of shielding the individual from psychological harm arising from goal failure. In the current paper, we argue that a delay in indulgence can be deceptively inferred as a sign of restraint allowing consumers to retain their subjective assessment of self-control, despite the fact that a goal violation has ensued.

We also argue that, despite the positive effect on self-perception, a delayed indulgence negatively influences purchase satisfaction. Prior research demonstrates that when the concept of self-control is salient, consumers infer that choice is less reflective of preference (Sela et al., 2017). As such, the exaggerated sense of self-control resulting from postponing an indulgent purchase, deflates purchase desirability, and hence purchase satisfaction – compared to an immediate, impulsive purchase, which is deemed more enjoyable and satisfactory. We conducted two experiments to verify our hypotheses.

The objective of study 1 (n=161) was to test our main prediction that a delayed indulgence bolsters perceptions of self-control. We employed a one factor (purchase: immediate, delayed, none) between-participants design. CrowdFlower (crowdsourcing platform) participants read a scenario adapted from Soman and Cheema (2004), in which they were presented with their savings goal, followed by an opportunity to make an indulgent purchase that would violate that goal. Participants either read that they made the purchase immediately, did not make the purchase immediately but returned to the store a week later and made the purchase then, or did not make the purchase at all. It was specified that no extra income would be incurred during the elapsed time. Measures relating to self-control perceptions (adapted from Puri, 1996), and manipulation checks were then obtained. Results revealed that a delayed purchase bolstered perceptions of self-control relative to an immediate purchase. Further, there was no difference in reported self-control perceptions between the delayed and no purchase conditions ( $M_{\text{immediate}}=4.13$ ,  $M_{\text{delayed}}=4.72$ ,  $M_{\text{nopurchase}}=5.09$ ;  $F(2,157)=7.21$ ,  $p=.001$ ; see figure 1).

Findings from study 1 demonstrate that delaying an indulgence allows consumers to retain their perception of self-restraint, despite having violated their goal.

The objectives of study 2 (n=175) were to test our mediation hypothesis and expand on a boundary condition. Namely, the act of delaying the indulgence must be seen as a sign of restraint to produce the proposed effects. In contrast, the effect should not be apparent if the delayed indulgence is seen as an eventual lack of willpower. A delay-due-to-depletion condition was therefore added to the procedure in study 1, in which participants read that they returned to make the purchase a week later because they could no longer resist the temptation. After the selfcontrol perception measure, participants completed

a measure of purchase satisfaction. Consistent with our previous findings, a delayed indulgence enhanced perceptions of self-control relative to an immediate purchase. This contrast was eradicated when the delayed indulgence was framed as resulting from willpower depletion ( $M_{\text{immediate}}=4.57$ ,  $M_{\text{delayed}}=5.07$ ,  $M_{\text{delayed\_depletion}}=4.24$ ,  $M_{\text{nopurchase}}=5.19$ ;  $F(3,171)=5.36$ ,  $p=.001$ ; see figure 2). A delay resulting from depletion did not enhance assessment of self-control relative to an immediate purchase. Further, participants in the delayed indulgence and no purchase conditions reported lower levels of satisfaction compared to participants in the delayed-due-to-depletion purchase conditions ( $M_{\text{immediate}}=3.95$ ,  $M_{\text{delayed\_depletion}}=4.07$ ,  $M_{\text{delayed}}=3.09$ ,  $M_{\text{nopurchase}}=3.20$ ;  $F(3,171)=3.23$ ,  $p=.02$ ; see figure 3). Finally, a mediational analysis using model 4 of Hayes's PROCESS macro indicated a significant full mediation (5000 samples, 95% CI [-.18, -.02]) (see figure 4). Findings from study 2 support that although a delayed indulgence is interpreted as a sign of restraint, it ultimately results in reduced purchase satisfaction.

Some might argue that the observed effect is driven by the differing perceptions of impulsivity arising from the different purchase conditions. The additional condition in study 2 however counters this argument by demonstrating that a delayed indulgence in and of itself does not decrease perceptions of impulsivity.

Findings from the present research contribute to the literature on self-regulatory failure (Baumeister, 2002) by identifying another circumstance under which consumers escape the negative outcomes of goal failure. In particular, we show that, merely delaying an indulgence leads to an assessment of self-restraint that is comparable to that evoked from goal compliance, potentially protecting consumers from the psychological harm arising from goal failure. The caveat however, is that because decreased preferences are inferred when choices are made under conditions of self-restraint (Sela et al., 2017), purchase satisfaction is ultimately sacrificed. In future research, we hope to replicate this study in an actual consumption context.

## The Illusion of Knowledge Effect: Learning (And Forgetting) Attribute Information Decreases Choice Deferral and Increases Confidence

Jose Mauro Costa Hernandez (Centro Universitario FEI); Maira Jesus Neves (Universidade de Sao Paulo); Fernando Henrique Oliveira Aguiar (Centro Universitario FEI)

### **Brief Abstract:**

This study examines situations in which consumers acquire attribute information over time and choose among the given options or defer the choice. We find that prompting consumers to recognize missing information increases choice deferral and decreases confidence in the decision. However, with the passage of time, memory of attribute information fades away and consumers are trapped in the illusion of knowledge, making them more prone to choose and more confident in having made the right choice.

### **Extended Abstract:**

In general, consumers choose among different options with incomplete information (Kardes & Sanbonmatsu, 2003). Perception of incomplete information increases uncertainty and choice deferral (Dhar, 1997) but consumers generally fail to recognize missing information (Sanbonmatsu et al., 1992, 2003, 1997, 1991).

Understanding the consequences of insensitivity to omitted information on decision making is important because failure to recognize missing information leads to inappropriately extreme judgments (Sanbonmatsu et al., 2003) and poorer choices.

Most of previous studies about the effects of missing information on consumer decision have examined situations in which decision makers were forced to choose. More recently, Gunasti & Ross (2009) examined situations in which respondents had the option to defer the choice but all the alternatives' information was present. However, in the real world, it is more likely that consumers search for information over time and make decisions based partly on attribute information that is stored in memory (Lynch & Srull, 1982). Sanbonmatsu et al. (1991) examined the joint effect of memory and sensitivity to missing information on judgment but not on choice deferral.

We hypothesize that prompting consumers to perceive missing information increases choice deferral and decreases confidence in the decision. However, with the passage of time, memory of learned information fades away and consumers are trapped in the illusion of knowledge (Hall et al., 2007), that is, the mere fact of learning and unconsciously forgetting attribute information decreases choice deferral and increases confidence.

In three studies, we prompted subjects to detect missing attribute information (Kardes et al., 2006) in the descriptions of a set of options and asked them to choose one of the options or to defer the choice. One group ("same-day") decided following the prompting while a second group decided with a one-week delay ("one-week"). The descriptions in each choice set were pre-tested to be similarly attractive, increasing choice difficulty (Dhar, 1997).

In Study 1, 77 undergraduates (68% male) participated in a betweensubjects, two-group experiment. The same-day group reviewed information of two brands of TV (A and B), side-by-side, while the oneweek group reviewed information of each brand one week apart (A or B, randomly presented). Next, participants were asked to choose between the target TV (A or B, depending on the order of presentation) or defer the choice (Dhar, 1997). Each brand was described along eight attributes, five containing values and three containing a "not available information" label. To stimulate participants to recognize missing information, two of the five attributes were aligned across brands while three attributes were nonaligned (Sanbonmatsu et al., 1992). To assess perception of missing information, participants were asked to use a percentage scale to indicate the relative importance of the five attributes describing the target TV and the relative importance of all other attributes not present in the description (Sanbonmatsu et al., 2003). Once the relative importance of the attributes should total 100 percent, the higher the relative importance of all other attributes, the higher the perception of missing information. Finally, participants were asked to indicate how confident they were in their choice using a 9-point scale.

As predicted, compared to participants of the same-day group, participants of the one-week group attributed less relative importance to all other attributes, were less likely to defer the choice and demonstrated more confidence in the decision (Table 1).

In study 2, 162 undergraduates (67% female) participated in a between-subjects, three-group experiment (same-day, one-week, and control). The first two groups were asked to review an alleged "air conditioner purchasing guide" describing the importance of eight attributes and then to review

information of two brands of air conditioner described with four attributes not present in the purchasing guide. The control group was not shown the purchasing guide. Having learned attribute information presented in the purchasing guide should stimulate individuals to detect missing information. Comparing the one-week and the same-day groups,

Study 2 replicated the findings of Study 1 (Table 1). Compared to the control group, the one-week group attributed the same importance to all other attributes, suggesting that participants of the one-week group forgot completely what they learned. However, participants of the one-week group were less likely to defer the choice and demonstrated more confidence than participants of the control group.

We hypothesized that the control group was more likely to defer the choice due to the small size of the choice set. If this hypothesis was correct, increasing the number of options in the choice set would stimulate participants of the control group to choose but would not affect the other two groups.

In study 3, 163 undergraduates (59% female) participated in a between-subjects, three-group experiment (same-day, one-week, and control). The first two groups were asked to rate the relative importance of six attributes of a cable TV plan; next, the three groups were asked to review four options of cable TV plans described with four attributes not present in the rating task. Having rated the importance of attributes should trigger individuals to detect missing information. Comparing the one-week and same-day groups, the findings of Study 3 replicated Studies 1 and 2 (Table 1). As predicted, the one-week group attributed the same importance to all other attributes and were as likely to defer the choice compared to the control group. In other words, increasing the choice set decreased choice deferral of the control group but did not affect other groups.

Three studies using different product categories as stimuli and different missing information detection techniques demonstrated that learning and forgetting attribute information decreased choice deferral and increased confidence. While participants of the same-day group were more likely to detect missing information, participants of the one-week group demonstrated levels of missing information detection similar to participants that were not prompted to detect missing information. The paper has important managerial contributions by showing that increasing search may not necessarily contribute for better decisions. As memory of attribute information fades away, the illusion of knowledge influences consumer's decisions, not only making them more prone to choose but also more confident in having made the right choice.

## **Let's Be Altruistic and Make the World a Better Place - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Bonnie Simpson, Western University, Canada*

**Making the World a Better Place: How Crowdfunding Shifts Consumer Preferences  
Toward Social Good Products**

Bonnie Simpson (Western University, Canada); Martin Schreier (Vienna University of Business and Economics); Sally Bitterl (Vienna University of Business and Economics); Katherine White (University of British Columbia, Canada)

**Brief Abstract:**

Crowdfunding involves financing new ventures by relying on a large number of individuals who collectively back the venture. We predict that consumers will make different product choices when crowdfunding versus merely purchasing a given product, despite the fact that the exchange is identical in both scenarios (a product is exchanged for a certain amount of money). We find across 5 studies that crowdfunding activates an interdependent mindset which subsequently increases the salience of collective efficacy beliefs. We demonstrate that consumer preferences shift away from products positioned as providing superior self-benefits, toward products with a more positive social and/or environmental impact.

**Extended Abstract:**

Crowdfunding involves financing via a large number of individuals who collectively back a venture, and subsequently receive the new product in return. While crowdfunding has been studied from a financing perspective (e.g., Gubler 2013), less research has examined its impact on consumer decision-making (e.g., Bitterl and Schreier 2018). As the consumer exchanges money for a product in both crowdfunding and purchase situations, it is not clear whether preferences vary as a function of acquisition mode. We propose that a crowdfunding context will lead consumers to focus less on the self-benefits a product provided, and more on collective benefits (i.e., positive social and/or environmental impact), resulting in a heightened preference for products that support social good.

In making this prediction, we suggest that the collective element of crowdfunding (relative to purchase) will activate a heightened interdependent (vs. independent) self-construal (characterized by viewing the self as interconnected with others; Markus and Kitayama 1991). Contextual factors can temporarily activate the salience of interdependence or independence (Gardner, Gabriel, and Lee 1999), and given that, by its very nature, crowdfunding activates thoughts of people working together, we suggest that crowdfunding (vs. purchase) will activate interdependence.

We further propose that an interdependent mindset will lead to heightened collective efficacy (Bandura 2000), an increased belief about the competence and capabilities of a group to perform a given behavior. Those who are more interdependent emphasize collective aspects (e.g., collective efficacy; Triandis 1989), and the efficacy cognitions of those who are more interdependent are group-oriented (Earley 1994). Thus, we propose a crowdfunding (vs. purchase) context activates an interdependent self-construal, which leads to heightened thoughts of collective efficacy, which drives consumer preference for products that are more focused on collective benefits (vs. self-benefits; i.e., a preference for social good products).

Study 1 tested whether the level of social good is related to the success rate of crowdfunding campaigns. Data was sampled from all active campaigns self-identified as 'green' on Kickstarter.com in July 2018 (216 successful and 75 failed campaigns). Two independent coders rated the extent of social good of each project (scale of 1-5; averaged). Social good was positively correlated with the success of campaigns ( $p < .001$ ) and the number of backers received ( $p < .001$ ). Further, the average contribution made in social good campaigns (\$117.93 USD) was higher than the average pledge made across Kickstarter campaigns as a whole (\$80.73 USD). In sum, greater extent of social good increased the probability of a successful campaign.

Study 2 demonstrated the focal effect of crowdfunding on product choice. Participants ( $N = 181$ ) were

randomly assigned to a 2(Context: Purchase vs. Crowdfund) design, where they could either get a product via a crowdfunding initiative or simply purchase the product. They were then presented with two product options – one that emphasized self-benefits (product quality) and one that emphasized social good. The behavioral dependent variable was the product selected in the event that the participant won a lottery draw. Consumers were more likely to choose the social good product in the crowdfund (44.9%) versus purchase condition (28.3%;  $p = .02$ ).

Study 3 tested the prediction that crowdfunding leads to a more interdependent mindset (vs. purchase context), which predicts product choice. Participants ( $N = 134$ ) were randomly assigned to a 2(Context: Purchase vs. Crowdfund) design. After choosing which product they would prefer (self-benefit vs. social good), participants qualitatively elaborated on their choice. Responses were coded by two independent raters ( $r = .86$ ) for references related to interdependent self-construal. Results indicate that a crowdfunding context led to a more interdependent self-construal ( $p < .001$ ), which predicted a preference for the social good product ( $p < .001$ ). The indirect effect of context on product choice via self-construal was demonstrated.

Study 4 tested a serial mediation pathway via collective efficacy. Participants ( $N = 164$ ) in a 2(Context: Purchase vs. Crowdfund) design were shown two ‘new products available to crowdfund (purchase),’ and asked which they would be most interested in. Prior to viewing products, they completed 3 self-construal items (7-point scales;  $\alpha = .93$ ), and indicated product choice: 1 = definitely purchase [support] ‘Start up A’ to 7 = definitely purchase [support] ‘Start up B’; (recoded such that a higher score represents a preference for the social good product). Collective efficacy was then measured (three items; 7-point scales;  $\alpha = .93$ ). Results reveal that a crowdfunding context led to a more interdependent self-construal ( $p = .04$ ) and an interdependent self-construal heightened collective efficacy ( $p < .001$ ), and finally, greater collective efficacy resulted in an increased preference for the social good product. Indirect effects indicate that only the serial pathway of context to self-construal to collective efficacy to product choice is significant.

Study 5 manipulates self-benefit, as our theorizing suggests that activating a focus on self-benefits should mitigate the effect. Participants ( $N = 348$ ) were randomly assigned to a 2(Context: Purchase vs. Crowdfund) x 2(Benefit: Control vs. Self-benefit prime) design. They were introduced to a purchase or crowdfunding context, and read two product descriptions (each emphasizing product quality or social good). The control condition received no further instructions, while the self-benefit condition was asked to pay attention to how they ‘would benefit if they chose one product over the other.’ The dependent variable was product choice. Results replicate in the control condition, participants chose the social good product more in the crowdfunding control (70.8%) versus purchase control condition (54.9%;  $p = .033$ ). In the selfbenefit condition, no difference emerged (crowdfunding: 50.5%, purchase: 42.7%;  $p = .305$ ). The self-benefit manipulation reduced participants’ preference for the social good product (within crowdfunding, vs. the control;  $p = .008$ ), and the focal effect was no longer significant comparing the crowdfunding self-benefit condition (50.5%) to the purchase control condition (54.9%;  $p = .532$ ).

Our research makes a contribution to the sparse literature (e.g., Bitterl and Schreier 2018) exploring how crowdfunding impacts consumer decision-making. We highlight the activation of an interdependent self-construal, and subsequent collective efficacy thoughts, as the process underlying consumer preference for products that support social good in a crowdfunding context.



## When Disadvantage Is an Advantage: Benevolent Partiality in Consumer Donations

Gabriele Paolacci (Erasmus University Rotterdam, The Netherlands); Gizem Yalcin (Erasmus University Rotterdam, The Netherlands)

### **Brief Abstract:**

How should altruistic consumers choose whom to help? The classical utilitarian answer, championed by the Effective Altruism movement, urges people to choose the charitable alternatives that maximizes the size of the benefit and the number of beneficiaries irrespective of their characteristics. In contrast to utilitarian prescriptions, we show that a sizable number of donors value saving the lives of members of disadvantaged groups more than what the disadvantage implies from a utilitarian impartiality standpoint. Benevolent partiality is decreased when donors reflect on how they should donate beforehand, when disadvantage is self-determined, and when donors are more approving of instrumental harm.

### **Extended Abstract:**

How should an altruistic consumer choose whom to help? The classical utilitarian answer, championed by the Effective Altruism movement, urges people to choose the charitable alternatives that produce the greatest welfare benefits (MacAskill 2015, Singer 2015), maximizing the size of the benefit and the number of beneficiaries irrespective of their characteristics (Pellegrino 2017). The size criterion posits that one should give towards the causes that bring more benefit, which typically and aptly prescribes that, all else being equal, people should help the most disadvantaged. Because of the diminishing marginal returns of wealth, one should, for instance, donate \$100 to a poorer family rather than to a slightly less poor family, because \$100 produces a more sizable benefit for the former (MacAskill 2015, Singer 2015).

The effectiveness of donating to the disadvantaged, however, is contingent on donations alleviating the disadvantage; when economic disadvantage (or any other form of disadvantage) is unaffected by one's donation, it does not increase the size of the potential benefit and it is therefore irrelevant for one's donation decision. For instance, although economic disadvantage is more severe in Chad than in Nigeria, one should donate polio vaccines to hospitals in Nigeria (where polio has not been eradicated yet) rather than in Chad (where polio has been eradicated). When disadvantage is orthogonal to the cause, therefore, utilitarianism prescribes that donors should only attend to the number criterion: because "everybody to count for one, nobody for more than one" (Bentham 1789/1983), people should give towards the causes that allows benefiting more people as opposed to fewer. In contrast to utilitarian prescriptions, we document a phenomenon that we call benevolent partiality. Across seven online studies (all study materials are available in the appendix: <https://tinyurl.com/benpartscp2019>), we show that when choosing between charitable projects, consumers weigh the well-being of members of disadvantaged groups more than what the disadvantage implies from a utilitarian standpoint, choosing to save the lives of members of more disadvantaged groups even if the same donation allows saving more lives.

In Study 1, participants chose which charity between two (Schistosomiasis Control Initiative and END Fund) they wanted the experimenters to donate \$100 to (we donated \$100 to the most selected charity). We provided truthful effectiveness information about the charities, i.e., the amount of donated money needed to avert an under-5 death (retrieved from GiveWell.org). In addition, in a between-participants

design, we either explained that the charities collaborated with countries among those with the lowest Human Development Index or gave participants an example of a country that the charity operated in. In the latter condition, we matched the more (less) effective charity with a country with slightly higher (lower) literacy rate and GDP per capita. (These were truthful examples). As predicted (<https://aspredicted.org/blind.php?x=7gq4gp>), emphasizing relative disadvantage increased donations to the less effective charity (25.5% vs. 43.0%;  $\chi^2(1) = 10.407$ ,  $p = .001$ ).

Studies 2A-2B-2C provided individual-level evidence of benevolent partiality by eliciting participants' direct preferences for donating to a project saving more people vs. one saving people of more disadvantaged groups. We took several precautions to make disadvantage irrelevant from a utilitarian standpoint: Donations impacted lives saved but not quality of life (i.e., donations did not alleviate disadvantage), and were described as the only means of help available to recipients (i.e., disadvantage could not be used as a proxy for the inaccessibility of other solutions). We found that a sizable number of people (44.4% of participants) give money to the project in the more disadvantaged country rather than to the one saving more lives (Study 2A), a result that cannot be explained by beliefs that either project may be underfunded (Study 2B; 42.1% donated to the disadvantaged country), and that replicate when people can allocate their donation across projects (Study 2C; on average, participants donated \$4.56 (SD = \$2.51) to the least effective project, saving fewer lives than they could). In these three studies, we also analyzed our data with and without participants who failed to report in a comprehension check that money would be exclusively used to save lives: excluding failed participants did not change the results. Further studies addressed predictors of benevolent partiality. In Study 3, we manipulated whether or not participants were asked to weigh the importance of the decision criteria prior to making a choice, mimicking a typically recommended step in prescriptive models of decision-making (Bazerman et al. 2008). This intervention significantly reduced benevolent partiality, making participants more likely to choose the project saving more lives (78.6% vs. 57.5%,  $\chi^2(1) = 10.28$ ,  $p = .002$ ). In Study 4, we manipulated the cause of economic disadvantage and found that participants were more likely to donate to the project that saved more lives when the cause of disadvantage was controllable (e.g., overharvesting) than when it was uncontrollable (e.g., natural soil type) (55.0% vs. 38.0%,  $\chi^2(1) = 6.08$ ,  $p = .014$ ).

Finally, consistent with our moral characterization of this donation choice, Study 5 found that benevolent partiality is less prevalent among people with more permissive attitudes towards instrumental harm, a core dimension of utilitarian thinking which captures people's beliefs that sacrifices are acceptable if they produce a larger benefit (Kahane et al. 2017). More permissive attitudes towards instrumental harm were associated with higher likelihood to donate to the more effective project ( $\chi^2(1) = 6.07$ ,  $p = .014$ ).

Altogether, our findings join recent research documenting how donation decisions are often sensitive to factors other than effectiveness (e.g., Berman et al. 2018; Cryder et al. 2017; Evangelidis and Van den Bergh 2013; Small et al. 2007). Importantly, whereas this literature has typically documented instances of "heuristic ineffectiveness" that is often corrected when people jointly evaluate differently effective charitable options (e.g., Kogut and Ritov 2005), we documented benevolent partiality under the most conservative conditions—with donors evaluating options jointly, and deliberately choosing to save fewer lives in both hypothetical and consequential decisions. Practically, highlighting the socioeconomic disadvantage of donation recipients may increase prosocial behavior, even within the context of donations that address needs that are unaffected by disadvantage and do not affect

disadvantage.

## Dignity, Power, and Justice in the Exchange of Community Resources

Stacey Menzel Baker (Creighton University); Courtney Nations (University of North Florida); Meredith Rhoads Thomas (Florida State University); Aronte Marie Bennett (Villanova University)

### **Brief Abstract:**

Dignity is a fundamental element of the human experience and a central topic across many disciplines. However, the concept of dignity has not yet been thoroughly explored from a consumer behavior perspective. Focusing on the vulnerability that accompanies being unable to meet one's basic needs, the current research investigates the role of dignity in the consumer experience of accessing community resources. Specifically, this work investigates the social structures that influence how social resources are distributed (power), and how power imbalances impact self-perceptions (dignity). Further, this study develops a deeper understanding of justice in terms of normative ideas about fairness in resource distribution procedures.

### **Extended Abstract:**

Who controls resources within society and how resources are distributed within society are contemporary, practical problems that revolve around how best to understand and to address human vulnerability. Poverty, by definition, is a source of vulnerability. 12.7 percent of the American population lived below the federal poverty line in 2016 (United States Census Bureau 2017). Federal welfare programs are available to any applicant able to demonstrate financial need relative to the poverty level and strictly administered by the federal government; one in five American households receives some form of assistance via these programs (United States Census Bureau 2015). Unfortunately, these programs are often insufficient to extract households from the throes of poverty, leading to additional reliance upon locally based social programs. Locally based social programs follow a similar approach to federal welfare programs in determination of eligibility (Trattner 2007) but are less stringently administered. An estimated 6.5 percent of the population calls upon these programs for food, transportation, clothing and housing assistance (Valle and Johnson 2017).

Existing research has so narrowly focused on the “who” and “what” of which people deserve resources through these programs and what level of resources they have the right to receive, that the “how” has been neglected (Baker et al. 2015). Addressing this gap in the literature, our work seeks to illuminate the experience of acquiring and consuming resources obtained through social programs. We specifically investigate perceptions of vulnerability, dignity, power and justice in interactions with social programs.

Baker et al. (2005, p. 134) define consumer vulnerability “as a state of powerlessness that arises from an imbalance in interactions ... The actual vulnerability arises from the interaction of individual states, individual characteristics, and external conditions within a context where consumption goals may be hindered, and the experience affects personal and social perceptions of self.” The current project seeks to understand the impact of the process of acquiring social program resources on consumer self-perceptions, namely the stripping away of dignity.

Dignity reflects individuals' feelings of respect, value, and connectedness, as well as ability to

participate in things that affect them (McGregor and Goldsmith 1998). Fundamental to this perception is the way that people view and experience social structures and processes, which have the capability to impinge on freedoms and degrade identities. This capability is amplified during interactions in which one party has significantly more power than the other.

Power involves a dyadic relationship between two agents, wherein a social agent, such as a person, a group, or part of a group, has the ability to influence another person (French and Raven 1959; Raven 2008). The dynamic between the consumers and agents of social programs can give rise to an imbalance of power, often to the detriment of a consumer's identity, particularly their dignity. Individuals' evaluations of interactions, with people and organizations, are based on outcomes relative to expectations (Thibaut and Kelly 1959), judgments that procedures and policies are fair (Lind and Tyler 1988), and concerns about interpersonal respect (Bies and Moag 1986). Central to current investigation, procedural justice, or "judgments that procedures and social processes are just and fair" (Lind and Tyler 1988, p. 1). As they navigate the social resource landscape, recipients' perceptions of fairness are both objective and subjective.

A qualitative study, utilizing interview protocol, was used to develop an understanding of the complex relationships between resource acquisition, dignity, power and justice. Fortynine depth interviews with fifty-three consumers of community resources and federal assistance programs were conducted. Independently, members of the research team reviewed transcripts, coding for key ideas, followed by inter-case analysis focused on ideas that crossed multiple interviews (Belk, Fischer, and Kozinets 2013; Glaser and Strauss 1967).

Findings from the data imply a power struggle between resource recipients and resource providers, almost always in favor of the provider. Throughout the data, consumers attempt to regain agency and maintain a sense of self, while providers, intentionally or unintentionally, often utilize power to make seemingly unfair decisions and worsening consumer suffering. With ideas of power and justice in mind, three major themes arose from our data: (1) Need for Continuity of Self, (2) Procedural Variation, and (3) Exacerbation of Victimization.

First, we found that consumers needed at least some form of joy or expression of self, often in the form of a single "vice" or personal indulgence, despite their desperation or lack of resources. Though indulgences were viewed as too extravagant by onlookers, given the financial constraints of the resource recipients, they assisted in the maintenance of a sense of self throughout the process, contributing to the preservation of dignity. Second, we found a great deal of variation in the process of resource distribution. In some cases, the resource provider had the leeway to choose recipients, often without a fair or consistent formula for determining need. In other cases, stories of consumers abusing the system arose, and because service providers lacked procedures or care for catching and preventing this behavior, other resource recipients found it unfair and frustrating. Finally, our data revealed that the vulnerability of consumers in need of community resources is often intensified through interactions with providers. In some cases, providers spoke very harshly to consumers, often blaming or stigmatizing the person in need, minimizing consumer dignity, and demanding more information than necessary to determine need. In other cases, victimization was exacerbated through assumptions that placed the resource recipient in a difficult position.

Overall, the current research contributes to the field by initiating an understanding of how a unique

power dynamic impacts consumers in vulnerable states. This project explores the social structures and procedures that determine how social resources are distributed (power). It also investigates how power imbalances impact self-perceptions (dignity). Further, it develops a deeper understanding of fairness in resource distribution procedures; offering novel insights for justice literature by examining processes that do not simply impede fairness but create or exacerbate existing trauma. In addition to theoretical contributions, these findings have significant implications for practice, policy, and consumer well-being.

## **Focusing on Possession and Materialism - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Shreyans Goenka, Cornell University, USA*

### **The Malleable Morality of Conspicuous Consumption**

Shreyans Goenka (Cornell University, USA); Manoj Thomas (Cornell University, USA)

#### **Brief Abstract:**

This research demonstrates that the morality of conspicuous consumption is malleable, contingent upon how different moral lenses highlight the different characteristics embedded in the behavior. An archival dataset and six studies (N = 2903) show that the individualizing values (i.e., equality and welfare) make people focus on the self-enhancing characteristics of conspicuous consumption (e.g., vanity, superiority), deeming it immoral. However, the binding values (i.e., deference to authority, in-group loyalty, and purity) make people focus on the social identity signaling characteristic of conspicuous consumption, making it seem morally justifiable.

#### **Extended Abstract:**

Conspicuous consumption, the purchase and exhibition of costly items for social impression, has been decried as immoral by the scholars of society. Veblen (1899) argued that the very essence of conspicuous consumption lies in the element of wasting time and resources. Socrates lamented that “the children now love luxury; they have bad manners, contempt for authority; they show disrespect for elders” (Patty & Johnson, 1953). Benjamin Franklin (1758) also warned that “without frugality, nothing will do.” Similarly, religious and spiritual texts have typically discouraged the purchase and exhibition of luxury products (Lama, 2009). This notion has also trickled into contemporary pop-culture where characters engaging in conspicuous consumption are often portrayed with questionable morals. Furthermore, people typically ascribe negative personality traits to others engaging in conspicuous consumption (Belk, 1978; Van Boven, Campbell, & Gilovich, 2010). Hence, a pervasive intuition exists that conspicuous consumption is a moral weakness. That is, a moral person would not purchase products like Prada handbags and Rolex watches.

However, conspicuous consumption is quite rampant and has always been an integral aspect of human society (Mason, 1998; Page, 1992). It is estimated that the worldwide value of luxury goods market has reached \$289 billion (Paton, 2017) and virtually all consumers have bought, or will buy, at least one luxury brand during their lifetimes (Taylor, Harrison, & Kraus, 2008). Importantly, conspicuous consumption has existed in tandem with the moral fabric society. In some cases, reputed society leaders and even religious places of worship have spearheaded the ostentatious consumption of luxury cars and designer outfits. This begs the question – how can conspicuous consumption be considered

immoral and yet be widely embraced in society? What are the psychological determinants of the morality of conspicuous consumption?

We utilize the Moral Foundations Theory (Graham et al., 2011; Haidt, 2007; Haidt & Joseph, 2007) to posit that the morality of conspicuous consumption is malleable. Conspicuous consumption may not always be considered immoral; rather, its morality is contingent upon how different moral lenses highlight the different characteristics embedded in the behavior. We predict that the individualizing moral foundations (i.e., care and fairness) increase the reprehensibility of conspicuous consumption as they emphasize the importance of welfare and equality. These moral values can highlight the self-enhancing characteristics of conspicuous consumption such as wastefulness, vanity, and superiority (Belk, 1988). Unsurprisingly, when one attends to these aspects of conspicuous consumption, it is considered immoral. However, the binding moral foundations (i.e., deference to authority, in-group loyalty, and purity) can reduce the moral objections to conspicuous consumption, as they highlight the group-focused characteristics of conspicuous consumption such as signaling of social identity, group values, and group membership (Dubois & Ordabayeva, 2015). Consequentially, we argue that different moral lenses, which highlight these different characteristics of conspicuous consumption can alter its moral judgment. This proposition goes counter to the popular view that conspicuous consumption is a moral lapse. Instead, our argument is that conspicuous behaviors can actually be motivated by certain moral values.

We conducted seven studies to compare the effects of the individualizing and binding moral values on conspicuous consumption. First, in studies 1 and 2, we assessed how the endorsement of the two moral foundations can have a consequential impact on conspicuous preferences, producing economic and social implications. Study 1 analyzed country-level archival data, spanning 32 countries, to examine how the prevalence of individualizing and binding values can predict the per-capita consumption of luxury goods across countries. We find that countries which report a higher prevalence of binding values relative to individualizing values are more likely to consume luxury goods. Study 2 found that individual differences in endorsement of the moral foundations can predict conspicuous preferences. Further, this study also demonstrated that political conservatives and religious individuals are more likely to engage in conspicuous consumption due to their adherence to the binding foundations.

Having examined the direct relationship between the moral foundations and conspicuous preferences, we then investigated the theorized pathway and tested for causality. First, Study 3 found that the moral values can predict the moral judgments of conspicuous consumption. The individualizing values predict harsher moral judgments of conspicuous consumption, but the binding values predict greater moral acceptance of conspicuous consumption. This study also controlled for related social constructs (collectivism, group identification) to demonstrate the independent effects of moral values. Next, Study 4 demonstrated that priming the two moral foundations can causally alter the moral judgment of conspicuous consumption. Further, the moral judgments mediated the effect of the moral primes on conspicuous preferences. Study 5 demonstrated that the moral values highlight the different characteristics (self-enhancing vs. social-identity signaling) of conspicuous consumption. The sensitivity to the different characteristics mediate the effect of the moral primes on the moral judgements of conspicuous consumption. Finally, we examine some boundary conditions for the effect of moral values on conspicuous preferences. Study 6 investigated how the effect of moral values on conspicuous preferences is moderated by the price and visibility of the products. Study 7 examined how social visibility moderates the effect of moral values on conspicuous preferences.

Examining the malleable morality of conspicuous consumption produces important implications for understanding the antecedents of this widespread social behavior. First, it offers an explanation for the paradoxical question why a lot of people including political, social, and religious leaders engage in conspicuous consumption even when many others consider it immoral. Second, it augments the extant literature on moral foundations by identifying a hitherto unexamined effect of individualizing and binding moral values. While researchers in the past have examined how different moral foundations can produce downstream consequences for domains such as politics (Graham, Haidt, & Nosek, 2009), social groups (Smith, Aquino, Koleva, & Graham, 2014), self-control (Mooijman et al., 2017), and prosocial behaviors (Kidwell, Farmer, & Hardesty, 2013), the extant research has not examined how they can influence consumption behaviors. Hence, this research demonstrates a novel consequence of the distinct moral foundations, extending our understanding of when, why, and how morality can impact consumption and economic activities in society.

## Feeling Wealthy, Spending Less: The Interplay of Perceived and Objective Wealth on Consumption

Silvia Bellezza (Columbia University, USA); Joe Gladstone (University College London)

### **Brief Abstract:**

We investigate the interaction between objective and perceived wealth on consumer spending. Through field studies (data from a money management app and a large retail bank), lab experiments, and large public surveys (representative samples of America and China), we demonstrate that those who are objectively wealthy but feel subjectively poorer spend the most. We find evidence that the psychological mechanism underlying this effect is interpersonal influence: those who are highly influenced by what others think of them display the highest spending.

### **Extended Abstract:**

How does consumers' perceived wealth influence their spending? Perceived wealth is the subjective assessment of one's financial situation and it is different from objective wealth (e.g., income, savings, and investments). While there is a positive association between actual wealth and its perception (Wilhelm, Varcoe, and Fridrich 1993), this relationship is often weak (Gasiorowska 2014). Two people with the same wealth are likely to have different perceptions about their subjective financial situations. This may be due to their different consumption values and habits, different needs and wants, different aspiration levels, and different social comparison processes (Clark and Oswald 1996). In this research, we seek to understand the influence of subjective wealth on consumption across different levels of objective wealth. We argue that while objective wealth will have a positive relationship with spending, above a certain level, feeling wealthy will, in fact, have a negative relationship with spending. This is because perceiving oneself to be wealthy provides a buffer against the social pressures associated with consumption. In other words, a consumer who feels rich is also more likely to feel autonomous in their spending, being less susceptible to interpersonal influences from others (Bearden, Netemeyer, and Teel 1989).

Through a series of studies, we investigate the interaction between perceived wealth and objective wealth on spending. Studies 1 and 2 model these relationships using field data from a money management app and a large retail bank and. Study 3 tests the implied mechanism in a controlled lab experiment. Finally, studies 4 and 5 demonstrate that our effects hold longitudinally and across

cultures using two large public surveys from the USA and China.

In study 1, we use a dataset obtained from a British money management app and containing over 2 million individual transaction records from participants ( $N = 2,232$ ) over 12-months period. We asked users for their subjective views on how wealthy they felt in a survey (e.g., “I feel wealthy right now”) and paired these responses with their account data. As predicted, we find a significant interaction between objective and subjective wealth ( $b = -.12$ ,  $p < .001$ ) on total spending. As seen in figure 1, among objectively wealthy people (i.e., right side of the graph), those who view themselves as wealthier spend less than people feeling subjectively poorer.

In study 2, we analyzed customer account data from a large U.K. retail bank ( $N = 716$  customers; 12-months). As predicted, there was a significant interaction between objective and subjective wealth ( $b = -.05$ ,  $p < .001$ ) on total spending. Again, we find that among the objectively wealthy, those who felt wealthy spent less compared to those who felt poorer for those with higher incomes.

In study 3, we aimed at replicating previous findings in a more controlled experiment manipulating subjective wealth and testing the hypothesized process of susceptibility to interpersonal influence. Participants ( $N = 980$ ; online) imagined a society in which wealth is measured in alpha coins and were randomly assigned to one of two conditions: feeling-rich versus feeling-poor. Next, we measured propensity to consume, the dependent variable, and susceptibility to interpersonal influence (Koschate-Fisher and Hoyer, 2012). As expected, the analysis revealed a significant interaction ( $b = 19.44$ ,  $t(976) = 2.73$ ,  $p = .006$ ). Respondents in the feeling-rich condition wanted to spend less alpha coins ( $M_{Rich} = 566.6$ ) than respondents in the feeling-poor condition ( $M_{Poor} = 609.3$ ,  $t(979) = 2.91$ ,  $p = .004$ ). Moreover, the effect was particularly strong for respondents who are less susceptible to others ( $b = -44.2$ ,  $t(976) = 4.39$ ,  $p < .001$ ).

In study 4, we used data from a large-scale national survey to investigate the relationship between spending, income, and subjective wealth over a four-year period. We use data from the Health and Retirement Study (HRS), a biannual longitudinal survey of adults age 50 or above and their spouses of any age, living in the United States. Consistent with previous findings, we find a significant interaction between subjective wealth and income (time 1:  $b = -.002$ ,  $p < .001$ ; time 2:  $b = -.003$ ,  $p = .001$ ). We next ran a series of models longitudinally, controlling for baseline spending. Including lagged dependent variables can be a solution to the omitted confounding factor (Angrist and Pischke 2009). We demonstrate that our findings are robust to this additional analyses ( $b = -.001$ ,  $p = .012$ ).

Finally, in study 5 we wanted to test our results in a different culture. The Rural Urban Migration in China (RUMIC) dataset used in the analysis relies on a survey in China conducted since 2008. Again, in this dataset we find the predicted interaction between subjective wealth and objective income ( $b = -.08$ ,  $p < .001$ ).

In conclusion, this research deepens our understanding about how perceived wealth influences actual spending among wealthy consumers. We demonstrate that those who are objectively well-off but who feel poorer spend the most.



## Sustainable Luxury: A Paradox or a Desirable Consumption?

Jennifer Sun (Columbia University, USA); Silvia Bellezza (Columbia University, USA); Neeru Paharia (Georgetown University, USA)

### **Brief Abstract:**

We show that luxury consumption is sustainable, as luxury goods have a longer life cycle and are more likely to be recycled on secondhand markets than ordinary goods. Despite that luxury products last longer and have higher resale potential compared to ordinary products, many view luxury consumption as a wasteful and materialistic behavior, even when controlling for the total amount purchased and the time horizon, because these purchases are deemed unnecessary. We demonstrate how this bias is attenuated when luxury purchases are framed as long-lasting investments.

### **Extended Abstract:**

Is it better to spend \$1,000 on one high-end luxury product or \$1,000 on four mid-end ordinary products? What if the high-end product is more durable and longer-lasting? How do we view consumers who choose to spend the same budget on quality over quantity?

We propose that buying high-end luxury products is more sustainable as they last longer and have higher recycling potential on secondhand markets. To provide support for the notion that luxury consumption is sustainable, we conducted two pilot studies. First, we surveyed 222 owners of shoes and bags, and find that they use their high-end belongings for longer than low-end products ( $M_{\text{highend}} = 2 - 2.5$  years vs.  $M_{\text{lowend}} = 1.5 - 2$  years,  $p = .025$ ). Moreover, individuals are more likely to trash low-end ( $M_{\text{lowend}} = 19.1\%$ ) compared to high-end products ( $M_{\text{highend}} = 7.9\%$ ,  $p = .034$ ), instead of reselling or donating them. Thus, luxury goods have a longer product life cycle. Second, we collected data on over 4,700 products sold by twenty secondhand (e.g., ThredUp) and new (e.g., Nordstrom) online retailers. We find that luxury products are more prevalent in secondhand markets; the brands listed on secondhand websites are higher-end compared to those on the new products websites ( $M_{\text{secondhand}} = 2.4$  vs.  $M_{\text{new}} = 2.0$ ,  $p < .001$ ). Further, secondhand products are listed at higher prices compared to new products ( $M_{\text{secondhand}} = \$226.0$  vs.  $M_{\text{new}} = \$87.2$ ,  $p < .001$ ). Thus, luxury goods are more likely to be sold as secondhand products and recycled.

Despite the fact that luxury goods are more sustainable, past work on luxury consumption suggests that luxury consumers are seen as extrinsically motivated and disliked by others (Van Boven, Campbell & Gilovich, 2010; Christopher & Schlenker, 2000). We seek to directly compare the two spending habits — consumption of luxury, high-end goods versus ordinary goods— while holding constant the amount of money spent and time horizon to deepen our understanding of the inferences that consumers draw about these buying habits. Across a series of studies, we demonstrate that the purchasers of high-end products are viewed negatively compared to those who spend the same amount on ordinary goods because luxuries are deemed unnecessary and superfluous. Furthermore, we show that this negative bias is attenuated when luxury purchases are framed as investments and we explore boundary conditions of the effect.

In Study 1, we establish that luxury consumption is perceived to be a wasteful and materialistic behavior. In a 2-condition, between-subjects design, participants ( $n = 138$ ; lab) judged a shopper spending \$300 on one high-end pair of shoes (luxury condition) versus the same amount on multiple mid-end pairs of shoes (ordinary condition). Compared to the ordinary shopper, the luxury shopper is

viewed as more wasteful and materialistic ( $M_{luxury} = 4.0$  vs.  $M_{ordinary} = 3.1$ ,  $p < .001$ ).

In Study 2, we replicate our finding using more calibrated stimuli (e.g., price of luxury product – \$400 vs. ordinary product – \$100, based on a pretest with 201 online and 204 lab participants), while controlling for the end functionality (e.g., purchasing shoes for work vs. leisure; Keinan, Kivetz & Netzer, 2016). Participants ( $n = 243$ ; online), split across gender, rated a shopper – Sam or Sally – in a 2 (consumption: luxury vs. ordinary) x 2 (function: leisure vs. work) between-subjects design. Again, we find that the luxury shopper is seen as more wasteful and materialistic ( $M_{luxury} = 5.2$  vs.  $M_{ordinary} = 4.4$ ,  $p < .001$ ) regardless of whether the purchase is for work or for leisure. In addition, we coded the open-ended comments and identified four main themes. Mediation analyses based on such themes reveal that luxury consumption is perceived to be more wasteful and materialistic (versus consumption of ordinary products) because the purchase is deemed unnecessary and superfluous (.50; 95% CI from .30 to .71).

Study 3 ( $n = 399$ ; online) replicates results from previous studies that buyers of luxury goods, compared to those who spend the same amount on ordinary goods, are judged more negatively and illustrates that the effect persists even when we manipulate the number of products already owned. Because a person spending money on high-end shoes may be more likely to own many pairs of shoes, we controlled for this issue across conditions. Participants rated a shopper – Sam or Sally – in a 2 (consumption: luxury vs. ordinary) x 3 (number of products owned: few vs. many vs. control) between-subjects design. Again, we find that, controlling for the total amount spent and the time horizon (1 year), buying one pair of high-end shoes, compared to buying multiple mid-end shoes, is seen as more wasteful and materialistic ( $M_{luxury} = 5.3$  vs.  $M_{ordinary} = 4.7$ ,  $p < .001$ ), regardless of the number of products already owned. We also test for mediation and, again, find that the extent to which the purchase is perceived as unnecessary mediates this effect (.36; 95% CI from .16 to .57).

Study 4 ( $n = 187$ ; lab) explores conditions under which we see a reversal in the perception of luxury consumption. When the luxury shopper views her purchase as a onetime investment in a high-end product, she is perceived less negatively than the ordinary goods shopper purchasing multiple products for the same amount of money and time horizon ( $M_{luxury} = 3.5$  vs.  $M_{ordinary} = 4.7$ ,  $p < .001$ ). In fact, when the investment aspect of the purchase is prominent, the luxury shopper is perceived to be less materialistic and wasteful compared to when the investment aspect is not made salient ( $M_{investment} = 3.5$  vs.  $M_{no-investment} = 4.2$ ,  $p = .008$ ).

Across two pilots and four studies, our findings address the notion of sustainable luxury consumption and demonstrate that sustainable luxury, rather than a paradox, is more of a tautology as luxury products are more long-lasting and have a higher resale value than ordinary goods. We propose that marketers of high-end products focus on positioning their products as investments to reduce the stigma associated with luxury consumption.

Sometimes It's Okay to Give a Blender: Mismatched Giver and Recipient Preferences for Hedonic and Utilitarian Gifts

Elanor Williams (Indiana University, USA); Emily Rosenzweig (Tulane University, USA)

**Brief Abstract:**

Gift givers are often torn between fun but frivolous gifts and useful but less fun gifts. We suggest givers favor hedonic gifts, in part because they focus on the moment of exchange when choosing gifts. However, givers may be miscalculating: recipients instead focus on owning the gift and are more satisfied with utilitarian gifts than givers expect, even preferring them to more fun gifts, and find such gifts to be better reminders of their givers.

**Extended Abstract:**

Anticipating which gift will make someone happiest can be challenging. When choosing a gift, givers often find themselves torn between gifts that are fun but frivolous and gifts that are more useful but less enjoyable, too often opting for the former, as scores of dusty knickknacks, unwatched movies, and regrettably-eaten chocolates can attest. Adding to the literature that highlights situations when and reasons why giver and receiver preferences may be misaligned (e.g., Galak, Givi, & Williams, 2016; Gino & Flynn, 2011; Steffel & LeBoeuf, 2014; Zhang & Epley, 2012), we show that givers place undue emphasis on giving hedonic gifts, underestimating recipients' preferences for more utilitarian ones.

Our first study examined people's perceptions of the best gifts they had ever exchanged with a friend. Participants described the best gift they had ever given and the best gift they had ever received, and indicated how fun and enjoyable and how useful and necessary each was. People believed the best gift they had given was more hedonic than utilitarian ( $M_{hed} = 5.54$ ,  $SD = 1.32$  vs.  $M_{util} = 2.86$ ,  $SD = 1.51$ ), but this effect is attenuated for the best gift they had received ( $M_{hed} = 5.92$ ,  $SD = 1.47$  vs.  $M_{util} = 4.46$ ,  $SD = 1.90$ ), resulting in a significant interaction,  $F(1, 131) = 25.99$ ,  $p < .001$ . Participants felt the best gift they had received was much more utilitarian than the best gift they had given, paired ( $132$ ) =  $18.70$ ,  $p < .001$ . Further, this difference held regardless of whether the other person in the exchange was a close other or a causal acquaintance, and was not driven by how material or experiential the gift was.

Study 2 investigated consumers' prospective preferences for gifts. Participants considered a friend for whom they would buy a gift in the next few months, or who would buy them a gift. They indicated how important six dimensions (fun, enjoyable, attractive, useful, needed, practical) would be in determining what they give to their friend, or how important they would like those features to be in determining what their friend would give to them. Recipients want their friend to take utilitarian factors into account more than givers plan to ( $M_{recip} = 5.01$ ,  $SD = 1.43$  vs.  $M_{giver} = 4.76$ ,  $SD = 1.50$ ), and hedonic factors less than givers plan to ( $M_{recip} = 5.36$ ,  $SD = 1.04$  vs.  $M_{giver} = 5.65$ ,  $SD = .94$ ),  $F(1, 240) = 6.01$ ,  $p = .02$ .

Next, study 3 shows that this asymmetry determines givers' and recipients' preferences for specific items. Participants imagined exchanging small stocking stuffer gifts with five friends, and chose which five gifts from a list of fourteen possible options they would opt to give to or receive from their friends. Half of the items were hedonic, like a book of crossword puzzles or a dance music CD, and half were utilitarian, like a corkscrew or set of coasters. Participants wanted to receive a higher proportion of the utilitarian items ( $M = 59.8\%$ ,  $SD = 21\%$ ) than they would choose to give to their friends ( $M = 53.4\%$ ,  $SD = 21\%$ ),  $t(244) = -2.43$ ,  $p = .02$ .

Study 4 examined why givers underestimate how much recipients appreciate utilitarian gifts and gift

features. Participants imagined taking part in a Secret Santa exchange, in which they were going to give or to receive a flash drive. They or their coworker were choosing between either a plain flash drive or a snowman-shaped drive with slightly less storage capacity. Givers were more likely to prefer to give the less-useful-but-more-fun snowman drive ( $M = 2.92$ ,  $SD = 2.25$ ) than recipients were to receive it ( $M = 2.21$ ,  $SD = 1.96$ ),  $t(278.72) = -2.80$ ,  $p = .005$ . Givers were also more likely to report focusing on the moment of exchange (rather than the gift's long-term value;  $M = 3.52$ ,  $SD = 1.24$ ) when choosing the flash drive they preferred than were recipients ( $M = 3.84$ ,  $SD = 1.14$ ),  $t(282) = -2.27$ ,  $p = .02$ . This differential focus on exchanging the gift versus ownership of the gift mediated participants' choice of flash drives, 95% CI:  $-.05$  to  $-.67$ .

Finally, we tested whether there might be benefits to giving utilitarian gifts that givers do not anticipate. In Study 5, participants considered either a useful or a fun gift they had given or received in the past and reported the degree to which it reminded the recipient of the giver, and how good a gift it was. Recipients think that fun gifts as commonly prompt them to think positively of givers ( $M = 5.65$ ,  $SD = 1.34$ ) as givers expect such gifts to do so ( $M = 5.46$ ,  $SD = 1.29$ ),  $t(297) = 1.25$ ,  $p = .21$ , but they are more likely ( $M = 5.72$ ,  $SD = 1.44$ ) than givers are ( $M = 5.28$ ,  $SD = 1.44$ ) to state that a useful gift reminds them of the giver than givers expect,  $t(300) = 2.67$ ,  $p = .008$ . In addition, givers think that the fun gifts they gave are slightly, although not significantly, better gifts ( $M = 6.05$ ,  $SD = 1.01$ ) than their useful gifts ( $M = 5.87$ ,  $SD = 1.09$ ),  $t(296) = -1.49$ ,  $p = .14$ . However, recipients state that the useful gifts they received are significantly better gifts ( $M = 6.31$ ,  $SD = 1.05$ ) than the fun gifts that they had received ( $M = 6.03$ ,  $SD = 1.32$ ),  $t(284.48) = 2.08$ ,  $p = .04$ , equal variances not assumed.

Overall, our work suggests that to make their recipients happier, givers might consider more what their recipients might need and less what they might enjoy. This tendency to give fun gifts even affects retailers, as follow-up research suggests that recipients are more likely to return gifts because they are insufficiently useful rather than insufficiently fun. At the very least, givers underestimate the degree to which recipients often appreciate a gift with useful features, as well as the giver of such a gift. Givers might wish to remind themselves that sometimes, it's okay to give that blender.

## **Disposing of Possessions: How Past and Future of Used Products Affect Owner Decisions - Symposium**

*Sloane (2nd Level)*

This symposium explores how the past and potential future of used products affect the decisions of owners regarding how to dispose of them (e.g., sell, donate, share, rent, store, discard, recycle). The history of a possession can make it special or cherished to owners, who become emotionally attached—and this can influence owners' disposal preferences. Similarly, considering the future of a possession via transformation messaging can change the way owners wish to dispose of it. All four papers in this session examine how the meaning created by a possession's history or potential future can affect an owner's disposal decisions.

*Chair: Antje Graul, Utah State University*

To Sell or Donate: Why Special Possessions Are Donated and Not Sold?

Saurabh Rawal (University of Alberta, Canada); Robert J Fisher (University of Alberta, Canada); Jennifer J Argo (University of Alberta, Canada)

**Brief Abstract:**

Why do consumers donate rather than sell their special possessions? Although it seems logical that consumers should seek financial compensation when they dispose of possessions that they consider special, we find that selling a special possession is a threat to the owner's self-concept, and as a result special possessions are less likely to be sold (or more likely to be donated) than non-special possessions.

**Object History Value Shapes Owner Decisions in the Sharing Economy**

Charis Li (University of Florida, USA); Chris Janiszewski (University of Florida, USA)

**Brief Abstract:**

Individual owners of valuable, durable objects determine the supply and pricing in the peer-to-peer sharing economy (e.g., Airbnb). We propose that object history value, a value owners assign to their possessions given the history the objects have witnessed, can influence owners' willingness to share their possessions with others through the sharing economy, and the price they set. Three studies document these effects and draw implications regarding how sharing platforms can increase supply, facilitate matching of idiosyncratic supply and demand, and grow the sharing markets.

**When Cherished Possessions Are Offered for Rent: The Role of Emotional Attachment in Consumer-To-Consumer Rentals**

Antje Graul (Utah State University); Aaron Brough (Utah State University); Mathew Isaac (Seattle University)

**Brief Abstract:**

When owners dispose of possessions to which they feel attached, they typically care about how the product will be used. We propose that owners' preferences for usage frequency depend on whether the product is offered for sale or for rent. Since frequent usage can both increase users' enjoyment and cause greater product wear-and-tear, this creates a tradeoff for owners. Prior research is agnostic as to which of these motivations would dominate owners' decisions when disposing of cherished possessions, but we find that strongly-attached (vs. weakly-attached) owners tend to prefer renters who signal low-usage frequency and buyers who signal high-usage frequency.

**Knowing What it Makes: Product Transformation Awareness Increases Recycling**

Karen Page Winterich (Pennsylvania State University, USA); Gergana Nenkov (Boston College, USA); Gabriel Gonzales (Pennsylvania State University, USA)

**Brief Abstract:**

Recycling campaigns abound, but do consumers understand what becomes of those recyclables? This research proposes that product transformation awareness (PTA; i.e., thinking about new products made from recyclables) increases recycling intentions and behavior. By considering positive explicit outcomes of the recycling process via PTA, consumers perceive greater benefits of recycling, thereby increasing their likelihood to recycle. Consistent with this theorizing, this effect only occurs for those who do not chronically consider the potential future outcomes of their decisions. Studies in the lab and in the field demonstrate the effectiveness of product transformation in increasing both recycling

intentions and behavior.

## **Marketing Elements and Consumer Perception - Competitive Paper Session**

*Scarborough 3 (Lobby Level)*

*Chair: Lam An, University of Central Florida, USA*

### **Keep Your Distance: The Impact of Facial Prominence on Consumers' Evaluation of Marketing Communications**

Lam An (University of Central Florida, USA); Ze Wang (University of Central Florida, USA); Xia Wang (Renmin University of China); Jonathan Hasford (University of Central Florida, USA)

#### **Brief Abstract:**

Marketing communications frequently feature human faces to communicate information about the brand. However, researchers and executives alike have largely overlooked the influence of facial prominence, defined as the ratio between the area of the model's face and the total area of the marketing displays, on consumer responsiveness to various types of persuasive appeals. Across four field and two lab studies, we demonstrate that consumers prefer marketing communications with a smaller facial prominence. We provide evidence that this effect is based on a consumer's desired interpersonal distance and examine how interpersonal similarity impacts our findings.

#### **Extended Abstract:**

Print ads, billboards, online banners, and product packaging frequently feature human faces. While existing literature suggests that incorporating a face into marketing communications is beneficial, research has been surprisingly silent on issues related to the size of a face featured within a marketing message. The current research addresses this gap by examining how facial prominence in marketing communications affects consumer preferences.

We define facial prominence as size of a source's face within a marketing communication relative to the overall size of a marketing message. Fridlund (2017) proposes that facial displays, including the size of one's face, help communicate unobservable information about oneself to others. According to this view, personality traits including friendliness or dominance can be inferred simply from the size of one's face in a photo. For example, faces with larger prominence have been associated with enhanced perceptions of intelligence and ambition (Schwarz and Kurz 1989). Based on these theories, one may expect enhanced facial prominence to be beneficial in marketing communications. However, we propose that facial prominence affects perceptions of interpersonal distance between the target and source in marketing communication, which subsequently impacts consumer preferences.

The space between two or more people (interpersonal distance) influences the dynamics of social interactions. Individuals often desire a certain level of personal space and once one's personal space is intruded, the person may experience threat (Lloyd 2009), discomfort (Xu, Shen, and Wyer 2011), and a decrease in their desire to interact with others (Sommer 2009). In marketing contexts, consumers often value interpersonal distance from others and violations of desired interpersonal distance can negatively impact consumer attitudes and evaluations of a shopping experience (Knoeferle, Paus, and Vossen 2017; O'Guinn, Tanner, and Maeng 2015). Therefore, as the size of a face increases, individuals may

feel their personal space is being violated. Thus, a product package, advertisement, or other type of persuasive communication is likely to elicit discomfort when a larger face is featured and thus appears closer to the consumer. As a result, we predict that consumers will prefer a smaller facial prominence in marketing communications. This prediction was tested across six studies.

In studies 1a, 1b, and 1c, we collected data from three major e-commerce websites in China and the United States with three different product categories and dependent variables of interest. Facial prominence (defined as the ratio between the area of the model's face and the total area of the product image) from the data collected was then calculated by using an image and video processing package included in Python. Study 1a investigated the effect of facial prominence on the number of consumer reviews within the television product category on one of the largest business-to-consumer (B2C) e-commerce platforms in China. Study 1b looked into the effect of facial prominence on women's wear-to-work dress's sales ranking on Amazon.com. Study 1c explored this effect on monthly sales of men's casual shirts on another major ecommerce site in China. These product categories were chosen because of the popularity of using models to display these products. These three studies demonstrated consistent results that if the models' faces take up more area of the product images (higher facial prominence), marketing relevant outcomes such as products' popularity, sales ranking, and monthly sales will be negatively affected. Detailed descriptive statistics and model estimations of studies 1a, 1b, and 1c can be seen in tables 1, 2, and 3, respectively.

Studies 2 and 3 replicated findings from studies 1a, 1b, and 1c with lab experiments and tested the underlying mechanism of desired interpersonal distance. Study 2 examined the effect of facial prominence with a flyer of a female house cleaner using 172 participants recruited from Amazon MTurk. Study 3 looked into this effect with a flyer of a male real-estate agent using 78 participants from a major Southern university. Facial prominence was manipulated (high versus low facial prominence) while desired interpersonal distance, advertising evaluations (study 2), and purchase intention (study 3) were measured. The scenarios and measures used can be found in the Appendix. Both these studies demonstrated consistent results and showed that desired interpersonal distance mediated the effect of facial prominence on marketing outcomes (advertisement evaluation and purchase intention). Detailed results and model coefficients of studies 2 and 3 can be seen in figures 1 and 2, respectively.

Study 4 examined the boundary condition of interpersonal similarity with another lab study. Interpersonal similarity captures the degree to which one is perceived to be similar or dissimilar to another (Heider 2013). Interpersonal similarity effects can be explained by social identity theory, which proposes that as similar others move closer to oneself, social acceptance and intimacy will increase (Kurzban 2001). As a result, we predict that perceived similarity between the target and source of a marketing communication should make the negative effect of high facial prominence to go away. In this study, 185 participants from a major Southern university evaluated an advertisement of a personal trainer in a 2 (facial prominence: high versus low) x 2 (similarity: similar versus not similar) between-subjects design. Similarity was manipulated by saying either the personal trainer got a degree from the same school the participants are at or from a different school. As predicted, in the non-similar condition, lower facial prominence was preferred but in the similar condition, the effect goes away (Figure 3).

In summary, findings from three field and three lab studies provided support for our hypothesis that

larger facial prominence can have a negative impact on marketing-related outcomes. This effect is mediated by the desired interpersonal distance and moderated by interpersonal similarity between the target and source in marketing communication.

## **Better Together: How Bundling Increases Experiential Perceptions of Material Goods** Eugenia Wu (University of Pittsburgh, USA); Sarah Moore (University of Alberta, Canada); Peggy Liu (University of Pittsburgh, USA)

### **Brief Abstract:**

Although experiential purchases generally lead to more positive consumer and firm outcomes than material purchases, little is known about how firms might increase experiential perceptions of material goods. We examine product bundling as one possibility. Eleven studies show that consumers perceive material items as more experiential when bundled. This effect occurs when comparing bundled products to their components, and when comparing sets of products that are bundled vs. unbundled (e.g., single vs. separate screens), provided that the products are sufficiently complementary (can be used together). This effect occurs because bundling constrains the perceived potential uses for the bundled items.

### **Extended Abstract:**

Imagine that you purchase a folding chair and a bag of marshmallows. Would you perceive these items differently if you purchased them as a bundle rather than separately? Objectively, whether the items are bundled or not should have little impact on their perceived nature. However, we propose that the act of bundling material goods together causes consumers to view the bundled items as more experiential, increasing the extent to which they are characterized by the positive features of experiences (e.g. increased satisfaction, happiness, etc.; Gilovich, Kumar, & Jampol, 2015; Gilovich & Kumar, 2014). Specifically, we theorize that bundling constrains the number of uses that consumers generate for bundled items, and that this usage constraint increases experiential perceptions of material goods.

For most products, it is possible to generate numerous ways in which a given item could be used. For instance, a bag of marshmallows could be used to make Rice Krispies Treats™ or to decorate a gingerbread house. Similarly, a folding chair could be used as a parade-watching perch or as part of a “musical chairs” game. When products are presented as a bundle (e.g., marshmallows and a folding chair together) however, we suggest that the set of uses considered for the items shifts to incorporate all bundle components, resulting in fewer (i.e., more constrained) uses (e.g., camping). To support this argument, we draw from the multifinality constraints effect (Köpetz et al. 2011). This effect states that the more objectives that one would like to meet at any given point (i.e., more constraints), the fewer the options that will accomplish them all. In our context, we suggest that although one might come up with multiple uses for separate items, bundling increases the number of items (constraints) to be incorporated into potential uses, thereby constraining the number of uses that come to mind.

The present research links this idea of usage constraint to the properties characterizing experiential versus material purchases, and therefore, to perceptions of experientiality. Relative to material items, experiential purchases are typically characterized by more constrained (i.e., fewer) uses. Whereas material items can often be used flexibly in a number of contexts and ways, experiential goods tend to be used in a specific manner, place and time. To illustrate, a material good such as headphones



(Goodman and Lim; Study 1A) can be used to cancel out background noise, listen to music, or to have a hands-free call. In contrast, an experience such as a concert (Goodman and Lim; Study 1A) occurs at a specific time and location, and is generally consumed in a particular way—that is, by rocking out. Consistent with being more constrained in use, experiences are seen as more unique and individualized (specific) than material goods (Carter and Gilovich 2012; Dai et al. 2017; Goodman and Lim 2018) and as less interchangeable (Rosenzweig and Gilovich 2012). Experiences are also used less frequently than material goods (Weidman and Dunn 2016), again suggesting that they may have a more restricted set of uses and usage occasions. We build on this conceptualization of experiential versus material goods to propose that by constraining the set of potential uses for its component items, bundling increases the extent to which those items are characterized by experiential properties, heightening the extent to which those items are seen as experiential.

We tested these hypotheses in ten studies. Table 1 presents the designs and stimuli for each study, and Table 2 presents the main results. In most studies, participants were shown a material goods purchase (e.g., a bag of marshmallows; a folding chair; a bag of marshmallows and a folding chair together) and asked to indicate their experiential-material perceptions of the purchase.

Studies 1A-1D demonstrated that bundling increases experiential perceptions across five sets of stimuli. For example, participants rated a bundled purchase of sunscreen and a beach towel as more experiential than a separate purchase of either sunscreen or a beach towel. Studies 2A and 2B replicated this basic effect and demonstrated that bundling increased the extent to which material items were characterized by experiential features including heightened anticipated happiness (Nicolao, Irwin, & Goodman, 2009; Van Boven & Gilovich, 2003), social interactions (Caprariello & Reis, 2013), word-of-mouth (Bastos & Brucks, 2017), and identity overlap with the purchase (Carter & Gilovich, 2012).

Although the results of studies 1A-2B were consistent with the idea that bundling increases experiential perceptions, these studies contrasted single product purchases with bundled ones (Adams & Yellen, 1976; Popkowski-Leszczyc & Häubl, 2010), leaving open the possibility that our effects were driven by the greater number of products in the bundle condition, rather than by the act of bundling. Critically, study 3 conceptually replicated our findings by manipulating whether the same set of products was presented as bundled (i.e., on the same screen) or not (i.e. on separate screens).

Studies 4 and 5 found support for usage constraint as an underlying mechanism for our effect. In study 4, participants listed potential uses and rated number of perceived uses for either a two-product bundle or for each product separately; this usage constraint measure mediated the effect of bundle condition on experiential perceptions (Figure 1). Study 5 manipulated the number of uses for a two-product bundle to be one or five, and found that participants rated the bundle as being more experiential when it had one use relative to five.

Study 6 identified a key moderator and showed that our effect emerged only when the bundled items are sufficiently complementary (i.e., can be used together; Figure 2).

Our research makes several contributions. First, we examine how external marketing actions (i.e., bundling) can shift material goods along the experiential-material continuum. Second, we highlight a key difference between material and experiential purchases by providing initial evidence that

experiential purchases are characterized by more constrained potential uses. Moreover, in linking usage constraint to experiential perceptions, our work contributes to general work on advantages of constraint (e.g., Moreau & Dahl, 2005). Third, we extend work on bundling by showing that bundling constrains usage and increases experiential perceptions and associated outcomes.

## Perceiving Attitude Change: How Qualitative Change Increases Perceptions of Evaluative Shifts

Christopher Bechler (Stanford University, USA); Zakary Tormala (Stanford University, USA); Derek Rucker (Northwestern University, USA)

### **Brief Abstract:**

Attitude change and persuasion are extensively studied topics in consumer psychology, but we have little insight into perceived attitude change—for example, what shapes marketers' and consumers' assessments of the magnitude of a shift in someone's opinion. The current research represents an initial investigation of this issue. Multiple experiments show consistent evidence that qualitative attitude change (e.g., negative to positive) is perceived as greater than otherwise equivalent non-qualitative attitude change (e.g., negative to less negative) because qualitative change is easier to process. This effect has meaningful marketing consequences and implications for future attitude change research.

### **Extended Abstract:**

Imagine an advertising strategy designed to enhance consumers' attitudes toward a particular company (e.g., Facebook, Uber, or Wells Fargo; Wiener-Bronner, 2018). Whose improvement would the company's executives perceive as the greatest? Would it be Consumer A, who shifts her attitude toward the company from very negative to just slightly negative, or Consumer B who shifts her attitude from slightly negative to slightly positive? Or would it be Consumer C who shifts her attitude from slightly positive to very positive?

Attitude change and persuasion are among the most highly studied topics in social and consumer psychology, yet little is known about the factors that drive perceived attitude change. This is surprising given that people observe and interpret on attitude change on a regular basis. Marketers are frequently required to interpret attitude change and consumers witness attitude change daily as well—learning, for example, about a friend's souring on a new restaurant or a politician's change of course on a social issue after being elected. What determines whether these changes seem large or small? In the example above, which consumer would be perceived as changing the most?

One possibility, the null hypothesis, is that all three consumers would be perceived as changing the same degree. That is, the type of change that has occurred might have no impact on the perceived magnitude of that change. Especially in contexts in which people can easily calculate the degree of attitude change that has taken place (e.g., 2 points on a 9-point attitude scale), it could be that they attend solely to the objective magnitude of change to assess perceived change. Alternatively, an attitude strength perspective (Petty & Krosnick, 1995) might predict that people perceive Consumers A and C as changing the most because they shift in attitude extremity (extremity hypothesis). Attitude extremity is considered a central dimension of attitude strength and changes in attitude strength correlate with changes in behavior. Therefore, Consumers A and C might be perceived as experiencing the most meaningful change, making their change seem the greatest. Although these hypotheses have merit, we posit that people would perceive Consumer B as having changed the most because her

attitude crossed a neutral threshold and shifted from one valence to another. In essence, we propose that people perceive qualitative change as greater than non-qualitative change. In the attitudes context, this means that changes of valence (or changes of type; e.g., from negative to positive) would be viewed as greater than changes within valence (or changes of degree; e.g., from very negative to less negative or from somewhat positive to more positive). Operationally, we argue that even when the objective magnitude of attitude change is held constant—say, 2 points on the 9-point attitude scale—individuals will perceive greater change when that change crosses the neutral midpoint compared to when it does not. Our theorizing is rooted in past research on categorical perception and processing fluency: Because qualitative changes are easier to process than non-qualitative changes and ease of processing is inherently linked to magnitude (e.g., bigger differences are easier to see), we postulate that qualitative changes are perceived as greater in magnitude. Across 6 primary experiments and a series of supplemental studies (total  $N=3,178$ ), we find consistent support for our prediction.

In Experiments 1-4 (total  $N=1,204$ ), participants read that one person, Bob, attempted to change another person's, Frank's, mind about a particular policy. All participants read that Bob made some interesting points and ultimately moved Frank's opinion. However, Frank's attitude change varied in type based on random assignment. In the qualitative change condition, participants read that Frank shifted his view in valence (e.g., negative to positive). In the other conditions, participants read that Frank changed by an equivalent amount within negative (e.g., very negative to somewhat negative) or within positive (e.g., somewhat positive to very positive) valence. As hypothesized, participants who saw Frank change qualitatively perceived the change as greater than those who saw Frank change an identical amount non-qualitatively,  $ps<.01$ . This effect was robust to numerous procedural variations.

Experiment 5 examined the psychological mechanism behind the qualitative change effect. Six hundred sixteen participants read that an individual, Ashley, had been thinking about the benefits and drawbacks of self-driving cars. All participants read that Ashley had an initial opinion about self-driving cars, but later shifted her opinion by 12 points on a scale from -50 (strongly opposed) to +50 (strongly in favor), with 0 being neutral. In the qualitative change condition, participants read that Ashley was at first "somewhat opposed" (-6) to self-driving cars, but shifted to "somewhat in favor" (+6). In the non-qualitative change conditions, participants read that Ashley moved from "pretty opposed" (-18) to "less opposed" (-6) or from "somewhat in favor" (+6) to "more in favor" (+18). Again, participants perceived qualitative change as greater than non-qualitative change,  $p<.001$ . Additionally, participants perceived qualitative change as easier to process,  $p<.01$ , and as implying greater future behavior change,  $p<.001$ . Mediation analysis indicated that qualitative changes were easier for individuals to detect and understand, leading to greater perceived change and inferences of greater behavior change, 95% CI=[.013, .063].

Experiment 6 examined a real-world consequence of the qualitative change effect, demonstrating that the effect has implications for people's voting intentions in a political context. One hundred fifty-two participants read about three politicians who had shifted by the same amount to become more against a specific policy. Importantly, only one of the three politicians' change was qualitative in nature. Participants reported that they believed the politician who shifted qualitatively had shifted the most,  $p<.001$ , and that they were least likely to vote for this politician,  $p<.001$ , despite viewing all three targets simultaneously and having the option to report that all politicians changed equally.

Taken together, these results highlight the importance of better understanding attitude change

perceptions. Attitude change that shifts across valence is perceived as greater because it is easier to process, and this finding has profound implications for consumer behavior and for consumer research more generally.

## Is Nestlé a Lady? Brand Name Linguistics Influence Perceived Gender, Warmth and Brand Loyalty

Ruth Pogacar (University of Calgary, Canada); Justin Angle (University of Montana); Tina M. Lowrey (HEC Paris, France); L. J. Shrum (HEC Paris, France); Frank R Kardes (University of Cincinnati, USA)

### **Brief Abstract:**

Feminine brand name gender increases perceived warmth, which increases brand loyalty. Longer names ending in a vowel (Burberry) sound more feminine/warmer than shorter names ending in a consonant (Ford). Using experimental and observational methods with hypothetical and real brands, we show that people feel more loyal toward feminine brand names and predict that they are more successful. In fact, Interbrand top brands have more feminine names than less successful brands. The feminine name advantage is greater for hedonic than utilitarian products, but is neutralized when the typical user is male, and reversed when warmth is not a desirable attribute.

### **Extended Abstract:**

There are many ways a name can convey information about a brand. Names like Pizza Hut use semantic appositeness to clearly indicate the brand's purpose (Klink, 2001). Even the individual phonemes of a brand name can influence product perceptions and choice. For example, an ice cream called "Frosh" is preferred to an ice cream called "Frish" because the "o" sound suggests creaminess, which is a desirable attribute (Yorkston & Menon, 2004). Conversely, a two-seater convertible called "Gimmel" is preferred to one called "Gommel" because the "i" sound suggests smallness and fastness (Lowrey & Shrum, 2007).

Brand names can also suggest gender; although a name may 'sound' masculine or feminine, most people would have difficulty explaining why. Names – including brand names – sound masculine or feminine due to listeners' conditioned associations, i.e., people's expectations based on repeated experience (Cassidy et al., 1999). Over time, people have learned to infer name gender from three key linguistic characteristics: phonemes, number of syllables, and stress (Barry & Harper, 1995). Specifically, feminine names tend to contain more syllables, with stress on the second or later syllable, and often end in a vowel, especially the "a" sound (as in Lisa or Visa; Lieberman & Bell, 1992; Slater & Feinman, 1985). Conversely, masculine names tend to have fewer syllables and end in a consonant (as in Brad or Ford). Thus, while Coca-Cola, Burberry, and Nestlé are all successful brands for many different reasons, one thing they have in common is that their names have feminine linguistic characteristics. While there is no obvious reason to view a brand like Coca-Cola as feminine or masculine, whether consumers recognize it or not, brand names contain the same linguistic features commonly associated with gender in person names.

We examine when brand names with feminine versus masculine linguistic characteristics are advantageous. Beyond simply matching brand name gender to product category or user, we posit a process based on the Stereotype Content Model (Fiske et al., 2002) by which feminine brand names convey warmth. This can positively influence affiliative intentions, including purchase intentions, willingness to recommend, and ultimately, brand loyalty.

### Warmth and Competence

Femininity is generally associated with warmth, positivity, pleasantness, and goodness (Cuddy, Fiske, & Glick, 2007; Fiske et al., 1999). According to the Stereotype Content Model, warmth represents the degree to which a target seems warm, tolerant, good-natured, and sincere whereas competence represents the degree to which a target seems competent, confident, independent, competitive, and intelligent (Cuddy, Fiske, & Glick, 2007; see Fiske, 1998). Of the two, warmth is primary because it distinguishes friend from foe (Cuddy, Glick, & Beninger, 2011; Fiske, 2018). Importantly, when a target is both warm and competent, people seek affiliation (Fiske et al., 1999).

### Brand Loyalty and Performance

Affiliation, as conceptualized above, maps onto brand loyalty as defined by consumers' continued purchasing and positive word-of-mouth (Swan & Oliver, 1989). Moreover, brand loyalty is driven by two primary factors: trust and positive affect (Chaudhury & Holbrook, 2001). These qualities derive from warmth, as defined by the Stereotype Content Model. Thus, if certain combinations of sound, length and stress convey gender associations that lead to inferences of warmth this may enhance brand loyalty, as long as the brand is also perceived to be competent, because warmth - in combination with competence - leads to affiliation (Becker & Asbrock, 2011; Cuddy et al., 2007; Fiske et al., 2002).

Across six studies, we demonstrate the broadly positive effects of linguistically feminine brand names for both observed and predicted loyalty and performance, in the context of both well-known and hypothetical brands. Specifically, we find that feminine brand names are perceived to be warmer than masculine brand names, leading consumers to be more loyal, provided the brand is also perceived as adequately competent (Study 1). Moreover, hypothetical brand names carefully constructed to vary only on gender differentially influence perceptions of warmth, loyalty intentions, and overall performance expectations (Study 2). These effects are stronger for hedonic versus utilitarian products because warmth is more central to the evaluation of hedonic products (Study 3). However, the advantage for feminine names is neutralized when the typical user of a product is male (Study 4) and masculine brand names are preferred when warmth is not a desirable product attribute (Study 5). However, since warmth is generally a desirable attribute for most products, and most products are used by both men and women, Interbrand top brands are more likely to have feminine than masculine names (Study 6).

## Improving Consumer Conversations - Symposium

### *Scarborough 4 (Lobby Level)*

(NOTE: An abstract was not requested in the symposia/session call for papers information, but I've provided an attempt here taken from the 500 word session overview.) How can we help make consumer conversations better? This session integrates a variety of perspectives showcasing the importance of language and paralinguistics in consumer conversations to help address this question. For example, can linguistic evidence of an employee's construal level while conversing with a customer shape the latter's perceptions of the employee? Can subtle paralinguistic cues in text messages shift perceptions towards the conversation partner, including those of "artificial" conversants (e.g. AI/machine chatbots)? And how might products be valuable in helping to facilitate conversations among consumers? This session sheds light on these and other questions as it presents new insights from research examining language and paralinguistics in conversations.

**Chairs: Grant Packard, York University, Canada; Jonah Berger, University of Pennsylvania, USA**

## Linguistic Concreteness in Customer-Firm Conversations

Grant Packard (York University, Canada); Jonah Berger (University of Pennsylvania, USA)

### **Brief Abstract:**

We demonstrate that a conversation partner's linguistic construal (i.e., concreteness) of focal topics can impact the listener's perception of the partner's closeness to the object of discussion, and perceived closeness of the object itself. Two field data studies find that concreteness in customer service employee language leads to heightened perceptions of the employee's helpfulness and increased customer purchases. These effects sustain controlling for the interactive effect of customer and employee concreteness over conversational turns. The effect of linguistic concreteness on helpfulness is mediated by perceptions that the employee is psychologically closer to the customer's needs.

## Nonverbal Mimicry of Textual Paralanguage

Andrea Webb Luangrath (University of Iowa); Joann Peck (University of Wisconsin - Madison, USA); Victor Barger (University of Wisconsin - Whitewater, USA)

### **Brief Abstract:**

This research explores nonverbal mimicry in response to textual paralanguage (TPL) in online conversations. We demonstrate that consumers mimic nonverbals after being exposed to messages containing TPL. This occurs due to greater levels of empathy evoked by exposure to TPL. Mimicry is more likely to occur in the same sensory modality for auditory and visual TPL, but not for tactile TPL. We conjecture that auditory and visual TPL (vs. tactile TPL) are better at conveying their modality-specific qualities.

## To Err and Pause is to be Human: How Unintentional Cues in Written Communication Can Signal Humanness

Shirly Bluvstein (New York University, USA); Johann Ludwig Melzner (New York University, USA); Alixandra Barasch (New York University, USA); Juliana Schroeder (University of California Berkeley, USA)

### **Brief Abstract:**

We demonstrate that seemingly unintentional aspects of written communication, such as making a typographical error or pausing to think, can lead readers to infer that a communicator is more likely to be human. This inference can further lead readers to believe the communicator has greater mental capacity (e.g., warmth), and make them more willing to share personal information with the communicator. Four experiments using ambiguous conversational counterparts (e.g., customer service agents who could be bots) provide support for our predictions. Our results provide insight into when people share their personal information, with implications for building brand trust and consumer privacy.

## Paying to Purchase a Conversation Topic

Hillary J.D. Wiener (University at Albany, SUNY, USA); Josh Wiener (Oklahoma State University, USA)

### **Brief Abstract:**

Can products play a role in facilitating conversation? We look at whether consumers predict that non-self-relevant products can facilitate conversation, and when they will pay a premium to purchase products that might do so. We investigate this issue by examining consumers' likelihood to purchase expensive products that are associated with product related stories, such as those about the product's history or making. Importantly, the stories are about the products, rather than the purchaser, and are not self-relevant. We predict and reveal that people will pay a premium for a story-associated product if they think they can use it to facilitate conversation.

## **Session 7**

### **Social Class, Status, and Identity - Competitive Paper Session**

*Verlst (2nd Level)*

*Chair: Christopher Cannon, Northwestern University, USA*

#### The Dark Side of Luxury: Social Costs of Luxury Consumption

Christopher Cannon (Northwestern University, USA); Derek Rucker (Northwestern University, USA)

### **Brief Abstract:**

Prior literature suggests that luxury consumption provides consumers with a myriad of social benefits. In contrast, the present research explores the idea that luxury consumption carries significant social costs for actors. Although luxury consumption leads actors to be ascribed higher status, they are perceived as lower in warmth. Consequently, in contrast to prior research, luxury consumption should yield both positive and negative social consequences for an actor as a function of whether status or warmth is relevant for a decision. Four experiments demonstrate the social costs of luxury consumption, provide evidence for an impression management account, and illustrate boundary conditions.

### **Extended Abstract:**

Veblen (1899/1981) coined the term conspicuous consumption to indicate the purchase and display of expensive, luxury items by the rich to signal their wealth and social prominence to others. In more contemporary approaches, researchers have examined the consequences of luxury consumption in more general forms, such as wearing brands with visible logos, namedropping luxury brands, and attending high-status social events (Griskevicius et al., 2007; McFerran & Argo, 2014; Nelissen & Meijers, 2011; Rivera, 2010; Sundie et al., 2011; Wang & Griskevicius, 2014).

The prominence of luxury consumption might be due, in part, to the fact it can be a powerful social influence strategy. Nelissen and Meijers (2011) found that actors received more money from a partner who wore a shirt with a luxury brand logo compared with a non-luxury brand logo. Similarly, Lee, Ko, and Megehee (2015) found that individuals who wore luxury brands versus non-luxury brands or no

logos were viewed as more suitable for an internship, deserving of a higher salary, and received larger charitable donations. Luxury consumption also affords mating opportunities. For example, Sundie and colleagues (2011) found that men who owned a luxury (vs. non-luxury) car were more likely to be chosen by women for short-term romantic dates.

Although luxury consumption has been found to be a powerful social influence device, the present work explores when luxury consumption backfires. We draw upon the person perception literature in which people categorize others by their ability (e.g., status) and their intent (e.g., warmth; Abele, Cuddy, Judd, & Yzerbyt, 2008; Fiske, Cuddy, & Glick, 2007). We propose that, while luxury consumption enhances social influence via positive attributions about status, luxury consumption reduces social influence via negative attributions about warmth. We explore two competing mechanisms for this effect: impression management motives (Godfrey, Jones, & Lord, 1986; Leary & Kowalski, 1990) and envy (Fiske, Cuddy, Glick, & Xu, 2002). We find that luxury consumption raises concerns that the actor is engaging in impression management, which negatively affects participants' ascribed warmth. Finally, based on our theoretical perspective, we propose that the successfulness of luxury consumption on social influence depends on the diagnosticity of the warmth (vs. status) perception.

Experiment 1. Participants ( $N = 119$ ) were presented with a picture of a man wearing either a t-shirt (non-luxury condition) or an identical shirt that displayed a Gucci trademark (luxury condition). Replicating prior work, participants perceived the luxury (vs. non-luxury) consumer to have higher status ( $M = 4.81$  vs.  $M = 3.83$ ,  $p < .001$ ). However, participants perceived the luxury (vs. non-luxury) consumer to also have lower warmth ( $M = 3.96$  vs.  $M = 4.62$ ,  $p = .003$ ). In addition, participants perceived the luxury (vs. non-luxury) consumer to have higher impression management motives ( $M = 5.14$  vs.  $M = 2.20$ ,  $p < .001$ ), but not greater feelings of envy ( $p = .234$ ). Impression management motives mediated the relationship between luxury consumption and warmth perceptions; see Figure 1.

Experiment 2. The second experiment aimed to conceptually replicate experiment 1, with a different luxury brand. We also measured envy from other people's perspective, to rule out socially desirable responding. Participants ( $N = 120$ ) were presented with a picture of a purse with no label (non-luxury condition) or a visible Burberry checkered pattern (luxury condition). Participants were then asked to imagine the woman that owns it. Replicating experiment 1, participants perceived the luxury (vs. non-luxury) consumer to have higher status ( $M = 5.57$  vs.  $M = 5.05$ ,  $p = .019$ ), but lower warmth ( $M = 3.71$  vs.  $M = 4.35$ ,  $p = .011$ ). In addition, we found that participants perceived the luxury (vs. non-luxury) consumer to have higher impression management motives ( $M = 5.41$  vs.  $M = 3.89$ ,  $p < .001$ ). As in the first experiment, impression management motives mediated the relationship between luxury consumption and warmth perceptions; see Figure 2.

Experiment 3. The third experiment demonstrates both positive and negative consequences of luxury consumption in the form of observers' choice to interact with an actor. Participants ( $N = 115$ ) were assigned to read two questionnaires, counterbalanced, which were presumably filled out by other participants. One of the questionnaires mentioned luxury brands, whereas the other questionnaire did not. Participants were asked to make a choice as to which participant they would work with in an upcoming task for either the job of corporate publicist (i.e., status-diagnostic role) or a human resources coordinator (i.e., warmth-diagnostic role). A significant relationship emerged between luxury consumption and job type ( $\chi^2 = 38.42$ ,  $p < .001$ ); participants chose the actor that engaged in luxury (vs. non-luxury) consumption for the corporate publicist (vs. human resources coordinator) job; see



Figure 3.

Experiment 4. Experiment 4 examined a boundary condition for the social costs of luxury consumption. Namely, based on an impression management motivation, the social costs should dissipate when consumers do not hold lay theories that luxury consumption is related to impression management. Participants (N = 102) were assigned to one of the two conditions from the first experiment. In addition, we measured lay beliefs that luxury good consumers typically have impression management motives. We found that impression management lay beliefs moderated the link between luxury good consumption and warmth inferences ( $B = -.24$ ,  $SE = .11$ ,  $p = .034$ ). Participants with stronger lay beliefs perceived the luxury (vs. non-luxury) consumer to have lower warmth (65.7%), whereas participants with weaker lay beliefs viewed them as equally warm (34.3%).

In summary, the present work allows for a better understanding of when and why luxury consumption is an effective versus ineffective social influence strategy. Observers infer from luxury consumption both higher status and lower warmth. This negative social reaction or “dark side of luxury consumption” appears driven by perceptions of impression management motives rather than envy. The present work introduces opportunities to explore the more complex dynamics of luxury consumption and consumer behavior.

### Fashionably Late: Signaling Sociometric Status Through Conspicuous Consumption of Leisure Time

Kıvılcım Döğlerlioğlu Demir (Sabanci University); Andy H. Ng (Sabanci University); Cenk Koçaş (Sabanci University)

#### **Brief Abstract:**

This research examines how people react to individuals who arrive late to social gatherings. We demonstrate that people infer higher sociometric status for late-arriving (vs. on-time) targets, which in turn motivates people to affiliate with these targets. Furthermore, we show that arriving late to social events have downstream consequences for attitudes and behavioral intentions of observers, such that high sociometric status of targets, as signaled by their late arrival times, make their consumption choices more likable and more likely to be imitated. And this imitation tendency is stronger for observers who have a high (vs. low) chronic desire for status.

#### **Extended Abstract:**

This research examines how people react to individuals who arrive late to social gatherings. Late arrival to social events is a costly act, associated with opportunity costs (e.g., missing out opportunities to meet new friends). However, anecdotal evidence suggests that some people do arrive very late to social gatherings and they are considered “fashionable”, implying that there might be an upside to being “fashionably late”. What would that be?

Costly signaling theory (Grafen, 1990) maintains that individuals engage in behaviors that are costly to signal others valuable information about themselves (Bird & Smith, 2005). Just like a peacock’s tail, arriving late to a party might signal valuable information about one’s sociometric status – the respect, admiration, and voluntary deference individuals are afforded by others (Anderson et al., 2015). That is, tardiness might signal that one has sufficient resources (popularity, prevailing social network) to be able to afford to lose current socializing opportunities without a negative impact on existing

qualifications. Thus, we propose that such incidents of tardiness might be associated with sociometric status. Consequently, others might be motivated to affiliate with these high status late-comers.

Mimicry behavior is common when people are trying to affiliate with others. For instance, when people see others snacking, they are more likely to snack and prefer the snacks that others are consuming (Tanner, Ferraro, Chartrand, Bettman, & Baaren, 2008). Likewise, people mimic intentionally when they perceive others as consumer role models (Ruvio, Gavish, & Shoham, 2013). Accordingly, we anticipate that arriving late to social events will have downstream consequences for attitudes and behavioral intentions of observers, such that high sociometric status of targets, as signaled by their late arrival times, would make those targets' consumption choices more likeable and more likely to be imitated. We further expect that these consumption consequences would be stronger for observers who have a high (vs. low) chronic desire for status. In summary, the following hypotheses were tested across four studies.

H1: An individual who arrives late (vs. on-time) would be perceived as having higher sociometric status.

H2: Late (vs. on-time) arrival would have an indirect effect on an observer's intention to affiliate with the target through the effect of higher perceived sociometric status.

H3: Late (vs. on-time) arrival would have an indirect effect on likeability of a consumption choice that the target exhibits through the effect of higher perceived sociometric status.

H4a: Late (vs. on-time) arrival would have an indirect effect on an observer's tendency to imitate a consumption choice that the target exhibits through the effect of higher perceived sociometric status.

H4b: The effect in H4a would be stronger among observers who have a higher (vs. lower) chronic desire for status.

In Study 1, 197 American adults were asked to imagine going to a big party and for two attendees, an on-time target and a target who arrived 90 min late, participants were asked to indicate the degree to which the targets were considered fashionably late and to judge their sociometric status (2 items). Supporting H1, the very late (vs. on-time) target was perceived as more fashionably late,  $p < .001$ , and having higher sociometric status,  $p < .001$ . Furthermore, perception of fashionably late predicted sociometric status perception,  $p = .02$ .

Study 2 (N = 81 Turkish university students) was similar to Study 1 with affiliative behavioral intention (2 items) as an additional dependent variable. Conceptually replicating Study 1, the very late (vs. on-time) target was again perceived as more fashionably late,  $p < .001$ , and having higher sociometric status,  $p = .001$ . Moreover, participants were more likely to show affiliative behavioral intention toward the very late (vs. on-time) target,  $p = .05$ . Importantly, there was an indirect effect of fashionably late perception on affiliative behavioral intention through the effect of sociometric status perception,  $p < .05$ , supporting H2 (see Figure 1). Study 3 (N = 96 Turkish adults) was a field study. Four research assistants were asked to go to some large parties individually and observed three arriving

attendees every half an hour since the party started, recording their arrival time, judging their sociometric status, and evaluating the likeability of their outfit. Conceptually replicating Studies 1 and 2, arrival lateness predicted perceived sociometric status,  $p = .03$ . Moreover, perceived sociometric status predicted likeability of the outfit,  $p < .001$ , and there was an indirect effect of arrival lateness on likeability of the outfit through the effect of perceived sociometric status,  $p < .05$ , supporting H3 (see Figure 2).

In Study 4, 136 Turkish university students were first asked to imagine that they attended a large welcome party and then told that an attendee showed up to the party on-time or 90 min late, randomly assigned, and brought a six-pack of Hoegaarden beer to the party. Participants then indicated their intention to try that beer and completed a measure of chronic desire for status (7 items; Cassidy & Lynn, 1989). Multiple linear regression with imitation intention as the criterion, and arrival time and chronic desire for status as predictors revealed a main effect of arrival time,  $p < .01$ , supporting H4a, as well as an interaction effect,  $p < .01$ ; the beer brand that the target brought to the party was more likely to be chosen when he arrived late (vs. on-time) for participants whose chronic desire for status was at one standard deviation above the mean,  $p < .001$ , or at the mean,  $p < .01$ , but not for those whose chronic desire for status was at one standard deviation below the mean,  $p = .88$ , supporting H4b (see Figure 3).

In future research, it would be worthwhile to complement the current work with research questions tapping into whether and under what conditions people would deliberately adjust their arrival time to appear popular, having high sociometric status. In addition, although our central hypothesis has received empirical support in both Turkey and the United States, it would be theoretically informative to further examine generalizability of our findings in other cultural contexts where punctuality norms might be different.

## Consumer Minimalism as Identity Curation Process

Daniele Mathras (Northeastern University, USA); Katherine Hayes (Northeastern University, USA)

### **Brief Abstract:**

In this research, we model the process by which individuals transition into a more minimal consumer lifestyle. Results from interviews with minimalists across capsule wardrobe, tiny house, vanlife, and minimal lifestyle segments reveal that the psychological and physical transition into minimalism is an identity curation process. Consumer identity curation is the development of a cohesive collection of products and services that define and provide value to the present self through deliberate, ongoing acquisition, dispossession, and consumption activities. Through self-honesty, intentionality, detachment, and a reallocation of resources, minimalists shed possessions by first crafting, then maintaining focus on their best present self.

### **Extended Abstract:**

Minimalism in consumer behavior is on the rise, with consumers choosing to shed their possessions, simplify their shopping habits, collect experiences versus material items, and focus on their psychological and financial well-being (Weinswig 2016). Rooted in voluntary simplicity (“the choice out of free will... to limit expenditures on consumer goods and services, and to cultivate non-materialistic sources of satisfaction and meaning” (Etzioni 1998, 620)), consumer minimalism involves

the conscious dispossession of belongings and the voluntary decision to reduce acquisition of new possessions in one or more consumer domains. Previous research on voluntary simplicity and anti-consumption has addressed who engages in these behaviors (e.g., downshiffters, strong simplifiers, and simple living movement segments: Etzioni 1998), why they do so (e.g., ecological awareness: Leonard-Barton 1981, social responsibility and community focus: Huneke 2005), and what behaviors are characteristic of these consumers (e.g., energy conservation: Leonard-Barton 1981, composting and avoiding impulse purchases: Huneke 2005). However, to date, little to no research has focused on the how; that is, the psychological and physical process by which individuals become more minimal in their consumer behavior.

To address this gap, we developed a rich macro, market, and micro-level dataset focused on consumer transitions into minimalism via capsule wardrobes (small, curated wardrobe comprised of timeless pieces and complementary seasonal items), tiny houses (homes typically less than 500 square feet), vanlife (living out of a converted van), and general minimal lifestyles (minimalism across multiple domains). During phase one of data collection, we gathered text, images, and quotes from news articles, websites, blogs, books, and television shows about consumer minimalism (142 unique sources, yielding over 600 pages of data). These secondary data sources informed our interview guide and model development for the second phase of data collection. During phase two, we conducted depth interviews with 30 minimalist consumers using theoretical sampling techniques to address the phenomenon of transitioning into consumer minimalism across multiple consumer segments. Using the constant comparative method (e.g., Charmaz 2006), we conducted open, axial, and selective coding on all secondary and primary data. Following the workbench modes outlined by Giesler and Thompson (2016), we coded for transformation using a series of intratextual, intertextual, and intertemporal analyses to uncover how consumers move from a less minimal (Reality 1) to more minimal lifestyle (Reality 2).

Results reveal that the process of becoming more minimal is a consumer identity curation process (see Figure 1). We define consumer identity curation as the development of a cohesive collection of products and services that define and provide value to the present self through deliberate, ongoing acquisition, dispossession, and consumption activities. The first step of identity curation is defining the best present self. Individuals craft a sense of self through possessions (Belk 1988), use consumption to signal their identity to their self and others (Baumeister 1982), and abandon undesirable consumer selves through dispossession (Belk, Sherry, and Wallendorf 1988). Results find that the consumers who are most successful at minimizing are those who maintain focus on the best version of their present self. For example, one informant said “Ok, I don’t need this in my life because that’s not really how I want to present myself” and another said “So it’s kind of learning to be more in touch with who I am, and what my personal style is.” By first identifying one’s best present-self, minimizers develop a reference point against which to evaluate all consumption decisions.

The second step of identity curation is the editing process, during which consumers maintain focus on the present self through dispossession and acquisition behaviors. Akin to museum exhibit curation, minimalists surround themselves with items that help paint a cohesive story without much overlap between items. Four key strategies of the editing process emerged: self-honesty, intentionality, detachment, and reallocation of resources. During the process, consumers practiced self-honesty (ruthlessness) by “being brutal with yourself and really honest about what you are going to use and what you are not going to use.” Transitioning into minimalism requires constant scrutiny of the

alignment of consumption practices with the best present self. This intentionality is explained by one respondent: “I’m always analyzing anything new that I put into my life, and I’m constantly looking at things that I already own or already have to use, and thinking, “Do I need this? Could two things be replaced with one thing?” The present-self focus also supports consumers in dispossession decisions through detachment. One tiny house participant said, “If we find something that’s still unnecessary, we’re pretty fast about throwing it away and just kind of saying, “Oh, if we need it again, we will buy it.””

Throughout the identity curation process, minimalists also reallocate time, physical space, and financial and psychological resources to support one’s best current self. One respondent said “I don’t like worrying about things, and I’d rather just free up that mind space and time, because it’s a lot of time to own things...and it just kind of clogs my mental clarity.” Another respondent talked about reallocating financial resources away from material possessions by saying her resources “can be used I think in better ways than just buying things that only serve myself.” Overall, through the identity curation process, minimal consumers are strategically acquiring, dispossessing, and reallocating their constrained personal resources to pursue their best present selves.

The third phase of the identity curation process is characterized by reevaluation and maintenance. Most participants recounted fairly “regular purges.” One vanlife participant said “I tried to at least once very year to just take an inventory of all my things and realize I haven’t looked at this thing since I last looked, so maybe I don’t need it.” Importantly, this reevaluation stage suggests that minimalism is an ongoing journey, not an end state. As the self (relative to one’s possessions) transforms over time, so continues the process of identity curation for consumers practicing minimalism. This research provides a process model of minimalism to guide future experimental research on consumer minimalism, as well as to provide guidance to consumers who maybe considering a more minimal lifestyle.

## Persuasiveness of Descriptive Norms: The Role of Culture and Decision Context

Rebecca Chae (University of Michigan, USA); Carolyn Yoon (University of Michigan, USA)

### **Brief Abstract:**

Prior research on descriptive norms suggests that messages containing provincial norms as compared to global norms lead to greater conformity and persuasion. We investigate how culture (interdependent vs. independent) and decision context (private vs. public) moderate the persuasive effects of descriptive norms on decisions in domains involving socially conscious behavior. Four studies using field and laboratory experiments across different domains provide convergent evidence that in relatively private contexts, independents (interdependents) are more persuaded by provincial (global) norms. However, in public (vs. private) settings, independents (interdependents) are more persuaded by global (provincial) norms.

### **Extended Abstract:**

Persuasive communications to increase socially-conscious behavior commonly contain appeals using descriptive norms: provincial or global. Provincial norms refer to shared perceptions of common patterns of behavior of one’s local settings and circumstances, while global norms apply more generally to those beyond one’s local settings and circumstances. Prior research has found that messages using provincial norms are more persuasive (Goldstein, Cialdini, and Griskevicius 2008).

These findings, however, are based on studies conducted in private decision contexts (e.g., deciding whether to reuse towels in hotel rooms) in the United States. We posit that since norms are derived from culture, normative influences on persuasion would differ as a function of the cultural orientation of message recipients. We conceptualize cultural differences in terms of the widely accepted distinction between independence and interdependence (Markus and Kitayama 1991). Conformity is generally higher among interdependents, although not necessarily uniformly so (Bond and Smith 1996; Savani et al. 2015). Susceptibility to descriptive norms can differ depending on cultural differences in how one identifies with the group whose norms serve as the reference. For interdependents, salient reference groups usually include others who share a common destiny (e.g., friends, family, or fellow citizens) (Bontempo, Lobel, and Triandis 1990), and these groups exert a stronger influence on interdependents than independents (Triandis et al. 1988). Moreover, whether the decision context is private or public is likely to be consequential given that social motivations generally differ across cultures (Kim and Drolet 2009). Whereas personal attributes of the self are more influential for independents, social attributes hold greater importance for interdependents. Thus, we examine whether cultural differences exist in the persuasive impact of descriptive norms and how they might be affected by public versus private contexts.

In private contexts in which social factors to consider are minimal, one is presumably less concerned about impression management (Leary and Kowalski 1990). Thus, people would be more likely to follow norms of a reference group with which they identify. We propose that interdependents would be more persuaded by global norms of a meaningful reference group. For independents, we expect them to be more persuaded by provincial norms, in line with findings by Goldstein et al. (2008). In public contexts, however, perceptions of what will yield social approval often determine behavior (Warner and DeFleur 1969), and thus people favor options that support their social motivation. Because independents value being unique and differentiating themselves from others, they would be less likely to conform to provincial norms in public. Rather, they would follow global norms more in public (vs. private). By contrast, interdependents are more motivated to maintain harmony with the reference group in their immediate surrounding and thus would be more likely to be persuaded by provincial norms in public (vs. private). Studies 1 through 3 examined cultural differences in private contexts, and Study 4 investigated them across private and public contexts.

Study 1 was a 2 (culture) x 3 (norm: control, global, provincial) design. Independent versus interdependent culture was operationalized cross-culturally. Participants in Korea or the U.S. were provided with a hypothetical hotel stay scenario. In the global (provincial) norm condition, they read a message that encouraged them to follow the norms of fellow citizens (hotel guests who had stayed in the same room) in reusing towels. Participants in the control condition read a standard environmental message. An ANCOVA yielded a significant main effect of culture ( $F(1, 326)=15.57, p<.001$ ) and interaction ( $F(2, 326)=4.21, p=.016$ ) on participants' willingness to reuse towels. As expected, independents (interdependents) were most willing to reuse towels when they read a message containing the provincial (global) norms. Study 2 was a field study that sought to replicate findings for interdependents from Study 1. Data of condom usage (yes/no) were collected from 513 daytime room rentals across eleven motels in Seoul, Korea. Each room had one of the following messages: health message encouraging condom usage with no descriptive norm (control); citizen identity global norm; motel guest identity global norm; gender identity global norm; or same room motel guest identity provincial norm. Planned contrasts revealed that the provincial norm message was marginally less effective in increasing condom usage than the three global norm messages combined ( $\chi^2(1,$

$N=407$ )= $2.93$ ,  $p=.087$ ). There were no differences between the control and the global norm messages combined, nor among the global norm messages. The contrast of the four message conditions combined versus the provincial norm message condition resulted in a marginally significant difference ( $\chi^2(1, N=513)=3.77$ ,  $p=.052$ ). This suggests that the provincial norm message resulted in the lowest condom usage among interdependents. Study 3 was a 2 (culture: independent, interdependent) x 3 (norm: control, college student global norm, study participant provincial norm) design in the context of willingness to help freshmen in a tutoring program. Culture was manipulated using a text comprehension task adapted from Trafimow, Triandis, and Goto (1991), and participants read a message that contained one of three descriptive norms. As expected, an ANOVA resulted in a significant interaction on willingness to help ( $F(2, 285)=3.83$ ,  $p=.023$ ): independents (interdependents) were most willing to help freshmen after reading a message containing provincial (global) norms.

Study 4 was a 2 (culture: independent, interdependent) x 3 (norm: control, college student global norm, study participant provincial norm) x 2 (context: public, private) design. Culture was operationalized cross-culturally. Participants received money up front and read a descriptive norm message, encouraging donation for children's education. Participants only in the public condition wrote their name and donation amount on the donation envelope. An ANOVA revealed a significant effect of decision context on donations, which was greater in public than private ( $F(1, 486)=16.49$ ,  $p<.001$ ). More importantly, the three-way interaction was significant ( $F(2, 486)=3.75$ ,  $p=.024$ ). In private, provincial (global) norms was more persuasive for independents (interdependents). In public than in private, independents were more persuaded by global norms, and interdependents were more persuaded by provincial norms.

Taken together, our results provide convergent evidence that culture and decision contexts moderate the persuasive effects of descriptive norms on socially conscious behavior.

## **The Experiential Consumer: Group Evaluations, Satiation, and Stress - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Aleksandra Kovacheva, University at Albany, SUNY*

### **Come Sail with (Out) Me: When Asymmetrical Decisional Control Makes Group Experiences Unappealing**

Aleksandra Kovacheva (University at Albany, SUNY); Eugenia Wu (University of Pittsburgh, USA); Cait Lamberton (University of Pittsburgh, USA)

#### **Brief Abstract:**

This paper examines the extent to which the utility of joint consumption experiences is influenced by the distribution of decisional control within the group. We demonstrate that consumers are less likely to engage in group experiences when they expect to have asymmetrically higher decisional control compared to the rest of the group. Our findings suggest that this is driven by increased feelings of stress, induced by feelings of greater responsibility over the group outcome.

#### **Extended Abstract:**

Consumers often take part in group experiences – from going to a restaurant with the family to

backpacking with friends. Despite the ubiquity and complexity of such experiences, the research on joint consumption has focused mostly on examining the experiential utility obtained in dyads (Raghunathan & Corfman 2006; Ramanathan & McGill 2007), and given little attention to factors that could impact consumers' decisions to engage in group activities in the first place.

In this research, we examine how the expected distribution of decisional control within the group – i.e., the extent to which one or more participants within the group determine key aspects of the joint experience – influences consumers' preference for group vs. solo activities. For example, imagine that Jane wants to have dinner at a restaurant. She can go alone or with a group of friends. Does the extent to which Jane (vs. someone else in the group) has asymmetrically higher decisional control – e.g., decides which restaurant to go to – make Jane favor engaging in the experience as part of a group (vs. alone)?

The work on choice suggests that having higher decisional control is desirable as it allows Jane to design the dinner experience in a way that will satisfy her individual consumption goals (Botti & McGill 2006; Iyengar & Lepper 2002). However, group contexts require the balancing of individual and group goals (Ariely & Levav 2000) and the literature on social loafing has shown that consumers tend to disengage in collective (vs. individual) activities. Extending this work to consumption experiences, we propose that Jane's choice between a solo and a group activity will be influenced not only by her individual goal of utility maximization, but also by her concern for the group outcome. We further argue that higher decisional control in group settings is associated with greater responsibility for the group outcome, which induces feelings of stress. As feeling anxious is undesirable (Etkin et al. 2015), we hypothesize that consumers would avoid group experiences when they have high (vs. low) decisional control (see figure 1). We test this theoretical framework in four studies (detailed results in table 1).

In study 1A, participants were randomly assigned to one of three conditions: high, low, and neutral (no mention) decisional control. They imagined planning to rent a boat during the weekend and were asked to choose between two rental options: a solo boat and a larger boat for up to six people. In the high (low) decisional control condition, participants were told that if they chose the group option, they (one of their friends) would be in charge of coordinating the activity. In the neutral condition, no information about the distribution of decisional control was provided. As manipulation checks indicated that the neutral and low decisional control conditions were not different, the two groups were collapsed. The results supported the hypothesized relationship between decisional control and engagement in the group experience - participants in the high (vs. low) decisional control condition were less likely to choose the group rental option.

Study 1B replicated the effect and addressed several potential confounds. First, we used a lowstakes context – having dinner in a restaurant alone vs. with 5-6 friends – to test whether the distaste for the group experience in the high control condition will be observed for everyday experiences. Additionally, the scenario listed all decisions that had to be made and reminded participants that they will need to make the same decisions in the solo experience. Thus, the only difference between the high and low decisional control conditions was who was responsible for making the group decisions. The results replicated the proposed effect – participants in the high (vs. low) decisional control condition were less likely to select the group experience. Study 2 tested the proposed sequential mediation process, using the modified boat rental scenario. We replicated the main effect of decisional



control and observed the proposed mediation process – participants in the high decisional control condition reported feeling greater responsibility over the group outcome, which induced higher feelings of stress and explained their distaste for the group rental option. The reverse mediation model (stress  $\diamond$  responsibility) was not supported.

Study 3 tested the proposed model with a consequential dependent variable in a different context. We assigned participants to complete a video task alone or in a group with fellow MTukers and asked them to choose whether they want to select the video themselves or have it randomly assigned. We hypothesized that participants who wanted greater engagement in the experience would opt to choose the video by themselves. Additionally, half of the participants assigned to the group experience were told that they would see the other group members' evaluations of the task (group-public condition), while the other half – that the video evaluations were confidential and would not be shared (group-private condition). We reasoned that the observability of the group outcome is a necessary condition for experiencing accountability and stress (Lerner & Tetlock 1999). Thus, we expected and found that participants in the group-public condition favored lower engagement (by opting that the survey select the video) than those in the alone and group-private conditions (who preferred to select the video themselves to ensure preference match). Qualitative data collected after participants made their choice provided additional support for this reasoning (available upon request).

Overall, this research suggests that the utility of joint consumption depends, to some extent, on the distribution of decisional control within the group. We demonstrate an interesting case of social loafing in consumption experiences – consumers are less likely to engage in group experiences (either by opting to complete the experience alone or by choosing to outsource key decisions) when they expect to have asymmetrically higher decisional control compared to the rest of the group. Our findings suggest that this is driven by increased feelings of stress, induced by feelings of greater responsibility over the group outcome. Future research will investigate interventions to decrease the perceived stress of asymmetrical decisional control in order to encourage group consumption.

## Products as Consumption Companions: How Collectivism Influences Consumer Responses to Anthropomorphic Products

Rhonda Hadi (Oxford University, UK); Sara Baskentli (Western Washington University, USA); Leonard Lee (National University of Singapore, Singapore)

### **Brief Abstract:**

This research examines how collectivism influences consumer responses to anthropomorphic products. We find that collectivistic consumers show an exaggerated preference for anthropomorphic products, because these products represent social surrogates allowing for more communal consumption experiences. This effect holds across various product categories, regardless of whether collectivistic thinking is measured, primed, or operationalized based on ethnicity. This research contributes to anthropomorphism literature by highlighting an important individual difference moderator and offers practical implications for product designers and marketers targeting consumers across cultural boundaries.

### **Extended Abstract:**

Anthropomorphism, the attribution of human-like properties to nonhuman agents and objects, is generally considered a universal phenomenon (Epley et al., 2007). Marketers often induce product

anthropomorphic thought via explicit advertising (Aggarwal & McGill, 2007), naming (Aaker, 1997) and visual features (Chandler & Schwartz, 2010). Such practice is especially prevalent in Eastern countries: many packaged foods in South Korea are given visual anthropomorphic traits (Branding in Asia, 2007), many classic consumer electronics in Japan have anthropomorphic product names (e.g., “Game Boy” and “Walkman”; Shea, 2014), and the market for human-like service robots is flourishing in several East Asian countries (Belk, 2016).

Surprisingly, despite the disproportionately high popularity of anthropomorphic products in Eastern countries, no research has actually tested whether Eastern consumers do in fact respond more favorably to anthropomorphic versus non-anthropomorphic products, nor examined what particular cultural traits might drive such preferences. We address this gap by zeroing in on a well-established cultural factor in both psychology and marketing literatures: collectivism (Hofstede, 1984; Singelis, 1995). We propose that because collectivistic consumers assign greater value to communal (versus solitary) consumption experiences (Markus & Kitayama, 1991), and since anthropomorphized objects can serve as surrogates fulfilling social needs (Mourey et al., 2017), collectivistic consumers should reap greater rewards from the consumption of anthropomorphic (versus non-anthropomorphic) products. However, we would not expect this for consumers low in collectivism. To our knowledge, this is the first research demonstrating that culture can influence consumer responses to anthropomorphic products. Further, we show the process underlying the effects. We find that since consumers high in collectivism are motivated to consume in a communal manner, they are more likely to perceive anthropomorphic products as “consumption companions” than those low in collectivism.

We tested this theorizing across four studies. Study 1 (N=203) was a 2(Ethnicity: Asian American vs. Non-Asian American) x 2(Product Description: Control vs. Anthropomorphic) between-subjects design. As per previous research (e.g., Briley et al., 2017), we employed a single-country sample including participants from both interdependent (Asian Americans) and independent (non-Asian Americans) cultural backgrounds, allowing us to control for any nonculture factors that might affect study results (e.g., differential exposure to anthropomorphic products in the marketplace). Participants were presented with a description of a tablet. In the anthropomorphic condition the tablet was described in the first person (“I”) while in the control condition it was referred to in objective and impersonal language (“It”; manipulation from Hur et al., 2015). Participants were asked to evaluate the tablet (on an 8-item scale, e.g., “I would enjoy this product,”  $\alpha=.89$ ). ANOVA results revealed a significant Ethnicity x Description interaction on product evaluation ( $p<.001$ ). An analysis of contrasts supported our hypothesized effect: Asian Americans displayed greater evaluations for the anthropomorphic versus nonanthropomorphic tablet ( $M_{Control}=4.51$  versus  $M_{Anthropomorphic}=5.13$ ,  $p<.02$ ). Interestingly, though not hypothesized, those in the low collectivism condition showed the reverse pattern ( $M_{Control}=5.30$  versus  $M_{Anthropomorphic}=4.69$ ,  $p<.02$ ).

Study 2 (N=402) extended our findings by testing the effects of procedurally manipulated collectivism. This study employed a 2(Collectivism: Low versus High) x 2(Anthropomorphic traits: Absent versus Present) between-subjects design. To manipulate collectivism we adopted a procedure from Aaker and Lee (2001), in which participants examined one of two advertisements for a real brand (in our case, a retailer). The low collectivism advertisement displayed a picture of a single individual, and the last sentence read, “We provide quality service and attention, so that you can focus what really matters: Taking care of yourself”. In the advertisement designed to evoke high levels of collectivism, the picture included three individuals, and the last phrase read, “Taking care of your friends and family.”

Afterwards, participants were told to evaluate a vacuum cleaner ostensibly sold at that retailer. They were presented with a photo of either a plain red cleaner (non-anthropomorphic condition) or a red vacuum with a face on it (anthropomorphic condition; both vacuum cleaners are readily available on the market). ANOVA results revealed a significant Collectivism x Anthropomorphic Traits interaction on product evaluation of the vacuum ( $p=.04$ ), supporting our proposed moderated effect: those in the high collectivism condition displayed greater evaluations for the anthropomorphic vacuum cleaner ( $M_{Control}=4.38$  versus  $M_{Anthropomorphic}=4.82$ ,  $p<.02$ ), while those in the low collectivism condition did not show this evaluative preference ( $M_{Control}=4.71$  versus  $M_{Anthropomorphic}=4.63$ ,  $p>.66$ ).

A third study ( $N=402$ ) replicated the interactive effect with collectivism measured as a continuous moderator, using a different product: a clock that had either a plain white background (non-anthropomorphic condition) or a pair of eyes on the background (anthropomorphic condition).

Our final study ( $N=238$ ) allowed us to measure participants' enjoyment upon actually consuming a product and to examine the underlying process. This study employed a 2(Collectivism: Low versus High) by 2(Anthropomorphic traits: Absent versus Present) between-subjects design. To manipulate collectivism, we adapted an open-ended response protocol from previous literature (Trafimow et al., 1991). As part of a purportedly separate study, participants were asked to taste and evaluate chocolate candies. In the non-anthropomorphic condition, the candies were blank, while in the anthropomorphic condition, they had a neutral face imprinted on them. After consuming at least one candy, participants reported their enjoyment of the product (e.g., "I enjoyed this candy",  $\alpha=.87$ ). Afterwards, we measured perceived consumption companionship (our proposed mediator) by asking participants to respond to three items (e.g., "I felt social while eating this candy,"  $\alpha=.75$ ). ANOVA results revealed a significant Collectivism x Anthropomorphic Traits interaction on enjoyment ( $p<.02$ ). An analysis of contrasts replicated our proposed moderated effect: those in the high collectivism condition reported greater enjoyment of the anthropomorphic versus non-anthropomorphic candies ( $M_{Control}=5.24$  versus  $M_{Anthropomorphic}=5.71$ ,  $p=.08$ ). As found in study 1, though not hypothesized, those in the low collectivism condition showed the reverse pattern, displaying greater enjoyment of the non-anthropomorphic candies ( $M_{Control}=5.53$  versus  $M_{Anthropomorphic}=5.02$ ,  $p=.06$ ). Results of a moderated mediation analysis with 10,000 bootstrapped samples (Hayes, 2013; model 8) demonstrated that for individuals in the high collectivism condition, perceived consumption companionship mediated the effect of anthropomorphic traits on enjoyment (95% CI: .0072 to .2772). The indirect effect was not significant for participants in the low collectivism condition (95% CI: -.0959 to .1319).

## More Than One Way to Break an Egg: Reducing Satiation with Creativity

Yanfen You (New Mexico State University, USA); Na Wen (City University of Hong Kong); Xiaojing Yang (University of Wisconsin - Milwaukee, USA); Wenyu Dou (City University of Hong Kong)

### **Brief Abstract:**

Consumers often need to repeat the same experiences or consume the same products in their daily lives. Across three experiments, we demonstrated how situationally primed creativity and chronic creativity reduce satiation by prompting individuals to employ different approaches to seemingly repetitive consumption experiences. We showed that, instead of resorting to different alternatives, enjoyment can also be maintained by taking different approaches to consuming the same item. Because

of their approach variety, creative consumers virtually create “new” experiences when repeating seemingly same experiences, resulting in less satiation.

**Extended Abstract:**

Recent research on creativity starts to examine how a creative mindset influences consumer behavior and decision making. For example, Gino and Ariely (2012) find that priming creativity makes people less moral and engage in more unethical behaviors. Yang et al. (2011) show that a creative mindset makes people prefer advertising messages inconsistent with their common way of thinking. Building on this line of research, we investigate the effect of a creative mindset on consumers’ enjoyment of seemingly repetitive consumption experiences.

Consumers often have to repeat the same experiences in their daily lives. These repetitions are likely to cause satiation and result in reduced experience enjoyment. We predict that rather than showing more satiation towards repeated experiences, a situationally primed creative (vs. non-creative) mindset and a chronic creative (vs. uncreative) personality actually make consumers less satiated and enjoy the repeated consumption experiences more.

Variety seeking has been found to be effective in sustaining consumption enjoyment and reducing satiation. For example, consuming a variety of items (i.e., food) improves consumers’ consumption experiences (e.g., Redden 2008), and even anticipation of future variety has been shown to reduce present satiation rate (Sevilla, Zhang, & Kahn, 2016). Rather than between-item variety (i.e., resorting to different alternatives), we argue that enjoyment can also be maintained through within-item variety (i.e., taking different approaches to consuming the same item).

Drawing from research on creativity and satiation, we argue that creativity prompts consumers to take different approaches within the same experience when constrained to the same task or product consumption. Preliminary support can be drawn from research showing that creativity facilitates flexibility in moral judgment (Gino & Ariely, 2012) and product usage (Mehta & Zhu, 2016). A central premise of our theory is that creativity promotes flexibility in terms of how individuals approach the same consumption experience. Because creative consumers are able to generate more variety in their approaches to completing the same experience (approach variety), they virtually create “new” experiences when repeating seemingly same experiences, resulting in less satiation.

Study 1 examines how a creative personality affects approach variety and satiation with a writing assignment. After working on a writing task twice, participants completed several measures aimed at assessing their enjoyment (e.g., writing the second poem felt interesting). They also reported how willing they were to work on the same writing task again. Approach variety was also measured (e.g., “I tried to take a new perspective to conduct the writing task for the second time.”). Finally, participants completed Gough's (1979) Creative Personality Scale. The results showed that enjoyment was positively correlated with approach variety ( $p = .001$ ) and creative personality ( $p = .02$ ). Behavioral intention was also positively correlated with approach variety ( $p < .001$ ) and creative personality ( $p = .001$ ). Bootstrapping method with 5000 resamples (Hayes Model 4) showed that creative personality increased enjoyment via approach variety. Similarly, creative personality increased willingness to conduct the activity again via approach variety.

Study 2 manipulated the creative mindset by asking participants to recall creative (noncreative)

experiences. Participants were randomly assigned to recall two situations in which they had behaved creatively (creativity condition) or two things they did on the previous day (control condition). Next, they were directed to an ostensibly unrelated task in which they were asked to imagine that they did not have anything else except for some raw eggs in the refrigerator and they had to have eggs for breakfast for the next three days. Then, participants reported how they would cook the eggs for breakfast for the next three days and their feelings and thoughts of having the eggs for three mornings. Our results showed that, participants in the creativity prime condition reported more enjoyment than those in the control condition ( $p < .05$ ).

Study 3 demonstrates that the satiation-buffer effect of creativity disappeared when participants were merely informed of the existence of a different alternative. In a 2 (prime: creativity vs. control)  $\times$  2 (alternative salience: salient vs. control) between-subjects design, participants first completed a scrambled-sentence task aimed at priming a creative mindset (Gino & Ariely, 2012). In the creativity (vs. control) condition, eight out of twelve sentences (vs. no sentences) contained words related to creativity. Next, they were asked to write a short story with a few given words. After completing the writing task, participants were exposed to the alternative salience manipulation. In the alternative salience condition, participants were informed that they needed to work on a second task but the assignment of this task would be randomly determined—they could end up either in the same writing task or in a different task. Though in reality, no participant was given the “alternative” task. No such information was given in the control condition. After the manipulation of alternative salience, all participants were instructed to complete the writing task for the second time. Participants indicated their agreements with several statements (e.g., “How much did you enjoy the writing task you just completed?” “How boring was writing the second story?”; averaged to form an enjoyment index). The results revealed a significant interaction effect ( $p = .036$ ), such that when no alternative task was mentioned, participants in the creativity condition reported more enjoyment than those in the control condition; by contrast, when participants were informed of an alternative task, there was no significant difference between the creativity and control conditions.

To sum up, our research expands the view of tackling satiation with variety to consider not only how individuals reduce satiation by turning to different alternatives but also by turning to different approaches towards repeated consumptions of the same alternative. Our work connects research on creativity, satiation, and choice constraint to inform how creativity can help alleviate satiation in repeated consumptions.

## Terror-Induced Stressful Life Events Blunted Arousal Reactivity and Impaired Affect Integration in Subsequent Aesthetic Evaluations

Aiqing Ling (INSEAD, France); Tobias Kalenscher (Heinrich Heine University Düsseldorf, Universitätsstrasse); Hilke Plassmann (INSEAD, France)

### **Brief Abstract:**

With the increased frequency of people witnessing terror attacks, it is important to understand how the experience of such stressful life events alters consumers’ emotional reactions and their decision-making processes. Based on a natural experiment, we found that terror-induced stressors caused selective affect bluntness, dampening the integration of emotion when making subsequent evaluations. This result supports a recent arousal transport hypothesis that arousal necessitates the carry-over effects of affect on value-based evaluations. Our finding reveals a novel mechanism and a boundary

condition where marketing strategies that appeal for consumers' incidental affect could be ineffective.

### **Extended Abstract:**

Stressful life events are omnipresent and powerful modulators of individuals' affective states in most modern societies. Stress is also known to influence cognition, judgment, and decision-making. For example, acute stress typically down-regulates reward sensitivity (Montoya, Bos, Terburg, Rosenberger, & van Honk, 2014), alters risk-taking (Coates & Herbert, 2008) and decreases loss aversion (Chumbley et al., 2014).

Interestingly, from a neurobiological perspective, these stress effects on judgment and decision-making are often time-dependent, with opposing effects immediately after stress relative to stress aftermath (Hermans, Henckens, Joels, & Fernandez, 2014; Joëls, Fernandez, & Roozendaal, 2011). Specifically, immediately after acute stress, individuals' affective states become hypo-aroused. As time goes by, the stress aftermath outlasts the acute stress and down-regulates the arousal responses in order to restore the cognitive control. With few exceptions (Chemin, de Laat, & Haushofer, 2013; Coates & Herbert, 2008; Haushofer, Schunk, & Fehr, 2013), the most common approach to study the effects of stress on cognition involves the employment of standardized stress induction procedures in a well-controlled laboratory setting. Even though the advantages of such manipulation are obvious, they lack the ecological validity that is necessary to extrapolate laboratory findings to the real world.

This concern is also ecologically relevant to consumer research. In an era when many catastrophic incidents (e.g., terrorist attacks, natural disasters) have become a global and unfortunately quite frequent issue, the chances that consumers are exposed to these events, directly (e.g., taking place in one's close surrounding) or indirectly (e.g., via news and social media), have also risen. As a consequence, a stressful experience due to the exposure to these events may shape the consumer climate where consumers make judgments and decisions. Thus, it is essential to understand how stressful life events could alter consumers' emotional reactions and their decision-making processes, especially the impact on marketing strategies that induce incidental positive affect to influence consumer behavior.

Here, we present the data of a natural stress induction: A subset of our participants experienced a real-world exogenous stressor due to terror-related events in Paris and Brussels while we were collecting data for a study on affect integration on aesthetic evaluations. According to a recent arousal transport hypothesis (Ling, George, Shiv, & Plassmann, 2018), arousal necessitates the carry-over effects of affect on subsequent evaluations. Given that stress aftermath would down-regulate the arousal responses, we hypothesized that affect integration on subsequent aesthetic evaluations will be interrupted.

### **Design and Methods**

Participant's affective responses were sampled using automatized facial expression recordings to capture affective valence, and skin conductance recording to capture arousal at a baseline phase followed by sampling the same affective reactions during an aesthetic evaluation task. At baseline phase, participants viewed different pictures of objects and scenes one at a time after a resting black screen. In the evaluation task, participants received random monetary rewards as affect manipulation and subsequently, in a seemingly unrelated task, they evaluated their enjoyment of looking at different pictures on a 9-point scale. 51 participants participated in the study up to 7 days after either the Paris

terror attacks or the Brussels' attacks and 35 participants in the absence of a terror attack. The terror and control groups of participants were recruited from the same subject pool and shared a similar demographics background.

### Analyses and Results

We analyzed the behavioral and psychophysiological data to answer the following questions: (1) how did an exogenous, terror-related stressor influence participants' baseline affective responses? (2) how did such a stressor influence participants' affective responses toward primary (i.e., pictures) and secondary (i.e., money) affective stimuli? (3) how did such a stressor alter the integration of incidental affect induced by the monetary gains on subsequent evaluations?

(1) Baseline affective responses: We found that participants' facial affect valence (FAV) were not different between those in the terror-induced stress group (SG) and control group (CG) ( $p = 0.189$ ), but participants in SG had significantly lower skin conductance amplitude (SCA) than those in CG ( $p < 0.001$ ).

(2) Primary affective stimuli: During the baseline phase, we found a significant main effect of picture type on FAV such that FAV was expectedly highest when viewing positive pictures, followed by viewing neutral pictures and negative pictures in both groups ( $p < 0.001$ ).

In contrast, for SCA, we found a significant interaction between stress and picture type ( $\beta = 0.049$ ,  $p < 0.001$ ). As expected, SCAs were highest when viewing negative pictures, followed by viewing positive pictures and neutral pictures in the CG ( $p < 0.001$ ). As predicted by stress aftermath, SCA was significantly lower ( $p < 0.001$ ) and showed no variation toward different types of pictures in the SG ( $p = 0.554$ ).

Secondary affective stimuli: We found a significant main effect of FAV when participants won money vs. did not win in both SG and CG ( $p < 0.001$ ).

We replicated the stress-dependency of FAV and SCA responses toward similar pictures during the evaluation task.

As for SCA, we found a trend for an interaction between monetary gains and stress ( $p = 0.056$ ) and a significant main effect of monetary gains ( $p < 0.0001$ ). These results suggest that SCAs in responding to winning money vs. not winning money was significantly increased for participants in CG ( $p < 0.001$ ) but not in SG ( $p = 0.107$ ).

(3) Affect integration on aesthetic evaluation of pictures: We found a significant interaction of stress by monetary gains ( $p = 0.029$ ) and a significant main effect of monetary gains ( $p < 0.001$ ). These results suggested that while receiving money increased aesthetic evaluation of pictures among participants in CG (which replicated previous findings), the magnitude of the effect was significantly attenuated in the SG.

To further understand the underlying processes, we run a set of moderated mediation analyses. We found that the attenuation of affect integration was caused by the reduction of arousal that suppressed the integration of affect on picture evaluations among participants in SG ( $\beta_{\text{low arousal}} = 0.01$ , 95% CI

= [-0.0103 0.0447];  $\beta_{\text{high arousal}} = 0.009$ , 95% CI = [-0.0205 0.0566]). The moderated mediation effect was maintained among participants in CG ( $\beta_{\text{low arousal}} = 0.056$ , 95% BCI = [0.0268 0.0988];  $\beta_{\text{high arousal}} = 0.076$ , 95% CI = [0.0356 0.1333]).

### Discussion and Conclusion

The consequences of being stressed for judgment and decision-making have been mostly studied in the laboratory setting. However, it remains unclear how findings from the laboratory are generalizable to real-world stressful situations as well as in the consumer-related context. Our data collection directly followed local terrorist attacks with a population of Parisian students who were affected by those attacks allowed us to test how a terror-induced stressor in real life altered affective responses and their integration in an aesthetic evaluation task.

By sampling participants' moment-based psychophysiological responses (i.e., FAV and SCAs), we found that the terror-induced stressor selectively dampened the reactivity of SCAs while the reactivity of FAV was relatively intact. Such selective impairment was consistently observed in our data when participants were at baseline and responded to primary affective pictures (i.e., primary rewards) and monetary gains (i.e., secondary rewards).

We also showed that in turn, the experience of stressful terrorist events attenuated integration of affect when making evaluations as a seemingly unrelated evaluation task: We found a decreased reported enjoyment of viewing pictures after winning money in the SG versus the CG. This finding was in line with our recently proposed arousal transport hypothesis for affect integration on unrelated evaluations. More specifically, we demonstrated that as the terror-related stressor dampened psychophysiological responses of arousal, valence of affect could not be appropriately transported to execute the mediating effects on subsequent evaluation of pictures.

Our finding indicates a boundary condition where marketing strategies that try to influence consumer behavior by inducing positive affect could be ineffective. Because negative affect is generally detrimental for product evaluations, marketing managers would like to cheer consumers' affect up (e.g., by means of running advertisement with humorous contents or price promotion campaign) after the occurrence of a stressful event. However, this study shows that such approach could be ineffective because of the fact that individuals' psychophysiological response of arousal is blunted after experiencing a stressful event. Marketing managers may want to hold off their planned joyful campaigns within a short period after stressful events.

## **Social Judgments as Stop-and-Go Signals for Consumption - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Xiaoying Zheng, Nankai University*

### Conspicuous Anti-Consumption: Role of Signaling in Green Demarketing Contexts

Tejvir Sekhon (Western Washington University, USA); Catherine A Armstrong Soule (Western Washington University, USA)

#### **Brief Abstract:**

Reduced consumption is more environmentally beneficial than "green" consumption and more brands



are encouraging it using green demarketing strategies. A possible deterrent against such anti-consumption behavior is the inherent lack of observable signals, which can be strong motivators in luxury and green consumption. This research explores whether brands engaged in green demarketing can use an observable signal to mitigate this barrier. We report an exploratory analysis using Facebook data and three experimental studies that provide evidence of conspicuous anti-consumption and suggest that observable signals motivate anti-consumption and benefit the consumers and demarketing brands due to favorable perceptions by observers.

### **Extended Abstract:**

Green demarketing refers to a brand's use of environmental appeals meant to reduce overall category consumption while building the focal brand (Armstrong Soule & Reich, 2015). As anti-consumption is more environmentally beneficial than "green consumption" and as more companies are using green demarketing strategies, it is critical to understand how companies can encourage anti-consumption through demarketing while building brand equity. A possible deterrent against anti-consumption is the lack of any observable signal, which is a strong motivator in luxury (Han, Nunes, & Drèze, 2010; Veblen, 1899) as well as green consumption (Griskevicius, Tyber, & Van den Bergh, 2010). Absence of any positive signal (and the possibility of a negative signal regarding one's finances) can encourage consumers to opt for green consumption instead of anticonsumption. This paper explores whether a signal of anti-consumption can benefit the consumer as well as the brand engaged in demarketing through an exploratory study using Facebook data and three experimental studies (Table 1 shows a summary of results).

REI's Opt Outside campaign (meant to encourage outdoor activities rather than shopping on Black Friday) is an example of green demarketing. Ideally, refraining from consumption should be more appealing to consumers with lower socioeconomic status, but we suspected that consumers with higher socioeconomic status are using conspicuous anti-consumption as a new status-signaling mechanism. In an exploratory study, we found evidence with Facebook members' usage of REI's #OptOutside hashtag that anticonsumption signaling is associated with higher socioeconomic status.

Next, we conducted three experimental studies. Study 1 utilized a 2 (presence vs. absence of anti-consumption signal) x 2 (presence vs. absence of explicit information about anticonsumption behavior) between-subjects design. Participants were shown a picture of a consumer wearing an old jacket and asked to evaluate the person as well as the jacket brand. Presence of the signal was manipulated by adding a "Worn Wear" patch to indicate the garment has been repaired. We found marginal effects of signal on perceived consumer status ( $F(200, 3) = 3.00, p = .085$ ), on willingness-to-pay for a new product by that brand (WTP) ( $F(200,3) = 4.10, p = .044$ ) and a marginal effect on attitude toward the brand ( $F(200,3) = 3.15, p = .078$ ). Further, there was an effect of information about anti-consumption behavior (i.e. the repaired nature of the jacket due to environmental reasons) on perceived environmental-consciousness of the consumer ( $F(200,3) = 46.41, p < .001$ ), attitude toward the brand ( $F(200,3) = 38.92, p < .001$ ) and a marginal effect on WTP ( $F(200,3) = 3.65, p = .057$ ). These findings suggest that observers form positive evaluations of anti-consumers and the green demarketing brand - provided the motivation is made known either through explicit information or through a signal.

In study 2, we tested if an anti-consumption signal can make a low status product more attractive to consumers who seek status. We manipulated the presence (vs. absence) of an anti-consumption signal and the status of the brand (pretested as low vs. high) and measured need for status. Participants

imagined coming across a stall selling bottled water on a hot day. Then, they were shown a picture of a disposable water bottle and were asked to rate their WTP for the bottle, as well as their need for status. We manipulated the presence of an anti-consumption signal via a sticker saying “I pledge to Reuse” on the bottle. We found a three-way interaction of presence of signal, status of the brand and need for status of the participants ( $\beta = -0.29$ ,  $t = -2.13$ ,  $p < .05$ ) on WTP. For the highstatus brand, we did not find any effects. However, in the case of low-status brand, we found a significant positive effect of presence of an anti-consumption signal on WTP for participants whose need for status was higher than 2.48 ( $b_{JN} = .22$ ,  $SE = .11$ ,  $p < .05$ ), suggesting that, when need for status is high, presence of an anti-consumption signal leads to higher WTP.

In study 3, we tested whether there were negative inferences about anti-consumption behaviors (in this case repairing a jacket) and if those inferences could be mitigated with an external signal of environmental (vs. financial) motivation. Participants read a person’s typical Saturday morning schedule and subsequently reported their evaluations of the person. The only difference across the five between-subject conditions was in the description of a repairing activity (i.e. an anti-consumption behavior) on this list. In the control condition, no repairing activity appeared. The anti-consumption condition included “10:30 -11:00 Repair my old jacket.” In the three signal conditions (using a lowstatus brand, a green brand, or a high-status brand as signals), the schedule read “10:30 -11:00 Repair my old (Walmart/Patagonia/Gucci) jacket.” Perceived status in the control condition ( $M= 6.02$ ) was higher than the anti-consumption condition ( $M= 5.35$ ;  $t(247) = 2.37$ ;  $p < 0.05$ ), which was higher than the low-status brand (Walmart) condition ( $M=4.49$ ;  $t(247) = 3.08$ ;  $p < 0.005$ ). These findings suggest that though repairing a low status brand leads to decreased status perceptions, just the act of repairing without any brand mention is also considered lower status as compared to the control condition.

However, perceived status for a person repairing a high-status brand (i.e. Gucci;  $M=6.14$ ) was higher than the unbranded anti-consumption condition ( $M=5.35$ ;  $t(247) = 2.82$ ;  $p < 0.01$ ) showing that mentioning a high-status brand mitigates the negative status perceptions associated with anti-consumption. For the green brand condition, we selected participants whose familiarity with Patagonia was higher than the scale mid-point and compared them with the unbranded anti-consumption condition and found that perceived status was higher for someone repairing a Patagonia product ( $M= 6.09$ ) as compared to a generic product ( $M= 5.35$ ,  $F(1,75) = 4.62$ ,  $p < 0.05$ ). Study 3 suggests that a brand that is a well-known signal of environmental consciousness can mitigate any negative status inferences via conspicuous anti-consumption.

As status-signaling is a deep-rooted desire manifesting as unnecessary consumption, separating the signal from actual consumption can be a way to reduce consumption and can become a win-win-win for consumers, brands and society.

**Possession-Alienation: How Consumers Treat Possessions When Feeling Self-Alienated?**  
(Joyce) Jingshi Liu (Hong Kong University of Science and Technology); Amy Dalton  
(Hong Kong University of Science and Technology)

**Brief Abstract:**

People feel alienated from themselves when they act in a manner that is untrue to the self. Because possessions are part of people’s self-concept, feeling alienated from oneself implies feeling alienated

from the possessions that are part of the self. Indeed, we find that self-alienation leads to lower connections to one's possessions, but this effect only applies to products that are relevant to the self-concept. Moreover, self-alienation increases consumers' likelihood to trash their possessions and decreases their willingness to repair versus replace their possessions.

### **Extended Abstract:**

People feel alienated from themselves when they act in a manner that is untrue to the self (Wood et al. 2008; Sheldon et al., 1997). For example, telling a lie or cheating (Gino et al., 2015), using a counterfeit product (Gino et al., 2010), or perceiving conflict when executing one's roles (e.g., employee, parent, friend; Sheldon et al., 1997) can elicit self-alienation. Self-alienation correlates with low self-esteem, anxiety, stress, depression, and low life satisfaction (Lopez & Rice 2006; Sheldon et al. 1997; Wood et al. 2008), making this construct important to understand. While clinical psychology spearheaded inquiry into self-alienation, little experimental research has systematically examined the nature, causes and consequences of self-alienation.

The present research examines how self-alienated consumers treat their possessions. We advance a relatively straightforward but novel theoretical point about what it means to feel self-alienated and, in turn, the implications of self-alienation for consumer behavior. We note that feeling alienated from oneself implies feeling alienated from one's self-concept, perceptions of oneself based on both internal and external inputs. Self-concept is formed not only using internal thoughts, feelings, and actions, but also external events, objects, and people (James 1890). Thus, feeling alienated from oneself implies feeling alienated from those aspects of the external world that are part of the self. For this reason, self-alienation can have implications for how consumers relate to their possessions, to the extent those possessions are part of the self-concept. For many consumers and in many product categories, a self-possession connection exists. To quote Belk's (1988) seminal paper on this issue, "We impose our identities on possessions and our possessions impose their identities on us". Thus, the core assertion of our research is that a positive relationship exists between feelings of self-alienation and feelings of "possession alienation," and this relationship has implications for how consumers treat possessions.

Three studies test this assertion. Study 1 demonstrates that behaviors that trigger self-alienation also cause possession alienation. Following Gino et al. (2010), we manipulated self-alienation using counterfeit consumption. Participants (N=173) imagined using a counterfeit [genuine] product and reported their feelings of self-alienation (7-points, Wood et al. 2008). The counterfeit (vs. genuine) condition felt more self-alienated ( $M_{\text{counterfeit}}=3.43$ ,  $M_{\text{genuine}}=2.76$ ,  $p<.01$ ), indicating a successful manipulation. Participants then reported how connected they felt to their favorite possessions (adapted from Aron et al., 1992). We asked about favorite possessions because they are central to consumers' self-concept (Schultz et al. 1989). As predicted, the alienation (vs. true-self) condition felt less connected to their favorite possessions ( $M_{\text{counterfeit}}=4.57$ ,  $M_{\text{genuine}}=5.25$ ,  $p=.03$ ; Figure 1). What does self-alienation imply for how consumers treat their possessions? Feeling connected to a possession is associated with keeping it or disposing of it in a way that preserves its life-cycle (e.g., recycling, Trudel et al. 2016). Feeling alienated, in contrast, could increase the likelihood of trashing possessions that are otherwise connected to the self. We test this prediction in a 2 (alienation, control) X inclusion of possessions in self-concept (continuous measure) study. Participants (N=196) in the alienation [control] condition described a situation wherein they were not being themselves [morning routines] (Gino et al. 2015) and reported self-alienation ( $\alpha=.91$ ). Then, they decided whether to keep, donate, or trash their clothing in a "spring cleaning" scenario, and reported tendencies to include

possessions in self-concept (BESC, Sprott et al. 2009). The alienation (vs. control) condition felt more self-alienated ( $M_{alienation}=3.50$ ,  $M_{control}=2.94$ ,  $p=.02$ ). They also decided to trash more clothes ( $M_{alienation}=13.25\%$  vs.  $M_{control}=9.57\%$ ,  $p=.04$ ; Figure 2a). Moreover, self-alienation increases trashing among those high ( $p=.001$ ) versus low ( $p=.6$ ) in the tendency to include possessions in self-concept (interaction  $p=.02$ ; Figure 2b). Thus, self-alienation increases trashing of possessions, to the extent the possessions are part of the self-concept.

Self-alienation is associated with possession alienation (study 1) and a tendency to trash possessions (study 2). Another potential implication of self-alienation is a tendency to replace broken possessions rather than repair them. This is addressed in study 3. Moreover, study 3 tests a theoretically-derived boundary condition: the effect of self-alienation on how consumers treat possessions should be limited to possessions that are part of the self-concept.

Participants ( $N=401$ ) completed a one-factor (alienation, control, true-self) between subjects study. The alienation [control; true-self] condition described a situation wherein they were not being themselves [morning routines; a situation wherein they were completely being themselves] and reported self-alienation ( $\alpha=.94$ ). The alienation condition ( $M=2.70$ ) felt more self-alienated than the control ( $M=2.24$ ,  $p=.02$ ) and true-self ( $M=2.28$ ,  $p=.04$ ) conditions, which did not differ ( $p>.8$ ), indicating an effective manipulation. For the dependent measure, participants decided whether to repair or replace a smartphone that had a black screen (1 = “definitely get a new phone”, 100 = “definitely repair the current phone”). They also reported how connected they felt both to their own phone and to a phone in the store. Regarding their own phone, consistent with study 1, the alienation condition ( $M=4.10$ ) felt less connected than the control ( $M=4.46$ ,  $p=.04$ ) or true-self ( $M=4.49$ ,  $p=.03$ ) conditions, which did not differ ( $p>.8$ ; Figure 3a). Regarding a new phone, no differences emerged (all  $ps>.8$ ; Figure 3b), consistent with our assertion that self-alienation should affect only possessions that are part of the selfconcept. Regarding the decision to repair or replace, the alienation condition ( $M=66.41$ ) were marginally less likely to repair compared to the control condition ( $M=73.49$ ,  $p=.07$ ), and directionally, to the true-self condition ( $M = 70.63$ ,  $p=.29$ ; Figure 3c). Importantly, the decision to repair was mediated by connection to one’s phone controlling for connection to a phone (bootstrap sample = 5000, alienation vs. control 95% CI=[.2251, 3.3175]; alienation vs. true-self 95% CI=[.2358, 3.3897]). Thus, self-alienation decreases consumers’ connection to their phone and not to an unrelated phone. The decreased connection to one’s phone in turn increases the desire to replace rather than repair it.

In sum, consumers who feel alienated from the self also feel more alienated from (or less connected to) their possessions. This effect only applies to products that are relevant to the selfconcept and has downstream effects on consumers’ decisions to trash and to repair versus replace possessions.

## Effects of Recipients’ Negative Emotional Expressions on Donors’ Preference for Survival Helping Versus Developmental Helping

Xue WANG (University of Hong Kong); He (Michael) Jia (University of Hong Kong); Sara Kim (University of Hong Kong)

### **Brief Abstract:**

In this research, we focus on the difference between helping that fulfills people’s development needs and helping that fulfills people’s survival needs. Across five studies, the current research shows that

compared to positive emotional expressions, negative emotional expressions of a recipient will make donors less optimistic about the recipient's future, thus perceive the recipient to have a higher need for survival helping but a lower need for developmental helping, and ultimately have a stronger preference for survival helping over developmental helping to the recipient.

### **Extended Abstract:**

Traditionally, a large amount of donations have been used to provide people in need with goods that fulfill their survival needs (e.g., necessities and medicines). Nowadays, it has been increasingly popular for governments and non-profit organizations to dedicate charity donations to training and education programs for the underprivileged group or microloans to the poor (Genevsky & Knutson, 2015), which emphasize people's potential for growth and needs for self development. This research focuses on the difference between helping that fulfills people's development needs (hereafter as developmental helping) and helping that fulfills people's survival needs (hereafter as survival helping). We examine how emotional expressions of people in need influence these two types of helping. Specifically, we propose that compared to positive emotional expressions, negative emotional expressions of a recipient will make donors less optimistic about the recipient's future, thus perceive the recipient to have a higher need for survival helping but a lower need for developmental helping, and ultimately more willing to donate money to satisfy the recipient's survival needs but less willing to donate money to satisfy the recipient's developmental needs.

Study 1 (N = 440) adopted a 3 (emotional expression: positive, negative, vs. neutral)  $\times$  2 (helping: developmental vs. survival) between-subjects design. Participants viewed either a positive, a negative, or a neutral expression of African children and evaluated the child they viewed in terms of either perceived need for food or perceived need for books (1 = not at all, 7 = extremely). Books (vs. food) were used to operationalize developmental (vs. survival) helping. The two-way interaction is significant ( $F = 11.85, p < .001$ ). Specifically, negative expression ( $M = 5.57, SD = 1.29$ ) increased perceived need for survival helping compared to positive ( $M = 5.09, SD = 1.56, t = 2.16, p = .032$ ) and neutral expressions ( $M = 4.87, SD = 1.40, t = 3.05, p = .002$ ), and there was no difference between positive and neutral expressions ( $t = 1.00, p = .321$ ). In contrast, negative expression ( $M = 5.29, SD = 1.53$ ) decreased perceived need for developmental helping compared to positive ( $M = 6.15, SD = 0.97, t = -4.04, p < .001$ ) and neutral expressions ( $M = 5.89, SD = 1.15, t = -2.71, p = .007$ ), and there was no difference between positive and neutral expressions ( $t = 1.22, p = .224$ ).

Study 2 (N = 745) tested the mediating role of optimistic belief with a 2 (emotional expression: positive vs. negative)  $\times$  2 (helping: developmental vs. survival) between-subjects design. Participants viewed either a positive or a negative expression of African children, rated either perceived need for food or perceived need for books of the child they viewed, and indicated how optimistic they were about the child's future (e.g., "I predict the best from his life," 1 = not at all, 7 = extremely). The two-way interaction is significant ( $F = 30.05, p < .001$ ). Replicating Study 1, negative expression increased perceived need for food ( $t = 2.30, p = .022$ ) but decreased perceived need for book ( $t = -5.49, p < .001$ ). Furthermore, a moderated mediation with optimistic belief as the mediator and helping domain as the moderator is significant (95% CI: -.70, -.28). Specifically, negative (vs. positive) expression reduced optimistic belief ( $F = 122.54, p < .001$ ), which further mediated the effects of negative (vs. positive) expression on perceived need for books (95% CI: -.46, -.14) and for food (95% CI: .05, .35) in opposite directions.

Study 3 (N = 595) demonstrated a downstream consequence of emotional expressions in terms of donation preference and provided further evidence for the proposed optimistic belief mechanism by manipulating the process variable. This study adopted a 2 (emotional expression: positive vs. negative) × 2 (message framing: concerned vs. optimistic) between-subjects design. We created a charity ad, in which we used two pictures of the same girl to manipulate emotional expression. In the charity ad, a slogan underneath the girl image was framed as “Be concerned about these girls. They will have a decent life” in the concerned condition and “Be optimistic about these girls. They will have a bright future” in the optimistic condition. After viewing the charity ad, participants completed a bipolar scale measuring their relative donation preference between food (1) and books (8). There is an emotional expression × message framing interaction on donation preference ( $F = 3.32$ ,  $p = .069$ ). Compared to positive expression, negative expression decreased participants’ preference for developmental helping over survival helping in the concerned condition ( $M_{\text{negative}} = 3.15$  vs.  $M_{\text{positive}} = 3.78$ ;  $F = 7.16$ ,  $p = .008$ ) but not in the optimistic condition ( $M_{\text{negative}} = 3.53$  vs.  $M_{\text{positive}} = 3.55$ ;  $F = .01$ ,  $p = .930$ ).

Study 4A (N = 358) generalized the effects to adult recipients. Participants were randomly assigned to view either a positive or a negative expression of the same female and then completed a bipolar scale measuring their relative donation preference between an assistance program providing basic daily necessities (1) and an assistance program providing training courses (8). Compared to positive expression ( $M = 4.58$ ,  $SD = 2.29$ ), negative expression ( $M = 4.01$ ,  $SD = 2.18$ ) decreased participants’ preference for developmental helping over survival helping ( $F = 5.82$ ,  $p = .016$ ). Study 4B examined actual donation behavior, with 158 Hong Kong undergraduates allocating 15 HK dollars (about two U.S. dollars) between book purchase and food purchase for a girl. One half of participants viewed a picture in which a girl looked sad, while the other half viewed another picture in which the same girl looked happy. Compared to positive expression ( $M_{\text{book}} = 7.25\text{HKD}$  vs.  $M_{\text{food}} = 7.72\text{HKD}$ ), negative expression ( $M_{\text{book}} = 5.92\text{HKD}$  vs.  $M_{\text{food}} = 9.08\text{HKD}$ ) decreased participants’ relative allocation of money to book purchase over food purchase ( $F = 8.76$ ,  $p = .004$ ).

This research extends the literature by distinguishing between developmental helping and survival helping, by showing how emotional expressions of a recipient influence donors’ relative preference between these two types of helping, and by demonstrating optimistic belief as the underlying mechanism.

## **Behaving for the Greater Good - Competitive Paper Session**

*Sloane (2nd Level)*

*Chair: Noah VanBergen, University of Cincinnati, USA*

### **Cohesion or Coercion? Why Coordinated Actions Backfire in Marketing Contexts**

Noah VanBergen (University of Cincinnati, USA)

#### **Brief Abstract:**

Previous research ranging from the study of brand extensions to social groups repeatedly demonstrates benefits of similarity and coordination. In contrast, the present work demonstrates that engaging in less (vs. more) coordinated actions in organizational contexts (e.g., cause-related marketing) results in more favorable perceptions. Four studies show that when organizational entities engage in varied (vs. coordinated) actions, consumers perceive greater impact resulting from those actions. This effect is

driven by agency perceptions: In hierarchical organizations such as corporations and universities, variation signals agency while coordination signals coercion. Therefore, marketing actions that involve variation (vs. coordination) are perceived more favorably.

### **Extended Abstract:**

Consumers often see brands and organizations in the marketplace engaging in various actions. Moreover, subordinate representatives of an overarching organization (e.g., sub-brands, product lines, departments) can each engage in actions that may or may not be the same as other representatives from the same organization. For example, the NFL has historically raised awareness for breast cancer, and each team performed the same actions to promote this unified cause. However, in 2017, the NFL's cancer campaign changed such that teams could elect to support different cancers—teams performed different actions. The present research asks which strategy consumers perceive to be more effective: coordination or variation.

Previous research from several domains points to benefits of similarity and coordination. For example, much work in branding demonstrates the importance of “fit” and similarity (Aaker and Keller 1990; Völckner and Sattler 2006). Likewise, research on social group entitativity attests to the importance of group member coordination. Entitativity refers to the extent to which individuals are perceived to form a single coherent group (Hamilton and Sherman 1996). When group members coordinate their actions, perceptions of competence increase (Ip, Chiu, and Wan 2006). Thus, entitativity also suggests that organizational actions should be coordinated, not varied.

However, I propose that consumers apply different assumptions for the motivating force behind actions performed by organizational entities (vs. individual people): Individual people are assumed to have agency over their own actions; therefore, coordination is a signal of group cohesiveness and improves perceived competence (Ip et al. 2006). In contrast, organizational actions are determined at least in part by superordinate levels of the hierarchy. Therefore, coordination may signal coercion rather than cohesiveness, whereas non-coordination may signal intentional and agentic involvement of subordinate actors. If this is the case, observing varied (vs. coordinated) actions should increase the perceived impact of actions.

Four studies provide support for my conceptualization. Study 1 tests my main hypothesis using a three-cell design with 106 Mturkers. I described a fictitious corporation comprised of four brands engaging in a charitable campaign. I manipulated whether each brand performed the same actions in this campaign (i.e., donating the same percentage from the same time period) or performed different actions (i.e., donating different percentages from a different time period). I also included a control condition that did not specify donation percentages or time frames. The dependent measure was the perceived impact of the campaign. I found significantly higher perceived impact for varied actions ( $M=4.85$ ) than coordinated actions ( $M=4.08$ ;  $p=.025$ ). The control condition was equivalent to the varied condition ( $M=4.74$ ).

Study 2 built on study 1 by using a different (non-numerical) manipulation of actions in a two-cell design with 106 undergraduates. I described a fictitious brand comprised of four subbrands engaging in a philanthropic campaign. Each sub-brand donated the same percentage of revenue in each condition; however, in the coordinated (varied) action condition, the same single target (four different targets) received donations. I measured perceptions of the campaign's success and perceptions of each sub-brand's agency in the campaign. Results showed that varied actions ( $M=4.92$ ) significantly increased perceived success ( $M_{\text{coordinated}}=4.35$ ,  $p=.04$ ). I also found that varied (vs. coordinated) actions

increased the perceived role of the sub-brands (vs. the corporation) in determining the details of the campaign ( $M_{\text{varied}}=5.48$  vs.  $M_{\text{coordinated}}=6.15$ ;  $p=.017$ ), that each sub-brand had more freedom ( $M_{\text{varied}}=3.04$  vs.  $M_{\text{coordinated}}=2.39$ ;  $p=.028$ ), and that each sub-brand contributed more to overall success ( $M_{\text{varied}}=4.37$  vs.  $M_{\text{coordinated}}=3.78$ ;  $p=.029$ ). Further, agency perceptions mediated the impact of varied actions on perceived campaign success.

Study 3 extends the investigation beyond donation contexts. I also rule out a potential alternative explanation for the above results, whereby consumers respond most favorably to scenarios that depict both a source of variability and a source of coordination (e.g., donating different amounts to the same cause, or vice versa). To rule this out, study 3 used a 3-cell design with 179 undergraduate business students in which I described four university departments implementing a campaign to make campus greener: In the same-same condition, the same goal (increase recycling) was served by the same four actions. In the same-different condition, this same goal was served by four different actions. In the different-different condition, different goals (recycling, energy use, water conservation, and emission reduction) were served by four different actions. The dependent measure was perceived impact of the campaign, and I again measured agency perceptions. Results showed that both the same-different ( $M=5.13$ ) and different-different ( $M=5.23$ ) conditions led to greater perceived impact than the same-same condition ( $M=4.41$ ,  $ps<.01$ ). This pattern was also found for agency perceptions, which mediated perceived impact.

My final study demonstrates when variation (vs. coordination) will not improve the perceived impact of organizational actions through moderation of process. According to my conceptualization, if agency is signaled by cues other than varied/coordinated actions, variation should no longer improve perceptions. To test this, study 4 used a 2 (action: coordinated vs. varied) x 2 (agent: corporate vs. individual) between-subject design involving 203 Mturkers. I manipulated coordinated vs. varied actions through a nonprofit campaign, similar to studies 1 and 2. I manipulated the agent by describing who made the announcement about the campaign: In the corporate (individual) condition, the company's CEO (manager of each sub-brand) made the announcement. I again measured perceived impact and agency. Results showed a significant two-way interaction on both items ( $ps<.05$ ), such that varied (vs. coordinated) actions led to greater perceived impact and agency in the corporate condition ( $ps<.05$ ) but not the individual condition ( $ps>.08$ ). Again, perceived agency mediated perceived impact. A conceptual replication of study 4 omitted for space considerations shows that a group comprised of organizations (friends) benefits (does not benefit) from varied vs. coordinated actions.

These studies demonstrate that coordination is not always a signal of cohesiveness, and lack thereof is not necessarily negative. This contributes to research on branding and entitativity by showing that varied (vs. coordinated) actions signal agency and increase perceptions of impact in the context of hierarchical organizations.

### Giving to Political Candidates: The Role of Underdog Positioning

Gustavo Schneider (University of South Carolina, USA); Jennifer Savary (University of Arizona, USA); Anastasiya Pocheptsova Ghosh (University of Arizona, USA); Ted Matherly (Oklahoma State University, USA)

#### **Brief Abstract:**

We demonstrate how political candidate's positioning as an underdog or favorite affects consumer



choices between modes of support, either through donating money privately or through public campaign merchandise purchase. Specifically, we find that supporters of underdog candidates are more likely to buy merchandise compared to supporters of the favorite in a two-way political race, and that these effects are enhanced during major campaign events. We find converging evidence for this effect through surveys of recent donors to political campaigns, experiments and by analyzing contribution data from the 2008 and 2016 Presidential elections.

### **Extended Abstract:**

Contributions to political campaigns have typically been seen as a way to influence policy (Claessens et al., 2008) and to improve the likelihood of election of a preferred candidate (Ingberman, 1989). However, candidates' recent emphasis on courting large numbers of smaller donors has enabled a new group of donors to participate in the electoral process. At the aggregate level, the importance of small donors has increased in recent elections with donation figures reaching hundreds of millions of dollars (Vandewalker & Norden, 2016). At the individual level, however, small donors are unlikely to affect election outcomes, and instead they may contribute to political campaigns because it allows them to communicate to others about their identities (Aytimur et al., 2014). Furthermore, donors now face a decision when giving to their preferred candidate: whether to make a monetary donation or to purchase candidate's merchandise. While a donation is a largely private means to support a candidate, purchasing merchandise allows individuals to publicly signal their support, preference and views.

While prior work has considered how donor motives may influence the timing of contributions (Hassell, 2011), in this research we consider how their motives may influence the format of donations, represented in the choice between private contributions of cash and publicly visible purchases of merchandise bearing candidate names and slogans, such as Obama's "Hope" Tshirts and Trump's "MAGA" hats. We propose that the desire to publicly communicate political affiliations – an important source of identity (Jost et al., 2009) – is particularly likely for supporters of candidates positioned as underdogs, those candidates who face external disadvantages but possess determination to overcome them (Paharia et al., 2011). Prior work demonstrates that, to the extent that a consumer identifies with an underdog, they are more likely to engage in "purchase activism" to publicly demonstrate this support (Paharia et al., 2014). In the political realm, buying candidate's merchandise can publicly signal one's preference, unlike a less visible donation. Thus, we expect that consumers who support underdog candidates will be more likely to do so through publicly visible merchandise purchases. Further, we expect this effect to be amplified during periods of high news coverage as higher competitive salience increases the support for the underdog (Paharia et al., 2014), and higher news coverage increases engagement in political races (Hayes & Lawless, 2015). To test these propositions, we used a mixed methods approach, finding converging evidence by analyzing contribution data from the 2016 and 2008 Presidential elections, and using experiments and surveys of recent donors to political campaigns.

For Study 1 we used actual donation data from FEC filings of the 2016 election to analyze the effect of major campaign events, where the media would be focused would be on the candidates and their supporters, on the number of daily donations and merchandise purchases. These events were identified from Google Trends data. As Trump had positioned himself as an underdog (Danzinger, 2016), we expected that his supporters would be more likely to purchase merchandise than Clinton supporters, and that this effect would be enhanced during periods of campaign events. We used a difference-in-differences approach to demonstrate the differential impact of such events on merchandise sales (vs.

donations) for Trump and Clinton as the underdog and favorite candidates, respectively. Following an event, the underdog candidate saw an 18% increase in the overall number of contributions, and this increase was 40% stronger for merchandise sales.

For Study 2, we replicate these effects for the Obama campaign during the 2008 election, where Obama was positioned as an underdog, providing evidence against idiosyncratic causes such as party affiliation and the candidates and environment of the 2016 election.

In Study 3, during October-November 2016, we surveyed Clinton and Trump supporters (N=154) who had contributed to their candidate. Participants' contribution decision (money donation vs. merchandising purchase) was used as dependent variable in this study. A logistic regression revealed that, controlling for the contribution amount, underdog supporters were marginally more likely to purchase merchandise than favorite supporters (B = 0.66, Wald  $\chi^2$  (1) = 3.42, p = 0.06; Trump = 52%; Clinton = 38%).

In Study 4, we asked Clinton and Trump voters (N=275) to recall major campaign events during the 2016 election, with half recalling a positive event and the other recalling a negative one. Next, participants indicated how likely they would be to donate money and purchase merchandise on that day. Replicating the results of the prior studies, participants were more likely to purchase merchandise from the underdog than from the favorite candidate (F(1, 271) = 24.56, p < 0.001; MTrump\_Purchase = 3.88, MClinton\_Purchase = 2.68). Interestingly, there was a significant underdog by news event interaction (F(1,271)=4.34, p < 0.05): participants were more likely to support the underdog when they focused on a good event for the underdog (Mgood\_event x Trump = 4.21) as compared to a bad event (Mbad\_event x Trump = 3.56, F(1, 271) = 4.01, p < 0.05). In contrast, favorite supporters did not differ in their intentions to contribute based on the type of event (p > 0.38).

In sum, we demonstrate that underdog positioning of a political candidate influences decision of how to contribute to the campaign, by increasing the likelihood of purchase candidate's merchandise (vs. making money donations). Prior work has shown how underdog positioning can affect sales (Paharia et al., 2014), and we extend these findings by showing how underdog positioning also influences political contributions. Furthermore, this work contributes to the growing body of research examining how political identity shape consumer-related behaviors (Crockett & Pendarvis 2017; Jung et al., 2017; Ordabayeva & Fernandes, 2018) by shedding light on how consumers participate in the political process through the choice to publicly (vs. silently) support their candidate.

## The Far Side of Consumers' Charitable Giving: Autonomous Pro-Social Behavior

Moran Anisman-Razin (Duke University, USA); Liat Levontin (Technion University, Israel)

### **Brief Abstract:**

Pro-social behaviors can be autonomy-oriented, provide recipients with the means to succeed in future situations but not supplying an immediate solution, or dependency-oriented, providing an immediate solution but not supplying tools for future success. We show that most of consumers' prosocial research is focused on money donations, usually a form of dependency-oriented help. However, growth mindset consumers, those who believe personality can change with effort, are less likely than fixed mindset consumers to provide dependency-oriented help. Accordingly, more focus on autonomy-

oriented prosocial behavior, the “far and dark side of pro-social behavior” is needed.

**Extended Abstract:**

Pro-social behavior has many expressions, consumers help others by donating money or goods (e.g., clothes), or time (e.g., volunteering in soup kitchens). A vast body of literature examined the antecedents of consumers’ pro-social behavior, such as the presentation of the request for help (e.g., Cialdini, & Schroeder, 1976; Fraser, Hite, & Sauer, 1988; Liang, Chen, & Lei, 2016), or identifiability of the help recipient (e.g., Ein-Gar, & Levontin, 2013; Erlandsson, Björklund, & Bäckström, 2015; Small, Loewenstein, & Slovic, 2007). Although much knowledge has accumulated, most of the research focused on dependency-oriented prosocial behavior. A concept originating from research on inter-group relations, dependency-oriented pro-social behavior provides its recipient with a solution to the problem but does not teach them the knowledge or skills that prepare them to solve the specific issue (or future ones) on their own (Maki, Vitriol, Dwyer, Kim, & Snyder, 2015; Nadler, 2002). This type of help reinforces existing power relations and status quo (Nadler, 2002). Contrary, autonomy-oriented help involves providing knowledge or skills recipients need to independently solve a problem (Nadler, 2002) and as such, power gaps between giver and receiver reduce. While any type of pro-social behavior is beneficial, each has its downsides. Dependency-oriented help provides immediate relief to one’s needs, while autonomy-oriented is more beneficial in the long run. Surprisingly, this important distinction is absent from consumer pro-social literature.

The distinction between dependency-oriented and autonomy-oriented pro-social behavior is important since some consumers may prefer to give dependency-oriented help while others will be reluctant to provide this type of help. We propose that a growth mindset, the belief that people’s characteristics are malleable, is negatively related to consumers’ willingness to provide dependency-oriented help, as they perceive it as an ineffective way of helping and a waste of their resources. Since most of the pro-social research was focused on dependency-oriented help, there is much room to study the prosocial tendencies of those with a growth mindset.

The current research includes four studies, the first is a review of the current stand of the literature. Studies 2-4 provide an initial empirical evidence of the effect of mindsets on preference for autonomy-versus dependency-oriented pro-social behavior.

Study 1 examined the state of the pro-social behavior literature in one of the leading consumer research journals (*Journal of Consumer Research*) in the years 2007-2017 in terms of the types of pro-social behaviors that were studied. We searched for empirical articles, using the keywords: prosocial, pro-social, help, charity, nonprofit, donation, volunteer, charitable giving. Twenty-three articles matched the search criteria. We extracted the pro-social behaviors used as dependent variables in these articles and compiled a list of 67 unique behaviors.

To assess the extent to which these behaviors are dependency-oriented versus autonomy-oriented, we recruited 202 judges, who learned the definitions of the two types of pro-social behaviors, and the differences between them. Each judge, assigned to either autonomy-oriented or dependency-oriented judgments, assessed the degree for which 15 behaviors (randomly selected from the pool of behaviors) were autonomy-oriented (dependency-oriented). To create a dependency-orientation score, we subtracted the mean autonomy-oriented rating of each item from its mean dependency-oriented ratings (higher than 0 scores indicates a more dependency- than autonomy-oriented item). Of the 67 unique

behaviors, only 22 (33%) were rated as more autonomy than dependency-oriented, thus indicating that most prosocial behaviors studied in JCR (67%) are dependency-oriented (See Table 1).

Study 2 (N=99) examined whether a growth mindset is related to a preference for autonomy-oriented prosocial behaviors. Participants reported their mindsets (8 items of the Implicit Person Theory scale; Levy, Stroessner & Dweck, 1998;  $\alpha = .90$ ) and their perceptions of autonomy-oriented pro-social behavior being a waste or a good use of their resources (5 items developed for the present study, e.g., : “I believe that by engaging in an autonomy-oriented help I waste my resources”;  $\alpha = .82$ ). The results of a simple linear regression ( $\beta = -.25$ ,  $p = .015$ ,  $R^2 = .10$ ) suggest that as expected, a growth mindset is negatively related to the perception of autonomy-oriented pro-social behaviors as a waste of one’s resources, controlling for age, gender and level of education.

Study 3 (N=216) examined the effect of mindsets on the willingness to provide autonomy-oriented or dependency-oriented help. In a 2X2 study, we manipulated participants’ mindset (growth/fixed) and the type of help requested (dependency-oriented – installing smartphone apps for a person/ autonomy-oriented – teaching a person how to install smartphone apps). There was no main effect for mindset,  $F(1,212) = .28$ ,  $p = .599$ ; nor for type of help,  $F(1,212) = .83$ ,  $p = .362$ . However, as expected, growth mindset condition participants were more willing to provide autonomy-oriented than dependency-oriented help ( $F(1,212) = 4.08$ ,  $p = .045$ ,  $\eta^2 p = .019$ ), whereas no differences were found for fixed mindset condition participants ( $F(1,212) = .55$ ,  $p = .458$ ,  $\eta^2 p = .003$ , see Figure 1).

Study 4 (N=622) examined the relations between participants’ chronic mindset measured as in Study 1, their preference for autonomy-oriented help (using 8 items from Maki et al., 2017, e.g., : “I like to help individuals develop the skills and knowledge to help themselves”), and their actual pro-social behaviors (whether they volunteered in the previous year and their satisfaction from their volunteer work). We found that participants’ growth mindset was positively related to the likelihood of engagement in autonomy-oriented pro-social behavior (i.e., volunteering; see Table 2). Among the 249 participants who reported volunteering, growth mindset was positively related to satisfaction with volunteer work, via autonomous help orientation ( $b = .04$ ,  $SE = .02$ ,  $CI\ 95\% [.01, .10]$ , see Figure 2).

The results of studies 2-4 suggest that a growth mindset is associated with higher willingness to engage in autonomy-oriented prosocial behavior, but less so in dependency-oriented pro-social behavior. In light of Study 1 that show that the majority of pro-social research focused on dependency-oriented pro-social behavior, the current research sheds some light on the “far and dark side of pro-social behavior”. This implies that consumers’ mindset may affect the antecedents, motivations and consequences of consumers’ autonomy- vs. dependency-oriented prosocial behavior, which should be further addressed and examined.

## **Imagine This: There Are Many Ways to Induce Imagery and They Do Not Always Yield Positive Results - Symposium**

### *Scarborough 3 (Lobby Level)*

This session distinguishes the effects of different imagery induction methods as well as between positive and negative effects of these methods on imagery, emotional and behavioral responses. The first and second presentations distinguish the effects of different induction methods (visuals vs. instructions; products presented independently or as bundles) on positive imagery and behavioral intentions. The third and fourth presentations focus on negative effects of different induction methods on imagery,

expectations, and emotional responses.

*Chairs: Gizem Ceylan, University of Southern California, USA; Kristin Diehl, University of Southern California, USA*

### To Imagine or Not to Imagine: How Imagery Induction Methods and Prior Experience Affect Behavioral Intentions

Gizem Ceylan (University of Southern California, USA); Kristin Diehl (University of Southern California, USA); Wendy Wood (University of Southern California, USA)

**Brief Abstract:**

Using a meta-analytic approach Ceylan, Diehl, and Wood examine whether induction methods that rely more on internal compared to external representations (i.e. instructions vs. visuals) affect imagery and behavioral intentions differently. They observe similar effects regardless of method, but identify prior experience with the purchase as a novel and critical moderator that heightens the effectiveness of induction methods relying on internal representations.

### The Effect of Bundling on Imagery and Product Evaluation

Min Zhao (Boston College, USA); Lan Xia (Bentley College, USA)

**Brief Abstract:**

Counter to prior research on greater utility of segregated gains, we propose and demonstrate that bundled presentation can increase product evaluation and willingness to pay. The effect occurs because bundling related products together can enhance spontaneous mental imagery of using the products, which leads to greater perceived psychological ownership of the products and increase valuation. The effect of bundling is attenuated or reversed when spontaneous mental imagery is disrupted by constraining mental resources, bundling products with inconsistent theme, or bundling disliked items together. Evidence from five studies provides converging support to these hypothesized effects and underlying process.

### When a Photo is Not Worth 1000 Words: How Photos Constrain Consumer Imagery and Expectations of Experiences

Alixandra Barasch (New York University, USA); Emily Powell (New York University, USA)

**Brief Abstract:**

Consumers are spending more money on experiences than ever before and, with the rise of social media, they are sharing increasing numbers of photos of their experiences. While photos are typically thought to increase consumers' ability to imagine prospective experiences, we show that these photos can actually constrain consumers' imagery. This is because consumers have idiosyncratic preferences, so the concrete nature of photos can actually limit their ability to imagine an experience that matches their preferences. In four studies, we show that this constrained imagery leads to lower expected enjoyment and desire to engage in an experience.

## Guilty Displeasures: Food Related Emotional Consequences of Process Versus Outcome Imagery

Ryan Elder (Brigham Young University, USA); Gina Mohr (Colorado State University)

### **Brief Abstract:**

Across three studies we show that for unhealthy (vs. healthy) foods, outcome (vs. process) imagery leads to an increase in negative emotions, with the difference exacerbated among restrained eaters. Importantly, when imagery elicited emotions are measured prior to consumption, the negative emotions experienced during actual consumption decrease.

## **Together, Together: Social Influences in Consumption - Competitive Paper Session**

*Scarborough 4 (Lobby Level)*

*Chair: Helen van der Sluis, Arizona State University, USA*

## With Inclusion Comes Influence: The Psychological and Persuasive Consequences of Observable Disability in the Marketplace

Helen van der Sluis (Arizona State University, USA); Adriana Samper (Arizona State University, USA); Kirk Kristofferson (Ivey Business School)

### **Brief Abstract:**

Although marketers and policy makers increasingly focus on the inclusion of individuals with disabilities, little research has addressed how physical disabilities may shape inferences within a consumption context. We demonstrate that consumers attribute heightened moral character to people with physical disabilities due to the perception of their having overcome adversity, and find that these moral character inferences increase the persuasiveness of those with disabilities in a sales context.

### **Extended Abstract:**

In 2016, 44.3% of employed people with disabilities worked in sales and service roles (U.S. Bureau of Labor Statistics, 2016), consumption contexts that require significant customer employee interaction. While past research has shown that people perceive those with disabilities as warmer but less competent (Fiske et al., 2002), no work has examined morality inferences, a more important trait to person perception in the consumption domain (Goodwin et al., 2014). Moreover, despite how important observable characteristics are to person perception (Naumann et al., 2009), research is mute regarding the persuasive impact visible physical disabilities may have in the marketplace.

This research addresses these gaps and investigates the person-perception and persuasion effects of observable physical disabilities in retail contexts. We propose that consumers attribute a moral halo to individuals with disabilities (S1, S2, S3, S4), and that such perceptions are driven by the perceived increased adversity those with disabilities endure (S2, S4). Importantly, we propose this moral halo positively affects the persuasiveness of the disabled individual in a sales context (S1, S3, S4), particularly when persuasion knowledge is salient.

Study 1 establishes in an interpersonal interaction context that a physical disability elicits perceptions of higher moral character, which in turn positively affect persuasiveness. Undergraduates (n=206)

interacted with, and completed a survey for, a confederate posing as an outside research firm representative (in a wheelchair v. not) working with the lab. Afterward, participants completed a survey that included moral character (e.g., ethical; Samper et al., 2018;  $\alpha=.87$ ), and persuasiveness (e.g., future collaboration) items about the confederate. As predicted, participants assigned higher moral character ( $M_{\text{disabled}}=6.00$ ,  $M_{\text{not disabled}}=5.64$ ;  $p=.02$ ; figure 1) and persuasiveness ( $M_{\text{disabled}}=5.97$ ,  $M_{\text{not disabled}}=5.62$ ;  $p=.04$ ; figure 2) to the confederate when she was in a wheelchair (v. not). Mediation analysis revealed that the ‘moral halo’ drives increased persuasion (Model 4; Hayes, 2013;  $B=.32$ ,  $CI95: .05, .57$ ).

Study 2 replicates the moral halo effect and examines potential mediators in a controlled setting. Undergraduates ( $n=116$ ) read a profile about man named Alex. In addition to life details (e.g., job, relationship status), they learned he was physically disabled (vs. not), and then assessed his moral character via moral identity (Aquino & Reed, 2002;  $\alpha=.96$ ). When he was disabled (vs. not), participants assigned Alex higher moral character ( $M_{\text{disabled}}=6.72$ ,  $M_{\text{not disabled}}=5.93$ ;  $p=.01$ ; figure 3), perceived that he overcame more life adversity ( $M_{\text{disabled}}=5.60$ ,  $M_{\text{not disabled}}=4.04$ ;  $p<.0001$ ; figure 4), and felt more empathy towards him ( $p<.001$ ). Mediation analysis revealed only a significant indirect effect through overcoming adversity (Model 4; Hayes, 2013;  $B=.41$ ,  $CI95: .14, .73$ ). An additional study demonstrated process support via moderation by including a moral transgression factor. Taken together, results show the moral halo assigned to physically-disabled individuals results from the perception that they have overcome adversity in their lives.

Study 3 examines how people interact with disabled individuals in a retail clothing context, particularly when persuasion knowledge is made salient. We employed a 2 (disabled, not disabled) x 2 (persuasion knowledge: high (clothing irrelevant), low (clothing relevant)) design. Undergraduates ( $n=305$ ) went through a guided visualization exercise in which they interacted with Gina, a female salesperson (disabled vs. not) in a clothing retail store, and told her they were shopping explicitly for a dress shirt for work. In selecting items to try, Gina offered either a dress shirt (relevant to need) or a pair of jeans (irrelevant). Upon completion, participants indicated salesperson persuasion through their willingness to accept the salesperson’s clothing suggestion (1-7 scale). Results revealed a significant disability x persuasion knowledge interaction ( $p=.01$ ). When the clothing item was relevant (low PK), as anticipated, there was no significant difference in salesperson compliance, regardless of disability. However, when the clothing suggestion was irrelevant (high PK), participants were significantly more compliant to the salesperson’s suggestion when she was disabled versus not ( $M_{\text{disabled}}=4.37$ ,  $M_{\text{not disabled}}=3.39$ ;  $p=.002$ ; figure 5). We also measured salesperson and retail experience satisfaction and the results are consistent. Thus, consumers were more compliant and satisfied with the explicit sales attempt even when it was irrelevant to what their purchase goal. Put another way, the presence of a physical disability positively affected outcomes of traditional persuasion-knowledge access (Friestad & Wright, 1994).

Study 4 examines how people interact with disabled individuals in a different retail interaction (car purchase) and uses a different observable disability, lacking an arm. This study used a 2 (disabled, not disabled) x 2 (suspicion-inducing PK: high, low) between-subjects design where participants were guided through a car-purchase scenario in which they met with a salesperson named John. In the disabled condition, John had only one arm. Upon reading through the introduction to the scenario and learning that John was either disabled or not, participants ( $n=337$ ) responded to a baseline moral character index (Samper et al., 2018;  $\alpha=.91$ ). Participants then read that John showed them an ideal car

for their criteria, but quoted a price that was either at (Low PK) or above (High PK) their budget. Participants completed the moral character index again ( $\alpha=.94$ ) and rated their likelihood of recommending John to other car buyers. We replicated the moral halo at baseline ( $M_{\text{disabled}}=5.61$ ,  $M_{\text{not disabled}}=5.38$ ;  $p=.03$ ; figure 6) and observed the predicted disability x PK interaction on moral character after the PK manipulation ( $p=.004$ ). Consistent with study 3, the moral halo persisted at high PK ( $M_{\text{disabled}}=5.45$ ,  $M_{\text{not disabled}}=4.63$ ;  $p<.0001$ ), but no differences emerged at low PK ( $M_{\text{disabled}}=5.58$ ,  $M_{\text{not disabled}}=5.49$ ;  $p=.58$ ; figure 7). Importantly, the presence of the disability drove subsequent persuasiveness. When John was disabled, he was more likely to be recommended than when he was able-bodied ( $M_{\text{disabled}}=5.32$ ,  $M_{\text{not disabled}}=4.98$ ;  $p=.02$ ; figure 8). There was no interaction such that PK did not matter ( $p=.26$ ), suggesting that perceptions of disability have important marketing implications.

In conclusion, we provide the first investigation into the psychological and persuasive consequences of persons with disabilities in a consumption context. We find that consumers perceive those with disabilities as having elevated moral character due to the perception of their having overcome adversity. This moral halo circumvents previously-documented persuasion knowledge effects and leads to increased persuasion even when an explicit persuasion attempt is present.

## Want to Come Along? How Emotional Expressiveness Influences the Appeal of a Potential Consumption Partner

Wilson Bastos (Catolica Lisbon School of Business and Economics)

### **Brief Abstract:**

Choosing a companion is an important decision in the consumption of experiences. What drives this decision? This work investigates emotional expressiveness (EE) as one determinant. Results show that individuals expected to display an average level of EE during the experience are the preferred companion. However high-EEs and low-EEs are not equally desirable—high-EEs are preferred over low-EEs. Two distinct sequential-mediation paths explain these differences. Compared to average-EEs, high-EEs are less preferred because they exert pressure on the partner to ‘tune up’ his/her emotions, which is distracting. Low-EEs are less desirable because they fail to provide feedback, which hinders social connection.

### **Extended Abstract:**

Companions are an important element in the consumption of experiences (Caprariello & Reis, 2013). But how do we go about selecting our experience partners? Put differently, what determines an individual’s appeal as a partner? This investigation hypothesizes and shows that emotional expressiveness (EE; Friedman et al., 1980; Riggio & Riggio, 2002) is a reliable determinant of how desirable a person is as a potential experience partner. Specifically, the amount of emotion that individual is expected to express during the experience determines their appeal as a partner for an experience consumption.

Drawing on previous research (Butler et al. 2003), this work examines three levels of EE—low, average, and high. However, instead of engaging in HARKing (Hypothesizing After the Results are Known—Kerr, 1998), the author lets the empirical evidence point to the answer of which level of EE makes for desirable consumption companions.

Experiment 1 uses an actual choice procedure to examine whether expected emotional expressiveness



influences people's selection of a companion for an upcoming experience.

Participants (N=150) were asked to write the names of three friends who live at their city and who tend to display different levels of emotion—low, average, or high—while watching movies. Participants also described what they thought it would be like to watch a movie with each friend. Next, participants were informed that, as a result of participating in the study, they would enter a drawing for two movie tickets, but that first they would indicate, on a series of pairs, their preferred companion (i.e., low-EE-friend vs. average-EE-friend; average-EE-friend vs. high-EE-friend; and low-EE-friend vs. high-EE-friend; the position of the names within each pair [i.e., left or right] was randomized). This procedure is suitable for this investigation because it covers all possible comparisons among potential partners, while allowing for an examination of how each partner performs against the others. At post-study, a research assistant was involved in the electronic delivery of the tickets to ensure participant anonymity.

Three z-tests indicated that, in the first choice (low-EE vs. average-EE), the average-EE friend was selected by a majority of the 150 participants (87%), a value that is significantly greater than the indifference value of 50% ( $z=9.06, p<.001, CI(95\%)=[80.64, 91.93]$ ). In the second choice (average-EE vs. high-EE), average-EE was the preferred companion of a significant majority (69%,  $z=4.65, p<.001, CI(95\%)=[60.94, 76.29]$ ). Last, in the third choice (low-EE vs. high-EE), high-EE was preferred by a significant majority (59%,  $z=2.20, p=.027, CI(95\%)=[50.68, 66.95]$ ). These results indicate the following order of preference: average-EE > high-EE > low-EE.

Experiment 2 employs a between-subjects design to test the replicability of Experiment 1 and advance explanations for the differences. It tests the ideas that, compared to average-EEs, high-EEs are less desirable because they exert pressure on the focal individual to “tune up” their own emotional reactions (emotional adjustment; Gross, 2013); and low-EEs are less preferred because they fail to send feedback about the experience (feedback; Gross, 1998).

Participants (N=142) read the definition of emotional expressiveness and were asked to select from a drop down menu of movie genres (action, comedy, documentary, drama, horror, romance) one “in which your emotional expressions while watching this type of movie are average.” Subsequently, participants were randomly assigned one of the three EE conditions (companion's EE: low, average, or high). They were instructed to think of someone they expected to express a low, average, or high level of emotion while watching a movie of the genre they had selected earlier. Finally, participants were asked to imagine that they were planning to watch a movie of that genre and that the other person could be interested in watching that movie too. This was followed by the measures of the focal constructs.

Participants answered, on 7-point scales (1=Strongly disagree; 7=Strongly agree) a four-item measure of the other person's appeal as a partner (termed here as Partner's Appeal (PA); e.g., “I would want to watch the movie with that person.”;  $\alpha=.930$ ), and four-item measures of the two predicted mediators: emotional adjustment (e.g., “I would have to change the amount of emotion I usually display.”;  $\alpha=.937$ ) and feedback (e.g., “During the movie, I would know what's in that person's mind.”;  $\alpha=.752$ ).

An ANOVA with EE (low vs. average vs. high) predicting PA showed a significant effect ( $F(2,139)=38.46, p<.001, \eta^2=.356$ ). As expected, average-EEs ( $M=5.80, SD=1.12$ ) were favored over both high-EEs ( $M=5.01, SD=1.55, p=.006$ ) and low-EEs ( $M=3.40, SD=1.44, p<.001$ ), and high-EEs were

avored over low-EEs ( $p < .001$ ).

Two mediation analyses (PROCESS, model-4, 10,000 resamples) showed the predicted indirect effects. Namely, pressure to emotionally adjust explained why high-EEs are less appealing as a companion than average-EEs, and lack of feedback explained why low-EEs are less desirable as a movie partner than average-EEs (Figure 1).

Experiment 3 re-tests the model with a recall-based approach (vs. scenario—Experiment 2) involving a different type of experience (sports watching). Further, it investigates more complete, sequential pathways. Specifically, it examines the ideas that emotional adjustment is distracting (Sheppes et al., 2009) and lack of feedback hinders social connection (Butler et al. 2003); thus negatively affecting PA.

Participants ( $N=146$ ) were asked to describe a previous sports watching experience they had with a person who expressed a low, average, or high level of emotion. Following, they answered identical measures of PA ( $\alpha=.871$ ), emotional adjustment ( $\alpha=.907$ ), and feedback ( $\alpha=.637$ ), as well as three-item measures of distraction (e.g., “That person’s presence distracted me from the enjoyment of the sporting event.”;  $\alpha=.873$ ) and social connection (e.g., “During the sporting event I felt close to the other person.”;  $\alpha=.942$ ).

Results show a significant influence of EE ( $F(2,143)=11.98, p < .001$ ). As expected, contrasts show that average-EEs ( $M=5.34, SE=.23$ ) were marginally favored over high-EEs ( $M=4.56, SE=.24, p=.071$ ) and significantly favored over low-EEs ( $M=3.67, SE=.24, p < .001$ ), and that high-EEs were significantly favored over low-EEs ( $p=.036$ ).

Two sequential mediation analyses (PROCESS, model 6) yielded the expected indirect effects. Specifically, compared to average-EEs, high-EEs are less desirable because they create pressure to emotionally adjust, which distracts from the experience; and low-EEs are less favorable because they fail to transmit information, which hinders interpersonal ties (Figure 2).

This investigation reveals a novel predictor of consumers’ decision to select experience partners—emotional expressiveness—and provides explaining evidence for the observed effects.

## Sources of Social Proof in Retail

Sarah C Whitley (Oklahoma State University, USA); Remi Trudel (Boston University, USA)

### **Brief Abstract:**

We explore how consumers interpret and utilize cues of social proof from observable product availability in retail. Across five studies we show that consumers interpret information about inventory allocations and visual evidence of prior consumers’ choices as cues on social proof from retailer and consumer sources, respectively. These two cues of social proof provide opposing interpretations regarding the relationship between product availability and consumer demand, despite often being observed simultaneously at the point of purchase. Contrary to consensus in social proof, shoppers are more likely to follow low consensus consumer cues rather than high consensus retailer cues.

### **Extended Abstract:**

Companions are an important element in the consumption of experiences (Caprariello & Reis, 2013). But how do we go about selecting our experience partners? Put differently, what determines an individual's appeal as a partner? This investigation hypothesizes and shows that emotional expressiveness (EE; Friedman et al., 1980; Riggio & Riggio, 2002) is a reliable determinant of how desirable a person is as a potential experience partner. Specifically, the amount of emotion that individual is expected to express during the experience determines their appeal as a partner for an experience consumption.

Drawing on previous research (Butler et al. 2003), this work examines three levels of EE—low, average, and high. However, instead of engaging in HARKing (Hypothesizing After the Results are Known—Kerr, 1998), the author lets the empirical evidence point to the answer of which level of EE makes for desirable consumption companions. Experiment 1 uses an actual choice procedure to examine whether expected emotional expressiveness influences people's selection of a companion for an upcoming experience.

Participants (N=150) were asked to write the names of three friends who live at their city and who tend to display different levels of emotion—low, average, or high—while watching movies. Participants also described what they thought it would be like to watch a movie with each friend. Next, participants were informed that, as a result of participating in the study, they would enter a drawing for two movie tickets, but that first they would indicate, on a series of pairs, their preferred companion (i.e., low-EE-friend vs. average-EE-friend; average-EE-friend vs. high-EE-friend; and low-EE-friend vs. high-EE-friend; the position of the names within each pair [i.e., left or right] was randomized). This procedure is suitable for this investigation because it covers all possible comparisons among potential partners, while allowing for an examination of how each partner performs against the others. At post-study, a research assistant was involved in the electronic delivery of the tickets to ensure participant anonymity.

Three z-tests indicated that, in the first choice (low-EE vs. average-EE), the average-EE friend was selected by a majority of the 150 participants (87%), a value that is significantly greater than the indifference value of 50% ( $z=9.06, p<.001, CI(95\%)=[80.64,91.93]$ ). In the second choice (average-EE vs. high-EE), average-EE was the preferred companion of a significant majority (69%,  $z=4.65, p<.001, CI(95\%)=[60.94,76.29]$ ). Last, in the third choice (low-EE vs. high-EE), high-EE was preferred by a significant majority (59%,  $z=2.20, p=.027, CI(95\%)=[50.68,66.95]$ ). These results indicate the following order of preference: average-EE > high-EE > low-EE.

Experiment 2 employs a between-subjects design to test the replicability of Experiment 1 and advance explanations for the differences. It tests the ideas that, compared to average-EEs, high-EEs are less desirable because they exert pressure on the focal individual to “tune up” their own emotional reactions (emotional adjustment; Gross, 2013); and low-EEs are less preferred because they fail to send feedback about the experience (feedback; Gross, 1998).

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of emotion while watching a movie of the genre they had selected earlier. Finally, participants were asked to imagine that they were planning to watch a movie of that genre and that the other person could be interested in watching that movie too. This was followed by the measures of the focal constructs.

Participants answered, on 7-point scales (1=Strongly disagree;7=Strongly agree) a four-item measure of the other person's appeal as a partner (termed here as Partner's Appeal (PA); e.g., "I would want to watch the movie with that person.";  $\alpha=.930$ ), and four-item measures of the two predicted mediators: emotional adjustment (e.g., "I would have to change the amount of emotion I usually display.";  $\alpha=.937$ ) and feedback (e.g., "During the movie, I would know what's in that person's mind.";  $\alpha=.752$ ).

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Results show a significant influence of EE ( $F(2,143)=11.98, p<.001$ ). As expected, contrasts show that average-EEs ( $M=5.34, SE=.23$ ) were marginally favored over high-EEs ( $M=4.56, SE=.24, p=.071$ ) and significantly favored over low-EEs ( $M=3.67, SE=.24, p<.001$ ), and that high-EEs were significantly favored over low-EEs ( $p=.036$ ).

Two sequential mediation analyses (PROCESS, model 6) yielded the expected indirect effects. Specifically, compared to average-EEs, high-EEs are less desirable because they create pressure to emotionally adjust, which distracts from the experience; and low-EEs are less favorable because they fail to transmit information, which hinders interpersonal ties (Figure 2).

This investigation reveals a novel predictor of consumers' decision to select experience partners—emotional expressiveness—and provides explaining evidence for the observed effects.

## Interview with the vendor: Conversational Disclosures Increase Responsiveness to Strategically Withheld Information

Nikolos M Gurney (Carnegie Mellon University, USA); George Loewenstein (Carnegie Mellon University, USA); Nick Chater (Warwick Business School)

### **Brief Abstract:**

Consumers can be remarkably insensitive to withheld information—giving, in effect, the ‘benefit of the doubt’ regarding absent information. Such results are found using abstract tabular representations of information—raising the possibility that people might treat the withholding of information very differently when embedded in a conversational interaction. In three experiments, we show that people are substantially more sensitive to, and suspicious of, withheld information in a conversational context. This work draws together consumer psychology, behavioral economics, and experimental pragmatics to suggest that conversational disclosures, whether auditory or written, may better engage important aspects of human reasoning than traditional formats.

### **Extended Abstract:**

Policy writers and marketers are motivated, for both good and nefarious reasons, to simplify consumer product information. Unfortunately, simplifications are often curated in a way that creates false impressions of the truth. For example, banks used to be able to hide the exorbitant fees associated with checking account overdrafts. This practice resulted in many Americans having and using the feature at a cost on par with payday lending. When the Consumer Financial Protection Bureau (CFPB) put in place a set of guidelines dictating how banks present account information in emails to consumers, opt-ins for “overdraft protection” dropped significantly. The CFPB emails rely on a simple, tabulated information format in which fees are clearly depicted in the main body of the message. Conceptually, the CFPB email guidelines are very similar to services like Yelp which succinctly convey product, service, and quality information to consumers on the behalf of businesses to facilitate persuasion. Our research calls into question the effectiveness of the standard, tabulated format used in these and other media to communicate with consumers. In three experiments, we show that people are substantially more sensitive to, and suspicious of, withheld information in a conversational context— whether they listen to a recorded conversation, see a chat unfold, or simply read a script. Bringing together consumer psychology, behavioral economics, and experimental pragmatics, this work suggests that naturalist conversational interactions, whether auditory or written, when compared to abstract, tabular presentations of information, may better engage important aspects of human reasoning.

Prior research shows that alerting consumers to incomplete information reduces their reported certainty about a decision (Tormala & Rucker, 2018), but little work has been done on how the channel, or medium, of information disclosure effects consumers perceptions of completeness and ability to make rational inferences. Economic theory suggests that no matter the medium of communication – written, oral or otherwise – when information is missing consumers should assume that it is as bad as possible (Grossman & Hart, 1980; Milgrom 1981). Experimental results, however, call this theory into question by demonstrating that consumers do not assume the worst when information is missing, if they even notice (Bederson et. al, 2016; Gurney & Loewenstein, 2017). On the other hand, sensitivity to, and reasoning about, withheld information is ubiquitous in experiments on language understanding (e.g., Noveck & Sperber, 2004). Research shows that the medium through which consumers send and receive information influences how they react to that information. Berger and Iyengar (2013), for example, suggested that compared to oral communication, written communication (text, blogging,

social media posts, etc.) leads consumers to bring up more interesting products, an effect they attribute to the asynchronous nature of written communication and the greater time that it affords. Oral communication, meanwhile, heavily influences how we perceive and respond to others – evidence suggests that a person is judged as more intelligent when they are heard rather than read (Schroeder & Epley, 2015).

Study 1 tested the hypothesis that a conversational disclosure format would lead consumers to make more rational inferences and be more skeptical of missing or withheld information. Participants interacted with a visual stimulus that was made to look like a Yelp screenshot or a recorded stimulus that was designed to contain the same information as the screenshot. Participants first reviewed their assigned stimulus and then, using a slider anchored at 0 (definitely not) and 100 (Enthusiastic!), indicated what they thought about going to the restaurant with friends. Participants next progressed to a new page without the stimulus and answered a battery of questions about the restaurant. Two questions were particularly relevant: one checked participants' recall of the SIG (or its presence) and the other requested an open-ended response about their reasoning behind their response to the stimulus. The effect of audio disclosure relative to visual disclosure was dramatic; an ordinary least squares analysis revealed that, relative to the audio highest SIG (grade of 'A') condition ( $\beta = 84.36$ ,  $p < 0.001$ ), the audio missing information condition ( $\beta = -31.47$ ,  $p < 0.001$ ) produced significantly more skepticism than the standard (Yelp screenshot) missing information. Treatment condition also predicted the correct recall of the target information: audio participants were significantly more likely to correctly recall the value or absence of information.

For study 2, we tightened the experimental manipulations to reduce the variance in information across operationalizations of the disclosed content as much as possible. Despite these efforts, an audio disclosure, because of intonations and other voice cues that can only be conspicuously absent, inherently has more information than a visual disclosure (Scherer, 2003; Clark & Tree, 2002; Schroeder & Epley, 2015). Additionally, we tested script and unfolding chat treatments. Concisely, study 2 supported our hypothesis that the conversational disclosure would prove more effective and it added the insight that unfolding chats and scripts are similarly effective.

Study 3 extended our findings to a new domain, consumer banking, by testing willingness to uptake a personal checking account overdraft option. When information was missing in an email, participants were significantly more likely to sign up for the overdraft option if they reviewed an email than if they reviewed a phone conversation script. Our results show that people can be sensitive to omitted information, with normatively appropriate skepticism, when that information is embedded in a conversational context, whether auditory or written. This fits with the observation from the language sciences that the interpretation of conversational input is exquisitely tuned not just to what is said, but to what might have been said, but was not (e.g., Grice, 1975). It also aligns with normative 'unravelling' predictions from economic theory (Grossman & Hart, 1980; Milgrom 1981). These results are significant in at least three ways: they suggest that theoretical conclusions from earlier studies suggesting insensitivity to omitted information may be premature; they suggest that conversational presentations of information may be important in communications between companies and consumers, regarding improving consumer welfare; and they suggest a concrete setting for future theoretical and empirical interaction among consumer psychology, economics, and the language sciences.

## Session 8

### **Vulnerable Consumers: Helping Children, The Poor, and Females Pursue Health and Financial Stability - Symposium**

#### *Verlst (2nd Level)*

This session aims to enable scholars to better understand (and marketers to better serve) three types of vulnerable consumers: children, low-income consumers, and females. Paper 1 partnered with UNICEF to launch three field experiments in elementary schools in Panamá, leveraging economic incentives to increase children's healthy choices. Paper 2 challenged the prevalent judgment of the poor and showed that because poor consumers were food-insecure, they chose unhealthy food not to indulge but to feel full. Paper 3 found that because consumers who grew up in resource-poor (vs. resource-rich) environments expected to live up to a lower age, they allocated a smaller share of income for retirement. Paper 4 extended the gender stereotype literature by providing a novel perspective for why females tend to invest less. Together, these papers bridge discoveries from numerous methodologies (domestic and international field experiments, in-lab studies, and secondary dataset) and in a diverse set of consumption domains (health, retirement, investment, financial planning).

*Chair: Szu-chi Huang, Stanford University, USA*

#### **Children are Price Sensitive Too: Using Price Promotions to Increase Children's Consumption of Healthy Food**

Szu-chi Huang (Stanford University, USA); Michal Maimaran (Northwestern University, USA)

##### **Brief Abstract:**

We partnered with UNICEF to launch three field experiments at three elementary schools in Panamá in order to examine the effectiveness of price-promotion interventions in boosting children's consumption of healthy food. We gave children in elementary schools coupons of varying message complexity to promote healthy food, and measured their actual redemption rates at schools' kiosks. This research provides novel insights into the impact of economic incentives on children's consumption and the moderating effect of the complexity of the message the economic incentive entails.

#### **Food Insecurity, Not Indulgence, Underlies Unhealthy Food Choices among the Poor** Broderick Turner (Northwestern University, USA); Aparna Labroo (Northwestern University, USA)

##### **Brief Abstract:**

A widespread belief is the poor favor immediate gratification, including the indulgence offered by unhealthy foods. Food assistance, similar to free money, is believed to further license indulgence. We challenge this view to posit poor consumers are food-insecure and, in choosing unhealthy foods, they seek filling, not indulgent, foods because unhealthy foods are often more filling. Food-assistance increases unhealthy choice, not by licensing indulgence, but by reminding users of food insecurity. Three experiments support our proposition. By coding 5,211 purchases of low-income shoppers, we additionally show that field-interventions framing healthy foods as filling increased healthy purchases

four-fold.

### Early-life Scarcity, Life Expectancy, and Decision-Making

Chiraag Mittal (Texas A&M University, USA); Vldas Griskevicius (University of Minnesota, USA); Kelly Haws (Vanderbilt University, USA)

#### **Brief Abstract:**

There are considerable disparities in financial outcomes among individuals from different socioeconomic backgrounds. Often, those from poorer backgrounds make seemingly myopic choices that affect them negatively in the long run. Yet why people from deprived backgrounds respond by behaving in ways that worsen their situation is an unresolved puzzle. We propose that one reason for financial disparities among people from different socioeconomic backgrounds is their perceived life expectancy. We find that in the presence of current stressors people growing up poorer feel that they are going to die sooner and that this tendency leads them to devalue retirement savings.

### Anxiety and Financial Vulnerability: Gender Effects

Punam Keller (Dartmouth College, USA); Annamarie Lusardi (George Washington University, USA); Nadia Linciano (CONSOB (Italy))

#### **Brief Abstract:**

Our studies demonstrate that women are less likely to engage in risky financial decisions than men because they are more likely to let their anxiety prompt a need for certainty. The literature on emotions supports the view that women engage in more emotional appraisal than men: Self-reports indicate that women have more frequent, and intense emotional experience than men (Fujita, Diener, & Sandyik 1991), and place greater value on their emotional states (Dube & Morgan 1998). One field study and three experiments in this paper show that for women, anxiety increases financial risk aversion, and undermines participation in financial markets.

### **It's All About Sensory Cues! - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Yunqing Chen, Chinese University of Hong Kong, China*

### The Effects of Endorsers' Facial Expressions on Inferences of Their Social Status and Willingness to Purchase the Product They Endorse

Yunqing Chen (Chinese University of Hong Kong, China); Robert Wyer (University of Cincinnati, USA)

#### **Brief Abstract:**

The facial expressions that endorsers convey in a print ad can influence consumers' reactions to the product being advertised. However, this effect, which is mediated by perceptions of the endorsers' social status, depends on whether the endorser is male or female. That is, consumers perceive smiling male endorsers to have high status but smiling female endorsers to have low status. These perceptions, in turn, influence consumers' willingness to purchase products whose social prestige value is unknown a priori. Four experiments confirm these conclusions and demonstrate their implications for actual



purchase behavior.

### **Extended Abstract:**

Print advertisements often contain a picture of a person who implicitly or explicitly endorses the product being promoted. The endorser's facial expression is a prominent feature of his or her appearance. Although the endorser is often smiling, this is not always the case. For example, Ketelaar et al. (2012) identified the facial expressions of 61 models that were shown in websites pertaining to three types of product (i.e. V-neck sweaters, shirts, and glasses), and found that the models for prestigious brands smiled less than models for less prestigious items. What effects does an endorser's smile have on consumers' reactions to the endorser and the product being endorsed?

Our research provides an answer to this question. Although the effect of facial expressions on inferences of warmth and competence has been identified in previous research (Wang et al. 2016), its effect on perceptions of social status has not previously been examined. In a series of studies, we found that these perceptions of an endorser's status depend on whether the endorser is a man or a woman. That is, smiling female endorsers are perceived to have low social status whereas smiling male endorsers are attributed high status. This difference is traceable to the different expectations that people hold for men and women by virtue of their gender-defined social role (Brody and Hall 2000; Shields 2000). A smiling female endorser confirms normative expectations that women are warm and nurturing. Correspondingly, a nonsmiling male endorser confirms expectations that men are achievement oriented, aloof and socially independent. Consequently, endorsers whose facial expressions deviate from these expectations may be attributed high social status (Bellezza et al., 2014; Wyer 1966). We found that consumers attribute higher social status to both male and female endorsers whose facial expressions were counter-normative than to those whose expressions conformed to these social role expectations. Moreover, these attributions influence consumers' actual consumption of products whose social prestige is unknown a priori.

Four studies examined implications of our conceptualization. Study 1 (N = 54) provided preliminary evidence of the interactive effects of individual's gender and facial expressions. It utilized a 2 (target gender) x 2 (facial expression) x 2 (target ethnicity) within-subjects design. Participants saw photographs of eight persons in random order and indicated the product in each or four pairs (e.g. Nissan car vs. BMW car) that the person was more likely to have or use. They also rated the extent to which they thought the person had high social status. Research showed that smiling males were expected to prefer more high status products and attributed higher status than nonsmiling males, whereas smiling females were expected to prefer fewer high status products and attributed lower status than nonsmiling females (see Table 1 for results summary).

Study 2 (N = 469) confirmed the results of the first study and compared the effects of facial expressions on perceptions of status to their effects on both competence and warmth. In doing so, it unconfounded differences in smiling and nonsmiling targets' physical characteristics. It used a 2 (facial expression: smiling vs. neutral) x 2 (target gender: male vs. female) x 2 (target type: endorser vs. non-endorser) x 2 faces replication between-subject design. Participants were shown one of eight photographs and rated the target with respect to 12 traits (e.g. cooperative, professional, prestigious, etc). Results showed that warmth, competence and status were independent constructs and that although smiling had a generally positive effect on perceptions of warmth and a negative effect on perceptions of competence, its effect on perceptions of social status depended on whether the endorser

was male or female (Table 2).

Study 3 (N = 690) examined the downstream impact of an endorser's status on reactions to products by investigating the role of product status and familiarity of the product. It used a 2 (facial expression: smiling vs. neutral) × 2 (gender of endorser: male vs. female) × 3 (product: Cartier watch vs. Swatch watch vs. Modica watch) between-subject design. Participants were shown one of twelve ads and indicated their willingness to pay for the watch in the ad and the extent to which the endorser was of high status. Results showed that the effect of an endorser's facial expression on evaluations of the product being endorsed will be greater when the brand of product is unfamiliar than when it is known a priori to have high or low social status (Table 3).

Study 4 (N = 150) explored consumers' real purchase behavior towards the endorsed product. It utilized a 2 (facial expression: smiling vs. neutral) × 2 (gender of endorser: male vs. female) between-subject study. Participants were given actual money to buy a roller pen shown in an ad. They were told that they could pay as much for the pen as they want (Gneezy et al. 2010), and when they left, they would be given the product and keep the rest of money they didn't used. As predicted, participants attributed higher status to a smiling male and a nonsmiling female and these attributions, in turn, increased the amount they were willing to pay for the product the endorsers promoted (Table 4).

Our research contributes to knowledge in several ways. The effects of endorsers' facial expressions on product evaluations and consumption through their mediating impact on perceptions of their social status have not previously been articulated. The contingencies of these effects on the endorser's gender have also not previously been identified. To this extent, our findings provide potentially important insights into the conditions in which the use of endorsers in print ads is likely to be effective.

## The Influence of Olfactory Cues on Consumer Preferences: The Moderating Role of Brand Names

Marina Carnevale (Fordham University); Rhonda Hadi (Oxford University, UK); Ruth Pogacar (University of Calgary, Canada); David Luna (Baruch College, USA)

### **Brief Abstract:**

Research has documented profound effects of olfactory cues on consumer product preferences. However, this influence may hinge on precursory cues, such as a product's brand name. Specifically, we find that phonetically incongruent brand names can ultimately lead consumers to discount subsequent olfactory information.

### **Extended Abstract:**

Product scents can be powerful differentiation tools for marketers, and academic research suggests olfactory cues can profoundly influence consumer memory and evaluations (e.g., Krishna, Lwin, & Morrin, 2010). However, while the influence of product scent on consumer behavior has been examined, it has mostly been assessed in isolation, without investigating how other product-based cues may moderate its influence.

We begin to address this gap by examining how brand names might shape consumer responses to a product's olfactory properties. This examination is practically relevant, given that consumers typically see a product's brand (e.g., on packaging) before being exposed to its scent.

However, this exploration is also theoretically motivated by the phonetic symbolism and olfactory processing literatures. Consumer research in phonetic symbolism suggests that the phonetic properties of a brand name can influence consumer perceptions (e.g., Klink, 2000; Lerman & Garbarino, 2002; Lowrey, Shrum, & Dubitsky, 2003). For non-word brand names, even the smallest unit of sound can evoke specific meaning. For example, front (back) vowels, such as the English sound “ee” (“o”) are associated with lightness (heaviness) and softness (hardness; Klink 2000). Accordingly, certain brand names may be more or less congruent with particular product categories, and such congruity may influence consumer preferences (Lowrey & Shrum, 2007). For instance, if lightness is typical in a category (e.g., tissues), a front vowel (e.g., the brand name “Deetal”) would be category-congruent while a back vowel (e.g., “Dutal”) would be category-incongruent.

Importantly, phonetic congruity (versus incongruity) not only affects product perceptions, but can also prompt more fluent (versus disfluent) processing (Topolinski & Strack, 2010). The facilitation of fluent processing is critical to the current research, given that sensory cues in general (Stephenson & Palmgreen, 2001) and olfactory cues in particular (DeBono, 1992) tend to be processed in a peripheral, heuristic manner. Accordingly, a product’s brand name should act as a germane antecedent determining the extent to which consumers rely on subsequent olfactory information when making product-based judgments and choices. Specifically, we propose that category-congruent brand names will encourage more fluent processing and facilitate consumer reliance on a product’s olfactory cues, whereas category-incongruent brand names will generate disfluency, leading consumers to discount subsequent olfactory information.

Study 1 (N=191) was a field experiment with a 2(Brand Name: Congruent vs. Incongruent) x 2(Scent: Unscented vs. Pleasant Scent) between-subjects design. Experimenters set up a table in a public space and offered passerby \$5 to sample a lip balm. The lip balm was either unscented or vanilla-scented (a pretest suggested vanilla was a desirable scent for this product category), and was packaged with a brand name pretested as being either congruent (“Frosh”) or incongruent (“Frish”) with the lip balm category. After trying the lip balm, participants were told they could either “purchase” it for \$1 of their compensation, or relinquish it and receive full compensation. Logistic regression results revealed a significant interaction of Brand Name x Scent on purchase likelihood ( $\chi^2=5.41$ ,  $p=.02$ , Odds ratio=5.83). Specifically, when the brand name was category-congruent, participants were significantly more likely to purchase the vanilla (versus unscented) lip balm (52% vanilla vs. 8% unscented;  $\chi^2=17.62$ ,  $p<.001$ , Odds ratio=.08). However, when the brand name was category-incongruent, there was no significant difference in purchase likelihood between the two scent conditions (36% vanilla vs. 21% unscented;  $\chi^2=2.50$ ,  $p>.1$ , Odds ratio=.48).

Study 2 (N=140) was a laboratory experiment with a 2(Brand Name: Congruent vs. Incongruent) x 2(Scent: Congruent vs. Incongruent) between-subjects design. Participants sampled a hand lotion that had either a congruent (lavender) or incongruent (pine) scent (previous research suggests category-congruent olfactory cues are preferred, e.g., Krishna, Lwin, & Morrin, 2010), and was packaged with a brand name that was pretested as being either category-congruent (“Sait”) or category-incongruent (“Soot”). After sampling the product, participants were given the option to either keep the product, or choose an alternative lotion to take home with them. Results confirmed a significant interaction of Brand Name x Scent on

Product Choice ( $\chi^2=3.95$ ,  $p<.05$ , Odds ratio=11.66), and the pattern of contrasts mirrored those of study 1: when the brand name was category-congruent, participants chose the lavender (versus pine) lotion more often (23% lavender vs. 5% pine;  $\chi^2=4.05$ ,  $p<.05$ , Odds ratio=.18). However, when the brand name category-incongruent, there was no significant difference in choice likelihood between the two scent conditions (6% lavender vs. 11% pine;  $\chi^2=.70$ ,  $p>.1$ , Odds ratio=2.13).

Our final study (N=121) was a laboratory experiment with a 2(Brand Name: Congruent vs. Incongruent) x 2(Scent: Pleasant vs. Unpleasant) between-subjects design. The objective was to investigate the underlying mechanism and test whether an incongruent brand name might attenuate negative effects of mildly aversive product scents. Participants sampled a hand sanitizer that had either a pleasant (orange) or unpleasant (musty pine) scent (according to pretest results), and was packaged with pretested category-congruent (“Gimmel”) or category-incongruent (“Gommel”) brand names. After sampling the product, participants evaluated it on a series of bipolar dimensions (e.g., good-bad), and their evaluation time was measured as a proxy for processing fluency (Schwarz, 2004). Results confirmed a significant Brand Name x Scent interaction on Product Evaluation ( $F(1,117)=4.68$ ,  $p<.05$ ). When the brand name was category congruent, participants evaluated the orange (versus musty pine) sanitizer more highly. However, when the brand name was category-incongruent, there was no significant difference in evaluation between scent conditions. Further, a moderated mediation analysis (Model 8 of Hayes 2013) confirmed that when the brand name was congruent, processing fluency explained the effects of scent on evaluation (95% CI=-.37,-.01), but this was not the case when the brand name was category-incongruent (95% CI=-.02; .23).

Our research suggests that brand names can play a pivotal role in determining the influence of olfactory cues on consumers’ judgements and behaviors, and this has important managerial implications. For instance, when scent is an important selling point in a product (e.g., candles), category-congruent brand names may enhance consumer valuation of the scent. However, for products with inherently bad scent (e.g., nail polish, blue cheese), marketers may benefit from category-incongruent brand names, so that the influence of unpleasant olfactory cues on consumer responses is attenuated.

REFERENCE

## Makeup Who You Are: Self-Expression Enhances the Authenticity of Consumers Who Put Effort Towards Their Appearance

Rosanna Smith (University of Georgia, USA); Michelle vanDellen (University of Georgia, USA)

### **Brief Abstract:**

Consumers spend significant time and money on products and services that enhance their appearance; however, prior work has found that consumers who invest effort in their appearance can be judged negatively as they are perceived to be misrepresenting their true self. We examine how reframing effortful beauty practices as self-expressive can enhance both authenticity perceptions of consumers who alter their appearance and evaluations of appearance-related products. We find this positive effect of self-expression is driven by framing authenticity in existentialist (the true self is in one’s choices and decisions) versus essentialist (the true self is natural and innate) terms.

### **Extended Abstract:**

Consumers spend significant time and money on their appearance; however, recent work has found that consumers who engage in beauty work can be perceived as inauthentic (Samper, Yang, & Daniels, 2017). This connection between inauthenticity and effort towards one's appearance has been found to, in turn, reduce purchase intentions towards beauty products. In this article, we explore how reframing beauty work as self-expression can actually enhance authenticity perceptions, and further, enhance the evaluation of beauty products and practices.

We propose that while beauty work can be seen as a way to disguise the true self, it can also be seen as a vehicle for consumers to express their true self. This difference is driven by two underlying notions of authenticity: essentialist (the true self is rooted in a natural and innate "essence"; Frazer, Gelman, Wilson, & Hood, 2009; Newman & Dhar, 2014) versus existentialist (the true self is rooted in one's existence (e.g., one's choices and decisions); Arnould & Price, 2000; Wang, 1999). We find that people tend to default to seeing the consumer's true self in essentialist terms, thus, the natural body is seen as the most authentic, and, subsequently, beauty work hurts authenticity perceptions and purchase intentions. However, when the consumer's true self is framed in existentialist terms via self-expression, the chosen appearance is seen as more authentic and, subsequently, beauty work enhances authenticity perceptions and purchase intentions.

Study 1A tested whether framing the use of makeup (i.e., a transformative beauty practice) as a consumer's form of self-expression alters how others assess the consumer compared to when no information is provided about the motivation behind the use of makeup. All participants viewed two photographs of the same woman: one of the woman's face before putting on makeup and the other of the woman's face after putting on makeup (see Figure 1). Participants were randomly assigned to either the self-expression or control conditions. In the self-expression condition, participants were told that the woman was motivated to change her appearance in order to express herself, while no information about motivation was provided in the control condition. As predicted, participants in the self-expressive condition perceived the woman who wore makeup to be more authentic ( $M_{\text{express}} = 4.95$ ,  $SD = 1.22$ ) than those in the control condition ( $M_{\text{control}} = 4.32$ ,  $SD = 1.44$ ),  $t(181) = -3.19$ ,  $p = .002$ ,  $d = .47$ .

Study 1B extended the examination of self-expression to perceptions of both genders. Participants viewed either a man or woman who had engaged in the same transformative beauty practice: dying their hair from brunette to blonde (See Figure 2). A 2(motivation: control vs. selfexpression) by 2 (gender of consumer: female vs. male) between-subjects ANOVA revealed a significant main effect of motivation,  $F(1, 359) = 10.92$ ,  $p = .001$ , with the self-expressive motivation seen as more authentic ( $M_{\text{express}} = 4.79$ ,  $SD = 1.27$ ) compared to control ( $M_{\text{control}} = 4.36$ ,  $SD = 1.14$ ),  $d = .36$ . Importantly, there was no main effect of gender or interaction between gender and motivation on perceptions of authenticity. While the previous studies examined transformative beauty practices, in Study 2, we were interested in low vs. high effort beauty routines. Between-subjects, participants either learned that an individual invests daily high (1 hour and 45 minutes) or low effort (10 minutes) into their appearance. A 2(motivation: self-expression vs. control) x 2(effort: low vs. high) between-subjects ANOVA on authenticity revealed a significant 2-way interaction  $F(1, 368) = 10.67$ ,  $p = .001$ . In the high effort conditions, the individual was seen as more authentic when the effort was in service of self-expression ( $M_{\text{express}} = 4.37$ ,  $SD = 1.17$ ) relative to control ( $M_{\text{control}} = 3.83$ ,  $SD = 1.20$ ),  $t(177) = 9.43$ ,  $p = .002$ ,  $d = .46$ . In contrast, there was no effect of motivation on the

low effort conditions between self-expression and control,  $t(191) = 1.72, p = .19$ .

In Study 3, we were interested in testing whether others' default assumption is that the motivation behind putting effort into one's appearance is to alter the natural body in service of pleasing others. To do this, we compared how others perceived the same individual who invests high effort into their appearance when the motivation was self-expressive in nature versus in service of enhancing their appearance for others. In addition, we included the no information control condition as in previous studies. Planned contrasts revealed that participants perceived the individual to be more authentic when they viewed the effort towards the individual's appearance to be driven by the desire to self-express ( $M_{\text{express}} = 4.76, SD = 1.28$ ) compared to the control ( $M_{\text{control}} = 3.70, SD = 1.12$ ) and appearance-enhancing conditions ( $M_{\text{enhance}} = 3.34, SD = 1.20$ ),  $t(213) = 6.86, p < .001$ . Further, the control and appearance-enhancing conditions only marginally differed from each other,  $t(213) = -1.82, p = .07$ .

Study 4 tested whether self-expression vs. self-enhancement messaging results in different perceptions of otherwise identical beauty products. Women were randomly assigned to learn about a company that frames makeup as a tool for self-expression versus to enhance one's appearance. Between-subjects, participants also rated either a high transformation product (bold lipstick) or a low transformation product (foundation to match one's skin tone). A 2 x 2 between-subjects ANOVA revealed a significant main effect of motivation,  $F(1, 343) = 7.19, p = .008$ . Participants who viewed the self-expression motivation evaluated the products more favorably ( $M_{\text{express}} = 4.84, SD = 1.72$ ) compared to those that viewed the self-enhancement motivation ( $M_{\text{enhance}} = 4.32, SD = 1.94$ ),  $d = .28$ . However, there was no significant 2-way interaction between motivation and product type,  $F(1, 343) = .06, p = .81$ . The same pattern held for perceived felt authenticity while wearing the products. A bootstrapping analysis revealed that perceptions of felt authenticity significantly mediated the relationship between motivation and product evaluations (indirect effect = .49,  $SE = .17, 95\% CI = [.15, .84]$ ).

These findings hold theoretical implications for the role of authenticity in consumer behavior and practical implications for companies that focus on beauty and personal care products.

## **Lay Beliefs and Interpersonal Judgments: Insights into Trade, Morality, and Product Design - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Samuel Johnson, University of Bath, UK*

Consumers' Beliefs about the Effects of Trade: The Role of Intuitive Mercantilism  
Samuel Johnson (University of Bath, UK); Jiewen Zhang (University of California Davis, USA); Frank C Keil (Yale University, USA)

### **Brief Abstract:**

Economists agree about the virtues of international trade, but consumers may not. Four studies demonstrate that anti-trade attitudes are rooted in mercantilist thinking—the (erroneous) belief that economic benefits track the flow of currency rather than consumption of goods and services. Studies 1 and 2 showed that importing countries are seen as harmed by trade, while exporting countries are seen as benefitting, and similar effects were found for trade across U.S. state lines. Study 3 found that educating consumers about balance of payments attenuated these beliefs, while Study 4 found that

these misconceptions lead consumers to moralize foreign transactions.

**Extended Abstract:**

Products increasingly originate from abroad, leading to efficiencies that benefit the economy broadly and the poorest consumers especially. Even though these facts are widely accepted by economists (IGM 2012), many non-economists do not appreciate these benefits (Caplan 2006). What causes these diverging attitudes?

Although much is known about country-of-origin effects in consumption choices (Elliott and Cameron 1994), little is known about beliefs about the economic impact of trade. Previous authors have suggested misunderstanding of comparative advantage (Baron and Kemp 2004) and nationalist parochialism (Boyer and Petersen 2018) as factors in trade-skepticism. We propose a third possibility: That people are intuitive mercantilists. In evaluating transactions among individual buyers and sellers (e.g., a customer buying a shirt), people tend to think that buyers are made worse-off and sellers better-off (Johnson, Zhang, and Keil 2018). Thus, consistent with economics prior to Adam Smith, people seem to believe that economic benefit tracks money rather than consumption. Might such misconceptions manifest in the domain of international trade too?

Four studies test this possibility. Studies 1 and 2 test beliefs about the effects of foreign purchases on importing and exporting countries, respectively. Study 3 attempts to reduce antitrade bias by explaining the balance of payments concept, which undermines mercantilist theory. Finally, Study 4 tested whether these beliefs translate into moral blame.

Study 1 participants (N=144 Americans) read about ten transactions (e.g., “Some people, who live in the United States, order pairs of Nike running shoes from [location]. They each pay \$150 for the shoes and receive them in the mail”). Six items varied whether the purchase was domestic, or from a developing or developed country. For each transaction, participants rated the effect on the welfare of the United States (“How well off do you think the United States now is”) on a scale from -5 (“Worse than before”) to 5 (“Better than before”).

Contrary to basic economics, participants often judged foreign transactions harmful (Table 1). Whereas only 13% of domestic transactions were deemed harmful, far more foreign transactions were (39%;  $p < .001$ ). This is consistent with mercantilist thinking, which deems trade harmful if it leads to currency outflows.

If this bias represents a fundamental misunderstanding about trade (as opposed to nationalist parochialism), then it should also occur for domestic trade. To test this, four items described transactions where consumers residing in one state made purchases from either the same or a different state. Consistent with mercantilism, 22% of across-state trades were deemed harmful, compared to only 13% within-state ( $p = .003$ ).

Study 2 tests whether selling countries (receiving currency) are thought to benefit at the buying countries' expense. Participants (N=144) completed the same task as Study 1, but reported beliefs about the selling rather than buying countries.

The pattern was the opposite of Study 1, consistent with mercantilism. Whereas 63% of domestic transactions were seen as benefitting the U.S., a larger proportion of exporting countries (78%) were seen as benefitting from sales to the U.S. ( $p < .001$ ). Developed rather than developing countries were also judged likelier to benefit ( $p = .002$ ), perhaps because people believe that trade exploits developing countries.

Study 3 harnesses an intuition from basic economics to reduce the perceived harmfulness of trade—the fact that payments must balance across countries (Hume 1752; Madura 2012). Thus, dollars sent abroad (in exchange for imports) must ultimately return to the United States either in exchange for consumption (exports) or investment (e.g., stocks or bonds). Such arguments undercut the conceptual basis for mercantilism, and lead most economists to be unconcerned about trade deficits (IGM 2014).

Participants ( $N = 140$ ) completed the same task as Study 1, except additional information was included after each transaction, highlighting the fact that payments balance (“The sellers of the shoes used the dollars they received to purchase U.S. products and invest in the U.S. economy”). This led to a major shift. Very few domestic (6%) and a modestly larger proportion of foreign transactions (17%) were deemed harmful, leading to a smaller asymmetry compared to Study 1 ( $p = .001$ ).

This supports our theoretical account, while suggesting a route toward practical interventions to reduce consumers’ zero-sum intuitions. In follow-up studies, we examined other messages, focusing on either additional consumer surplus due to trade (“These people made the purchases because this was the least expensive price available for the Nike running shoes”) or the positive implications for the local economy (“This choice allowed these people to save \$30, which they could spend on other purchases, primarily from the United States”)—both legitimate arguments. Neither message had an impact, presumably because they did not target the root cause of zerosum thinking—mercantilism.

Study 4 tests whether these beliefs about trade’s harmfulness lead consumers to view foreign purchases as immoral. Participants ( $N = 145$ ) completed the same task as Study 1, but made moral judgments (“Please rate the morality of these people’s actions”) on a scale anchored at  $-5$  (“Morally bad”),  $0$  (“Neither good nor bad”), and  $5$  (“Morally good”).

Whereas domestic transactions were infrequently seen as immoral (15%), condemnation was more frequent for foreign purchases, both from developed (23%;  $p = .003$ ) and especially from developing countries (36%;  $p < .001$ ). The difference between developing and developed countries was also significant ( $p < .001$ ), probably because trades with developing countries are deemed exploitative and thus lose–lose.

These results raise problems for marketing foreign goods, particularly from developing countries. If consumers view foreign transactions as immoral, they may incorporate this moral cost into their utility calculus and underconsume foreign products. Implications. These results implicate a basic decision-making bias—the over-valuing of money relative to goods and services (Johnson et al. 2018)—in intuitions about international trade. This has implications for political economy and for marketing. Voters with biased economic beliefs may adopt unwise policies (Caplan 2006), so political marketing that is both effective and economically honest should embrace interventions that nudge voters toward more accurate views. These results may also be useful to companies aiming to improve the perception of their (foreign-sourced) products’ benefits to society. Such advertising interventions could help



consumers to become more economically literate as well as financially better off.

## How Diversity Impacts Judgments of Moral Behavior

Nivriti Chowdhry (Rice University, USA); Ajay Kalra (Rice University, USA)

### **Brief Abstract:**

We investigate how the diversity of a team representing a firm influences perceptions of immoral behavior. Our main proposition is that homogenous teams are perceived to be more likely to engage in immoral behaviors as compared to diverse teams because diverse teams are perceived to engage in more perspective taking. Therefore, diverse teams are likely to self-regulate and exercise restraint in actions detrimental to consumers. In seven studies, we find that perceptions of perceived perspective taking in a diverse team lead to more affirmatory judgments of moral behavior and also facilitate in reducing negative perceptions after moral breaches.

### **Extended Abstract:**

Often, consumers make judgments and choices based on their perceptions of a small set of individuals in a group, or people comprising a team. For example, consumers select a television news show based on the set of anchors and parents choose summer camp after judging the team of administrators. Similarly, perceptions of the team matter in selecting extended care homes, local charities and how consumers react to a firm crisis. Though prior research has investigated how the characteristics of an individual service or sales employee impact perceptions (e.g., Ziethaml, Parasuraman, and Malhotra 2002), to the best of our knowledge, the literature has not addressed how team characteristics impact consumer judgments.

Moral behavior is becoming more relevant due a high frequency of prominent moral lapses by firms. For example, Facebook has been accused of laxity in protecting user data, and unlawfully using facial recognition on users' photographs (Singer 2018). Wells Fargo opened unauthorized accounts in customers' names and charged them for the accounts (McGrath 2017). Therefore, identifying cues that could reinforce judgments of moral behavior or mitigate negative perceptions is of substantive importance to firms.

We propose that diverse teams are perceived to be less likely to engage in immoral behaviors as compared to homogenous teams. In our studies, we focus on the role of racial diversity but also show that a combination of gender and racial diversity leads to the same effects. We examine the process by which consumers form judgments about a team's moral behavior and demonstrate that such judgments are based on perceptions of perspective taking in the team. Perspective taking is the ability to consider another person's point of view, especially a different perspective, and incorporate those thoughts in one's own decision making processes (Davis 1980) and has been shown to impact behaviors in negotiation (Galinsky and Mussweiler 2001), altruism (e.g., Batson et al. 1991), and stereotyping (Epley et al. 2004).

We propose that because diverse teams are perceived to be exposed to different perspectives, members of diverse teams are also inferred to be more in conflict with one another, including disagreements against one another's code of behavior. Therefore, diverse teams are likely to self-regulate and thereby eschew actions detrimental to consumers. Specifically, we propose that members of a diverse team are perceived to be more likely to consider multiple perspectives, which in turn makes them appear less

likely to engage in immoral behaviors.

In seven studies using contexts such as biased news, data breaches, misrepresentation of product ingredients, and charities, we examine the role of perspective taking in how morality judgments are formed. We find that increased perceived perspective taking in a diverse team leads to more affirmative judgments of moral behavior and facilitates in reducing negative perceptions after moral breaches. We demonstrate the robustness of our proposed effect by measuring morality judgments in three different ways (i.e., moral traits, moral behavior, and moral expansiveness).

In seven studies, we test and show support for our proposition and the underlying role of perspective taking. The results of all the studies are summarized in the table. There are two key differences between the studies: 1) the professional context in which the impact of diversity is tested and 2) the dependent variables, which range from different operationalizations of morality to behavioral intentions.

Studies 1A and 1B examine the role of team diversity in the context of news anchors. Participants viewed a team of diverse (four people of different races) or homogenous (four Caucasian people) news anchors that participants were told the local news station might hire. In study 1A, all the team members were male and in study 1B, all the team members were female. Participants then indicated how moral they expected the team to be in terms of traits, expected behavior, and moral expansiveness (Crimston et al. 2016; Samper et al. 2017), as well as behavioral intentions. We also measured perceived engagement in perspective taking. Results show that participants found the diverse team to be more moral and that this effect was mediated by perceived perspective taking (see table).

Studies 2A and 2B examine the role of diversity in male (study 2A) and female (study 2B) teams. The key differences are that two of the four members in the diverse teams were Caucasian in both studies, we include filler traits to rule out a “halo effect,” and rule of coordination and impression management as alternative explanations. We do so in the context of a technology company whose leadership (the diverse or homogenous team) was accused of knowingly selling private user data. The impact of team diversity on morality perceptions follow the same pattern of results as in studies 1A and 1B. There was no effect of team diversity on the filler traits, the coordination measure, nor the impression management measure (all  $p$ 's > .20).

In study 3, we examined how perceptions of a leader's morality – the CEO of the Honest Company in this study – benefit from positioning the CEO next to a diverse R&D team as opposed to a homogenous team. The CEO positioned with the diverse team is perceived to be more moral and less to blame. In study 4, we studied how executives would make hiring decisions for an HR team that would be assisting with the downsizing of their firm. Results show that executives trust a diverse HR team composed of men and women of different races to be unbiased and fair in their firing decisions, as compared to a homogenous HR team composed of Caucasian males. Similarly, in study 5, we examine how participants allocated real charitable dollars for Hurricane Harvey relief efforts to two Houston-based charities. One charity was run by a diverse team, and the other by a homogenous team. We found that participants allocated significantly more to the charity run by a diverse team, even though the two charities' mission statements were the same.

Taken together, these results demonstrate that consumer perceive diverse teams to be more moral,

which in turn positively impacts behavioral intentions and decisions.

## The Effect of Consumer Misbehavior on Their Reactions to Unrelated Service Failures Ran Li (Chinese University of Hong Kong, China); Meng Zhang (Chinese University of Hong Kong, China); Pankaj Aggarwal (University of Toronto, Canada)

### **Brief Abstract:**

Norm violations are common during company-consumer interactions. While the majority of research has focused on product/service failures on the company's side, this research examines how the wrongdoings of consumers can influence their reactions in subsequent, unrelated scenarios. Across eight experiments, we find that consumers may often see a causation between the events that are clearly unrelated and feel that a product/service failure is a consequence of, or a punishment for, what they did against another company previously. As a result, they react less negatively to the company that is currently causing a problem. Moderators of this effect are also investigated.

### **Extended Abstract:**

Norm violations, from both parties, are common during company-consumer interactions. On one hand, consumers may often encounter product/service failures, which may hurt their wellbeing. For example, a wrong delivery of products, excessive waiting to receive a service, or a pre-reserved spot being wrongly assigned to other consumers. On the other hand, consumers may engage in a range of actions which may do harm to a company. Examples include cutting in a line, wardrobing (the purchase, use, and then return of the used clothing or other products), or over-reporting of the accumulated consumption points to get the underserved memberships or discounts. Ample research has examined the reasons and recovery strategies of product/service failures in consumer behavior. However, relatively little is known about how the wrongdoing of consumers may influence the way they react towards product/service failures they encounter with a different company.

In this research, we found that consumers may often perceive a causation between the events that are clearly unrelated (e.g., when they have previously done something wrong against one brand, and later experience a service failure from another brand). In such situations, the consumers may feel that the problem they are encountering is a consequence of, or a punishment for, what they did previously (a karmic reasoning, like "What goes around comes around"). As a result, the company's transgression is viewed less unfavorably, and the consumers are less likely to complain or switch brands.

We found consistent evidence to this effect in eight experiments. Specifically, experiment 1 (N = 380) showed an initial set of evidence that participants who had misbehaved in a supermarket (i.e., minor shoplifting) predicted a higher likelihood that a product/service failure would be more likely to occur to them in the future (vs. occurring to an average consumer;  $p < .001$ ). Interestingly, when participants had not misbehaved, they predicted no such differences between self and an average consumer ( $p > .20$ ). These results were consistent with a unique, implicit assumption of our prediction: if people intuitively hold such karmic beliefs, they may become more pessimistic about their future commercial interactions after their own wrongdoing.

In experiments 2A-2C, we found that misbehaved consumers were indeed more satisfied with an unrelated service failure, using different manipulations and different consumption scenarios. Specifically, in experiment 2A (N = 106), we found that after imagining conducting some wrongdoing

in a store (i.e., accidentally broke a cup and hid it), participants were more tolerant of a service failure in a restaurant later (i.e., their pre-reserved table was wrongly assigned to another;  $p < .01$ ). In experiment 2B ( $N = 77$ ), we gave participants a real opportunity to behave dishonestly (i.e., cheating in a game; adopting the method of Mazar, Amir & Ariely, 2008) and found that those who cheated had a higher evaluation of a subsequent, real service failure (i.e., a dysfunctional survey portal;  $p < .05$ ). In experiment 2C ( $N = 120$ ), we found that after participants recalled their own misbehaviors in past shopping scenarios (e.g., jumped a queue, used pirated software, spent hours trying on different clothes but did not buy), they became more satisfied with a restaurant which wrongly assigned their reserved table to others ( $p < .05$ ).

Experiments 3 to 6 then went further to examine our prediction based on the logic of moderation of process (Spencer, Zanna & Fong, 2005). These moderators fell into two categories. (a). When the intuitive beliefs were “turned off”. Experiments 3 and 4 showed that when participants did not hold such karmic beliefs like “what goes around comes around”, either temporarily or as an individual difference, the predicted effect was mitigated. Specifically, in experiment 3 ( $N = 233$ ), we temporarily deactivated such beliefs by asking participants to elaborate on rational thinking and consider the known laws of nature (Chiu, Hong & Dweck, 1997). As predicted, after participants read a science report showing that although people sometimes talked about causal links between separate events, there was no scientific basis for it, the predicted effect disappeared ( $p > .30$ ). In experiment 4 ( $N = 222$ ), we measured participants’ personal beliefs on three scales. All these scales, to some extent, tapped into people’s propensity to generate a causal reasoning, consistent with the principle of “what goes around comes around”, by which sins would be punished and virtues rewarded. These scales were Belief in Karma scale (Kopalle, Lehmann & Farley, 2010), Belief in a Just World- General, Belief in a Just World - Personal (Dalbert, 1999). Significant correlations were found across these scales. Moreover, a moderating role of Belief in Karma was observed. According to the floodlight analysis (Spiller, Fitzsimons, Lynch & McClelland, 2013), the predicted effect was found on participants who held a stronger belief in karma (72.97% of the total participants). However, for those who scored on the lower end of the karma belief (27.03% of the total participants), the predicted effect was eliminated.

(b). Cause-consequence mismatching. Even when people hold karmic beliefs, they may not view any product/service failure they encounter as a result of, or a punishment for, their prior wrongdoing against another company. Drawing on the prior literature on causal inference (Faro, McGill & Hastie, 2010; LeBoeuf & Norton, 2011; McGill, 1989), experiments 5 and 6 examined the boundary conditions of our predicted effect from a different perspective. Specifically, we found that when participants’ “prior wrongdoing against a company” and “the service failure they received” happened in different countries (experiment 5;  $N = 236$ ), the predicted effect was significantly weakened. Moreover, in experiment 6 ( $N = 280$ ), we found that when the service failure was severe (e.g., after consuming in a restaurant, they had to be hospitalized for food poisoning) —leading the magnitude of service failure being far different from that of a consumer’s wrongdoing— the predicted effects went away ( $ps > .40$ ).

In all experiments, we measured participants’ gender, age, positive and negative affect (PANAS scale; Watson, Clark & Tellegen, 1988) and involvement. The observed effects could not be attributed to these factors. Theoretical and managerial implications were discussed.

## Slim-As-Luxury Effect: How Consumers Form Luxury Perceptions Based on Their Beliefs about High-Status People

Yu Ding (Columbia University, USA); Ji Xiong (National University of Singapore, Singapore); Gita Johar (Columbia University, USA)

### **Brief Abstract:**

We propose and found that consumers generalize their belief about human body shapes onto products. Specifically, slim human body shapes are commonly associated with high-status, and thus consumers evaluate slim-shaped (vs. wide-shaped) products as more luxurious. Six experiments were conducted to test the “slim-as-luxury” effect and the mediating role of belief about human body shapes. Further, we found that the effect will be attenuated when slimness is not a dominant feature of products (e.g., products with irregular shapes).

### **Extended Abstract:**

As one of the aspirational products that many people wish to own (Ward & Dahl, 2014), luxury products are defined by factors such as price, quality, exclusivity, as well as service and personalization in industry. In academic research, several factors have been identified that can influence luxury perception, such as giving white space in the ad (Pracejus, Olsen, & O’Guinn, 2006), having a less crowded environment (O’Guinn, Tanner, & Maeng, 2015), incorporating fine visual artwork to products’ design (Hagtvedt & Patrick, 2008), and increasing the size of a product (Dubois, Rucker, & Galinsky, 2011).

Interestingly, the above factors that contribute to people’s luxury perception of products seem to overlap with people’s beliefs about people with high social status. For example, people infer individuals who occupy more territories or spaces have a higher social status (Goffman, 1971); and people believe people with higher social status to consume and possess more highbrow fine arts (Alderson, Junisbai, & Heacock, 2007). It seems that people’s understanding of luxuriousness is partially shaped by their beliefs about people with high social status. Yet, no research has directly tested the link.

In this research, we examine whether people overgeneralize their beliefs about high social status people to form luxury perception of products. In particular, because consumers, especially those from developed countries, have the belief that people with high status tend to have slim body shapes (McLaren, 2007; Pampel, Denney, & Krueger, 2012; Rudman, 2004), we hypothesize that those consumers will project their belief about a slim human body shape and its status-signaling effect onto slim-shaped products. More formally, we propose a “slim-as-luxury” effect, that is, people perceive slim (vs. wide) products to be more luxurious. That is because people evaluate slim products in the same way as they perceive slim people. Accordingly, we also propose that this effect will only hold for people who hold the belief, and in situations where the belief about slimness-associated status can apply (i.e., when the context is luxury-relevant; when slimness is a dominant feature of product design). Six studies have been conducted to test our hypotheses.

Experiments 1A (n = 116) and 1B (n = 100) tested the basic slim-as-luxury effect. Experiments 1A used a one-factor two-level (market: high-end vs. low-end) between-participants design. Participants drew a contour of a beverage bottle, either for high-end or low-end market, and the slimness of the bottles (ratio of height/width) served as the dependent measure. The ratio for high-end (vs. low-end)

market beverage turned out to be larger ( $M_{\text{high}} = 3.71$  vs.  $M_{\text{low}} = 2.71$ ;  $t(115) = 5.92$ ,  $p < .001$ ), suggesting the high-end (vs. low-end) beverage was designed as slimmer. Experiment 1B controlled for the size and volume of the bottles and replicated the findings with a within-participant design.

Experiment 2 ( $n = 116$ ) tested the slim-as-luxury effect in a gift-giving setting. A one-factor two-level (friend: luxury-oriented vs. non-luxury oriented) between-participants design was used. Participants were asked to choose between two fitness trackers with different degrees of slimness. A chi-square test revealed that more participants chose the slim fitness tracker as a gift for their luxury-oriented friend (40%) than for a non-luxury-oriented friend (19%;  $\chi^2(1) = 5.90$ ,  $p = .015$ ).

Experiment 3 tested whether consumers' belief about status-associated body shapes would moderate the effect. A pretest showed that the people in the U.S. believe high-status people are slim whereas the people in India did not have the belief. Hence, a 2 (culture: the U.S. vs. India)  $\times$  2 (shape: slim vs. wide) between-participants design was used. Participants were asked to rate the luxuriousness of a slim- or wide-shaped air purifier. As predicted, the U.S. participants rated the slim-shaped air purifier more luxurious ( $M_{\text{slim}} = 7.24$  vs.  $M_{\text{wide}} = 6.71$ ,  $F(1,589) = 5.75$ ,  $p = .017$ ), whereas Indian participants rated the wide-shaped air purifier more luxurious ( $M_{\text{slim}} = 6.30$  vs.  $M_{\text{wide}} = 6.86$ ,  $F(1,589) = 8.11$ ,  $p = .005$ ) (see Figure 1). We further measured individuals' belief and replicated the moderating role of the belief for the slim-as-luxury effect in Experiment 4.

To establish the causal link from consumers' belief about the body shape of high status people to their perceived product luxuriousness, Experiment 5 ( $n = 400$ ) manipulated the belief. Accordingly, a 2 (belief about high-status-associated body shape: slim vs. wide)  $\times$  2 (gift for a friend: luxury-oriented vs. non-luxury-oriented) between-participants design was used, and participants' preference for a slim- over a wide-speaker was measured as the dependent variable. The results showed that for a luxury-oriented friend, participants preferred a slim- over the widespeaker as gift when they believed high-status people have slim body shapes ( $M_{\text{slim\_as\_status}} = .50$ ,  $M_{\text{wide\_as\_status}} = -.29$ ; mean difference = .79, 95% CI: .31 to 1.27;  $p = .001$ ). However, for a nonluxury-oriented friend, their preference towards the slim speaker was mitigated ( $M_{\text{slim\_as\_status}} = -.34$ ,  $M_{\text{wide\_as\_status}} = -.20$ ; mean difference = .14, 95% CI: -.34 to .63;  $p = .55$ ). Thus, Experiment 5 suggests that participants' luxury perception of the speaker with a slim (vs. wide) shape was shaped by their belief about the people who have high social status.

Lastly, Experiment 6 ( $n = 800$ ) investigated a boundary condition where slimness is not a dominant dimension of product design. A 2 (slimness: dominant vs. non-dominant)  $\times$  2 (shape: slim vs. wide) between-participants experiment found that, for the bottle with slimness as a dominant dimension, participants rated the slim (vs. wide) water bottle more luxurious ( $M_{\text{slim}} = 6.14$ ,  $M_{\text{wide}} = 4.61$ ;  $t(393) = 7.12$ ,  $p < .001$ ) only when they associated slim body shapes strongly with high social status ( $b = -0.43$ , 95% CI [-0.73, -0.13]). However, when the slimness is a nondominant dimension of the bottle, we did not find the moderating role of belief in luxury perception as participants' belief about status-associated body shape did not influence their luxury perception of the bottle ( $b = 0.11$ , 95% CI [-0.26, 0.47]).

## Mispredictions and Overconfidence: Health Risks, Product Evaluation, and Precommitment - Competitive Paper Session

*Sloane (2nd Level)*

*Chair: Monica Wadhwa, Temple University, USA*

### More Harm is Less Dangerous

Monica Wadhwa (Temple University, USA); Mustafa Karataş (Koc University, Turkey)

#### **Brief Abstract:**

The current research shows that people are less likely to adopt preventive actions when they are informed of multiple equally threatening and likely health risks, as opposed to only one health risk. To illustrate, at-risk obesity patients were less likely to exercise when informed of two obesity-related risks (High Blood Pressure and Type 2 Diabetes), as opposed to one of these risks. This happens because a single health risk can be more vividly imagined, compared with multiple health risks, which, in turn, negatively impacts the likelihood of adopting preventive actions. However, when people process risks deliberately, this effect is reversed.

#### **Extended Abstract:**

Many health problems can be prevented through simple preventive behaviors. To encourage adoption of preventive behaviors, people are commonly exposed to preventive messages, informing them of health risks. The current research explores whether the number of health risks communicated in a preventive message could affect preventive decision making. An anti-obesity message, for example, could communicate two equally threatening and likely obesity risks—high blood pressure and diabetes, or one of these risks. Which of these two strategies would be more effective in encouraging people to adopt preventive behaviors?

We propose that presenting multiple equally threatening health risks is a less effective strategy than presenting a single risk. Specifically, we argue that due to imagery capacity limitations (Baddeley & Andrade 2000), health risks should be less vividly imagined when one mentally simulates multiple health risks simultaneously, compared with when one simulates one health risk. Given vivid imagery is an important determinant of people's behaviors (Nisbett & Ross, 1980), we further propose that a health message is likely to be less effective when it communicates two equally threatening health risks than when it communicates one health risk. Five field and lab experiments tests these hypotheses.

In Study-1, conducted at a health center, at-risk obesity patients were handed a pamphlet, which communicated either two equally threatening and likely obesity risks—Type-2 Diabetes and High Blood Pressure—or one of these risks (see figure-1). The message encouraged walking daily to prevent obesity. Once patients had read the pamphlets, the physician encouraged them to join the obesity-prevention program, run by the health ministry, at the center. We measured patients' walking behaviors for one week and also recorded their likelihood to join the obesity-prevention program. Patients who received the one-risk pamphlet were more likely to walk (47.5%) than those who received two-risks pamphlet (30.8%; see table-1). Amongst those who walked, patients who received one-risk pamphlet walked more ( $M=44.19$  min) than those who received two-risks pamphlet ( $M=33.16$ ). Finally, these patients were more likely to join the obesity-prevention program (10.83%), compared with those in the two-risks condition (3.83%).

In Study-2, customers at a pharmaceutical store were exposed to posters, which communicated either two equally threatening and likely flu-related risks—muscle aches and sore throat— or one of these risks. The message encouraged customers to keep their hands clean to prevent flu. A third group of customers was exposed to a neutral health message poster. We measured customers' likelihood to purchase the hand-sanitizing wipes, available for sale at the check-out counter. Customers exposed to a single risk were more likely to buy the wipes (13.29%) than those exposed to two risks or neutral message (5.88%). There was no difference in hand-sanitizing wipes sales between the two-risks (6.16%) and the neutral-health message (5.59%) conditions.

Research suggests that in a deliberative processing mode, people are less likely to rely on vivid imagery and more likely to rely on their logic based reactions (Hsee & Rottenstreich 2004). Thus, when people process risks deliberately versus affectively, communicating two health risks in the message should be a more effective strategy. We tested this proposition in Study-3 by manipulating the processing style. Participants in the affective-processing condition examined their feelings toward different affectladen words, while those in the deliberative-processing condition solved simple math problems (Hsee & Rottenstreich, 2004). Subsequently, participants evaluated an anti-obesity message, which communicated either two obesity risks (same as in Study-1) or one risk, and encouraged participants to eat healthy. Finally, participants were given a choice between an apple and a chocolate brownie. In the affectiveprocessing condition, fewer participants chose an apple when informed of two risks (28.89%) than when informed of one risk (60%). In the deliberative-processing condition, more participants chose an apple when informed of two risks (68.89%) versus one risk (41.93%).

Study-4 examines our conceptualization by explicitly measuring vivid imagery. Participants viewed a flu-prevention message communicating either two flu-related risks (same as in Study-2) or one risk. Drawing upon research, which shows that using an affective (scientific) frame for a disease can induce affective (deliberative) processing style (Sinaceur & Heath 2005), we varied the frame used to describe flu. One set of messages (affective-frame) referred to flu as Grip-Nezle, an affective term used for flu by laypeople in Turkey. Another set of messages (scientific-frame) referred to flu as A Tipi Enflüanza (Influenza-Type A). After evaluating the message, participants made a choice between handsanitizing wipes and a pen. Finally, participants evaluated the degree to which the flu message evoked vivid images (Keller & Block 1997).

In the affective-frame condition, fewer participants chose hand-sanitizing wipes when informed of two risks (36.11%) than when informed of one risk (75.75%). In the scientific-frame condition, more participants chose hand-sanitizing wipes when informed of two risks (58%) than when informed of one risk (30%). Moreover, in the affective-frame condition, images elicited by the message were less vivid when two risks were communicated ( $M=3.14$ ) than when one risk was communicated ( $M=4.89$ ). No such difference was found in the scientific-frame condition. A moderated mediation analysis revealed that vivid imagery mediated the impact of number of risks on choice of hand-sanitizing wipes in the affectiveframe condition.

In Study-5, we explicitly manipulated reliance on imagery. Participants were shown the same flu messages used in the affective-frame condition in Study-4. One group of participants were instructed to rely on their power of their imagination to visualize the message (visualization), while another group was instructed to evaluate the message without letting their imagination get better of them (imagerydiscouraged). A third (control) group was not given any imagery instructions. After valuating



the message, participants chose between a pen and a hand-sanitizing wipes. In the visualization and control conditions, fewer participants chose hand-sanitizing wipes when informed of two risks (36.11%) than when informed of one risk (75.75%). In the imagery-discouraged conditions, directionally more participants chose hand-sanitizing wipes when informed of two risks (58%) than when informed of one risk (30%).

In sum, people's likelihood of adopting a preventive action non-normatively decreased when the health message communicated two health risks, compared with one risk.

## Evaluation Overconfidence: When Uncertainty in Attribute Understanding Produces Less Extreme Product Evaluations

Deidre Popovich (Texas Tech University, USA); Ryan Hamilton (Emory University, USA)

### **Brief Abstract:**

Consumers' ability to translate common product attributes into subjective evaluations is fundamental to theories of consumer choice. One factor that might affect these evaluations is consumers' confidence in their understanding of these commonly encountered attributes. This research proposes that consumers are often overconfident in assessing their own understanding. A series of six experiments show that simple interventions that encourage consumers to reflect on the level of their knowledge can make consumers less confident in their attribute knowledge. This reduced confidence leads to more moderate (less extreme) product evaluations and affects the options consumers choose.

### **Extended Abstract:**

Consumers' ability to translate common product attributes (watts, calories, megapixels) into subjective evaluations (perceived energy efficiency, perceived healthiness, perceived picture quality) is fundamental to theories of consumer choice. One factor that might affect these evaluations is consumers' confidence in their understanding of these commonly encountered attributes. This research proposes that consumers are often overconfident in assessing their own understanding. We show that simple interventions that encourage consumers to reflect on the level of their knowledge (e.g., estimating an attribute level, explaining an attribute, making relative attribute judgments) can make consumers less confident in their attribute knowledge. This reduced confidence leads to more moderate (less extreme) product evaluations and affects the options consumers choose. The authors derive an explanation for this phenomenon by drawing on research on folk science and the illusion of explanatory depth. Previous research in the domain of consumer confidence is diverse in scope, but has generally focused on confidence in the outcome of some judgment or evaluation (Brenner et al., 1996; Griffin & Tversky, 1992; Karmarkar & Tormala, 2010). This paper investigates a novel type of confidence: the implicit confidence consumers feel in their understanding of common product attributes. The ability to translate objective attribute information into subjective evaluations is fundamental to theories of consumer choice (Helson, 1964; Janiszewski & Lichtenstein, 1999; Kahneman & Tversky, 1979; Sharif & Hovland, 1961), but consumers' confidence in their understanding of the attributes they use to make these evaluations has not been investigated. We draw on insights from the literature in cognitive psychology on folk science and the illusion of explanatory depth (Keil, 2003; Rozenblit & Keil, 2002; Sloman & Fernbach, 2016) to make the prediction that a variety of cognitive tasks—likely to be common during typical consumer decisions—can reduce consumers' confidence in their own ability to make evaluations. As we show, this leads to more

moderate (less extreme) product evaluations and can affect choice.

We suggest that consumers are often more confident in their ability to evaluate common product attributes than is justified by their actual knowledge. We further suggest that this implicit confidence may be easily shaken by a number of simple interventions that invite consumers to consider the depth of their knowledge of a given attribute. We propose that the effect of these knowledge probes is to reduce consumers' confidence in their own ability to evaluate attributes, leading to less extreme evaluations of that attribute, relative to an otherwise equivalent consumer with unshaken confidence.

A series of six experiments (see Table 1) demonstrate that knowledge probes related to common product attributes can influence subsequent product evaluations. Specifically, participants' subjective evaluations of attributes like gigabytes, watts, and calories, were less extreme following a knowledge probe than were evaluations made without one. The experimental evidence suggests that a knowledge probe related to an attribute reduces consumers' confidence in their ability to evaluate that attribute. This account was supported by a mediation analysis (Experiment 3), as well as by theoretically derived moderators. Specifically, when participants had a high level of attribute knowledge, such that their confidence was well founded, the knowledge probe did not lead to less extreme evaluations (Experiment 4).

This phenomenon is robust across various manipulations of knowledge probes, including explaining an attribute (Pilot Experiment), making relative estimation (Experiment 1), estimating the focal option's attribute level (Experiments 2-4), and estimating the attribute level of unrelated options (Experiment 5). Taken together, the effect is consistent: a knowledge probe, regardless of the type, caused less extreme product evaluations.

This research provides several important contributions to theories of consumer judgment and decision-making. For one, it highlights the importance of a kind of confidence that has not previously been studied, namely, confidence in one's own understanding of common product attributes. This research demonstrates that changes in this kind of confidence can change consumers' product evaluations.

This research also demonstrates the counterintuitive finding that several common consumer activities frequently involved in making decisions—making estimates, making relative comparisons, explaining an attribute—are not inert, but can change the subsequent evaluations and decisions the consumer makes. This research suggests that anything in the decision-making process that encourages consumers to reflect on their attribute understanding could lead to less extreme product evaluations and thereby affect choice.

Although previous research has examined related issues such as how uncertainty can lead to purchase delay (Dhar, 1997; Dhar & Simonson, 2003) and how familiarity and confidence can facilitate judgments (Karmarkar & Tormala, 2010; Park & Lessig, 1981), it has not specified how the process of evaluating commonly encountered information such as product attributes can lead to more biased judgments. We contribute to the literature by specifying and testing a theoretical account based on overconfidence and uncertainty, which predicts that when consumers are prompted to re-assess their knowledge of a product attribute, they often become less certain of that knowledge.

## Wrong Predictions: The Benefit of Being Imprecise in Source Trustworthiness

Jorge Pena Marin (University of Cincinnati, USA); Ruomeng Wu (University of Cincinnati, USA)

### **Brief Abstract:**

The present work investigates how the type of information used in an estimate, particularly its level of (im)precision, influences evaluations of source trustworthiness after the target value of the estimate is revealed. We hypothesize that if the estimate is revealed to be incorrect, imprecise estimates (40%) elicit higher source trustworthiness than precise estimates (39%, 41%). This occurs because before the target value is known, imprecise estimates create lower accuracy expectations than precise estimates. Then, after the target value is known and proven to be incorrect, imprecise (precise) estimates (dis)confirm consumers' accuracy expectations, which positively (negatively) influences source trustworthiness.

### **Extended Abstract:**

Numerical estimations are ubiquitous in our daily lives—whether it is to estimate stock market prices, housing prices, food calories, or even temperatures, time, etc.—. Because of its relevance, much work has investigated how numerical information included in an estimation might be interpreted differently by its recipients, influence source judgments, or drive behaviors (e.g. Epley & Gilovich, 2005, 2006; Janiszewski & Uy, 2008; Jerez-Fernandez, Angulo, & Oppenheimer, 2014).

Most of the research, however, has been focused on judgments based on the target estimate without considering what happens after the recipient of the estimate knows the real value of the target. We seek to advance previous work by studying how the recipients of numerical estimates evaluate the source of the estimate if this is proven to be incorrect, particularly regarding source trustworthiness. For instance, consider the situation where a person asks a waitress about the number of calories in a dish that she or he might order, and the waitress provides an estimate that the person will use to decide whether or not to order the dish. Then, the person finds out that the waitress's estimate was incorrect. How would the waitress's trustworthiness be evaluated, and would this judgment influence the likelihood of coming back to the restaurant?

In the present work, we propose and find that consumers trust a source that gave an imprecise and incorrect estimate more than a source that gave a precise and incorrect estimate. For example, if the previous waitress estimated that the dish had 400 calories (imprecise estimate: round number) versus 417 calories (precise estimate: sharp number) and then the diner found out that the dish actually has 570 calories, he or she would trust the waitress more in the former than in the latter case, even though in the second case, the waitress was actually closer to the actual value and was thus more correct. In addition, we find that this effect has implications for consumers' behavior, being consumers more likely to come back to the restaurant when given an imprecise and incorrect estimate versus a more precise and incorrect estimate. We propose that before the target value is known, imprecise estimates (i.e., 400) create lower accuracy expectations than precise estimates (i.e., 417). Then, based on expectation disconfirmation theory (Oliver, 1977; 1980) and attributional research (Hastie, 1984; Ross, 1977; Weiner, 1977), we predict that once the target value is known and proven to be incorrect, imprecise (precise) estimates (dis)confirm consumers' accuracy expectations, which in turn positively (negatively) influences source trustworthiness and the recipient's behavior.

We conducted four studies (see Table 1 for full detail) to examine our main prediction and the underlying psychological mechanism. In Study 1, we found initial support for the proposed effect that consumers exhibit higher source trustworthiness after receiving an imprecise (vs. precise) incorrect estimate. Participants trusted more a seller after an incorrect discount estimate when they were provided an imprecise rather than precise estimate ( $p = .012$ ). In addition, it spoke to the generalizability of the effect since it prevailed independently of the consequence of the error for the participant (positive [negative] consequence if the actual discount was higher [lower] than the estimate).

Study 2 had a 2 (estimate type: imprecise vs. precise)  $\times$  2 (expertise: control vs. low) between-subjects design. Since the effect is based on the premise that imprecise estimates lower accuracy expectations, we hypothesized that if the recipients of the estimate know that the source has low expertise, it is unlikely that imprecision level will result in different accuracy expectations since forecasters with low expertise are likely to be incorrect. As expected, in the control condition, trustworthiness in a realtor that provided a market price estimation was higher after an incorrect and imprecise (versus precise) estimate. However, the effect didn't emerge when the realtor had low expertise.

In Study 3 we sought to provide direct evidence of the proposed mechanism based on the different consumers' accuracy expectations created by imprecise versus precise estimates in a scenario regarding stock market prices evolution. The results suggest that imprecise estimates created lower accuracy expectations than precise ones, leading participants to trust more a stock market broker after the imprecise (vs. precise) estimate was proven to be incorrect (CI: .008 to 0.254). Further, it showed that the difficulty to estimate the target acted as a boundary condition, such that when it was highly difficult to make the stock price estimate, these effects disappeared because level of precision didn't change accuracy expectations.

Finally, Study 4 directly tested the impact of precision on participants' behavioral decisions. This study had a 2 (estimate type: imprecise vs. precise)  $\times$  2 (product replicate: product A, product B) mixed design, with estimate type as between subjects and product replicate as within subjects. Participants played a game similar to the classic TV show "The Price is Right" in which they received the help of an "audience member", and their suggestions were either precise or imprecise. As expected, regardless of the product, participants rather maintain as advisors for future rounds in the game to audience members who provided incorrect and imprecise (vs. precise) estimates.

This work contributes to research on source judgments based on estimates by looking at consumer's judgments once the value of the target is revealed. In addition, we focus on source trustworthiness, a key element that drives consumers' judgments and decisions (e.g. Tormala & Petty, 2004). Second, this work advances our knowledge of how errors might influence consumer behavior. Although consumers usually create negative inferences about companies and people that make mistakes (Chesney & Su, 2010; Palmer, Simmons, & de Kervenoael, 2010), mistakes can also increase product preference. Our results suggest that source trustworthiness after an incorrect estimate is dependent upon the precision of the estimate. Third, we provide a more nuanced understanding of the relationship between estimates precision and source attributions (i.e. Jerez-Fernandez et al., 2014) by showing that in the context of incorrect estimates the use of precise information backfires.

# The Negative Effects of Precommitment on Reciprocal Behavior: Evidence from a Series of Voluntary Payment Experiments

Raghavendra KC (University of Cambridge); Vincent Mak (University of Cambridge); Elie Ofek (Harvard Business School, USA)

## **Brief Abstract:**

Many aspects of social life revolve around people receiving and reciprocating benefits. Oftentimes, there is little uncertainty about the benefits to be received, and it might seem unimportant as to whether the beneficiary is asked to precommit his/her reciprocal behavior. Through a series of experiments in several countries, we show that, on the contrary, precommitment often weakens reciprocal behavior. In a field experiment with pay-what-you-want pricing, the payment amounts decreased when consumers were asked to precommit. In two follow-up experiments, this weakening effect was replicated. The results from our final experiment provides process evidence for our posited mental-accounting mechanism.

## **Extended Abstract:**

Many aspects of social life revolve around people receiving and reciprocating benefits. In this research, we examine the effects of precommitment on reciprocal behavior towards a forthcoming benefit. We focus on reciprocal behavior in the form of voluntary payment— a sensitive measure of reciprocity as well as a common occurrence in practice. We also focus on baseline scenarios with minimal or no uncertainty regarding the value and delivery of the forthcoming benefit, so that, intuitively, precommitment should make little difference. Through a series of experiments in several countries, we show that, contrary to intuition, precommitment often weakens reciprocal behavior in those cases.

The decision contexts that motivate our research, as well as the decision contexts in our experimental studies, are all reciprocal exchange relationships between the decision maker and a stranger or a business. These are especially subject to “record keeping” (Clark, 1984) of benefits received and reciprocated, in the fashion of “maintaining an overall sense of equity and fairness within a relationship” (Zhang & Epley, 2009; Sleesman & Conlon, 2017). Taking cue from the notion of “record keeping” in reciprocal exchange relationships, we posit a general mechanism for our research that is derived from mental accounting (Thaler, 1985). Here, we propose that, before receiving a benefit, the recipient has not fully assimilated the benefit into his/her mental account for reciprocity. This leads to him/her having a weak appreciation of the prospective benefit (i.e., perceiving the benefit as relatively low). As a result, the recipient is less amenable to precommitting on a reciprocal decision that would draw down his/her currently “low-balance” account.

By contrast, after receiving the benefit, the recipient has fully assimilated the benefit into his/her mental account. The recipient now has a stronger appreciation of the benefit than in the recommitment scenario (i.e., perceives the benefit as relatively high). As a result, he/she is willing to reciprocate to a larger extent by drawing down a comparatively “high-balance” account. Thus, receiving a benefit can change an individual’s reciprocating behavior towards that very same benefit. Following this line of reasoning, we hypothesize that precommitment (compared with the case without it) can lead to comparatively lower motivation to reciprocate. We test our hypothesis, eliminate alternative hypotheses and provide process evidence with a series of experiments, which we discuss below.

Study-1: Restaurant Field Experiment

Study 1 was a field experiment conducted at a restaurant where participants could pay any amount they wished for non-alcoholic beverages. Through our setup we examine how customers, even those who are highly familiar with the drinks, could be affected when they are asked to precommit the payment amount.

Table 1 summarizes our results. As shown in Table 1, after controlling for the actual value ordered, the Pay-What-You-Want (PWYW) payment for familiar beverages at a table decreased by about 21 Rupees across both model specifications. In other words, our results provide evidence of precommitment weakening reciprocal behavior. We also find that our hypothesis is supported regardless of whether reference prices were absent or present.

#### Study-2: Voucher Experiment

Study 2 was a laboratory experiment where participants were able to pay any amount they wished for a £5 Amazon gift voucher. The study improved on rigor by using a benefit with no immediate consumption experience and little to no endowment effect.

Our results show that the PWYW payment for the Amazon voucher was significantly lower in the “Before” (precommitment) condition ( $M = £0.32$ ,  $SD = £0.67$ , 95% CI: [£0.10, £0.55];  $N = 37$ ) than in the “After” (no precommitment) condition ( $M = £0.81$ ,  $SD = £1.23$ , 95% CI: [£0.39, £1.22];  $N = 36$ ) with  $t(71) = -2.09$ ,  $p = 0.040$  from a between-subjects t-test. In fact, the mean “Before” payment was less than 40% of the mean “After” payment; this was observed even though the only difference between the two conditions was whether the participants were asked to pay before or after receiving the Amazon voucher. Hence, as in Study 1, our data provide support for our hypothesis.

#### Study-3: Lottery Ticket Experiment

Study 3 was conducted on M-Turk where participants were able to purchase a lottery ticket using tokens (experimental currency with predetermined fixed exchange rate to USD). The lottery had two potential outcomes – high and low. Participants were able to determine the amount they wished to pay for the ticket either before or after receiving the outcome of the lottery. In addition to this, the study introduced a “contingent-precommitment” condition where participants were able to specify the amount they wished to pay contingent on the outcome; essentially eliminating uncertainty. Figure 1 provides a summary of the major procedures in a flowchart.

A total of 322 participants took part in the experiment (the actual analyzed data include 261 participants after removing participants who did not wish to purchase the lottery ticket). Table 2 summarizes our main findings. Our results show that, despite being able to specify the reciprocal decision contingent on the outcome, participants still pay 37% less, on average, when asked to precommit. Study 3 eliminated uncertainty as a potential mechanism.

#### Study-4: Trust Game

Study 4, our final experiment, was conducted to understand these consistent effects and to test our posited mental-accounting mechanism. The study was an online trust-game experiment with manipulations of Gain/Loss framing that was expected to mitigate or reinforce this mental accounting process. Figure 2 provides a summary of the major procedures in a flowchart.

As predicted, the Gain framing successfully mitigated the effect of precommitment on reciprocal

behavior, while the Loss framing reproduced a similar precommitment effect as in the previous experiments. The results from this final experiment (see Table 3) provides supporting evidence to our posited mechanism.

Our research makes a number of substantive contributions to related previous studies (see also the Literature Review section). Firstly, our research contributes towards studies on prosocial behavior by our novel investigations into a moderating factor in reciprocity, namely precommitment. Concurrently, we make a substantive contribution towards behavioral studies on precommitment by expanding the domain of those studies into reciprocal behavior. Lastly, with our focus on reciprocal voluntary payment, we contribute towards the literature on charitable fundraising as well as the burgeoning recent research on PWYW. Managerially, our findings shed important light on the optimal timing of voluntary payment solicitation in donation appeals and PWYW transactions. Moreover, we show that framing the reciprocal payment as incurring less gain from the forthcoming benefit (vs. incurring a loss) can mitigate the weakening effect of precommitment – a result that provides additional practical guidance to firms.

## **Risky Business: New Technology and the Evolution of Consumer-Brand Relationships – Symposium**

### *Scarborough 4 (Lobby Level)*

Recent technological advancements have fundamentally reshaped how companies and consumers interact. These new technologies offer the promise of new ways to engage with consumers, but also the prospect of new ways to alienate them. Importantly, prevailing marketplace norms in offline settings may be poorly suited for this new landscape. Given the pace of change and sweeping implications thereof, understanding consumer perceptions of new technology is crucial for researchers and practitioners alike. While recent research has examined how technology impacts memory (e.g., Sparrow, Liu, and Wegner, 2011), social interactions (e.g., Ellison, Steinfield, and Lampe, 2007; Kraut et al., 1998), and self-perception (e.g., Wilcox and Stephen, 2013; Chou and Edge, 2012), technology-driven shifts that impact relationships between consumers and companies have received less attention. Here, the use of new technology is likely to represent a double-edged sword, introducing new opportunities and pitfalls and creating new winners and losers. Yet the nature of these changes is poorly understood. Our session fills this gap by exploring the risks and rewards of using new technology to alter relationships between consumers and companies. Using lab experiments, field studies, and secondary data, a total of 18 studies across four papers illustrate that while new technology can offer novel opportunities for engagement and feedback, its usage can also violate social norms and standards of fairness. The first two papers explore how new technology enables new types of interactions between consumers and brands and how this influences perceptions and behavior. Hofstetter, Kunath, and John investigate how photo-taking provides novel ways for consumers to connect with companies. They show that taking selfies with a brand (compared to taking a photo of the same brand in isolation) increases attachment, thereby improving purchase intentions. Kim, Anik, and Koley examine how digital platforms that allow companies to communicate tailored feedback to consumers (e.g., Uber passenger ratings) alter behavior by triggering norms of reciprocity. Specifically, providing customers with positive ratings motivates them to improve behavior, while providing customers with negative ratings encourages even worse behavior. The second set of papers examines how new technology can affect fairness perceptions. Barasch, Shaddy, and Bhattacharjee show how using technology to gain competitive advantages in the marketplace is seen as unfair. Because consumers neglect the fixed costs of initial investments required to develop new technology, they perceive the resulting reductions in variable costs as unfair, which decreases willingness to pay. Finally, Newman,

Fast, and Harmon highlight how firms' use of algorithms to make managerial decisions negatively impacts perceptions of procedural justice. These technologies violate social norms, causing people to feel dehumanized and less committed to the company. Together, these papers provide a fresh perspective on the changing nature of marketplace norms and how they affect relationships between consumers and companies. In the spirit of the conference theme, "Confronting Good and Evil," this session highlights both positive and negative consequences. To that end, we anticipate a broad audience with a diverse set of interests, including technology, fairness, branding, consumer experience, well-being, social norms, social media, and photo-taking.

*Chair: Alexandra Barasch, New York University, USA*

### Brand Selfies: Risks and Rewards of Consumers Taking Self-Photos with Brands

Reto Hofstetter (University of Lucerne, Switzerland); Gabriela Kunath (University of Lucerne, Switzerland); Leslie John (Harvard Business School, USA)

#### **Brief Abstract:**

We test how brand selfie-taking affects purchase intentions, both of the consumers who take those selfies (i.e., takers), and those who view them (i.e., observers). Using data from Yelp.com, Study 1 reveals a positive correlation between the presence of a brand selfie in a review, and the star rating given in that review. Follow-up experiments establish causality: taking a brand selfie increases the selfie-taker's purchase interest (Study 2), especially when many others view the selfie (Study 3). Brand selfies can also increase the purchase interest of those who view them, provided that the selfie-taker is attractive (Study 4).

### Feedback as a Two-Way Street: When and Why Rating Consumers Backfires

Tami Kim (University of Virginia, USA); Lalin Anik (University of Virginia, USA); Luca Cian (University of Virginia, USA)

#### **Brief Abstract:**

An increasingly popular strategy used by firms to keep consumers well-behaved is to provide them feedback. For instance, Uber and Airbnb allow their drivers and hosts respectively to rate customers. We develop a framework of when and why providing feedback to consumers backfires. Four studies employing a variety of paradigms show that consumers will only improve their behaviors when they believe that companies are upholding the norm of reciprocity (e.g., by providing them with positive feedback). When consumers perceive this norm to be violated, they will negatively reciprocate by becoming even more ill-behaved than they would have otherwise.

### Fairness and the Psychology of Technological Disruption

Alixandra Barasch (New York University, USA); Franklin Shaddy (University of California Los Angeles, USA); Amit Bhattacharjee (Erasmus University Rotterdam, The Netherlands)

#### **Brief Abstract:**

Consumers often bristle at the use of new technology in markets (e.g., ticket scalping "bots," algorithmic trading, "big data"). In this research, we examine why. New technologies alter perceptions



of firms' costs, in turn affecting perceptions of fairness. Consequently, the exact same outcomes are judged as less fair when obtained with technology than with human effort. Because consumers neglect the fixed costs of initial investments required to develop new technology, they perceive the resulting reductions in variable costs as unfair. These findings help explain the psychology of technological market disruption and yield important implications for both firms and policymakers.

**When Eliminating Bias Isn't Fair: Algorithms, Quantification, and Procedural Justice**  
David Newman (University of Southern California, USA); Nathanael Fast (University of Southern California, USA); Derek Harmon (University of Michigan, USA)

**Brief Abstract:**

Perceptions about decision processes have important outcomes for consumers and members of companies. Algorithmic decision-making has the potential to increase fairness in a number of contexts by overcoming biases commonly displayed by human decision makers. However, algorithmic decisions about humans may violate norms of procedural justice by appearing to reduce people to quantifiable attributes, stripping away their qualitative aspects. Results from two laboratory experiments (N=388) and a large-scale randomized experiment in a company (N=1,654) provide evidence for this theory by demonstrating that observers view people-related decisions determined by algorithms as less fair than identical decisions made by humans.

## **Session 9**

### **In Praise of Badness - Symposium**

#### *Verlst (2nd Level)*

Almost by definition, consumers should prefer good product options to bad ones. All else equal, people tend to prefer options that are higher in quality, free of flaws, consistent, and morally acceptable over those that are worse, flawed, inconsistent, or morally objectionable (Kruger et al., 2004; Kunda, 1990; Levin & Johnson, 1984; Lord et al., 1979; Tetlock et al., 2000). However, recent research demonstrates that mistakes in the design process can bolster product preference (Reich, Kupor, & Smith, 2018), that horrible movies often attract devoted fans (Sarkhosh & Menninghaus, 2016), and that consumers often seek out hedonically unpleasant experiences (Keinan & Kivetz, 2011). Why would consumers ever prefer to spend their limited time and money on bad options? Though some initial investigations have started to chronicle when these preferences might emerge, many unanswered questions remain. What do flaws, inconsistencies, or offensive qualities signal about products or producers, and when are these qualities important enough to drive consumer preference? What factors drive consumers to choose bad options rather than good options, and where do consumers derive their utility in each case? This session seeks to provide new insights about when and why bad qualities can improve the value of products and services. First, Carter and McGraw showcase five studies demonstrating when product flaws are appealing. When product flaws reveal desirable information about the creation process (i.e., a singer forgetting a lyric proves a concert isn't lip-synced), they can boost rather than diminish preference. Second, Gershon and Smith discuss how inconsistency in performance can enhance perceptions of authenticity. In four studies, they provide evidence that people perceive performers who repeat performances as less authentic, reducing consumer evaluations. Third, Bhattacharjee, Berman, and Yalcin present evidence that offensive behavior by artists (e.g., personal racism or producing content with racist themes) can arouse greater consumer interest in their work. Across four studies, people perceived offensive artists as more authentic

and creative than those who behaved acceptably. Finally, Weingarten, Bhattacharjee, and Williams present evidence for so-bad-it's-good consumption, or consumer preferences for extremely bad options over mediocre ones. In nine studies across several content domains, people were more likely to choose options they expected to be extremely bad rather than merely bad or average. Together, these papers provide a more nuanced understanding of how consumers gain utility from seemingly bad qualities. This session explores what traditional notions of product quality fail to capture: the costs of badness may help signal the presence or authenticity of other desirable sources of value. All four presentations are developed and have at least four completed studies. We expect this session to generate interest among researchers spanning a broad range of topics, including consumer preference, experiential consumption, signaling and symbolic consumption, authenticity, taste and quality, aesthetics, and humor. And given the presentations' relevance to fundamental assumptions about consumer preference and notions of value, we hope to stimulate a fruitful discussion.

*Chairs: **Evan Weingarten**, University of California San Diego, USA; **Amit Bhattacharjee**, Erasmus University Rotterdam, The Netherlands; **Patricia Williams**, University of Pennsylvania, USA*

### In Pursuit of Imperfection: How Flawed Products Can Reveal Valuable Process Information

Erin Percival Carter (University of Maine); A. Peter McGraw (University of Colorado, Boulder)

**Brief Abstract:**

We investigate circumstances where consumers seek flawed consumption opportunities. We find that consumers who care about production processes (e.g., organic farming) may choose imperfect products (e.g., blemished apples) or enjoy imperfect experiences (e.g., poorly written emails). Five studies reveal imperfections help resolve uncertainty about difficult to verify production processes.

### Twice-Told Tales: Self-Repetition Decreases Consumer Perceptions of Authenticity

Rachel Gershon (Washington University in St. Louis); Rosanna Smith (University of Georgia, USA)

**Brief Abstract:**

Performers often engage in self-repetition—repeating the same story, joke, or presentation across audiences. While behaving consistently has generally been found to enhance perceptions of authenticity, we find across multiple contexts (politics, entrepreneurship, tour guiding, comedy, job interviews) that performers who self-repeat are perceived as less authentic. Convergent evidence reveals that this is driven by the observer's assumption that social interactions are unique. Self-repetition leads performers to be seen as inauthentic because they are thought to be falsely presenting the performance as unique, which, in turn, leads to negative consumer consequences. This suggests that inconsistency could potentially enhance authenticity evaluations.

### The Upside of Immorality: The Signal Value of Offensive Producer Behavior

Amit Bhattacharjee (Erasmus University Rotterdam, The Netherlands); Jonathan Z Berman (London Business School, UK); Gizem Yalcin (Erasmus University Rotterdam, The Netherlands)

**Brief Abstract:**

Ample research documents the harmful consequences of morally offensive producer behavior or product characteristics. In contrast, we show that offensiveness can have an upside. Four studies demonstrate that offensive behavior by producers (e.g., racist personal behavior or producing content with offensive themes) can increase consumers' evaluations of their creative output. Our findings indicate that a willingness to offend signals authentic producer motives and indifference to others' judgments. Accordingly, offensiveness increases perceptions that a producer's work represents unfiltered creative expression, thereby improving consumers' evaluations.

**So Bad It's Good: When Consumers Prefer Bad Options**

Evan Weingarten (University of California San Diego, USA); Amit Bhattacharjee (Erasmus University Rotterdam, The Netherlands); Patricia Williams (University of Pennsylvania, USA)

**Brief Abstract:**

Why do people consume so-bad-it's-good content such as Tommy Wiseau's "The Room" or Rebecca Black's "Friday?" In ten studies across several content domains (e.g., Olympic ski runs, talent show auditions), we demonstrate that participants often prefer very bad options over mediocre ones, and begin to explore why. Bad options are chosen more often when they are perceived to be more ridiculous, in content domains that are more lowbrow, and when intended for enjoyment rather than information. Moreover, this phenomenon may only emerge when the worst option is extremely bad.

**How Bad Things Can Be Good Sometimes - Competitive Paper Session**

*Percival (2nd Level)*

*Chair: Thomas Allard, Nanyang Technological University, Singapore*

**The Only "\$20 More" Effect: How Focusing on the Upgrade Cost Increases Choice Share**

Thomas Allard (Nanyang Technological University, Singapore); David Hardisty (University of British Columbia, Canada); Dale Griffin (University of British Columbia, Canada)

**Brief Abstract:**

Using a series of six experiments, we show that superior quality products such as direct flights and larger capacity hard drives are more popular when the upgrade cost is defined using Additional Price Framing (APF) (e.g., "for \$20 more" [than \$40]) rather than through Inclusive Price Framing (IPF) (e.g., "for \$60 total"). We show that focusing one's attention on the price difference which, by virtue of being smaller than the total price, leads to lower perceived expensiveness, and hence greater choice share for superior quality options. We discuss managerial and public policy implications for this price-framing effect.

**Extended Abstract:**

Consumers must often decide between standard and upgraded versions of products and services, such as indirect vs. direct flights or smaller vs. larger capacity hard drives. The price of the superior quality option can be framed using Additional Price Framing (APF) (e.g., "for \$20 more") or Inclusive Price

Framing (IPF) (e.g., "for \$60 total"). APF is often used in retail settings but, surprisingly, has not been studied in academic literature. (Note that APF is conceptually and practically distinct from price partitioning, e.g. "\$10.80 including tax" vs. "\$10.00 plus \$0.80 sales tax", Morwitz, Greenleaf, and Johnson 1998.) Across six studies, we find that APF leads to greater choice share for the premium option. We show that the benefit of APF is driven by pricing focalism: APF (relative to IPF) focuses attention on the price difference which, by virtue of being smaller than the total price, leads to lower perceived expensiveness, and hence greater choice share for the superior quality option. The APF effect is robust to displaying the total cost of the purchase and to bad deals, but is eliminated when participants are instructed to take their time and decide slowly.

Study 1 demonstrates that the APF effect occurs even when the total cost of the upgraded product is made salient (thus ruling out that the effect is driven by confusion or deception). 546 undergrad students were randomly assigned to either the IPF, APF, or APF + total condition. They chose between a 23-inch television for \$199.99 or a 27-inch version for "\$259.99" ["\$60.00 more"] ["\$60.00 more (\$259.99 total)"]. The proportion of participants selecting the upgraded option in the APF condition (P=58%) was significantly higher than in the IPF condition (P=42%,  $p < .01$ ). Likewise, the APF+total price condition was also higher than in the IPF condition (P=53%,  $p < .05$ ). Furthermore, there was no difference between the APF and the APF + total price conditions ( $p > .75$ ). According to our pricing focalism account, consumers are naturally interested in the price difference and base their judgments of expensiveness on that (rather than the total price). Thus, adding the total price to APF framing has little effect.

Study 2a shows that the effect is unique to price, and does not work when applied to other product dimensions such as quality. 235 undergraduate students chose between a smaller, cheaper hard drive ("2 TB storage capacity for \$119.99 total.") and a larger, more expensive hard drive, which was framed with IPF ("3 TB storage capacity for \$169.99 total."), APF ("3 TB storage capacity for \$50.00 more."), or an Additional Quality Frame (AQF, "1 TB additional storage capacity for \$169.99 total."). The proportion of participants selecting the upgraded option in the APF condition (P=48%) was significantly higher than in the IPF condition (P=33%),  $p = .05$ , replicating previous results, and also higher than the AQF condition (P=29%),  $p < .05$ . There was no difference between the IPF and AQF conditions,  $p = .85$ . Study 2b (Prolific Academic, N=600) found similar results using flights (framing the price or the travel time). Studies 2a-2b provide support for the pricing focalism mechanism underlying the APF effect and cast doubt on other explanations such as anchoring and adjustment or a trade-off mindset model.

Study 3 provides mediational support for the proposed mechanism by showing that APF influences consumer choice by reducing the perceived expensiveness of the upgraded option and also tests the robustness of the effect across increasingly bad deals. 404 MTurkers were instructed to imagine themselves shopping for a new computer monitor and shown two different monitor options (23-inch vs. 27-inch), where the 23-inch version retailed at \$199.99. In the IPF conditions, the upgraded 27-inch monitor was available for either "\$259.99," "\$319.99," or "\$379.99" depending on the price condition (for "\$60.00 more," "\$120.00 more," or "\$180.00 more" in the APF conditions). Participants then answered, "Compared to the 23-inch version, how much more expensive is the 27-inch version?" (1:No more expensive-7:Very much more expensive.) Replicating previous results, a higher proportion of people selected the upgraded option in the APF condition (P=37%) compared to the IPF condition (P=22%),  $p < .001$ . There was also no significant interaction between that APF and IPF conditions and

price level in predicting the choice of the upgraded option ( $p=.20$ ). In other words, the effect of APF on choices was the same across different price levels. Moreover, judgments of expensiveness mediated the effect of AP framing on choices. Studies 3 provide mediational evidence that APF increases the choice of upgraded options over IPF because of a shift in the perceived expensiveness of the product. Importantly, the effect appears robust across "good" and "bad" deals, further differentiating the APF effect from a price partitioning effect.

In Study 4, 221 undergraduates took the role of buyer or seller of used bicycles, using APF or IPF. The "buyer" condition replicated previous results ( $P=70\%$  vs.  $P=50\%$ ,  $p<.05$ ), while the seller condition showed the opposite pattern ( $P=26\%$  vs.  $P=46\%$ ,  $p<.05$ ), a significant interaction,  $p<.01$ . This reversal happens because the offer price in the APF appears cheaper. Therefore the seller prefers to sell the upgraded product in the IPF condition (vs the APF condition). Indeed, judgments of expensiveness mediated the choice results, replicating and extending the results of Study 3.

In Study 5, before participants ( $N=571$  MTurkers) chose between a standard and upgraded set of wine glasses, they were told to respond quickly, or slowly, or no instruction control. The main effect of AP framing replicated previous studies,  $p<.03$ , but this was qualified by a significant interaction between AP framing and decision speed,  $p=.02$ . Specifically, the effect of AP framing was eliminated when participants were instructed to take their time and choose slowly and deliberately. APF (vs. IPF) also did not affect total purchase price recall ( $Z<1$ ).

Across all studies, we find support for the hypothesized link between APF, expensiveness judgments, and product choice and show that this is not driven by confusion. Thus, we contribute a new branch of inquiry to a substantial literature examining the effect of price formats on consumer judgments while offering important and straightforward implications for effective pricing practices.

## Framing Zero: When Losing Nothing is Better Than Gaining Nothing

Marcus Wardley (California State University San Marcos); Max Alberhasky (University of Texas at Austin, USA)

### **Brief Abstract:**

Loss aversion predicts that a loss should be more aversive than an equivalent gain. When that amount is zero we show the opposite. That is, "gaining nothing" is more aversive than "losing nothing." We show support for this effect across five studies. Studies one and two demonstrate the effect by replicating two well-known studies and varying the framing of zero. Study three examines the underlying affective mechanism. Study four explores financial decision-making, and study five demonstrates the difference between a small loss and gaining nothing is moderated by belief in risk-reward. These results have important implications for researchers and managers.

### **Extended Abstract:**

Imagine you are meeting with your financial advisor and she is describing some of your investment options including various types of annuities. She explains that with an indexed annuity, if the stock market goes up, you are guaranteed a certain rate of return. However, if the stock market goes down you gain nothing. In this scenario would it be any different if she had told you that you would "lose nothing" instead of "gain nothing?" Based on the pioneering work of Kahneman and Tversky on loss aversion, one would predict that losing nothing would be more aversive than gaining nothing.

However, we show the opposite. We show that gaining nothing is more aversive than losing nothing, and further, this has a marked effect on consumer behavior. Although prior research has established reversals of loss aversion under small monetary amounts (Harinck, Van Dijk, Van Beest, & Mersmann, 2007), no prior research has specifically looked at the framing of zero.

We demonstrate a reversal of loss aversion across five studies. In study one we replicate Problem 3 and Problem 4 from Tversky and Kahneman (1986) and vary the framing of zero. In study two we replicate and extend another well-known study from Bateman, Dent, Peters, Slovic, & Starmer (2007). Study 3 explores the affective mechanism. Study 4 examines the framing of zero in the context of a fixed annuity and study 5 shows a moderation effect. We expect these findings will be important to both academic researchers and managers. For researchers, these results demonstrate a special case in which loss aversion is reversed and how different framing of zero affects choice. For managers, it is important to consider the framing of zero as it relates to investments or decisions in which the downside of a choice is zero or the absence of some result.

### Study 1

In study one we replicate and extend Tversky and Kahneman (1986) by varying the framing of zero. The following table explains the stimuli and results: In the context of a gain, significantly more participants selected the risk-seeking choice when zero was framed as “lose nothing” ( $\chi^2(1) = 9.022$ ,  $p = .003$ ,  $N = 263$ ), and in the context of a loss, significantly more participants selected the risk-averse choice when zero was framed as “gain nothing” ( $\chi^2(1) = 11.803$ ,  $p = .001$ ,  $N = 263$ ).

### Study 2

Bateman et al. (2007) found that a bet with a 7/36 chance of winning \$9 and a 29/36 chance of winning nothing was judged as less attractive than a bet with a 7/36 chance of winning \$9 and a 29/36 chance of losing 5¢. We show that “lose 5¢” is more attractive than “gain nothing” ( $t(292) = 4.932$ ,  $p < .001$ ), but “lose nothing” is more attractive than “lose 5¢” ( $t(292) = 3.326$ ,  $p = .001$ ). See Figure 1.

### Study 3

According to Bateman et al. (2007), when the \$9 is paired with a small loss, the \$9 “comes alive with feeling” (p. 373) allowing for a more precise evaluation of how good \$9 is, and hence affecting the level of perceived attractiveness of the bet. The authors report the results of two studies in which participants rate each part of the bet. They found that the ratings of the “\$9” were higher in the lose 5¢ condition in comparison with the win nothing condition. Study 3 re-tests this explanation across three conditions (gain nothing, lose nothing, lose 5¢). Table 2 illustrates the questions and results. These results demonstrate that while “lose 5¢” makes the \$9 seem more positive when compared with “gain nothing,” there are no significant differences between how participants felt about the \$9 when comparing “lose nothing” and “lose 5¢.” Further, participants felt significantly better about the probabilities in the lose nothing condition in comparison with the lose 5¢ condition suggesting an affective mechanism.

### Study 4

Study 4 replicates the effects observed in Study 2 and 3 in the context of an indexed annuity. We test an indexed annuity which requires a \$1,000 initial investment and has a 20% chance to gain \$150 and an 80% chance to gain nothing/lose nothing/lose \$1 over the period of one year. We show that investment intention is significantly higher when participants stood to “lose \$1” in comparison with

“gain nothing” ( $t(397) = 4.913, p < .001$ ). However, investment intention was higher when participants stood to “lose nothing” in comparison with “lose \$1” ( $t(397) = 3.380, p = .001$ ). See Figure 2.

### Study 5

It has been established across a wide range of domains that there is a general relationship between risk and reward, and decision-makers utilize knowledge of this relationship when making decisions under uncertainty (Pleskac & Hertwig, 2014). We show that belief in riskreward interacts with condition (lose \$1 - gain nothing) on investment intention ( $b = .264, t(294) = 2.20, p = .029$ ). More specifically, we show that in the lose \$1 condition those who have a stronger belief in risk-reward exhibit a higher likelihood of investing in the fund ( $b = .340, t(294) = 3.880, p < .001$ ). Presumably, to those higher in risk-reward belief, the possibility of losing \$1 makes the investment seem more appealing. See Figure 3.

### Conclusion

Across five studies, we show that contrary to the predictions of loss aversion gaining nothing is more aversive than losing nothing. These studies also demonstrate that this effect has important implications for researchers, in framing choice problems, and managers when discussing choices that include the absence of some result.

## Guess Where I'm From: Ambiguous Accents Can Trigger Consumer Curiosity

Rebecca Rabino (Texas Tech); Elise Ince (University of South Carolina, USA);  
Deborah V. Thompson (Georgetown University, USA)

### **Brief Abstract:**

Though marketers can benefit from eliciting consumer curiosity, situational determinants of curiosity remain underexplored. Across several contexts, and using several speakers from a variety of different countries, we investigate the ability of ambiguous accents to trigger consumer curiosity. We demonstrate that accent-driven curiosity enhances consumers' interest in products and services endorsed by the speaker. Importantly, we find that making avoidance goals salient serves to mitigate the effect of accent-driven curiosity on consumer interest in associated products.

### **Extended Abstract:**

Curiosity is an intense motivational force with the power to influence consumer inferences, judgments, and behavior, but has received limited attention in consumer behavior research. In particular, little is known about situational drivers of curiosity (Loewenstein, 1994; Menon & Soman, 2002). We therefore examine a novel driver of curiosity: ambiguously accented speech. Ubiquitous with the rise of globalization (Gluszek & Dovidio, 2010), ambiguous accents (i.e., of indeterminate origin) may trigger curiosity about the speaker, influencing product and service evaluations.

A large body of research has examined the impact of specific, identifiable accents (Mai & Hoffman, 2014). However, ambiguous accents, or accents providing insufficient cues of geographical background and defying adequate categorization (Budner, 1962), remain unexplored. Upon hearing accents, consumers spontaneously seek to classify the speakers into ethnic, national, or religious groups (Mai & Hoffman, 2014). However, consumers are often unable to identify and categorize accents (Lindemann, 2003). We suggest that such accents are ambiguous in nature, and that this ambiguity triggers curiosity regarding where the speaker's accent is from. We furthermore argue that

this accent-driven curiosity extends to associated products and services, thereby increasing consumer interest and driving exploratory behavior.

In six studies, across a variety of contexts (i.e., a social media consultant, a boutique owner, a phone app developer, an art gallery owner, and a nutritionist), and a variety of speakers (American, Brazilian, Indian, Mexican, Bulgarian, Iranian, Ukrainian), we examine the impact of ambiguous accents on consumer curiosity. In Studies 1a-c we demonstrate the ability of ambiguous accents to pique curiosity about the origin of the speaker. In Studies 2 and 3 we seek to shed additional light on the accent-curiosity relationship by adopting ambiguity- and fluency-reducing manipulations. Specifically, in Study 2 we show that ambiguous accent-driven curiosity is attenuated when the source of ambiguity, the origin of the speaker, is disclosed. In Study 3, we show that the effect of ambiguous accents on curiosity is robust to a processing-fluency reduction manipulation. In addition to the use of fluency covariates in all studies, these findings lend support to the contention that it is accent ambiguity, and not disfluency related to difficulty processing accents, that drives consumer curiosity. In Studies 3 and 4 we furthermore examine whether accent curiosity transfers to interest in products and services associated with the speaker. Finally, in Study 4, we assess a theoretical and practically relevant moderator: approach vs. avoidance goals.

All study stimuli were pretested, and manipulation checks in all studies confirmed that the ambiguous conditions were significantly more ambiguous than the unambiguous conditions ( $p < .01$ ). Additionally, in all studies, various voice characteristics were measured (including how perceptually fluent, or easy to understand, the speaker was) in order to isolate the effect of the accent's ambiguity. All analyses were run both with and without any significant voice characteristics as covariates; the results remain significant after including the covariates. Thus, manipulation checks and voice characteristics are not discussed further.

In Studies 1a-c, we establish the robust effect of ambiguous accents on curiosity. In all studies, participants listened to a short audio clip of either an ambiguously or unambiguously accented speaker. After listening to the audio clip, participants indicated how curious they were about the speaker's accent (not at all curious/very curious) and completed the manipulation check and voice characteristic measures.

In Study 1a, ( $N = 116$ ), we compared an unambiguous accent (American) to an ambiguous accent (Brazilian). Study 1b ( $N = 171$ ) featured two foreign speakers (ambiguous: Mexican; unambiguous: Indian) instead of comparing an American, less ambiguous voice to an ambiguous foreign speaker. Study 1c ( $N = 106$ ) utilized the same speaker in both conditions; an American professional voice actress provided both an unambiguous and ambiguous voice clip. Importantly, as predicted, in Studies 1a-1c the ambiguous accent elicited greater curiosity than the unambiguous accent ( $p < .005$ ; see means in Table 1).

In Study 2 ( $N = 160$ ), we assess the impact of disclosing where the speaker is from in a 2 (accent: ambiguous vs. unambiguous)  $\times$  2 (disclosure: present vs. absent) design. While participants remained more curious in the ambiguous accent conditions than the unambiguous conditions ( $p < .0001$ ), within the ambiguous accent conditions, disclosure significantly reduced curiosity ( $p = .03$ ).

Study 3 ( $N = 190$ ) more directly assesses the potential role of disfluency. Specifically, Study 3



included a third condition in which the ambiguous accent was accompanied by a warning about the source of disfluency; such identification of the source of disfluency can attenuate disfluency effects (Oppenheimer, 2006). We also examine whether curiosity about the accent can transfer to interest in products associated with the speaker. Participants in the ambiguous conditions, with and without a fluency warning, were equally likely to download a phone app ( $p > .44$ ); participants in the two ambiguous conditions were more likely to download the app than the unambiguous condition (ambiguous:  $p < .01$ ; disfluency:  $p = .07$ ). A mediation analysis revealed that curiosity about the accent mediated the effect of accent condition on likelihood to download the app.

In Study 4, we examine the moderating role of approach versus avoidance goals. Participants with an avoidance goal focus on undesirable outcomes and desire to avoid the unknown. Thus, while an ambiguous accent may elicit curiosity, we predict a dampening effect on downstream consequences (interest in the speaker's services) for those with an avoidance goal. There was a positive effect of ambiguous accents on interest in the approach conditions ( $p = .02$ ), but this was attenuated in the avoidance conditions ( $p = .31$ ). However, as expected, participants were more curious about the accent in both goal conditions ( $ps < .001$ ). A moderated mediation analysis (model 14) was also significant.

Together, these studies suggest a new driver of consumer curiosity: ambiguous accents. Accent-driven curiosity can be effectively used to increase consumer interest in (Study 4: interest in a nutritionist's services) and prompt exploratory behavior for (Study 3: likelihood of downloading an app) associated products and services. However, these curiosity-driven effects are attenuated for those with an avoidance goal.

## Jesus, Take the Wheel: The Appeal of Spiritual Products in Satiating Concerns about Randomness

Steven Shepherd (Oklahoma State University, USA); Aaron C. Kay (Duke University, USA)

### **Brief Abstract:**

Why are consumers drawn to spiritual products? Leveraging theorizing regarding the psychological need to perceive the world as orderly and non-random, we posited that products imbued with religious/spiritual significance help manage concerns about randomness and uncontrollability. When randomness concerns were salient, religious consumers showed increased desire to attach religious significance to secular objects (e.g., having item blessed, physically attaching a religious symbol). For spiritual consumers, spiritual products (vs. non-spiritual physically equivalent products) were seen as having i) non-material efficacy (i.e., efficacy not bound to the purely material world) and ii) unfalsifiable efficacy (i.e., efficacy that is immune to contrary evidence).

### **Extended Abstract:**

American consumers regularly buy religious symbols to attach to their person, vehicle, or other personal items. In India, cars and other products are frequently blessed. Even as organized religion declines in the Western world (Saad 2018), various products and services (essential oils, Himalayan salt lamps, reiki, acupuncture, homeopathy) leverage associations with the spiritual, and are often marketed as alternatives to conventional medicine for when one's ailments seemingly have no clear cause or cure. Although past work has considered the numerous functions of spiritual products/services (for a review, see Einstein 2008), no work has explored the particular function of spiritual products in

satiating concerns about randomness and lack of control.

People have a fundamental need to perceive the world as orderly and non-random (see Kay, Whitson, Gaucher, & Galinsky, 2009; Landau, Kay, & Whitson, 2015). Maintaining perceptions of personal control is one common way of protecting people's belief that their existence is not random, but compensatory control theory suggests that when personal control is reduced, people can fluidly turn to external sources of control and order to reassure themselves that the world is under some control, even if the source of control is not the self. This includes i) God and religion (Kay et al., 2008; 2009; 2010), and ii) consumer products (Cutright 2012; Shepherd, Kay, Landau, and Keefer 2011; Shepherd and Kay 2018). However, whereas supernatural/divine forces are often seen as omnipotent and infallible, consumer products can be risky, unpredictable, and even contribute to a lack of control (e.g., car accidents, safety recalls, ineffective medical treatments).

In the current research we test i) whether or not consumer goods can become more appealing to religious/spiritual consumers by being imbued with religious/spiritual significance, thereby taking on some of the efficacy (an order and control-conferring property; Landau et al. 2015; 2018) associated with the spiritual and supernatural. Past work on contagion and culturally universal laws of sympathetic magic suggest that such a transfer is possible in the minds of consumers (Frazer, 1925; Kramer and Block 2014; Morales and Fitzsimons 2007; Rozin, Markwith, & Ross, 1990). We also test the specific features of spiritual products that would make them more appealing as sources of control relative to comparable non-spiritual products.

In Study 1 (N=221; MTurk), Indian participants were presented with a hypothetical purchase (bicycle, scooter, motorbike, or car, depending on their primary mode of transportation). The product was either described as unreliable and will sometimes break down (randomness salient), or as being uncomfortable. They were then asked how important it is and how likely they are to have the purchase blessed. Among those high (vs. low) in religiosity, there was greater interest and intention to have the product blessed when it suffered from low reliability (i.e., subject to randomness) compared to when it was uncomfortable (Figure 1).

Study 2 conceptually replicates this effect with American participants (N = 507; MTurk). Participants were either asked to write about their day to day car use, or to write about things that could happen to them while driving that are random and beyond their control (randomness salience condition). Participants were then asked to rate their interest in a variety of Christian symbols and rituals to attach to their car (e.g, having the car blessed, hanging a cross from the rear view mirror, etc.). Participants also rated their religiosity using an established scale (Huber & Huber, 2012). Among Christian participants, those higher (vs. lower) in religiosity showed increased interest in buying the religious symbols when randomness concerns were salient versus when they were not (Figure 2).

Study 3 (N= 609; MTurk) switches from religiously imbued to spiritually imbued products. Participants rated their spirituality on an established scale (Piedmont 1999). In one condition, participants were presented with an (ostensibly real) brand of essential oil, which we predicted would have more spiritual properties compared to a synthetic, chemically equivalent oil presented in the other condition. Participants rated the product on "non-material efficacy" (e.g., the extent to which it taps into a spiritual, unseen energy or force), evaluated the product (e.g., interest in buying it, perceived effectiveness at treating ailments) and willingness to pay (WTP). Those higher (vs. lower) in

spirituality saw the essential oil as having more non-material efficacy, rated it more favorably, and showed increased WTP, compared to the synthetic version, even though the synthetic version was chemically the exact same. For those high in spirituality, the effect of product type on evaluations and WTP was mediated by perceptions of non-material efficacy (Figure 3).

Study 4 (N=604; MTurk) tested whether or not spiritual products are seen as having unfalsifiable efficacy. Past research shows that unfalsifiable beliefs (i.e., those seen as being untestable or subject to evidence-based criticism) are valued because they are robust to criticism (Friesen, Campbell, & Kay, 2015). Religious/spiritual beliefs are one common form of unfalsifiable beliefs. Recall that secular products are often flawed and thus a less ideal means for maintaining perceptions of control and non-randomness. Spiritual products, on the other hand, may be seen as possessing an efficacy that cannot be disproven, making it more desirable and dependable. Study 4 used the same design and measures as Study 3, except it measured unfalsifiable efficacy by asking participants to imagine that a study showed that the oil they were presented with (essential oil vs. synthetic chemically equivalent oil) shows no evidence of effectiveness, and if this would impact their confidence in the product and if the effectiveness of the product could be disproven. Among consumers higher (vs. lower) in spirituality, the essential oil was seen as having more unfalsifiable efficacy than the synthetic version, which mediated the effect of product type on product evaluations and willingness to pay (Figure 4).

In short, when randomness concerns were heightened, religious participants showed an increased interest in imbuing products with religious significance (Studies 1-2). Studies 3 and 4 tested precisely what advantages spiritual products have over non-spiritual products that are relevant to conferring a sense of control and non-randomness; namely, non-material efficacy and unfalsifiable efficacy

## **Wise, Fun, and More: Emerging Constructs in Consumer Psychology - Competitive Paper Session**

*Vernon (2nd Level)*

*Chair: Michael Gerhard Luchs, William & Mary*

### **A Scale of Consumer Wisdom**

Michael Gerhard Luchs (William & Mary); Kelly Haws (Vanderbilt University, USA); David Mick (University of Virginia, USA)

#### **Brief Abstract:**

Wisdom has been conceptualized as an essential facilitator of well-being. Luchs and Mick (2018) recently developed a theoretical framework of consumer wisdom which we use as a starting point for the development of a concomitant measurement scale. Across three data sets, we refine Luchs & Mick's (2018) conceptualization and develop a 24-item scale of consumer wisdom (CWS). We demonstrate its stability across data sets and time while situating it within a nomological network of scales that brings together a broad range of consumption related constructs. Further, our results demonstrate that consumer wisdom is a substantial predictor of well-being.

#### **Extended Abstract:**

Over the last three decades, psychologists have developed a variety of models and measures of wisdom, which has been conceptualized as an essential facilitator of well-being. Researchers have also

acknowledged that wisdom is highly context-dependent (e.g., Sternberg 1998) and should, therefore, be studied in specific contexts. In response, Luchs and Mick (2018) recently developed an empirically derived five-facet theoretical framework of consumer wisdom which we use as a starting point for the development of a concomitant measurement scale. We refine their conceptualization and further support the importance of understanding and assessing consumer wisdom as a unique construct and one with important implications for improving consumer decision making and well-being. We describe our research as conducted through three data sets (see Table A for summary information about each data set).

Our first step was to generate potential scale items for consumer wisdom (CWS) based upon Luchs & Mick's (2018) theoretical framework. This led to a set of 120 items that were administered to an online sample of 286 Prolific Academic participants along with demographic questions. An exploratory factor analysis, coupled with analysis of face validity and internal consistency, suggested a six-factor model. We retained 24 items (4 per factor) based on factor loadings and conceptual breadth (see Table B). The results of confirmatory factor analysis are reported in Table B for data set 1; we repeated this analysis with data sets 2 and 3. Goodness of fit statistics for each of these data sets reached recommended levels (Netemeyer et al. 2003). Alternative factor structures were estimated as well, but none demonstrated superior goodness of fit.

For our second data set, we recruited an online sample of 439 Prolific Academic participants. In addition to providing ratings for the 24 CWS items, they also provided responses for a variety of established scales intended to establish convergent and discriminant validity. We also assessed socially desirable responding (Paulhus, 1991). As expected, CWS was positively and significantly related to consumer spending self-control (.57), elaboration of potential outcomes (.50), consumer self-confidence (.35), need for cognition (.22), growth mindset (.18), voluntary simplicity (.21), GREEN (.46), and socially responsible purchase and disposal (.34). Also as expected, CWS was negatively and significantly related to materialism (-.15), compulsive buying (-.31), and spendthrift behaviors (-.39). Overall, CWS was related to all of these constructs as expected, yet the correlations were all moderate to weak thereby affirming the unique position of CWS within this network of related consumer research constructs. Analysis of the socially desirable responding measures suggested that such responding was not a significant concern.

We invited a random sample of 200 participants from the prior data set 2 to participate in a follow-up survey eight weeks later. Of this invited pool, 157 (79%) participated in the followup survey. Test-retest correlations for the six dimensions of CWS taken eight weeks apart ranged from .64 to .76. The test-retest correlation for CWS overall was .75, indicating that CWS has sufficient temporal stability, similar to other consumer-based studies (Price et al. 2018).

Data set 3 used an online sample of 660 participants recruited by a third party vendor using a quota sampling approach to match the demographics of the latest US Census. After responding to demographic questions, participants provided ratings for the 24 CWS items. Next, participants provided responses for several measures of well-being (see Table C) since consumer wisdom is concerned with both personal well-being and others' well-being (Luchs and Mick, 2018). We also included measures designed to assess the incremental predictive validity of CWS in order to show the usefulness of our measure beyond that of existing measures, as shown in Table C. For our sociodemographic control variables, consistent with prior research (Netemeyer et al. 2017), we created

effects codes to facilitate analysis interpretation.

In the first set of regressions summarized in Table C, only control variables were included in order to establish the baseline model for comparison. Next, model 1 introduces the predictors of well-being except for consumer wisdom. Given our focus on demonstrating the incremental validity of our consumer wisdom scale, model 2 adds consumer wisdom to model 1. As expected, consumer wisdom was a significant incremental predictor in model 2 for all four measures of well-being. Further, the addition of consumer wisdom significantly improved the model for all four measures of well-being. Note that the standardized  $\beta$  values for consumer wisdom are comparable to those of the other three predictors, suggesting that consumer wisdom is an equally important predictor of well-being.

Overall, our six-factor model of consumer wisdom provides a refinement on Luchs and Mick's (2018) theoretical framework and provides a psychometrically sound 24-item measurement scale. We demonstrate the stability of the scale across data sets and time while situating consumer wisdom within a nomological network of established consumer research scales that brings together a broad range of consumption related constructs. Finally, our results demonstrate that consumer wisdom is a significant and substantial incremental predictor of a variety of dimensions of well-being. Looking forward, we encourage researchers to use this new scale in order to explore and understand the antecedents of consumer wisdom and consider the ways in which consumer wisdom can be induced or taught to enhance decision making and consumption-related behaviors in ways that simultaneously promote the well-being of individual consumers and society as a whole.

## The Psychology of Fun: Inquiry into Consumers' Fun Experiences

Travis Tae Oh (Columbia University, USA); Michel Tuan Pham (Columbia University, USA)

### **Brief Abstract:**

We propose an original framework of fun as a distinct affective pleasure construct, often a central outcome of consumption behavior across product and experience categories. We adopt a multi-method approach with data consisting of 21 depth interviews, 335 narrative experiences, 1,400 selfies, and a nomological network study. Our findings reveal six major psychological underpinnings - (a) Novelty, (b) Spontaneity, (c) Connectedness, (d) Boundedness, (e) Engagement, (f) Liberation - and two affective layers: (g) Increasing Positive Arousal and (h) Decreasing Negative Arousal. In particular, we find that "Liberation" is the most crucial element in defining the fun construct.

### **Extended Abstract:**

The Psychology of Fun: An Inquiry into Consumers' Fun Experiences

One prominent pleasure construct that plays a vital role in people's consumption is fun. The experience of "having fun" is ubiquitous among today's consumers, who spend considerable amounts of time and money on fun activities such as a week-long cruise. Moreover, firms frequently promote "fun" as an attractive promise in their advertising messages and strategically position themselves (e.g., Virgin Airlines) as fun brands.

Despite its growing presence as a unique concept in real-world circles, fun has yet to receive adequate academic attention as a psychological construct on its own right. Most of what is considered research on "fun," has utilized the word as a proxy of experiential utility (Babin et al., 1994) with little regard

for its psychological contents (Alba & Williams, 2013; Pham 2013). Thus, the main goal of this paper is to propose a theoretical framework on the psychology of “having fun” in consumers’ lives, and present fun as a unique construct, differentiated from related concepts such as happiness.

To reach this objective, we adopt a multi-method approach with data consisting of 21 depth interviews, 335 narrative experiences, 1,400 selfies, and a nomological network study.

## METHODOLOGY

To capture the psychological underpinnings of the fun construct, we conducted four types of studies to explore and establish an operational definition of fun.

**Depth Interviews.** 21 semi-structured interviews (Arsel 2017) were conducted in the phenomenological tradition (Thompson et al. 1989). Participants ranged from ages 18 to 73, were balanced in gender, and came from diverse socioeconomic backgrounds (e.g., homeless to retired).

**Narrative Experiences.** We recruited 300 participants from an online panel and randomly assigned them to three narrative conditions: Fun, Happy, and Personally Interesting. After participants wrote about their respective experiences, they filled out process measures.

**Prompted Selfies.** We partnered with a mobile market research company that specializes in collecting selfie data. Through its app, we recruited and randomly assigned participants to one of four conditions (Fun, Happy, Proud, and Relaxed) to upload a selfie regarding that particular moment. Analyses of selfies are omitted (refer to Appendix) due to space limitations.

**Nomological Network.** We recruited 200 participants to write about a personally interesting experience and then fill out scale items for the theorized psychological categories of fun. We ran structural equation modelling to assess the nomological validity of the fun framework.

In the following sections, we present (1) a psychological framework of consumer fun, (2) how fun is distinct from general happiness, and (3) a nomological network of fun.

## EMERGING FRAMEWORK OF CONSUMER FUN

As shown in Figure 1, the cross-data analyses reveal six major psychological underpinnings of fun: (a) Novelty, (b) Spontaneity, (c) Connectedness, (d) Boundedness, (e) Engagement, (f) Liberation, and two affective layers: (g) Increasing Positive Arousal and (h) Decreasing Negative Arousal. In particular, we find that “Liberation” is the most crucial element in defining the fun construct. Consumers were unwilling to spend their resources on fun consumption if current circumstances were too restrictive (e.g., lack of money, social pressure).

Given the importance of “Liberation” as a major determinant in the fun construct and due to space limitations, we present a more detailed analysis for this dimension below.

### Liberation.

The concept of liberation can be found similarly in the Epicurean ideology of “ataraxia” which represents freedom from mental discomfort as the highest order of pleasure (O’Keefe 2010). While meaningful consumption (“eudaimonia”) plays a significant role in consumer's

lives, we argue that fun as a modern day epithet of ataraxia is also critical to studying well-being in consumer psychology. For instance, a 27 year old teacher narrates about her Disney Cruise: “Disney- I feel like it’s not just for kids... but just to see adults sing Frozen songs, and just be... Carefree! Just to see people carefree, not caring what anybody thinks, singing all the songs, getting on all these rides, I find that fun.”

#### FUN AS A DISTINCT PLEASURE CONSTRUCT

We primarily focus on the differences between fun and happiness, as these two constructs are closely related, and have substantial implications to consumption experiences (e.g., Nicolao et al. 2009). Moreover, among 144 fun narratives, 120 involved purchasing of goods, services, or experiences, confirming prior research that fun is consumptive (McManus & Furnham 2010).

**Results.** Participants in the happy condition reported the highest level of meaningfulness ( $p < .01$ ). People in the fun condition reported that time progressed faster and was more fun than the happy condition ( $ps < .05$ ). More importantly, participants in the fun condition reported significantly higher feelings of liberation ( $p < .001$ ) and connectedness ( $p = .08$ ) than the happy condition. LIWC analysis showed that between conditions, “friends” was higher in the fun condition ( $p = .06$ ) and “family” was higher in the happy condition ( $p < .01$ ).

**Discussion.** We find evidence that consumers distinguish fun experiences as more fun, less meaningful, and progressing faster than happy experiences. Interestingly, people felt happier with family and more fun with their friends, implying that the content of connectedness matter.

#### DISCUSSION

We present a novel framework of fun, as a unique construct. We define fun as an affective pleasure construct identified by a strong sense of engaged liberation – often arising from bounded, novel experiences that involve moments of spontaneity and connectedness with others.

Our paper contributes to the growing literature on hedonic consumption by providing a content-rich insight into a consumer relevant pleasure construct. Moreover, the multi-method approach expands the epistemological lens traditionally used in consumer research. Future studies could operationalize the underlying mechanisms to further validate the framework, and distinguish fun from other related concepts as humor and play.

### Meat Me for Dinner: Animal Anthropomorphism and Food Choices

Sunye Yoon (University at Buffalo); Danny JM Kim (University at Buffalo)

#### **Brief Abstract:**

This research shows that animal anthropomorphism leads consumers to make a healthier choice in their meat dish selection. Our explanation for this effect is that people attempt to justify eating anthropomorphized animals by attributing their consumption to health (i.e., utilitarian reason) than taste (i.e., hedonic reason). As the first investigation to focus on animal consumption in marketing, the research explores the role of anthropomorphism on consumers’ guilt in animal consumption and healthy food choices.

### **Extended Abstract:**

While meat is central to most people's diets, people at the dining table rarely reflect on the fact that their meal was once alive, bearing a close resemblance to themselves. However, what if animals' humanlike characteristics becomes salient on the dining table? In this research, we contend that animal anthropomorphism can lead people to choose healthy meat dishes over unhealthy meat dishes.

An interesting finding regarding animal anthropomorphism is that it renders animals worthy of moral care and concern. For instance, people empathize with anthropomorphized animals more (Harrison & Hall, 2010) and show more concern for animal welfare (Butterfield, Hill, & Lord, 2012) because anthropomorphic entities are thought to experience emotions, thus deserving moral considerations (Gray, Gray, & Wegner, 2007). That is, animal anthropomorphism can lead to a sense of guilt about eating meat. Since guilt is an aversive state, people are motivated to alleviate it by finding a justification. The literature on guilt suggests that utilitarian benefits are easier to justify than hedonic benefits (Okada, 2005). Taste and health are two major benefits people seek from food (Mai & Hoffmann, 2012), and each indicates a hedonic and utilitarian benefit, respectively. Meat offers utilitarian values as an important source of protein and iron, and at the same time offers hedonic values such as taste (Allen & Ng, 2003). Thus, when animals are anthropomorphized, people would consider health reasons as a stronger justification for eating meat than taste. In sum, our central premise is that animal anthropomorphism will lead people to choose healthy (vs. unhealthy) meat dishes to justify their meat consumption.

Study 1 was conducted in front of a cafeteria on the campus during lunch time by inviting students walking toward a target vendor to participate in a short study (N = 220). After participants in the anthropomorphism (non-anthropomorphism) condition were asked to write two humanlike characteristics of animals (two animal characteristics that are not shared with humans), they made a choice between healthy and unhealthy meat dish options (grilled chicken over rice vs. deep-fried chicken nuggets with fries). As predicted, participants in the anthropomorphism condition (vs. non-anthropomorphism condition) showed a higher tendency to choose the healthy option ( $b = .70$ ,  $SE = .28$ ,  $Wald \chi^2 = 6.17$ ,  $p = .013$ ).

Study 2 tested a mediating role of health justification (MTurk, N = 190). After animal anthropomorphism manipulation using a sentence completion task, participants made a food choice option ("chicken breast salad" = 1, "deep-fried chicken wings" = 9) and indicated reasons of eating meat using three items (e.g., "meat is delicious" = 1, "meat is healthy" = 9). Again, participants in the anthropomorphism condition (vs. non-anthropomorphism condition) showed a higher tendency to choose the healthy option ( $b = .48$ ,  $t = 2.25$ ,  $p < .03$ ), and the health justification mediated this effect (95% CI [-.2895, -.0116]).

Study 3 tested if the effect of anthropomorphism is stronger among individuals with high guilt proneness to provide additional evidence for the mechanism. Participants in MTurk (N = 440) were presented with different pig images (a pig face with vs. without a speaking bubble) for animal anthropomorphism manipulation. Participants also indicated their likelihood to avoid ordering meat dishes. Next, they made a food choice option (BLT sandwich with low-sodium bacon = 1, BLT sandwich with regular bacon = 9), and their guilt proneness was measured (Cohen et al., 2011). We found a significant interaction ( $b = .25$ ,  $t = 2.10$ ,  $p = .04$ ) between anthropomorphism and guilt proneness in predicting the food choice implying that the anthropomorphism effect gets stronger with



the increase in guilt proneness of individuals. It implies that a sense of guilt plays a role. Furthermore, animal anthropomorphism did not affect consumers' avoidance of meat dishes which is consistent with previous literature suggesting that direct reparative actions (i.e., not eating meat) are less likely to occur for habituated and deeply ingrained behaviors (Festinger, 1957).

Study 4 (students,  $N = 225$ ) tested a boundary condition by showing that the effect of anthropomorphism on meat dish choice disappears when meat products are made from humanely treated animals. After anthropomorphism manipulation using the sentence completion task, participants either read a short description of beef sticks as being made from humanely treated animals or did not read such a description. Next, they chose which beef stick they would like to receive between a healthier and a less healthy options (original smoked beef stick vs. sweet smoked beef stick). As expected, we found a significant interaction between humane treatment and animal anthropomorphism in predicting beef stick choice ( $b = -1.69$ , Wald  $\chi^2 = 6.38$ ,  $p = .012$ ,  $\exp(b) = .19$ ). When the humane treatment information was present, the effect of anthropomorphism was gone ( $61.54\%$ ;  $\chi^2(1, N = 112) = .03$ ,  $p = .87$ ), implying that the effect of animal anthropomorphism is mitigated when the animals used for the products were treated humanely.

To our knowledge, this is the first study in the marketing area to investigate consumers' attitudes toward meat consumption and its downstream effects on consumer decision making. Furthermore, this research offers a new manner in which to alleviate consumer guilt that does not involve avoiding the guilt-inducing behavior itself, as meat eating is a habitual, normative behavior that most consumers have been performing with little compunction. Mounting research suggests that due to the difficulty of dietary change, when experiencing a sense of guilt about meat consumption, people often consider animals as unworthy of moral consideration by perceiving animals as not having minds or mental capacities of their own (i.e., objectification). This research explores how animal anthropomorphism, which makes the objectification an infeasible strategy, affects consumers' meat dish choices. Lastly, this research contributes to the literature on healthy food choices by examining the role of animal anthropomorphism, which can be induced using subtle techniques in promotional messages.

## Designed to Fail Aversion in Consumer Evaluation and Choice

Stephen Baum (University of California Berkeley, USA); Ellen Evers (University of California Berkeley, USA)

### **Brief Abstract:**

In 5 preregistered experiments, we provide evidence of a consumer aversion to products designed to fail (DTF aversion). We demonstrate that this aversion is robust across various consumer goods and multiple elicitation procedures. Furthermore, this aversion cannot be explained by participants' disapproval of companies that manufacture products designed to fail, or, by participants' optimistic beliefs about products' lifespans. Initial process evidence suggests that this aversion may be driven by the greater discomfort associated with the intentional (as opposed to unintentional) termination of a product's functionality.

### **Extended Abstract:**

Consumer goods often have a finite lifespan. After a certain period of time, cell phones and computers crash beyond repair, clothes fray and tear until they can no longer be worn, and produce rots and decays, rendering it inedible. However, just as the duration of a good's lifespan (i.e., the average

amount of time before its functionality is lost) can vary, so too can the reason for which that good's lifespan ends. A cell phone can die because of a component that happens to fail after a period of time, or, because that same component was intentionally manufactured to fail after a period of time. Anecdotal evidence suggests that consumers often experience unease with goods intentionally designed to lose their functionality. Apple's admittance of slowing down older iPhones led to widespread outrage amongst consumers, in addition to multiple class action lawsuits (Sarhan, 2017).

In 5 preregistered experiments, we provide evidence of a consumer aversion to products designed to fail (DTF aversion). We demonstrate that this aversion is robust across various consumer goods and multiple elicitation procedures. Furthermore, this aversion cannot be explained by a desire to punish companies that manufacture products designed to fail, or, by participants' optimistic beliefs about products' lifespans. In each of the studies we report, participants evaluated products designed to fail and/or not designed to fail alternatives matched on various desirable features. For example, participants chose between either a laptop with a nice screen, plenty of storage space, several USB ports, and an average lifespan of 3 years and 1 month (that was intentionally designed to fail after an average lifespan of 3 years and 1 month), and a similar laptop with an average lifespan of 3 years. In Experiment 1A (N = 202), participants were randomly assigned to evaluate either a laptop manufactured by Company X that was intentionally designed to fail after an average lifespan of 3 years and 1 month, or, a laptop manufactured by Company Y with an average lifespan of 3 years. Participants expressed a greater interest in purchasing the laptop with an average lifespan of 3 years ( $p < .001$ ). Experiment 1B (N = 104) replicated this effect utilizing a within-subjects design; participants expressed a greater interest in purchasing the laptop with the shorter average lifespan ( $p = .001$ ).

If the results of Experiments 1A and 1B stem from participants' disapproval of companies that manufacture products designed to fail, participants' aversion to such products should be eliminated when both products that they evaluate (i.e., the product designed to fail, and the non-designed to fail alternative) are manufactured by the same company. Experiment 2A (N = 190) was designed to rule out this explanation. In a within-subjects design similar to Experiment 1B, participants evaluated a laptop that was intentionally designed to fail after an average lifespan of 3 years and 1 month, and a laptop with an average lifespan of 3 years. Participants were told that both laptops were manufactured by the same company, and were excluded from analyses if they did not recognize this. Using a different elicitation procedure than Experiments 1A-1B, we again found evidence of DTF aversion: participants expressed a greater liking for the laptop with the shorter lifespan ( $p < .001$ ). Experiment 2B (N = 210) conceptually replicated this result using smartphones as stimuli ( $p < .001$ ).

Experiments 1A-2B employed evaluative rating scales. We next sought to see if the DTF aversion observed in these experiments would generalize to an elicitation procedure more consequential for consumer behavior: choices. Experiment 3 (N = 353) featured a two condition, between-subjects design. In the experimental condition, participants saw both a smartphone that was that was intentionally designed to fail after an average lifespan of 3 years and 1 month, and a smartphone with an average lifespan of 3 years. In the control condition, participants evaluated a smartphone with an average lifespan of 3 years and 1 month, and a smartphone with an average lifespan of 3 years. In both conditions, participants were asked to choose the product that they liked more. Then, participants estimated how long they would expect the two phones that they evaluated would last them. The proportion of participants in the experimental condition that preferred the phone with the shorter lifespan was significantly higher than the proportion of participants with this preference in the control

condition ( $p < .001$ ). Further analyses revealed that our results cannot be explained by participants' optimistic beliefs. Restricting analyses to participants that explicitly indicated that they expected the designed to fail product to last them longer didn't eliminate DTF aversion ( $p = .02$ ).

To summarize, across 5 experiments, we find evidence that suggests a consumer unease with products that are intentionally designed to fail. We demonstrate that this DTF aversion is robust across various stimuli and elicitation methods, while also ruling out two alternative explanations. Exploratory process data collected from Experiments 2A-3 suggests that participants find products that are designed to fail particularly aversive because of the intentional nature of such product failures. For consumers, considering a phone that dies because a battery happens to fail might evoke a mild disappointment, while considering a phone that dies because a battery intentionally fails might evoke a more considerable distress. Taken together, these results provide insight into how consumers' preferences might critically depend not just on when products lose their functionality, but the reasons why products lose their functionality.

## **What Comes First Matters! - Competitive Paper Session**

*Sloane (2nd Level)*

*Chair: Anne-Sophie Chaxel, Virginia Tech, USA*

**A Distrust Mindset Lowers Attitudinal Ambivalence: Why Watching Fox News Triggers More Extreme Product Attitudes.**

Anne-Sophie Chaxel (Virginia Tech, USA); Yegyu Han (Virginia Tech, USA); DaHee Han (McGill University, Canada); J. Edward Russo (Cornell University, USA)

### **Brief Abstract:**

Distrust elicited in one task can carry over to a second, unrelated task. Specifically, we propose that distrust toward a target in one task prompts consumers to activate inconsistent cognitions (i.e., two-sided personal knowledge) in a subsequent, unrelated task. The inconsistency-driven discomfort prompts a reconciliation process, which overcompensates for the elevated ambivalence and thereby reduces net attitudinal ambivalence toward the target. This lowered ambivalence influences the consumers' brand choice, attitude-consistent behavior, and receptiveness to advertising. Four studies show that the effects of distrust are robust over tactics for activating it, methods for measuring attitudinal ambivalence, and across several consumer behaviors.

### **Extended Abstract:**

A television news program with messages that evoke distrust is interrupted by breaks for commercials. Does any distrust elicited by the news affect the viewers' reaction to the commercials and, if so, how? Our focus is how distrust evoked in a nonmarket domain (a distrust mindset) affects the consumers' responses to subsequent product messages.

Specifically, we argue that distrust automatically activates two-sided personal knowledge about the attitude object. Since conflicting knowledge drives discomfort, consumers try to resolve these inconsistencies. This reconciliation process overcompensates for the elevated ambivalence, and thereby elicits more radical attitudes, i.e., lower attitudinal ambivalence.

Consider targets for which some people are predisposed positively, while the others' attitude is negative (e.g., Coke vs. Pepsi). For such non-consensus targets, the reduced attitudinal ambivalence induced by distrust should only affect the attitude's strength but not its net valence (some people will hold more positive attitudes, some more negative attitudes). In contrast, for consensus targets, attitudes are similarly positive (or negative) for most consumers. In such case, distrust should solely increase the consensus across participants (everybody gets more positive or negative). Prosocial positions, such as the concern for the environment, represent one likely source of consensus attitudes.

Study 1 (N=240) provides evidence that distrust lowers attitudinal ambivalence. In the trust and distrust conditions, participants were asked to form an impression of a person's face. One face cued trust, while a second one cued distrust (Schul et al., 2004). Participants in the control condition started with the measurement of attitudinal ambivalence. We recorded on a scale from 0 to 100 the extent to which the participant felt two-sided, conflicted, and indecisive about 5 societal topics (e.g., legalizing marijuana; Priester & Petty, 2001). An ANOVA yielded a significant difference across groups ( $F(2, 237) = 3.70, p = .03$ ;  $M_{\text{trust}} = 30.78, M_{\text{control}} = 32.03, M_{\text{distrust}} = 25.60$ ), where only distrust condition significantly lowers ambivalence compared to both control ( $t(156) = -2.53, p = .01$ ) and trust condition ( $t(161) = -2.09, p = .04$ ).

Study 2 (N=300) examines whether the reconciliation process which lowers attitudinal ambivalence is effortful. We followed a 2 (trust vs. distrust) x 2 (high vs. low cognitive load) between-subjects design. Distrust was activated with a recall task. Cognitive load was then manipulated by memorizing a string of 8 versus 2 letters (Epley & Gilovich, 2006). Finally, we measured attitudinal ambivalence towards several new products launched by Company ABC. Study 2 used a different measure of attitudinal ambivalence (known as the Griffin score; Sengupta & Johar, 2002; Zemborain & Johar, 2006). A two-way ANOVA yielded a significant interaction between distrust and effort ( $F(1, 296) = 11.65, p = .0007$ ). The low load condition replicated the results of Study 1, with distrust reducing ambivalence ( $t(148) = -2.68, p = .008$ ;  $M_{\text{trust}} = 2.66$  vs.  $M_{\text{distrust}} = 2.07$ ). However, the effect was flipped in the high load condition ( $t(148) = 2.15, p = .03$ ;  $M_{\text{trust}} = 1.91$  vs.  $M_{\text{distrust}} = 2.38$ ). Thus, the results confirm that the process by which distrust reduces attitudinal ambivalence is effortful.

Study 3 (N=200) shows the impact of distrust on a consensus attitudinal target, global warming. We used the same manipulation as in Study 1. We then measured attitudinal ambivalence towards global warming as in Study 1. Participants were given options to donate a part of their 1-dollar payment to a charitable organization, Greenpeace. Results confirmed that attitudinal ambivalence was lower in the distrust condition ( $t(198) = 3.73, p = .0003$ ;  $M_{\text{trust}} = 36.56$  vs.  $M_{\text{distrust}} = 24.45$ ). Furthermore, participants in the distrust condition donated more to Greenpeace than participants in the trust condition ( $t(198) = -2.04, p = .04$ ;  $M_{\text{trust}} = .02$  vs.  $M_{\text{distrust}} = 2.55$  cents).

Study 4 extends the results of Study 3 to a non-consensus target, a new product. Participants (N=214) in the distrust (trust) condition watched an extract from Fox News (a documentary about birds), followed by several commercials, including one about Pepsi. Then they read descriptions of new, similar products of both Coke and Pepsi, and chose which of the two to buy. We then measured participants' implicit preferences for Coke and Pepsi (D-score, Greenwald et al., 2003). We expected participants in the distrust condition to make choices closer to their implicit preferences, despite the presence of the commercial.

Attitudinal ambivalence toward Pepsi (measured as in Study 1) was confirmed to be lower in the distrust condition than in the trust condition ( $t(212) = -2.78, p = .006$ ;  $M_{\text{trust}} = 24.40$  vs.  $M_{\text{distrust}} = 16.56$ ). We also ran a LOGIT model on the likelihood of choosing Pepsi over Coke with condition (1=control, 0=distrust) and D-score (implicit preference for Coke over Pepsi) as predictors. The LOGIT model yielded a significant effect of the D-score on the likelihood of picking a new Pepsi product over Coke ( $b = -1.03, X^2(1) = 16.76, p < .0001$ ). This result equates to a significant negative relationship between an implicit preference for Coke and the likelihood of picking a new product launched by Pepsi when consumers watched the extract from Fox News. The interaction effect between the condition and the D-score also reached significance ( $b = .65, X^2(1) = 4.05, p = .04$ ). Therefore, when participants had an implicit preference for Coke (a high D-score), they were less likely to buy a new product launched by Pepsi after watching a Pepsi commercial on Fox News than they were after watching a documentary about birds. In brief, when inserted after an extract from Fox News, a commercial therefore failed to “convert” consumers that did not like the brand toward buying it and, instead, had the opposite effect of moving them toward its competitor (their true preference).

The present research shows that the distrust of products can originate as a spillover from prior, nonmarket distrust. Further, that prior distrust can influence a full range of consumer responses, viz., product choice, the willingness-to-pay, and reactions to advertising. A second finding helps to explain what causes those influences to occur, namely, an increase in attitudinal ambivalence followed by an even larger reactive decrease.

## A Small Pizza, Please! The Completeness and Presentation Order of Food Shape Influence Portion Size Choice

Fei Gao (HEC Paris, France); Tina M. Lowrey (HEC Paris, France); L. J. Shrum (HEC Paris, France)

### **Brief Abstract:**

In this research, we develop a unique intervention to reduce consumers' choices of food portion sizes. We find that successive exposure to incomplete and complete food advertising images reduces consumers' choices of portion sizes. This effect occurs because successive exposure to incomplete and complete objects primes the metaphor of becoming full and thus generally enhances the perception of fullness. Furthermore, we demonstrate that visualization is the boundary condition of this effect. Finally, we rule out the alternative explanation that this effect is simply driven by successive exposure to smaller and larger foods without being influenced by the completeness of food shape.

### **Extended Abstract:**

Overeating is one cause of obesity. To help consumers reduce the amount they eat, marketers have used healthy labels, disclosed calorie content, or employed slogans (Cornil 2017). Researchers have found that asking consumers to repeatedly or multi-sensorily imagine eating a food also leads to lower consumption (Cornil and Chandon 2016; Morewedge, Huh, and Vosgerau 2010). However, these explicit interventions require consumers' deliberate thoughts and may elicit conscious rejection; and some are time-consuming, which is difficult to apply.

Little is known about how to implicitly motivate consumers to choose smaller portion sizes. Here, we develop a unique intervention to affect consumers' portion size choices. We propose that the form/order of presentation of food advertising images influence consumers' portion size choices.

Specifically, if consumers are successively exposed to images of incomplete foods (e.g., pizza with a piece missing) and complete foods (e.g., whole pizza), then consumers will order smaller portions. This is because successive exposure to incomplete and complete objects will induce the metaphor of becoming full, leading consumers to feel full, and thus, reduce their portion size choices. We tested the hypothesis across four studies.

We first examined whether successive exposure to incomplete and complete food images could reduce portion sizes. Study 1A is a one-factor between-subjects design with six levels (food image presentation: only incomplete (piece missing) or complete pizza once, successive incomplete or complete pizza twice, successive incomplete (or complete) and complete (or incomplete) pizzas). We asked participants to imagine they were ordering takeout and viewing pizza images online. Next, we asked participants to view the pizza images presented in different conditions. Finally, participants rated what portion size they would like to order (1 = extremely small, 7 = extremely large). Participants' portion sizes in the incomplete-complete condition were significantly smaller than the other conditions, while there were no significant differences between the latter conditions, suggesting that successive exposure to incomplete and complete food images reduces portion sizes. In Study 1B, we replicated the findings of Study 1A with the same design but different food stimuli (chocolate bar) and participants (children aged between 6 and 13).

We then examined whether this effect is driven by the metaphor of becoming full, which is induced by the exposure process. If our theorizing is correct, then successive exposure to any type of incomplete and complete objects (not necessarily foods) should be able to prime people's metaphor of becoming full and thus generally enhance their perception of fullness. Accordingly, in Study 2, we asked participants to view a series of incomplete or complete neutral objects (e.g., moon, water in a glass, etc.) according to four conditions (successive exposure to incomplete or complete objects twice, successive exposure to incomplete (or complete) and complete (or incomplete) objects). Participants then rated their perception of fullness across hunger level (how hungry are you? how full are you?) and life status (how full is your life?). The results showed that participants in the incomplete-complete condition were less hungry and fuller in their stomach and life than the other conditions, while there was no significant difference between the latter conditions on hunger level, fullness, and fullness of life. These results suggest that successive exposure to incomplete and complete objects primes the metaphor of becoming full and enhances the perception of fullness.

Prior literature suggests that visualization is important for metaphor formation (Paivio 1969), so Study 3 examined whether visualization is a boundary condition of the effect of successive exposure to incomplete/complete images on reducing portion sizes. We employed a 2 (image presentation: successive incomplete and complete pizza, control – successive incomplete pizza twice)  $\times$  3 (mental load: visual, cognitive, no-load) between-subjects design. Participants' portion sizes in the incomplete-complete condition were significantly smaller than the control condition under both cognitive- and no-load conditions, while the effect disappeared under the visual-load condition in which participants' visuospatial working memory was inhibited, suggesting that visualization is necessary to reduce portion sizes by successive exposure to incomplete/complete food images.

In addition to the difference of completeness between incomplete (e.g., pizza with a piece missing) and complete foods (e.g., whole pizza), another difference is that the absolute amount of incomplete food is smaller than complete food. Thus, the effect of reducing portion sizes by successive exposure to

incomplete and complete foods may simply be driven by successive exposure to smaller and larger foods. In order to rule out this alternative, in Study 4, we added a condition to the design of Study 2, in which participants successively viewed an incomplete pizza with two pieces missing (the smaller pizza) and an incomplete pizza with one piece missing (the larger pizza). Participants' portion sizes were reduced only in the incompletecomplete condition but not in the incomplete (two pieces missing)-incomplete (one piece missing) condition.

## Starting Off with an Apology: Paving the Way to Consumer Persuasion?

Laura De Kerpel (Ghent University, Belgium); Anneleen Van Kerckhove (Ghent University, Belgium); Tina Tessitore (IESEG School of Management)

### **Brief Abstract:**

Apologies usually follow a notable mistake. However, recently companies have started to apologize in their persuasive communications for committing a trivial mistake. This article examines whether and why trivial apologies can serve as an effective persuasion technique in direct e-mail campaigns. Results show that (1) trivial apologies have a persuasive impact on attitudes and behavioral intentions, (2) a lack of persuasion knowledge activation explains this impact, and (3) the persuasive impact can be attenuated when disclosing the use of trivial apologies as a persuasion tactic.

### **Extended Abstract:**

'Sorry! Yesterday our cat ate our website speed. Please accept FREE SHIPPING on us as an apology!' By apologizing – even if for a trivial mistake – companies nowadays create the perfect opportunity to offer you a favor (e.g., free shipping) in their marketing campaigns. Although prior research has identified elements to optimize the response to direct e-mail campaigns (Ellis-Chadwick & Doherty, 2012), the use of trivial apologies is still left unexplored. To help fill this void, we investigate whether and why trivial apologies have an impact. While apologies have mainly been investigated as an effort to recover from mistakes, this study will perceive apologies as a proactive strategy.

To explain the impact of trivial apologies, we rely on the Persuasion Knowledge Model (PKM), stated by Friestad and Wright (1994). According to the PKM, people develop knowledge about persuasion tactics that may help them to identify and cope with future persuasion attempts (Friestad & Wright, 1994). Persuasion attempts not recognized as such inhibit the activation of persuasion knowledge (PK) and may eventually result in greater compliance with the persuasive message (Campbell & Kirmani, 2000; Friestad & Wright, 1994; Wei, Fischer, & Main, 2008). We believe that trivial apologies hide the actual persuasive intent of a message, inhibit PK activation, and, therefore, exercise a positive impact on consumer responses to the message.

For Study 1 (N=20640) we received field data from Sacha, a European footwear company. Two direct e-mail campaigns were sent to reactivate customers that did not buy for one year. Customers randomly received an e-mail with either 'sorry' or 'good news' as subject line. Except for subject lines, the content of both e-mails was the same, including a 20% discount to encourage reactivation. Results show that 37.67% of the customers opened the 'sorry' email, whereas only 28.66% opened the 'good news' e-mail ( $z=13.73$ ;  $p<.001$ ).

Study 2 (N=37) aims to replicate in the lab that a persuasive message accompanied by an apology for a trivial mistake can generate more positive consumer responses compared to an identical message

without apology. Study 2 also investigates if the activation of PK mediates the effect of apologizing on responses. A one-way between-subjects experiment with two conditions (apology: yes vs. no) was set up. Participants were randomly exposed to an e-mail campaign with or without trivial apology, this time in the e-mail message itself. Both before and after exposure, attitude toward the company (Ac; 3-item measurement;  $\alpha=.97$ ) and intention to purchase from the company (Ic; single 100-point item) were measured. The differences in pre- and post-measures were used as dependent variables. Two items measured PK activation after exposure ( $r=.88$ ).

Two independent samples t-tests revealed that a trivial apology (vs. no apology) increases Ac (Mapology=.96 vs. Mno\_apology=.12;  $t(35)=-2.31$ ;  $p=.03$ ) and Ic (Mapology=10.89 vs. no\_apology=.16;  $t(35)=-2.96$ ;  $p=.01$ ). Mediation analyses confirmed that a trivial apology leads to less PK activation, which in turn leads to a more positive Ac ( $ab=.38$ , 95% CI[.01;.95]) and a higher Ic ( $ab=3.62$ ; 90% CI[.16;8.74]).

Results indicate that the integration of a trivial apology in a persuasive message enables companies to cover up its persuasive intent and as such influence responses. Study 3 provides more evidence for this, by manipulating rather than measuring the mediator.

Study 3 (MTurk;  $N=143$ ) aims to replicate the effect of Study 2 by manipulating the extent to which PK is evoked. Therefore, we designed an explicit (i.e., desire to persuade is verbalized) versus implicit (i.e., desire to persuade is not verbalized) persuasive message (Reinhard, Messner, & Sporer, 2006). In the implicit condition, consumers were informed about a large assortment of winter coats, while in the explicit condition the desire to sell one of these coats was underlined.

If our assumption is valid that a trivial apology hides persuasive intent and thus, inhibits PK activation, we expect a positive effect of the inclusion of a trivial apology only in explicit persuasive messages, as for implicit persuasive messages PK activation is low overall. A study with a 2(apology: yes vs. no) x 2(explicitness persuasive intent: explicit vs. implicit) betweensubjects design was conducted.

A significant interaction between trivial apology and strength of persuasive intent on intention to respond to the campaign (Ir; measured by a 100-point item) was found ( $F(1,139)=7.70$ ;  $p=.01$ ). Simple effects analyses revealed that Ir is higher when a trivial apology (vs. no apology) is offered, however only for an explicit persuasive message (Mapology=69.64, Mno\_apology=44.80,  $F(1,139)=11.55$ ,  $p=.001$ ). For an implicit persuasive message, no difference in Ir was found (Mapology=39.45, Mno\_apology=42.82,  $F(1,139)=.23$ ,  $p=.63$ ).

Results show that a trivial apology is effective because it reduces PK activation if the attempt to persuade is readily apparent (i.e., explicit). If the desire to persuade is only implicit, trivial apologies cannot provide any additional effect. This also rules out an alternative explanation that the apology in itself may merely evoke additional interest.

Study 4 (lab;  $N=82$ ) examines whether the positive effect of apologies is attenuated when consumers recognize its persuasive impact. Therefore, we tested the impact of disclosing (vs. not disclosing) the use of trivial apologies on consumers' PK and Ac ( $\alpha=.97$ ). A study with three between-subjects conditions (apology with disclosure, apology without disclosure, no apology) was conducted. As in Study 2, participants were shown a direct e-mail campaign with or without trivial apology. In the



disclosure condition, participants saw an article where the use of trivial apologies was described as a persuasion tactic.

Simple effects analysis reconfirmed that the use of a trivial apology in a persuasive message increases Ac. As in Study 2, this study replicated full mediation of PK in the effect of apologizing on Ac. Furthermore, simple effects analysis showed that Ac is significantly lower for ‘apology with disclosure’ than ‘apology without disclosure’. Lastly, we found that PK mediates the effect of ‘apology with disclosure’ on Ac. Thus, disclosing the use of trivial apologies increases PK, which in turn has a negative effect on Ac (see Fig.1).

## When Expectations Backfire: How Argument Order Expectancies Influence Advertisement Efficacy

Joshua John Clarkson (University of Cincinnati, USA); Alan D.J. Cooke (University of Florida, USA); Nathanael S. Martin (University of Cincinnati, USA)

### **Brief Abstract:**

Should advertisements start or end with their strongest argument? The current research suggests the answer depends on whether the advertisement violates consumers’ expectations about argument order. Specifically, consumers’ expect advertisements to start strong in contexts where attentional demand is high (e.g., subway stations) but end strong in contexts where attentional demand is low (e.g., coffee shops). Three experiments support the presence of these expectancies while demonstrating that violating these expectations invokes greater processing of the advertisement and subsequently stronger purchase intentions. Consequently, argument order expectancies provide a novel means by which to understand advertisement efficacy and increase consumer engagement.

### **Extended Abstract:**

Persuasion researchers have long known that the order in which the same arguments are presented in a message can have a substantial influence on persuasive efficacy (Miller & Campbell, 1959; Lana, 1961, 1964; Schultz, 1963). However, evidence supports the enhanced impact of both starting and ending with strong arguments with little understanding of why such contradictory results exist. In this paper, we propose that people have expectations regarding the order in which arguments are most effectively presented. These expectations may be based on the recipient’s lay theory about the nature of the communication (cf. Igou & Bless, 2007).

Importantly, we contend the context in which advertisements are anticipated to be experienced may impact the extent that consumers believe one argument order is more effective than another. Specifically, we contend that consumers’ expect advertisements will start strong in contexts where attentional demand is high (e.g., busy, fast-paced contexts) but end strong in contexts where attentional demand is low (e.g., quiet, slow-paced contexts). This prediction is in line with research on conversation norms (Grice, 1975).

When attentional demand is high, advertisers should be motivated to convey their most important arguments as soon as possible (Igou & Bless, 2003, 2007; Unnava et al., 1994). However, when attentional demand is low, advertisers should be motivated to include additional arguments at the end only if they were highly important (Krosnick, 1990).

Yet we anticipate that messages which violate these expectations should paradoxically invoke greater processing due to their surprising nature (Ziegler, Diehl, & Ruther, 2002). As such, advertisements that violate consumers' expectancies should generate greater persuasion in the form of a heightened elaboration of strong arguments (cf. Petty, Haugtvedt, and Smith, 1995) and behavioral consequences for the advertised product.

To offer insight into our hypotheses, we conducted an initial experiment to assess whether violating expectations regarding attentional demand increase attitude certainty. In this experiment, undergraduates ( $N = 121$ ) were provided initially favorable information about a fictitious camera store (Townsend's) and then informed they would view a recent ad for the store. Before seeing the ad, however, participants read that the advertisement was intended for an audience of either high attentional demand (wherein viewers would have reduced attention) or low attentional demand (wherein viewers would have heightened attention). Then, participants viewed an ad for Townsend's that either started or ended with its strongest argument and reported their willingness to visit Townsend's. Consistent with expectations, there was a significant argument order  $\times$  attentional demand interaction on participants' willingness to visit Townsend's ( $p = .001$ ). In short, participants were more persuaded when the argument order violated their expectation based on attentional demand (see Figure 1).

Given the advertisements are comprised of strong arguments, we hypothesized that violating individuals' argument order expectations increases persuasion by increasing processing of the appeal. A second experiment ( $N = 102$ ) tested this hypothesis by manipulating both attentional demand and the argument order within an advertisement (starting or ending strong). Participants were then presented with an advertisement about a new phosphate-based detergent (Deter) and asked to report their willingness to purchase a 32oz bottle of Deter. Finally, we included a surprise recall task to assess participants' processing of the advertisement information (Craik and Lockhart 1972; Petty, Haugtvedt, and Smith, 1995). Analyses revealed a significant argument order  $\times$  attentional demand interaction for both participants' willingness to purchase ( $p < .001$ ) and recall ( $p = .001$ ). Moreover, mediational analyses showed that violating expectations increased participants' willingness to purchase Deter by inducing elaboration in the advertisement (95% CI: .021, .807).

Finally, to ensure these effects are rooted in consumers' argument order expectancies, we directly manipulated the expectancy (rather than attentional demand) in a third study. Specifically, undergraduates ( $N = 206$ ) were randomly assigned to a 2 (argument order: start or end strong)  $\times$  2 (argument expectancy: start strong or end strong) between-subjects design.

To manipulate argument expectancy, participants were led to believe that substantial research has ostensibly shown that structuring advertisements that start (end) with the strongest argument is more persuasive across domains. Argument order was manipulated as in Experiment 2. Participants then indicated their willingness to pay for a 32oz bottle of Deter before indicating their perceived elaboration of the advertisement (Barden & Petty, 2008). Analyses revealed a significant argument order  $\times$  argument expectancy interaction for willingness to pay ( $p = .002$ ) and perceived elaboration ( $p = .002$ ). Consistent with our conceptual model, participants induced to believe starting strong is most effective were more persuaded by the advertisement that ended strong, whereas participants induced to believe ending strong is most effective were more persuaded by the advertisement that started strong. Moreover, as in Experiment 2, this effect was mediated by perceptions of elaboration.

Collectively, then, the present work offers clarity to contradictory findings regarding the role of order effects in persuasion research. Indeed, while consumers possess expectancies regarding the contexts in which advertisers are better suited to start or end with their strongest arguments, they processed more deeply and were subsequently more persuaded by appeals that violated these expectations.

Understanding the nature of such expectations, then, provides an alternative framework by which to understand and predict how messages with the same arguments may be differentially persuasive on the basis of consumers' lay theories.

## **Best Competitive Paper Finalists - Competitive Paper Session**

*Scarborough 3 (Lobby Level)*

*Chair: Didem Kurt, Boston University, USA*

### **I Deserve Better: Income Inequality and Consumer Preference for Private Labels Versus National Brands**

Didem Kurt (Boston University, USA); Francesca Gino (Harvard Business School, USA)

#### **Brief Abstract:**

Growing income inequality is a concerning social issue in the U.S. We examine grocery shoppers' preference for private labels versus national brands and document evidence that income inequality plays an important role in consumers' everyday purchase decisions. Americans living in places with high versus low income inequality exhibit greater search interest for branded grocery products, have less search interest for a commonly available private label, include less private label products in their shopping baskets, and rate private label items less favorably. We provide process evidence related to social comparison orientation and feelings of deserving to buy better things.

#### **Extended Abstract:**

The U.S. has the third highest income inequality among OECD countries (OECD, 2018). Although many argue that income inequality is detrimental to consumer welfare, little is known whether and how income inequality affects everyday consumer decision-making. To shed some light on this issue, we examine the relation between income inequality and grocery shoppers' preference for private labels (i.e., store brands) versus national brands. The demand for private labels, which are cheaper alternatives to national brands, has been hampered as shoppers tend to perceive them as a "sacrifice" (Deloitte, 2015). Thus, it is important to examine the role of income inequality and social comparisons in consumer demand for private labels, contributing to the literature by demonstrating the implications of inequality for consumers' routine purchase decisions.

Prior studies on inequality and consumer behavior have focused primarily on conspicuous consumption. For instance, as compared with those living in low income inequality states, Americans who live in high income inequality states exhibit greater online search interest for positional goods such as designer clothes and expensive jewelry (Walasek & Brown, 2015) and are more likely to tweet about luxury brands (Walasek et al., 2018). These results are consistent with the social rank hypothesis, which posits that inequality enhances people's attention to status symbols. Nevertheless, when it comes to actual spending, household expenditure on conspicuous consumption decreases with

income inequality (Hwang & Lee, 2017). As Ordabayeva and Chandon (2010) argues, high inequality decreases bottom-tier consumers' desire for conspicuous consumption because acquiring positional goods would have limited impact on one's relative status in the society.

The goal of our research is to extend the focus of extant literature on income equality beyond the domain of conspicuous consumption and luxury products, many of which cannot be afforded by the average American consumer. Our context is grocery shopping for which social comparison and interpersonal influence are still relevant factors (e.g., Calder & Burnkrant, 1977; Hui et al., 2009). As pointed out by Veblen (1899), consumption patterns and tastes of the upper class serve as a reference point for those in other social classes, which holds true for inconspicuous consumption as well (Currid-Halkett 2017). In particular, while national brands are often associated with the consumption activity of upper-class consumers, private labels are perceived to have lower quality and typically characterized as value options for lower-class consumers (e.g., Richardson et al., 1996; Sethuraman & Cole, 1999; Steenkamp et al., 2010). We maintain that income inequality catalyzes social comparisons targeted toward achieving a "better" living through the purchase and consumption of premium, national brands rather than cheap, private labels. Accordingly, we predict that grocery shoppers' preference for private labels versus national brands decreases with income equality. We test our thesis in six studies using both field and experimental data. Our measure of income inequality is the Gini coefficient measured at the state- or county-level (depending on data availability).

Study 1 uses online search data from Google Trends for the period 2010-2016. We regressed state-level relative search interest for terms like "milk brands", "water brands", and "Great Value" (i.e., Walmart's private label) on state-level Gini coefficient and control variables. We find that relative search interest for grocery product brands in several categories increases with income inequality, whereas the opposite is true for a commonly available private label. This finding provides support for the premise that consumers' interest in national brands and private labels depends on income inequality.

Study 2 employs actual grocery purchase data from the Nielsen Consumer Panel for the period 2010-2016. For each year, we calculated households' private label purchases as a proportion of their total purchases. We regressed the proportion of private label purchases on county-level Gini coefficient and control variables. As expected, the results show that shoppers living in counties with high income inequality have a lower proportion of private label purchases than those living in counties with low income inequality.

Study 3 replicates this finding in a lab setting using a hypothetical grocery shopping task, in which MTurk participants were presented with four choices (2 national brands and 2 private labels) within five product categories such as milk and eggs. Supporting our prediction, the proportion of private label purchases again decreases with county-level income inequality.

Study 4 provides process evidence via a moderation analysis. MTurk participants completed the same grocery shopping task from study 3. As a moderator, we measured participants' social comparison orientation (SCO) using five items from Gibbons and Buunk (1999), e.g., "I always pay a lot of attention to how I do things compared with how others do things". As predicted, we find that the negative relation between the proportion of private label purchases and income inequality is magnified by participants' SCO.

Study 5 presents additional process evidence by priming perceived income inequality (via a short video clip) and measuring MTurk participants' tendency to believe they deserve to buy better things as a potential mediator (e.g., "I feel I deserve to buy better things"). Supporting the proposed underlying mechanism, a mediation analysis reveals that priming perceived income inequality has a negative indirect effect on the proportion of private label purchases through feelings of deserving to buy better things.

Study 6 uses grocery product review data from Amazon. By examining reviews of various private label items sold by Whole Foods ("365 Everyday Value"), we find that reviewers living in states with high income inequality rate private label items less favorably than those living in states with low income inequality. This finding suggests that consumers' post-purchase evaluation of private labels also depend on income inequality in the area where they live.

Our results demonstrate that consumers' preference for private labels versus national brands is a function of income inequality they experience. A desire to consume "better" brands reduces grocery shoppers' purchases of private labels in the face of high income inequality.

## Machine Talk: How Conversational Chatbots Promote Brand Intimacy and Influence Consumer Choice

Anouk Bergner (University of Geneva); Christian Hildebrand (University of Geneva); Gerald Häubl (University of Alberta, Canada)

### **Brief Abstract:**

This work examines the effects of conversational chatbot interfaces on consumers' brand perceptions and purchase decisions. Evidence from four experiments shows that incorporating such interfaces into the shopping process promotes more intimate consumer-brand relationships and increases consumers' inclination to choose more higher-priced premium offers compared to traditional interfaces.

### **Extended Abstract:**

Advances in natural language processing and the adoption of conversational interfaces gradually transform how consumers interact with firms (BI Intelligence 2016; Dale 2016; Hirschberg and Manning 2015). The use of messenger systems as a new interaction paradigm between human consumers and intelligent bots has been declared as the "next operating system in commerce" (Suri, Elia, and van Hillegersberg 2017; The Economist 2016) and is changing how humans search, shop, and express their preferences (Feldman, Goldenberg, and Netzer 2010; Tang and Guo 2013).

Research on the impact of these novel forms of conversational interaction modalities on consumers is both scarce and predominantly concerned with design and technology-related issues rather than the consequences for consumer behavior. Specifically, the majority of prior work examined either factors related to optimizing system design features (Landis 2014; Lokman and Zain 2010), user perceptions and acceptance (Boden et al. 2006; Comendador et al. 2015), or the ability for unsupervised learning through user-interactions (Serban et al. 2017).

The current work examines how conversational interfaces can systematically alter consumer-firm relationships and how theory-driven interface properties (e.g. the capacity to take turns, the extent of

system autonomy, the extent of anthropomorphism, and linguistic formality) can impact consumer brand perceptions and choice. Based on four incentive-compatible experiments, we show that consumers perceive a conversational interface as substantially more human-like compared to traditional interfaces, and that this increase in humanness creates more intimate consumer-brand relationships, ultimately enhancing the effectiveness of persuasion attempts.

Study 1 explores the structural properties of conversational interfaces (i.e. the ability to take turns, the extent of system autonomy) and their influence on perceived humanness and consumer brand perceptions. Participants (N=226) were randomly assigned to a 2 (presence vs. absence of turn-taking)  $\times$  2 (high vs. low system autonomy) between-subject experiment and completed a simple choice task in a design context. In the turn-taking present condition, the conversational interface interacted in a sequential question-answer exchange with participants, while in the turn-taking absent condition the interface presented all options simultaneously. In the high autonomy condition, the interface proactively moved to the next question while in the low autonomy participants controlled the sequence of interaction. We assessed the perceived humanness of the system (e.g. “This configuration system has human properties”, 7-point Likert scale;  $\alpha_{\text{human}}=.96$ ) and consumers’ brand perceptions (using a thought-listing task). In support of our theorizing, we find that inhibiting turn-taking as well as system autonomy significantly reduced the level of perceived humanness of the interface (MTurnTaking\_Present=4.28, MTurnTaking\_Absent=3.52;  $F(2, 222)=10.561$ ,  $p<.01$ ; MSystemAutonomy\_High=4.15, MSystemAutonomy\_Low=3.68;  $F(2, 222)=4.137$ ,  $p<.05$ ). The interaction between both experimental factors was non-significant ( $F(1, 222)=0.06$ ,  $p>.80$ ), indicating that they act independently to alter perceived humanness. Furthermore, we find that restricting turn-taking and the extent of system autonomy also led to lower brand evaluations (MTurnTaking\_Present=2.64, MTurnTaking\_Absent=0.53;  $F(2, 222)=15.522$ ,  $p<.001$ ; MSystemAutonomy\_High=2.47, MSystemAutonomy\_Low=0.76;  $F(2, 222)=10.202$ ,  $p<.01$ ). The interaction was non-significant ( $F(2, 222)=0.212$ ,  $p=.64$ ), supporting the independence of the two conceptual properties.

Study 2 more directly assesses whether a conversational interface is perceived as more human-like and promotes a more intimate consumer-brand relationship compared to a traditional interface. We developed a conversational rental car interface based on the flowXO technology (used across all following studies). 236 regular car rental customers were recruited (MAge=37.14, SDAge=11.26, 49% females) and randomly assigned to either a traditional booking interface or a conversational interface. Participants went through the same questions in both conditions (pick-up/return location, time/date, vehicle class) but specified their preferences via a chat console to a conversational bot in the latter. After completion, we assessed the perceived humanness of the system (e.g. “This configuration system has human properties”, 7-point Likert scale;  $\alpha_{\text{human}}=.96$ ) and how intimately participants feel connected to the brand (e.g. “I feel like AI.Rental really cares about me”, 7-point Likert scale;  $\alpha_{\text{BrandIntimacy}}=.92$ ). In line with our prediction, we find that consumers perceived the conversational interface as significantly more human-like compared to the traditional interface (MConversational=4.89, MTraditional=3.14;  $t(234)=7.654$ ,  $p<.001$ ) and also reported greater intimacy with the brand (MConversational=4.42, MTraditional=3.91;  $t(234)=2.248$ ,  $p<.001$ ), with brand intimacy being significantly mediated by perceptions of humanness (5000 bootstrap resamples; CI95%=[.86;1.59]).

Study 3 further explored whether greater intimacy can be induced by altering the linguistic formality

employed by the system (c.f. Ludwig et al. 2013). 214 regular car rental customers were randomly assigned to either a traditional booking interface, a conversational interface using a formal communication style, or a conversational interface using an informal communication style. A one-way ANOVA revealed a significant effect on both, perceived humanness of the system ( $F(2,214)=26.87$ ,  $p<.001$ ) and perceptions of brand intimacy ( $F(2, 214)=4.283$ ,  $p<.05$ ). Follow-up contrasts with Tukey HSD correction revealed that the more informal communication style was perceived as more human-like compared to both the interface using a more formal communication style ( $M_{\text{Conversational\_informal}}=5.15$ ,  $M_{\text{Conversational\_formal}}=4.49$ ;  $t(214)=2.239$ ,  $p=.07$ ) and the traditional interface ( $M_{\text{Traditional}}=3.11$ ;  $t(214)=7.198$ ,  $p<.001$ ). The findings on brand intimacy mirrored those on perceived humanness and replicated the pattern of mediation results revealed in Study 2.

Study 4 further explores the impact of a conversational interface on the downstream consequences on consumer choice. Specifically, we provide evidence that consumers are significantly more likely to accept a costly fuel service upgrade from a conversational compared to a traditional interface ( $P_{\text{Conversational}}=47.4\%$ ,  $P_{\text{Traditional}}=29.2\%$ ;  $z(257)=2.257$ ,  $p<.05$ ) and that this effect was amplified when the interface was personalized toward participants (matching participants' gender and initial letter of first name) ( $P_{\text{ConversationalPersonalized}}=54.5\%$ ,  $P_{\text{Conversational\_NotPersonalized}}=44.1\%$ ). We further extended these findings across a range of typical car rental upgrades (e.g. fuel, GPS, wifi) ( $P_{\text{Conversational}}=42.6\%$ ,  $P_{\text{Traditional}}=25.4\%$ ;  $F(1,157)=10.13$ ,  $p<.001$ ).

To the best of our knowledge, this is the first work that explores the consequences of conversational interfaces on consumers. We provide evidence that these interfaces can systematically alter brand perceptions and consumers' susceptibility to persuasion attempts. The current research also presents a new look at fundamental research on constructed preferences and reveals that the modality of expressing one's preferences through interactive, dialogue-based interfaces with a non-human agent can alter consumers' credibility perceptions of offers that are often rejected when using traditional interfaces.

## Tough Crowd! How Observers Influence Compensatory Consumption

Monika Lisjak (Arizona State University, USA); Soo Kim (Cornell University, USA); Sean Blair (Georgetown University, USA); Derek Rucker (Northwestern University, USA)

### **Brief Abstract:**

How do observers influence compensatory consumption? Results show that consumers strategically refrain from compensating in the domain of the self-discrepancy (i.e., within-domain compensation) when observed by judgmental (vs. benevolent) others, even when these others are unaware of their shortcomings. This happens because consumers are concerned that judgmental others may suspect that they are engaging in compensatory consumption. However, when presented with the opportunity to compensate in important domains unrelated to the self-discrepancy (i.e., across-domain compensation), consumers engage in compensatory consumption even in the presence of judgmental others because suspicion of compensatory motive is less likely.

### **Extended Abstract:**

Ample research has found that symbolic consumption is a means for consumers to offset their

insecurities (Wicklund & Gollwitzer, 1981; Mandel et al., 2017). However, prior work on compensatory consumption has largely utilized settings devoid of social context (Gao, Wheeler, & Shiv, 2009; Rucker & Galinsky, 2008). This limited focus seems surprising given that observers often play a significant role in consumer decision-making (Argo, Dahl, & Manchanda, 2005; Ashworth, Darke, & Schaller, 2005). Moreover, prior research has proposed that the effectiveness of products and other symbols in resolving self-discrepancies depends on others acknowledging and providing “social validation” of their intended meaning (Wicklund & Gollwitzer, 1982).

To fill this social vacuum, the current research examines how compensatory consumption varies in the presence of others. We draw on past research in personality psychology to distinguish between observers who are perceived to be judgmental and critical in their evaluation of others versus those who are benevolent and accepting (Ashton and Lee 2007; Lee and Ashton 2004). Building on this distinction, we investigate how judgmental and benevolent observers influence compensatory consumption. With respect to this question, one possibility is that the presence of judgmental observers might motivate consumers with a self-discrepancy to redouble their compensation efforts in order to elicit social validation from such a “tough crowd” (Wicklund & Gollwitzer, 1981). On the other hand, it is also possible that the presence of judgmental others might have the opposite effect, prompting consumers to refrain from compensating for concern of revealing their compensatory motive and thus preventing social validation (Ferraro, Kirmani, & Matherly, 2013; Lisjak et al., 2015; Wicklund & Gollwitzer, 1981).

We propose that the impact of observers on compensatory consumption depends not only on their characteristics but also on the type of compensatory consumption opportunity available. Specifically, we posit that judgmental (vs. benevolent) observers lessen efforts to compensate in the same domain as the self-discrepancy (within-domain compensation) but not in important domains unrelated to the self-discrepancy (across-domain compensation). This is because the direct relation of the product to the self-discrepancy in within-domain compensation increases concerns that others will suspect a compensatory motive. By contrast, the lack of direct relation in across-domain compensation makes it relatively unlikely that observers would suspect compensation. We test our predictions in five experiments.

Experiment 1 ( $n = 205$ ) examined people’s within-domain compensatory consumption in front of judgmental (vs. benevolent) others. Participants recalled either a time when they felt incompetent (self-discrepancy) or a neutral episode (control). Next, participants in a shopping scenario task reported their willingness to purchase three competence-signaling products (museum gift card, fountain pen, Newsweek magazine) when observed by a benevolent or judgmental other. A self-discrepancy  $\times$  observer interaction was significant ( $p = .05$ ). As predicted, threatened participants (vs. control) reported greater willingness to purchase competence-signaling products when the observer was benevolent ( $p < .01$ ) but not when the observer was judgmental.

Experiment 2 ( $n = 155$ ) examined this effect in a live social context. First, participants recalled a time when they felt incompetent versus a neutral episode. Then, all participants interacted individually with an observer (i.e., research assistant) who was unaware of their reported self-discrepancy. The observer followed a script to act in either a judgmental or benevolent manner. Finally, we offered participants an opportunity to compensate within-domain by asking them whether they wanted to sign-up for a research newsletter and by measuring their willingness to pay for a \$10 gift card for a local museum. A



self-discrepancy  $\times$  observer interaction was significant ( $p = .012$ ). Replicating experiment 1, threatened participants (vs. control) engaged in more competence-signaling behavior when they interacted with a benevolent observer ( $p = .019$ ), but not when they interacted with a judgmental other.

Experiment 3 ( $n = 197$ ) tested our proposition that consumers refrain from within-domain compensation in the presence of judgmental (vs. benevolent) others due to concerns that they will suspect their compensatory motive. After recalling a time when they felt incompetent, participants indicated their willingness to purchase a competence-signaling gift card in front of a benevolent or judgmental observer. Finally, they reported whether they thought that the observer would think they were compensating by purchasing the gift card. Consistent with our theorizing, participants were less willing to purchase a competence-signaling product ( $p = .049$ ) and more concerned about being labeled a compensator ( $p < .01$ ) when the observer was judgmental (vs. benevolent).

Experiment 4 ( $n = 201$ ) aimed to show that when consumers were presented with an opportunity to compensate across-domain, they would engage in compensatory consumption regardless of whether the observer was judgmental or benevolent. The procedure was identical to experiment 2 with one exception: our dependent measure was participants' decision to sign-up for a newsletter that signaled compassion (across-domain compensation). As predicted, threatened participants (vs. control) were more likely to sign-up for the compassion-signaling newsletter ( $p < .01$ ). Importantly, the self-discrepancy  $\times$  observer interaction was non-significant ( $p = .78$ ), suggesting that participants compensated across-domain regardless of whether the observer was judgmental or benevolent.

Finally, Experiment 5 ( $n = 197$ ) sought to replicate the within- and across-domain findings in a single experiment and show the effect could occur spontaneously without directly manipulating the observer. We first manipulated self-discrepancy. Then, participants imagined shopping in front of an observer and reported their willingness to purchase three competencesignaling (within-domain) or three creativity-signaling (across-domain) products. Finally, participants rated how benevolent or judgmental the observer was. The three-way interaction was significant ( $p < .01$ ). When compensating within-domain, threatened participants (vs. control) reported greater purchase intentions for competence-signaling products when the observer was less judgmental ( $p < .01$ ), but not when the observer was more judgmental (interaction:  $p < .01$ ). When compensating across-domain, we observed only a main effect of self-discrepancy ( $p = .03$ ), such that threatened participants (vs. control) were more likely to purchase creativitysignaling products.

These findings expand the literature via a recognition of the role others play in compensatory consumption and through the demonstration that within- and across-domain compensation are not used as interchangeable strategies to resolve self-discrepancies.

### When Shrouded Attributes Seem More Transparent: A Preference for Error-Inducing Complexity

Shannon Michelle White (University of Chicago, USA); Abigail Sussman (University of Chicago, USA); Dustin Beckett (Bureau of Consumer Financial Protection (formerly Consumer Financial Protection Bureau))

**Brief Abstract:**

Companies have flexibility in how they present pricing information and can make identifying total costs difficult. Across a range of products, we find that participants prefer more computationally complex fee disclosures. Participants believe complexity signals transparency and facilitates decision-making, even though complexity increases the likelihood of choosing higher-fee options. We explore interventions including warning messages to debias consumers and summary information to help them accurately assess costs. Together, results suggest that when fees are disaggregated, participants commit computational errors but believe they will not. Consequently, companies that disaggregate can signal transparency even while effectively obfuscating fees.

**Extended Abstract:**

Price is a major factor in most purchasing decisions. However, firms can shroud (e.g., hide, obfuscate) costs in many ways (Gabaix & Laibson, 2006). For example, computational complexity makes it difficult for decision-makers to identify total costs, causing people to choose dominated options (Carpenter et al., 2018), which firms can exploit by making fees more complex, rather than lowering prices (Carlin, 2008). Yet, little is known about demand for complex fee disclosures, except that consumers seem to prefer more detailed—and hence more computationally complex—price disclosures up to a point (Xia & Monroe, 2004). Are consumer preferences for complexity well aligned with their decision-making abilities?

We propose that there is a range of fee complexity over which consumers prefer more complexity despite being less able to identify total fees. In other words, consumers can exhibit a preference for detrimental information. While research has documented both people's desire to avoid useful information (for a review, see Golman, Hagmann, & Loewenstein, 2017) and people's tendency to seek non-instrumental information (Bastardi & Shafir, 1998; Eliaz & Schotter, 2007, 2010; Tsai, Klayman, & Hastie, 2008), little research has identified cases when individuals prefer to have information that handicaps their decision making (Hall, Ariss, & Todorov, 2007). Across a range of products, we identify situations in which most individuals prefer more computationally complex fee disclosures that include additional, decision-irrelevant information. This pattern persists even though complex fees lead people to choose higher-fee options.

In four studies, we first displayed fee disclosures for a consumer good. Complexity was manipulated by unnecessarily disaggregating fees in ways that would not impact payoffs. (See Figure 1.) For example, in the complex condition for prepaid cards, a category of "Initial Fees" included a "Card Acquisition Fee," a "Card Activation Fee," a "Service Fee," and an "Administration Fee"; these amounts were summed and displayed simply as "Initial Fees" in the in the simple condition. Then, regardless of participants' preferences, we randomly assigned them to make a choice between two options that both had either complex or simple fee disclosures. We incentivized participants to choose the lower-fee option with a bonus.

Across all studies and conditions, a majority of participants preferred complex to simple fee disclosures (Study 1: 70%; Study 2a: 62%; Study 2b: 63%; Study 3: 55%). Additionally, participants in complex conditions were more likely to select higher-fee options (all  $p < .005$ ). (See Table 1.) In all studies, fee disclosure preferences were not significantly related to selecting the higher-fee card (all  $p > .2$ ). (See Figure 2.)

In Study 1 (N=256), Study 2a (N=293), and Study 2b (N=397), participants selected between prepaid cards. In all studies, participants believed that the complex disclosure was more transparent (all  $p < .001$ ) and signaled more trustworthiness (all  $p < .001$ ) than the simple disclosure; these beliefs significantly predicted preferences for the complex disclosure (transparency: all  $p < .002$ ; trust: all  $p < .001$ ). In Studies 2a and 2b, we additionally found that participants believed they'd be more capable of selecting lower-fee options when choosing between options with more detail (complex) vs. less detail (simple), and these beliefs were not significantly associated with abilities to select lower-fee cards in either condition. (See Table 2.)

In Study 2a, we tested an intervention to reverse the preference for complexity. We randomly assigned participants to receive a warning message stating that participants in a previous study had made more mistakes when seeing more complex fees. The warning moderately decreased preferences for the complex disclosure (68% in the control and 55% in the warning condition;  $X^2(1) = 16.36, p < .001$ ), but a majority still preferred the complex disclosure. In Study 2b, we tested a new warning message stating that companies can make fee disclosures more detailed “in order to make the total price harder to identify, allowing them to charge higher prices without customers knowing it.” We also required participants to pass a comprehension quiz before eliciting preferences, requiring participants to note that no fees were avoidable. We preregistered our hypotheses with the Open Science Foundation. Although we replicated a preference for the complex disclosure, more selection of higher-fee cards in the complex condition, and predictors of a preference for complexity, the warning did not significantly affect preferences ( $p = .312$ ).

In Study 3 (N=932), participants were randomly assigned to select between different wedding venues, cell phone plans, or closing fees for a hypothetical purchase of property. Additionally, participants ranked their preferences for fee disclosures between a simple, a complex, and a summary information fee disclosure, which included both itemized and aggregated fees. (See Figure 3.) Again, participants were required to pass a comprehension quiz, indicating that no fees were avoidable and that price was unrelated to quality. The summary information disclosure was ranked as most preferred by most participants (71%), but most participants again ranked the complex disclosure as more preferable than the simple disclosure (55%). (See Table 3.) While participants in the complex condition were significantly more likely to select a higher-fee option relative to the other two conditions ( $p < .006$ ), the difference between the simple and summary information conditions was not significant ( $p = .801$ ). (See Figure 4.) This suggests that calculation errors drive selection of the higher-fee options, rather than preferences over subprices.

This research identifies how firms can take advantage of a consumer bias to raise prices without adding value. If consumers' preferences for complex fee disclosures were well-calibrated, then there would be significant market pressure to simplify fees, and firms' ability to shroud prices would be limited; however, our research demonstrates that that is not always the case. Individuals can prefer to have detrimental information, believing the information to enable their decision making when it in fact does the opposite. Furthermore, a comparison of interventions across studies suggests that policy solutions that work with consumer preferences could be more effective than informational campaigns to change consumer preferences.

## **Consumer Processing of Numerical and Scale Information - Symposium**

### *Scarborough 4 (Lobby Level)*

Consumers frequently encounter numbers. We see them in the prices of red wines and in average product ratings. We see them when evaluating sales advertising 10% off. And we see them when responding to scale items in consumer surveys on smartphones. But how do consumers perceive and evaluate the numbers they encounter? And how does this process guide consumer behavior? This symposium's objective is two-fold. The first objective is to glean a better understanding of how consumers process numerical information. Combined, the papers explore not only the processing itself, but also how framing and situational factors can influence this processing. The second objective is to explore the practical consumer consequences of these novel theoretical contributions. André, Reinholtz, and de Langhe and Bechler, Levav, and Morris open the session by discussing the incorporation of variance into judgment. André, Reinholtz, and de Langhe find that consumers simultaneously learning about numbers associated with multiple product categories (e.g., prices of red wines vs. white wines) can accurately encode and retrieve central tendency assessments for each category. However, they are inaccurate in their mental representations of variance for individual categories, reporting estimates that incorporate prices from other categories (i.e., variance "spills over" from one category to another). This is an issue as accurate representations of variance are necessary for optimal consumer choice. Relatedly, Bechler, Levav, and Morris reveal that when consumers encounter whole-number average ratings they perceive them to come from less variable distributions. This error in perception can affect consumer choice because consumers typically reject outcomes that they see as more variable. In their experiments, they find that this error can cause consumers to reject items that are objectively rated higher. Schley and Kyung, Thomas, and Krishna conclude the session by discussing the consequences of framing numbers in different formats. Schley examines how the framing of numerical sales information—as relative differences (e.g., 10% off \$1,000) or absolute differences (e.g., \$100 off \$1,000)—can affect its processing. Whereas the processing of absolute differences hinders the processing of relative differences and the processing of relative differences hinders the processing of absolute differences, the former effect is larger. Relatedly, Kyung, Thomas, and Krishna examine how the framing of a scale can affect scale point (i.e., numerical) responses, revealing that scales oriented vertically can worsen quality judgments compared to scales oriented horizontally. This finding has large marketing and research implications, as horizontal numerical scales on survey platforms (e.g., Qualtrics) are sometimes automatically re-oriented to display vertically on mobile devices. Combined, these four complete papers contribute to the field of consumer psychology in two ways. Theoretically, the session provides important answers to open questions about numerical processing. Practically, the session provides psychological insight into a wide array of instances in which consumers encounter numbers, including how consumers mentally represent price information, perceive product ratings, evaluate sales, and respond to surveys. We envision the questions posed and answered in this session will both further develop our understanding of numerical processing and spur innovative research in this influential area.

*Chair: Christopher Bechler, Stanford University, USA*

**When The Price is Not Right: Can Consumers Learn Distributions of Numerical Information?**

Quentin André (Erasmus University Rotterdam, The Netherlands); Nicholas Reinholtz (University of Colorado, USA); Bart de Langhe (Ramon Llull University, Spain)

**Brief Abstract:**

Can consumers form category-specific representations of numerical distributions? In multiple studies, we test people's ability to learn the distribution of prices in one category (e.g., red wines) independently of the distribution of prices in another category (e.g., white wines). We find that while consumers can form accurate representations of central tendencies (means) between categories, the same is not true of judgments of variance (price dispersion), which tend to be averaged across categories. We discuss implications of this "variance spillover" for theory and practice.

### Consumers Perceive Less Variance in Whole-Number Average Ratings

Christopher Bechler (Stanford University, USA); Jonathan Levav (Stanford University, USA); Joshua Morris (Stanford University, USA)

**Brief Abstract:**

Seven experiments (total N=12,436) document how consumers perceive less variability in the distributions of whole-number average ratings (e.g., 4; 4.0; 4.00) compared to those of non-whole-number average ratings (e.g., 4.01; 4.1)—even when this is statistically less likely. Inaccurate perceptions of variance are driven in part by consumers' notions of how likely certain averages are, and thus the "strangeness" in the underlying ratings that comprise these averages. Because consumers prefer certainty to uncertainty (i.e., prefer less variability), this effect can have important consequences for consumer choice, such as choosing products that are rated lower.

### It's Absolutely Relative: On the Processing of Absolute and Relative Differences

Dan Schley (Erasmus University Rotterdam, The Netherlands)

**Brief Abstract:**

We have long known that when consumers are presented a set of quantities (e.g., Was: \$100, Now: \$90) their judgments and decisions are sensitive to the absolute (e.g., \$10) and relative (10%) differences. But, most research has investigated these two interpretations of quantitative differences independent of one another. The current research explores these types of information processing in tandem, testing two opposing accounts which argue that processing absolute/relative differences is cognitively easier than processing relative/absolute differences. Additionally, this research explores a range of moderators that differentially influence the consumers' sensitivity to absolute and relative quantitative differences.

### Left-Right or Top-Down? The Effect of Horizontal Versus Vertical Orientation on Consumer Judgments

Ellie Kyung (Dartmouth College, USA); Manoj Thomas (Cornell University, USA); Aradhna Krishna (University of Michigan, USA)

**Brief Abstract:**

Organizations increasingly use online surveys to understand the preferences of consumers. In many instances, the orientation of the scales used are automatically altered by interface—horizontal for computer interfaces and vertical for mobile interfaces. Four experiments demonstrate that vertical scale orientations result in lower evaluations than horizontal ones and that this effect increases for higher

scale values. This effect is due to the differences in how we visually perceived horizontal versus vertically oriented interfaces.