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PROCEEDINGS**

Editors

Page Moreau

Stefano Puntoni

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Preface

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The 47th Annual Conference of the Association for Consumer Research (ACR) was held at the Maritim Hotel, Berlin, Germany, October 27-30, 2016. This volume reports the presentations made in special sessions, competitive paper sessions, working paper session, roundtables and film festival.

This was a landmark conference. It was the first time that the “North American” conference, the main ACR conference, took place outside of North America. The conference attracted over 1050 participants and an all-time record of 1255 submissions: 75 special session proposals (65.3% accepted), 638 competitive papers (29.9% accepted), 511 working papers (51.7% accepted), 6 roundtables (100% accepted) and 17 films (88.2% accepted).

We thank our generous donors, especially our schools, the Rotterdam School of Management, Erasmus University and the Wisconsin School of Business, University of Wisconsin-Madison. We would also like to thank for their generous support of the ACR Doctoral Colloquium the Journal of Consumer Research, the Eller College of Management, University of Arizona, and the Katz Graduate School of Business, University of Pittsburgh. Also supporting us from industry were Noldus, Now, Sage, and Stukent.

Many wonderful people worked tirelessly to help us. We thank our Program Committee, Competitive Paper Reviewers, Working Paper Reviewers, and Film Reviewers. Special thanks to Francine Petersen and Luk Warlop (Working Paper Chairs), Pierre Chandon, Stijn van Osselaer, and Klaus Wertenbroch (Forums Chairs), Marylouise Caldwell and Paul Henry (Film Festival Chairs), Cait Lamberton and Hope Shau (Doctoral Symposium Chairs), Deborah Small and Debora Thompson (Pre-Tenure Mentorship Program Chairs), and Ana Valenzuela and Joachim Vosgerau (Entertainment Committee). We would like to thank Katja Brunk, Thomas Eichentopf, and Andrea Weihrauch for the excellent ACR Guide to Berlin and the Journal of Consumer Research allowing the use of the journal’s formatting for the guide. Many thanks also to our excellent Associate Editors: Eduardo Andrade, Zeynep Arsel, Joseph Goodman, Kelly Haws, JoAndrea Hoegg, Ashlee Humphreys, Hope Schau, Robert Kozinets, Leonard Lee, Tina Lowrey, Mario Pandelaere, Maura Scott, Steven Sweldens, Joachim Vosgerau, and Juliet Zhu.

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

Our final thank you to colleagues who advised us throughout the year, especially Stijn van Osselaer, to everyone who made our program stellar by submitting their best research, and to Mary Frances Luce, ACR President 2016, for offering us the opportunity to organize the ACR conference and for all the help and support she provided throughout the process.

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2016 ACR Presidential Address

It's Time to Think

Mary Frances Luce, Duke University, USA

I would like to start by acknowledging what an historic conference this is for ACR. This is the first time that our major conference, what used to be known as the “North America” conference, takes place outside of North America. As is always the case for ACR, and as was particularly true this year, the most important thing that I did as president was to recruit two excellent volunteers to run the conference. I think we can all agree that Page Moreau and Stefano Puntoni have done an excellent job. Their job was harder than most due to the increased uncertainty around pulling off an ACR of this scale outside of North America. I know we all agree that they more-than rose to the occasion, so the organization truly owes them our thanks. This conference is an important step in ensuring that ACR remains the premier global organization for consumer research.

While I believe I did a good job on my main task, that is recruiting Stefano and Page, I was less certain about how to approach a second main task, this talk. It is hard to imagine something worth the time of such a wide and varied audience. In the end, I will make this short and I would like to mainly offer my own reflections on our individual and collective profession.

I start with what I think is a common occurrence for many in our community. We try to explain our profession to someone, explaining our specific job requirements (e.g., a certain number of hours teaching per week or month or year) and similar explicit responsibilities. The perplexed individual asks some version of “but what do you do all day?” More generally, for most of us we have a profession with amazing freedom to fill our days and our thoughts with whatever we find most rewarding. This is an awesome privilege. With this privilege comes, I would argue, the responsibility to be mindful about how we add value to society. I believe that we do so by thinking very deeply, creating new perspectives on important activities of individuals, society, and organizations. I also believe that truly adding value in this way takes time, and not just effort but time for reflection.

The importance, and the value, of time to think has been very clear to me in recent years. I have enjoyed some truly awesome opportunities, for instance to co-edit JCR with Ann McGill and Laura Peracchio and to serve as the dean of the faculty at Duke's Fuqua school. These responsibilities come with their own vexing problems and external deadlines. When I am immersed in these deadlines I, at least, find that I can do some research, but I cannot do research in the same way. Increasing my own level of busy-ness has illustrated to me that there is a stark contrast between producing output, even research output, and really reflecting. I find I have to willfully schedule downtime to really think. It is not something that happens well in spare hours here or there. Not having normal faculty reflection time has, like nothing else, shown me its value. Of course, this is a lesson many learn much earlier in their careers.

It seems to me that production can easily crowd out reflection, particularly in our current professional environments. It is very easy to use tools such as Mturk or google scholar searches to get tasks finished much more quickly than we can reflect on them. These productivity tools are important, and not going anywhere. And they are not bad things. However, today's environment makes it even more important, I believe, for all of us to be mindful of the incentives we set for ourselves and for others. It is easy for counting and other forms of productivity-focus to crowd out thinking and evaluating the

quality of ideas. We set incentives as mentors and reviewers. When we do so, it's often easy to assess production and harder to assess the novelty or quality of ideas. For example, as a reviewer, it is often easier to check the accuracy of a statistical test than it is to assess if the authors are causing you to think in a new way. As senior faculty making hiring or promotion decisions, it is simply easier to count papers than to read them. However, I believe the vibrancy of our field rests much more on the quality of ideas we collectively produce than on the overall number of experiments, or interviews, or journal pages. I'd like to encourage us all, myself included, to avoid losing sight of our profession as creating truly new ideas and perspectives that have the potential to not only change how each other thinks about consumption, but to ultimately change how business and global society functions. (Overall, then, in speaking of the importance of time to think, I am asking you to do as I say, but not as I do.)

My comments so far raise the question of what we should be thinking about? As members of ACR, we try to understand the role of consumption in people's lives: How they deploy key resources such as time and money, as well as how they promote meaning, enhance community, and steward global resources. Our field has unusual breadth due to the wide swath of human experience we study; we are almost constantly consuming and consumption is incredibly important to our economies, our societies, and our global environment. So, what is the goal of consumer research? I believe that any academic endeavor should ultimately solve problems, that is should ultimately improve the human condition. (Note that this is not the same as saying that research must be motivated by a clear problem. The most basic of research can become the most useful over time, and in unexpected ways.) But whose problems to do we solve? Sometimes we solve the problems of other consumer researchers by suggesting useful theories or methodologies. This is, of course, how science advances. However, if we are to ultimately claim that we have made an impact, we must go beyond solving each other's problems. One source of problems to solve resides in business, and this community has long had an important applied focus. It further seems clear that this organization has always aspired to do more than support business and instead to better society by ultimately making consumers better off with our work. Now, bettering society involves solving complex, messy, multi-determined problems. So, this goal brings me to a conclusion about consumer research that is important to me. Specifically, I think none of us can truly reap the benefits of our own reflection, nor can we truly realize the potential of ACR, unless we attempt to take an interdisciplinary approach to consumer research. Big, societal problems cannot generally be solved by the point of view of one paradigm. The power in ACR comes from our potential for interdisciplinary work integrating across our specific paradigms for robust solutions.

Truly integrative work is much more easily lauded than achieved. My JCR co-editors and I wrestled with this problem in our final editorial. There, we argued that our field is at an inflection point. As a scholarly community, we now have many clear building blocks. It is important to use them to build bridges instead of silos (Peracchio, Luce, McGill 2014). If we take our own field seriously, that is if we take consumption seriously as an important area of inquiry, then it seems that we have to take each other seriously

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as well, looking for integrative solutions to truly big problems. It is not an accident that many of ACR's important initiatives, such as the Transformative Consumer Research Initiatives and the Journal of the Association for Consumer Research, are interdisciplinary at their very core.

Thank you very much for your time.

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2016 ACR Fellow Address

Brand Attachment: Theory and Practice

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Ladies and gentlemen, it is my honor to share with you today my ever-evolving thoughts about the *attachment-based customer-brand relationship*. When we think about human relationships, there is a saying: we should never forget the 3 types of people in our lives: (1) those who helped you in your difficult times, (2) those who left you in your difficult times, and (3) those who put you in difficult times. Surely, we must remember who put, helped, or left us in our difficult times. But perhaps more important is not to forget what caused them to help, leave, or put us in difficult times. Depending on what we have done to other people, they may also either help, leave, or put us in difficult times. Similarly, depending on what a brand does for its customers, the customers may help, leave, or put it in difficult times. This brings up the topic of customer-brand relationship management. The important issue is what type of customer-brand relationship can secure customers who are willing to help the brand not only in its good times but also in its difficult times.

For the next 25 minutes or so, I will address the above issue by proposing that the attachment-based customer-brand relationship is the most effective one in securing loyal customers. In order to deliver this proposition in a time-efficient manner, I introduce the

overall model of brand attachment (Figure 1) and address four questions sequentially that relate to the components of the model. Before proceeding with the first question, I want to point out that my talk today reflects our collective view based on many long years of collaborative research with my colleagues. Those who collaborated with me at different stages of the brand-attachment research are Andreas Eisingerich, Sasha Fedorikhin, Dawn Iacobucci, Deborah MacInnis, Jason Park, Joseph Priester, and Matthew Thomson.

QUESTION 1: WHAT SHOULD SERVE AS THE METRIC FOR JUDGING THE STRENGTH OF THE CUSTOMER-BRAND RELATIONSHIP?

The best way to judge the strength of the customer-brand relationship is to consider how far customers are willing to go to support the brand; what I call pro-brand behaviors. We can think about many pro-brand behaviors that are difficult to enact. What I mean by “difficult” is how much consumers are willing to expend their resources (time, reputation, money, etc.) to support the brand. Examples of difficult-to-perform pro-brand behaviors include the following: (1) Buying Nike shoes, (2) Recommending Nike shoes, (3) Buying Nike

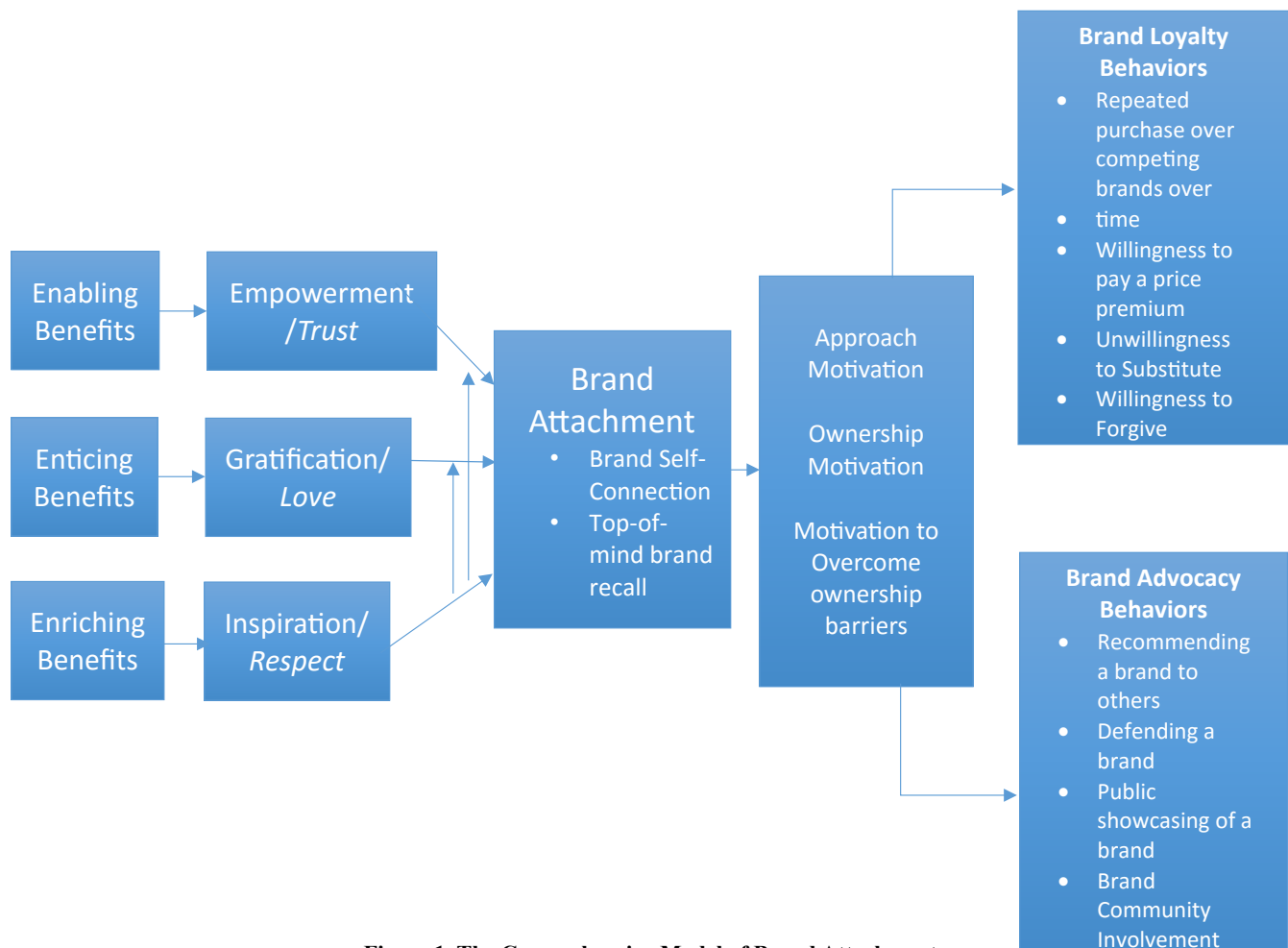


Figure 1. The Comprehensive Model of Brand Attachment

shoes despite their price increase, (4) Defending Nike against negative information, (5) Postponing the purchase and refusing to buy any other competing brands when Nike shoes are not available, and (6) Promoting the Nike brand by participating in Nike community events (spending time and money on behalf of Nike events).

We may assign the above difficult-to-perform pro-brand behaviors into two categories, as noted in Figure 1: (1) brand loyalty behaviors and (2) brand advocacy behaviors. Brand loyalty behaviors refer to repeated brand purchases over time. Brand advocacy behaviors refer to efforts to promote, protect and defend the brand. Engaging in these two types of difficult-to-perform pro-brand behaviors is analogous to helping a brand during difficult times. When customers are willing to engage in these difficult-to-perform behaviors, the relationship between a brand and its customers is like a tree with deep roots. It can resist against strong winds and hard times. A brand in this relationship should be able to secure strong revenues and profit over time.

QUESTION 2: WHAT DRIVES CUSTOMERS TO ENGAGE IN THESE DIFFICULT-TO-PERFORM PRO-BRAND BEHAVIORS?

We propose that *brand attachment* drives customers to engage in difficult-to-perform pro-brand behaviors. It is defined as the psychological state of mind in which customers have a salient, personal connection with the brand. Consumers feel personal connections with a brand and the brand becomes highly prominent in their minds (top-of-mind recall). This brand attachment is, in turn, developed through three key relationship variables: brand trust, brand love and brand respect (see Figure 1). We often use these three words to describe our relationships with others such as “because he is such a trustworthy person, because I love him or because I respect him, I did so and so.”

Interestingly, we typically use only one word to describe our relationships with others. We rarely use these three words together to describe our relationships. For example, it is uncommon to say “because I not only trust and love him but also respect him, I did so and so for him.” However, when we think about certain special people such as our mothers, our high school teachers, our benevolent bosses, or Mother Theresa, we know that all these three words are needed to describe our relationships with them. Similarly, in the context of a product or service, we typically use one of these three words to describe our feelings toward a brand such as “I love brand X”, “I respect the company X”, or “I trust Brand X”. It is not common for customers to use all three words to describe their feelings toward a brand. But there are a few brands toward which all three words are needed to describe our feelings. They are the ones that are destined to secure efficient profit and growth over time. Let me explain why these three words together — not one, or two, but all three — need to be present together in order for customers to develop strong brand attachment and to enact their loyalty and advocacy behaviors.

Does only trust alone motivate us to enact difficult-to-perform pro-brand behaviors? Before answering this question, we need to be clear about the meaning of trust. Researchers in the past defined brand trust with three different bases: competence-based, benevolence-based, and integrity-based. I think that this is part of the confusion we have regarding the effects of trust on customer-brand relationships. Because these three bases have different theoretical origins, lumping them all under trust makes it difficult to understand what trust does on customer-brand relationships. We need to separate competence from the other two bases so that we can have a better and sharper understanding of what trust does for us. I will get back to this issue shortly.

I define trust in terms of competence since in the brand context, we tend to understand trust more in terms of how much consumers can rely on the brand to solve their problems. Trust, defined in this way, lacks energy to propel people to engage in difficult-to-perform behaviors. Brand relationships with trust but no love is like a year without summer. It is cold. Brand trust in the absence of love makes consumers too lethargic to enact brand loyalty and advocacy behaviors. Therefore, brand trust without love makes customers highly vulnerable to superior competitive options. Whenever another competing option offers better performance at the same or lower price, they will switch to the competing brand quickly.

What about brand love? Does brand love alone motivate us to enact difficult-to-perform pro-brand behaviors? I doubt it! Let us pause a minute and ask ourselves how we use this term, *love*, in a brand context. For example, when I say I love Godiva chocolates, I do not mean that I am willing to sacrifice my life because of my love for the Godiva brand. I do not really mean the *Romeo and Juliet* or *Tristan and Isolde* type of love. Rather, I use the term “love” more or less in terms of my affective predisposition toward a brand and my positive interest in it. I doubt this type of love alone will cause people to engage in difficult-to-perform pro-brand behaviors. Love needs to be accompanied by trust. Love without trust is like a car with no engine. You can make the car go by pushing it, but it won’t get very far.

How about brand respect? Does brand respect alone carry people to difficult-to-perform pro-brand behaviors? I define brand respect as the degree to which consumers look up to and hold a brand in high regard. Respect alone, however, does not trigger strong behavioral motivation. Respect without love involves an arms-length relationship between customers and a brand. Respect is normally accompanied by trust (but not necessarily the other way around). But respect without love makes people only bow at a distance. Without love, a relationship with only respect cannot have a lasting close bond.

Therefore, in order to have a truly meaningful and strong attachment-based customer-brand relationship, a brand must elicit all three attachment-inducing variables: brand trust, love and respect. Using a tree metaphor, trust without love is like a tree without nutrients. It cannot grow well. But a brand relationship based on trust and love can flourish into a tree with lush leaves. That tree might be lovely to look at, and we’re OK with just visiting it sometimes — maybe for a picnic. A brand that is based on trust, love, and respect is a different entity altogether. It’s not only lovely to look at, it’s majestic. It has stature. People notice it, take photos of it, and visit it frequently.

QUESTION 3: WHAT DOES A BRAND HAVE TO DO TO INDUCE BRAND TRUST, LOVE AND RESPECT? ENABLING, ENTICING AND ENRICHING BENEFITS

This is perhaps the most important question to address. My colleagues and I proposed that a brand should offer three different types of benefits shown in Figure 2. They are enabling, enticing and enriching benefits. Enabling benefits offer functional pleasure in two different ways: (1) by solving customers’ problems and (2) by conserving their resources like time, money and mental, physical or emotional energy. Enticing benefits offer consumers experiential pleasure, also in two different ways: (1) through any one or a combination of their five senses or cognitive stimulation or (2) by warming their hearts. Enriching benefits offer consumers spiritual pleasure in two ways as well: (1) through internal self-enhancement by reflecting consumers’ cherished values or by confirming their self (e.g. their own heritage) and (2) through external self-enhancement by fostering belongingness and distinctiveness.

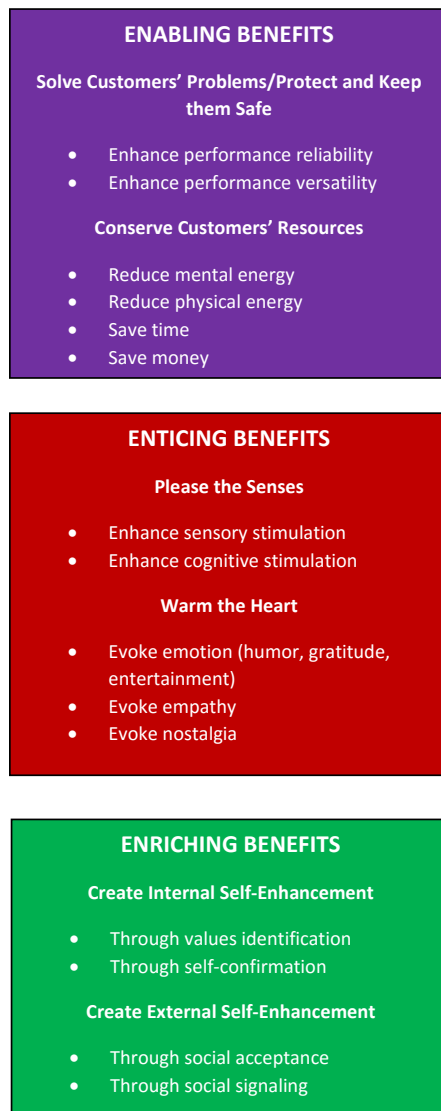


Figure 2. Three Types of Brand Benefits

The functionally effective problem-solving ability of a brand satisfies consumers' psychological need for competence and elicits the emotion of empowerment. As Figure 1 shows, we expect that the empowerment emotion most strongly leads to brand trust. Swiss Army Knives is a great example for the enabling benefits. Remember that we define brand trust in terms of a brand's competence to solve customers' problems or difficulties.

The enticing benefits gratify consumers' psychological need for hedonic well-being. As shown in Figure 1, they elicit an emotion that's best called gratification. As Figure 1 shows, we expect consumers come to love brands that gratify them. In this context, love reflects one's affective predisposition toward a brand. Hello-Kitty is perhaps the best example for these enticing benefits. It is interesting to note that despite its deformed features, it commands so much love from tens of millions of people around the world.

Enriching benefits fulfill consumers' psychological needs for self-affirmation and elicit the emotion of self-esteem. We expect that the self-esteem emotion most strongly leads to brand respect (see Figure 1). Patagonia and Toms Shoes are good examples for the first method (i.e., reflecting consumers' cherished values) of these enrich-

ing benefits because they stand for noble causes like protecting the environment or caring for fellow human beings.

My colleagues and I suggest that brand trust, love, and respect each have a main effect on brand attachment. In addition, we believe that brand respect acts like a multiplier. People do not expect or ask for enriching benefits from a brand. As long as the brand performs satisfactorily and offers experiential gratification, they are content with it. Enriching benefits are not considered. However, strong enriching benefits amplify the contribution of the other two brand attachment drivers: brand trust and love. Enriching benefits *exponentially* increase the positive impact of strong enabling (thus trust) and enticing (thus love) benefits on brand attachment (see the moderating role of the enriching benefits on brand attachment in Figure 1). Perhaps one way to describe the exponential power of enriching benefits is as unanticipated delight or pleasant surprise. Because of its unexpectedness, its impact on brand attachment becomes multiplied.

QUESTION 4: HOW DOES BRAND ATTACHMENT MOTIVATE CUSTOMERS TO ENGAGE IN DIFFICULT-TO-PERFORM BEHAVIORS?

To address this final question, we need to understand how each of the three attachment relationship-inducing variables motivates consumers to enact difficult-to-perform pro-brand behaviors in its own manner.

As Figure 1 shows, we propose that brand love taps into consumers' readiness to positively respond toward a brand. Gratification-based brand love makes consumers ready to move toward and approach the brand. Competence-based brand trust, on the other hand, directly influences consumers' desires to purchase or own a brand. Finally, self-esteem-based brand respect produces strong energy or drive to overcome any barriers that make it difficult for a consumer to buy or own a brand. Brand respect has perhaps the most potent motivational force that bridges the gap between behavioral intention and actual behavior. It generates strong motivation that is necessary for consumers to actually perform difficult-to-perform pro-brand behaviors. Respect only makes people bow at a distance, as I mentioned earlier. It has a limited impact on consumers. However, when respect is accompanied by trust and love, it has an exponential power on them.

FINAL THOUGHT

I must point out that strong brand attachment is a relative term. What I mean is that brand attachment isn't an all-or-none state. Rather, consumers are attached to brands at varying degrees. Even if consumers are strongly attached to a brand, marketers should still look for ways to keep that attachment strong. And just because a brand evokes limited attachment doesn't mean it can't improve. By continuously improving the 3 E's, every marketer should be on a continual quest to enhance the degree to which consumers are attached to their brand. As long as a brand is better than its competitors on at least any one of the 3 E's while being the same on the other two E's, it can still be highly successful. However, the magnitude and the sustainability of the market success of individual brands becomes strongest when a brand offers the 3 E's simultaneously. I particularly think that we need to pay careful attention to the role of the enriching benefits on the strength of the customer-brand relationship. They should deserve more attention and research from marketing scholars.

Think about the time-defying and classic entertainment brands such as *Gone with the Wind*, *Casablanca*, *Star Wars*, and *To Kill a Mockingbird*. Think about Nike or Apple — despite their relatively short histories, they are very powerful brands. Also, think about time-defying brands like Tiffany, Rolex, and Caterpillar. There is a

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common thread that ties all of these brands together: they have benefits that enable, entice and enrich their customers.

When a brand offers the 3 E's together, it should help consumers to emit several chemical transmitters in their brains that are important for feeling happiness, such as oxytocin, endorphin, dopa-

mine, and serotonin. I would thus say that a great brand with all 3 E's together can be a happiness inducer, sustainer and enhancer. This also means that we in the marketing field pursue a science of creating, sustaining and enhancing customers' happiness. Thanks.

2016 ACR Fellow Address

What I have Learned about Variety: (And are there any lessons here for our polarized US?)

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PREFACE

I prepared this talk the month before the November 2016 election and delivered it a week before Donald Trump was elected President. During the campaign season, diversity issues were front and center in much of the nation's conversations. Given my career-long interest in variety-seeking behavior, I wondered if there were any parallels in what I had learned about variety, and what management professors might tell us about how diversity within organizations affects firm outcomes and team performance.

Although I am clearly not an expert in these types of diversity issues, I read some well-cited review papers in the area and perused HBR and other popular business press articles to get a sense of the major findings. I then categorized my variety-seeking research into four major areas. I reviewed the major findings in each of these areas and then looked for parallels in the diversity literature.

1. WHAT IS VARIETY-SEEKING BEHAVIOR?

My interest in variety-seeking behavior began in the early 1980's when I was working on my dissertation at Columbia University under the tutelage of Donald Morrison. Don had discovered an interesting working paper in the library that had been written by Leigh McAlister who was a professor at MIT at the time. In this paper, she introduced the idea of variety-seeking behavior, a somewhat unusual focus for marketers who were naturally more interested in brand loyalty and building market share. We wondered at the time – what exactly is variety-seeking behavior, could we provide parsimonious measures for the behavior, and was this an important idea for marketers to embrace?

As I studied the area more deeply, I learned that others in addition to Leigh (who published her paper in *Journal of Consumer Research* (McAlister 1982) had begun to describe the behavior (e.g., Bass, Jeuland and Wright (1976), Huber and Reibstein (1978), Laurent (1978), Jeuland (1979), McAlister and Pessemier (1982), Givon (1984), Lattin and McAlister (1985), Lattin (1987), Bawa (1990). Interestingly, many of these papers were dissertations, illustrating how new this idea was at the time.

Together these papers defined variety-seeking behavior as deliberate behavior where consumers derived utility from *change*. Thus by definition, satisfying these types of customer needs would not lead to customer loyalty, which was thought to be the best strategy for profit maximization. Rather satisfying these customers' needs would suggest encouraging customers to switch away from a firm's brand, or provide a portfolio of options, which of course could increase costs. Obviously encouraging variety-seeking behavior then would not be a manager's first-choice strategy, but if the behaviors were naturally occurring, it would be foolhardy to ignore the phenomenon.

At the time, marketing academics had access to panel data that allowed us to observe consumers' actual shopping behavior in grocery stores. This gave me an opportunity to observe just how common variety-seeking behavior was in these types of categories. In my dissertation (which was published as Kahn, Kalwani and Morrison 1986), I proposed a model which could distinguish between variety-

seeking, brand loyal and zero order behavior and used this model to describe purchase patterns across four product categories.

Like it or not, consumers were definitely seeking variety in some product categories and the behavior was more prevalent for some brands than for others. I also identified distinct types of variety-seeking behavior: (1) pure variety-seeking, where consumers seek change on every choice occasion, (2) learning or exploring variety-seeking, where consumers seek change early on in a product category, and then move to brand loyal behavior, and (3) satiation behavior, where consumers are reasonably brand loyal for a period of time until they satiate or get bored and then they start seeking variety.

Using the models that I developed in my dissertation, I then studied how variety-seeking affected market share in different types of promotional conditions. Working with various co-authors (Kahn and Raju 1991; Kahn and Louie 1990, Feinberg, Kahn and McAlister 1992), I learned that in general more variety-seeking behavior **hurts high market share brands and helps low market share brands**. In markets where variety-seeking is common, major brands benefit more than minor brands when marketing activities make all the brands seem more similar and when promotional activity is high.

Are there parallels between these findings and what we were observing in the country on attitudes about diversity? I looked at Pew Research Center surveys that had specifically examined voters' attitudes towards diversity prior to the election. Trump supporters at the time were generally thought to be white men, whereas Clinton supporters were thought to skew more towards non-white and female. The survey showed, consistent with what my research had found for high-market share brands, that Trump supporters who would not benefit from diversity initiatives were significantly more likely to say that "compared with 50 years ago, life for people like you in America today is worse (81%), better (11%), same (18%) as compared to Clinton supporters: worse (19%), better (59%), same (6%). Diversity, like variety seeking, helps "lower share brands" or non-majority groups. Consistently, only 40% of Trump supporters agree that an increasing number of people of different races and ethnicities makes the United States a better place to live, whereas 72% of Clinton supporters agree with that statement. 16% of Trump supporters thought diversity made the US a worse place to live whereas only 2% of Clinton supporters thought that.

2. WHAT CONSUMER BEHAVIOR FACTORS AFFECT VARIETY-SEEKING BEHAVIOR?

In the 1990's I worked with several co-authors to better understand what consumer-relevant factors increased or decreased variety-seeking (Kahn and Isen 1993, Mitchell, Kahn and Knasko 1995, and Menon and Kahn 1995). Across all the studies, I generally found that positive affect increases variety-seeking behavior for several reasons. First positive feelings cue and facilitate access to positive material in memory. Positive is also more diverse than other material and a happy person has more ready access to a diverse set of cognitive material. Finally, all of this increased awareness of the differences among items make those items more stimulating and thus there is more interchange among brands.

On the other hand, stimulation exhibits an inverted U relationship with variety-seeking behavior. Consumers have an optimal stimulation level, and these differ by individual. This means that if the consumer feels insufficient stimulation, they are likely to seek more variety and if they are over-stimulated they are less likely to seek variety. Stimulation or variety in one context can also affect the amount stimulation or variety the consumer desires in another context, suggesting again that there is some optimal stimulation that consumers crave.

When I looked at the diversity literature there also was a u-shaped connection between stimulation (or creativity) and diversity, but those researchers looked at it from the opposite direction, i.e., not how stimulation affect variety-seeking, but rather how diversity stimulates decision-making. Their findings indicated that diversity (or variety) within a team or group could on one hand could cause too much stimulation resulting in discomfort, rougher interactions, a lack of trust, greater perceived interpersonal conflict, lower communication, lower group cohesiveness, and more concern about disrespect. But diversity or variety in race, ethnicity, gender and sexual orientation could also increase perspectives and thus stimulate creativity and encourage the search for novel information and perspectives that would lead to better decision making and problem solving. Some research indicated that diversity could also improve the bottom line and lead to breakthrough innovations.

My research would add to these findings by suggesting the alternative causality that if there is more stress and conflict in the environment, people would less likely to accept or seek out diversity and variety. This could predict that the stressful pre-election environment made some people less tolerant of differences or diversity among people.

3. ARE PEOPLE CHOOSING TOO MUCH VARIETY?

In 1990, Itamar Simonson wrote a seminal paper that spawned a whole stream of research that asked whether consumers were choosing too much variety. Ironically, by this time, variety-seeking behavior had become so well understood and accepted that people were now questioning whether people should cease seeking variety and stick to their favorites. Simonson (1990) showed that holding consumption constant, the time and patterning of the choice process (e.g., simultaneous vs. sequential) could affect how much variety people chose. Others looked at how preference uncertainty (Kahneman and Snell 1992), choice difficulty (Simonson 1990), flexibility for future (Kahn and Lehmann 1991), choice bracketing (Read and Lowenstein 1995), group choice (Ariely and Levav 2000), and self-monitoring or public image (Ratner and Kahn 2002) affected how much variety people chose.

My most cited paper in this stream was with Danny Kahneman and Rebecca Ranter (Ratner, Kahn and Kahneman 1999). In this paper, we asked participants to listen to sequences of music snippets over time. We varied the sequences to have high or low variety, and by design, the low variety sequences that had more repetition also included more of the participants' favorite songs, while the high variety sequences had less repetition but included less preferred songs. We found that there was a preference for high variety sequences when we asked participants to rate the sequences retrospectively, but when we asked them to rate the sequences in real-time they rated the lower variety sequences with more preferred songs higher. When participants chose their own sequences of songs, they tended to include songs that they did not enjoy as much just for the sake of variety. We concluded that consumers sacrifice utility for variety as a learned response to preferring the variety in memory.

These marketing results suggesting that consumers may be choosing too much variety and sacrificing utility for the favorites does have a direct parallel in the diversity literature. Critics of Affirmative Action initiatives argue that these types of policies in college admissions or in recruiting can yield less optimal candidate choices by prioritizing diversity over raw "intelligence" or "quality" metrics. This is obviously a more controversial discussion in the organizational literature than in marketing.

In defense of Affirmative Action programs, McKinsey (2015) studied the effect of diversity on organizations and found that these policies did have a positive impact on many key aspects of organizational performance. More diversity in an organization was found to help in the war for talent, strengthen customer orientation increase employee satisfaction, improve decision-making and enhance company image. Diversity in organizations also yielded financial returns higher than industry medians, and a BCG study showed that diverse companies could outperform homogenous ones.

Here the organization literature seems to have some implications for marketing in that it suggests that even when consumers choose "too much variety" and thus sacrifice consuming their favorites, there may be value in this variety that is not captured just by looking at utility.

4. ARE MARKETERS PROVIDING TOO MUCH VARIETY?

In 2000, Iyengar and Lepper wrote another seminal paper about variety. Here, they argued that too much choice leads to choice overload and consumers choose not to choose or they delay their choices. This research generated so many studies that there are several review papers and meta-analyses on the topic. My own contribution in this area was in two areas.

First, in Huffman and Kahn (1998) we found similarly to Iyengar and Lepper (2000) that consumers can get overwhelmed by having too much variety, particularly in situations where they were customizing their own products making the assortment seem almost limitless. We found that if we helped consumers learn their preferences through simple techniques the consumers were much more able to appreciate the variety, the perceived complexity was lessened and they were more likely to make choices without delay. I found parallels to these ideas in the diversity literature such that if participants were told to elaborate and think more about the spectrum of information that was offered by diverse teams, the positive effects of diversity increased. Thus in both cases, elaboration helped people appreciate variety.

The other way I have thought about this issue of too much choice is to reframe the discussion into thinking about it as actual variety versus perceived variety. In various studies, I show different ways marketers can arrange the assortment such that the actual variety is held constant but the perceived variety varies – and it is this perceived variety that ultimately affects decision-making.

The first paper I did in this stream was with Brian Wansink (Kahn and Wansink 2004) where we found that increases in perceived variety, holding actual variety constant, increased how much participants consumed. More recently Townsend and Kahn (2014) found that holding everything else constant, that depiction of an assortment visually is found to have more perceived variety than depiction of the same assortment in text. Further, when the assortment is small, people prefer the visual assortment and are more likely to not defer choice compared to the same assortment shown in words. However, when the assortment size gets big, people still prefer visual depiction but this can make the assortment appear too complex and can delay choice as opposed to the same assortment depicted in

text. Most recently in Deng, Kahn, Rao, Unnava and Lee (2016) we showed that holding the actual variety constant but displaying the assortment horizontally (as opposed to vertically) will increase perceived variety and will increase variety-seeking behavior.

Interesting in the diversity literature there have been similar types of investigations comparing actual to perceived impressions. Generally, one of the advantages of diversity in an organization is that different perspectives and different information can come into the discussion and that improves decision making. One study that showed even if the actual information is held constant, mock juries performed better at considering case facts and made fewer errors recalling relevant information and displayed a greater openness to discussing race when the juries were diverse as opposed to all one race. Thus, although the actual diversity of information was held constant, the perceived diversity of information varied and that made people more diligent and open-minded.

CONCLUSIONS

As I reflect back, I feel fortunate that the ideas I explored in my dissertation continued to interest me all of these years later, and that this area could attract other researchers who helped to expand the boundaries of inquiry. Further exploration of variety seeking in marketing seems to have some parallels in other areas that look at variety in different ways.

Summarizing, I found that variety-seeking (or diversity) can threaten the status quo, and the “haves” are hurt, and the “have-nots” are helped. Open-mindedness and positive thinking enhances desire for variety (diversity) and vice versa. However, too much conflict (stimulation) can diminish the desire for variety (diversity). Choosing for the sake of variety can undermine choosing the most preferred options, but is that all bad? Is there such a thing as too much variety? Even if variety is enormous, structure, learning of preferences and elaboration can help. Finally perceived variety (diversity) matters more than actual variety (diversity).

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2016 ACR Fellow Address

Reflections: Progress Made and Perspective Shifted

Alice M. Tybout, Northwestern University, USA

Being named an ACR Fellow prompted me to think back to my first ACR conference, which was 44 years ago, almost to the day. As I reflected, I wondered about what has changed and what has stayed the same. What *progress* have we made and how has my *perspective* evolved?

When I attended what was the 3rd Annual Conference in 1972, ACR had 254 members, 20 of whom were students and 19 of whom were from outside North America. The conference was held on the campus of the University of Chicago at the Center for Continuing Education and the program was printed in the Newsletter. JCR was but an idea in the minds of the leadership of the young organization... it would launch two years later. To give younger ACR members a sense of the time, fashion-forward attendees were wearing polyester bell-bottoms, their data analysis was conducted using punch cards, and their paper submissions to the conference were prepared using a typewriter and submitted by U.S. mail. And, I was a first year, first quarter doctoral student at Northwestern attending the conference with my fellow doctoral students and several faculty members.

By last year's conference, ACR membership had grown more than seven-fold to 1973, 628 of whom were students and 714 of whom were from outside North America. Today, we are meeting in Berlin, marking the first time that the main (fall) conference has been held outside North America—this conference has traditionally been called the North American Conference but obviously a new description is needed. JCR is a thriving journal with 3,518 subscribers. Instead of a hard copy program, there's Whova app with the program and much more. You can look around the room for current fashion, data collection is often electronic and uses "M-Turk" to recruit participants, and all conference materials are prepared and submitted online.

Much has changed and I think it is fair to say we have made progress as a field by engaging such a diverse group of scholars who examine a wide range of topics using a variety of methods. The one thing that has stayed the same is my affiliation. I just can't seem to get out of Evanston, IL. And bell-bottom pants are again fashionable, though they've gone in and out of fashion so it's not the same as my unwavering attachment to NU.

In 1972, not only was I attending ACR as a newbie to the field, but thanks to my advisor, Jerry Zaltman, who was in charge of the conference arrangements, I found myself on the program. Let me explain. I was just settling in at Northwestern and stopped by to visit with Jerry, who had been instrumental in my decision to come to Northwestern for my doctoral training. During our conversation, I mentioned that I had conducted a study while at Ohio State, where I did my undergraduate and master's degrees, in which I surveyed women's attitudes toward the feminist movement, a hot topic at the time. The Equal Rights Amendment or ERA as it was called, had been passed by Congress and was being ratified by states across the country, Gloria Steinem and the National Organization of Women were regularly in the news, and women were demonstrating in favor of more equitable treatment in the workplace and at home. Although not active in the feminist movement, I supported equal rights and was interested in the degree to which other women felt the same. However, I was stunned when in response to my mention of the study, Jerry enthused, "That's great, there's a session at the ACR confer-

ence that's coming up where you could present your findings. I'll put you on the program!" Apparently, no long, drawn-out formal review was required to get on the program back then, something I couldn't appreciate at the time! The behavior was pure Jerry. He'd throw you in the deep end of the pool confident you'd figure out how to swim! It made him a great mentor and I'm thankful for the opportunities he gave me.

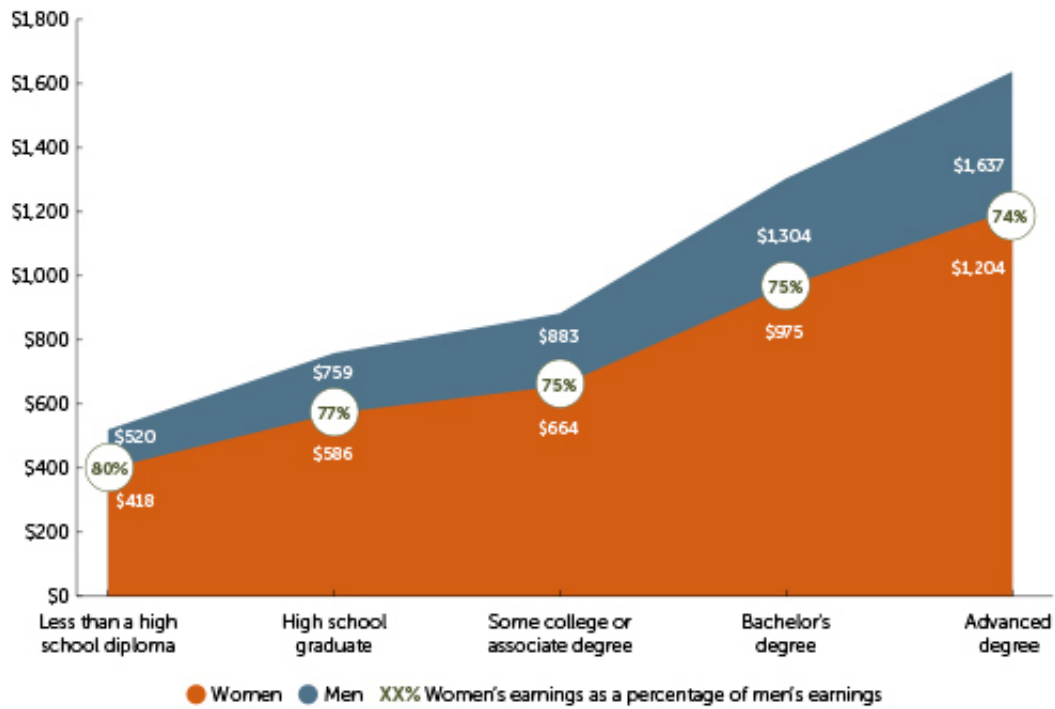
I was more than a bit intimidated but I set about preparing a presentation based on my study. I'd conducted a telephone survey of 94 women in Columbus, Ohio in which I asked questions regarding their beliefs about equality in the workplace and their knowledge of the Equal Rights Amendment, which was under consideration for ratification by the state of Ohio at the time. My paper was entitled "The Feminist Movement: Attitudes, Behavior, and Potential" and was part of a session on called "Ms. and Consumer Behavior: Some Perspectives" (Beery 1972).

When I re-read my paper in preparing my remarks for today, I couldn't help but wonder about the progress made in terms of women's equality, particularly in light of volatile discussions surrounding the presidential election in the U.S. How might women today respond to the questions I asked in 1972? It didn't seem reasonable to repeat the same telephone survey but I thought it would be interesting to ask some of the same questions to a sample of women and see how different or similar their responses were.

My sample a few weeks ago was 248 women from the Midwest who responded to an online survey. I did not repeat the questions about the Equal Rights Amendment. I suspect most respondents today would either be unfamiliar with the E.R.A. because it was never ratified by the 38 states required for passage, or they would confuse the acronym with ERA the brand, a detergent marketed by P&G.

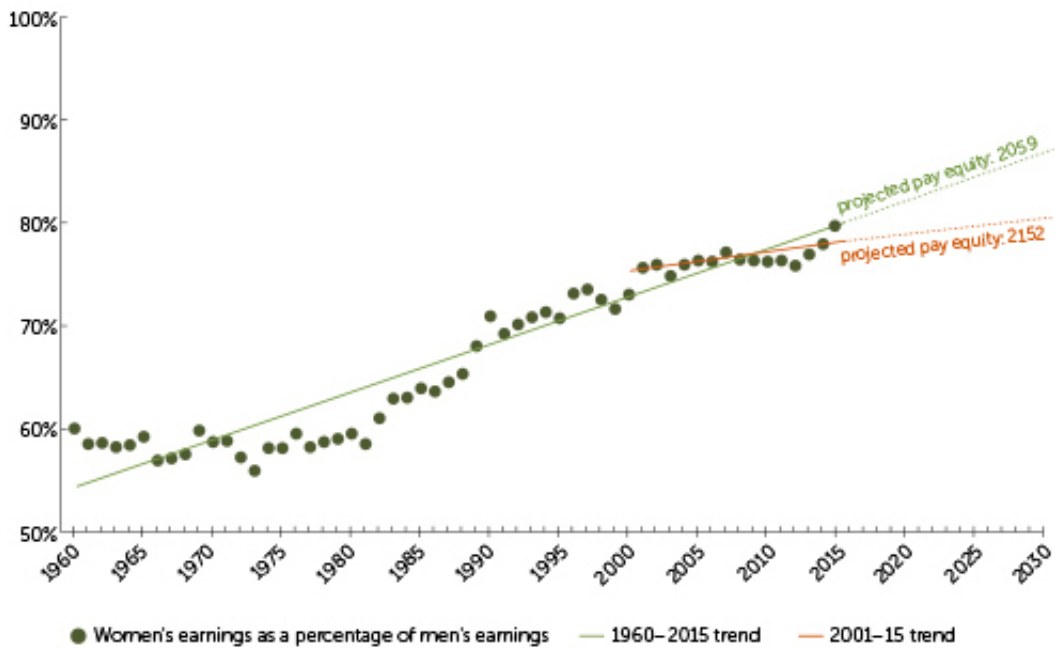
Differences between the responses in 1972 and 2016 wouldn't be surprising given the myriad of changes in just about everything from the sample and mode of data collection to changes in the workplace. What was interesting to me was the fact that there were both differences *and* similarities. Views toward women working outside of the home when they have young children are now far more liberal; only 6% of the 2016 sample agreed with the statement "Women with young children should not work," versus 47% in 1972. Most likely this reflects the economic necessity of women working either because they are single mothers or because two incomes are often required for a family to earn enough to cover basic expenses. Likewise, agreement with the statement "Because men often have a family to support, they should receive higher pay than women for the same work," had declined from 27.7% in 1972 survey to 3.6% in 2016. Further, women who responded to the recent survey were more likely to believe that their family members support equal employment than was the case in 1972 (57% versus 82%).

However, women were *not* optimistic about work place fairness either then or now. Few agreed with the statement "Women generally receive the same pay as men when they perform the same work (21.3% in 1972, 18.5% in 2016)" and they have good reason to be skeptical. Recent studies report that on average women are paid 20% less than men in comparable positions and this disparity is *greater*, not smaller, for women of color and women with advanced degrees (see Figure 1). This pay gap is not anticipated close before 2052 (see



Note: Based on median usual weekly earnings of full-time wage and salary workers, ages 25 and older, 2015 annual averages
 Source: U.S. Census Bureau, *Current Population Survey*, reported in U.S. Department of Labor, U.S. Bureau of Labor Statistics, *2015 Usual Weekly Earnings Summary*, *Economic News Release USDL-16-0111*, Table 9

Figure 1. Median Weekly Earnings, by Level of Education and Gender, 2015



Source: AAUW analysis of data from Proctor et al., U.S. Census Bureau, *Income and Poverty in the United States: 2015*

Figure 2. Women's Median Annual Earnings as a Percentage of Men's Median Annual Earnings for Full-Time, Year-Round Workers, 1960-2015

Figure 2). I won't live to see that the happen and my now 23 year old daughter will be nearing retirement by that time. A significant portion of women in both samples also shared a belief that employers discriminate against women in hiring (36.2% in 1972 and 40.7% in 2016) and felt that women do not have the same opportunity for advancement as men (57.4% in 1972 and 62.1% in 2016).

What do I conclude from comparing the responses to these two surveys? As I look around this conference, it is obvious that women make up a substantial portion of the membership and fill many of the leadership positions in ACR. Moreover, many marketing departments have a number of female faculty at all ranks. My own department and school are led by female faculty. And woman heads the ticket of a major party in this year's presidential race for the first time. These are significant changes and represent considerable progress. But the persistent pay gap, the small number of female CEOs and limited representation of women on corporate boards suggests that there is much still to be done to achieve equality in the workplace. Perhaps the glass is moving toward full but it certainly isn't there yet.

In addition to prompting reflection on the topic of my presentation at the 1972 ACR, looking over the program from that conference reminded me that ACR's founders had a vision bringing together not simply academics from a broad range of disciplines but also practitioners and those who work in government to address issues related to consumers. A number of sessions at the 1972 conference focused on public policy issues and involved speakers from industry and government. Indeed, my dissertation research involved field experiments funded by the Illinois Department of Public Aid in which I examined the effectiveness of various persuasive communication strategies for enrolling Medicaid recipients in an HMO program. Listening to Presidential addresses by Punam Anand Keller and Angela Lee at ACR over the past few years, I sense a resurgence of interest in research that has an impact in addressing real world problems.

Since my dissertation, my own effort to contribute to using my skills as a consumer researcher to address practical problems have taken a more philosophical bent and my thinking in this regard has evolved. A paper entitled "Designing Research for Application," which was coauthored with Bobby Calder and Lynn Phillips and published in JCR in 1981, is my most frequently cited work and it details two alternative paths to research application. Let me briefly recap what motivated us to write the paper and the essence of what we said. In 1977, JCR had a new editor, Robert Ferber, an economist and statistician whose own research relied heavily on surveys. In the tradition of new editors, Ferber wrote an editorial entitled "Research by Convenience," in which he argued strenuously against the heavy reliance on convenience samples of students as participants in consumer research. Ferber's position was grounded in principles of statistical generalization; one must draw a probability sample from the relevant population in order to generalize the finding from the sample to the population.

We did not dispute Ferber's argument about statistical generalization. If generalizing observed effects from a sample to a larger population is the goal, then randomly drawing subjects from that population would support such generalization. However, we viewed Ferber's admonitions about the use of student subjects and the related arguments against laboratory settings as too sweeping and inappropriate when the researcher's goal was not to generalize specific effects but rather to test theory. We argued that, in theory testing research, the goal is to test hypotheses under conditions where the expected effect can be detected if it indeed exists. Homogenous samples of students and controlled settings can strengthen such tests

by minimizing the variance attributable to factors unrelated to the causal relationship under investigation, thereby reducing Type 2 error, the danger of accepting the null hypothesis when the alternative hypothesis is correct. Theories that have been so tested and survived rejection are ones that are appropriate for application to real world problems. The theory, rather than the effects observed to test the theory, is what is generalized and the basis for generalization is the understanding provided by the theoretical explanation not the representativeness of the sample. We also noted that using theory to address a specific real world problems requires translating the theory into a viable intervention, something that involves creativity and the impact of which cannot be known on the basis of the theory. Therefore, when the stakes are high, we argued it may be prudent to stress test the intervention by subjecting it to noisy conditions that characterize the natural setting to assess its impact. Thus, we saw theory as a framework for designing interventions that had a stronger foundation than intuition and avoided problem of induction when generalizing specific effects.

Our paper prompted some debate when it was published and the issue of how to conduct research that is interesting, valid, and applicable continues to engage the ACR community. A recent paper by Lynch and others (Lynch, Alba, Krishna, Morwitz and Gurhan-Canli 2012), distinguishes between two types of research; that which is has the goal of documenting important substantive phenomena and that which is the goal of building and testing theory. The crux of their argument is that both types of research are useful but they should be judged by different criteria. To confuse the two creates unnecessary schisms in the field; the solution is separate but equal. At the same time, questions about reproducibility of effects/phenomena documented in psychology and consumer research have surfaced concerns about the validity of many phenomena and thus their generalizability. The Open Science Collaboration spearheaded by Brian Nosek (2015) documents that many efforts to replicate previous published studies fail. Specific examples can be found in the literature on the attraction effect in choice sets (Huber, Payne and Puto, 1982 vs. Frederick, Lee and Baskin, 2014) and the impact of global versus local norms in encouraging the pro-social behaviors (Goldstein, Cialdini, Griskevicius 2008 vs. Bohner and Shluter 2014). Recommended solutions to improve reproducibility include greater statistical power and conducting more exact and conceptual replications.

These recent discussions prompted me and my colleagues, Bobby Calder, Miguel Brendl and Brian Sternthal to again consider the relationship between effects, theory and developing solutions to practical problems. Our emerging view is that treating phenomena capture and theory testing as separate enterprises may hamper our progress and ability to address real world problems. Yes, it is important to pin down phenomena to be explained and some researchers may elect to focus on this whereas others may emphasize building and testing theory or using theory to construct interventions. But it is always necessary to move from phenomena to explanation as the basis for application in new settings. Insightful explanations for *when and why* the phenomena occur and careful construction and testing of theory-based interventions will help us address real world problems (see Figure 3).

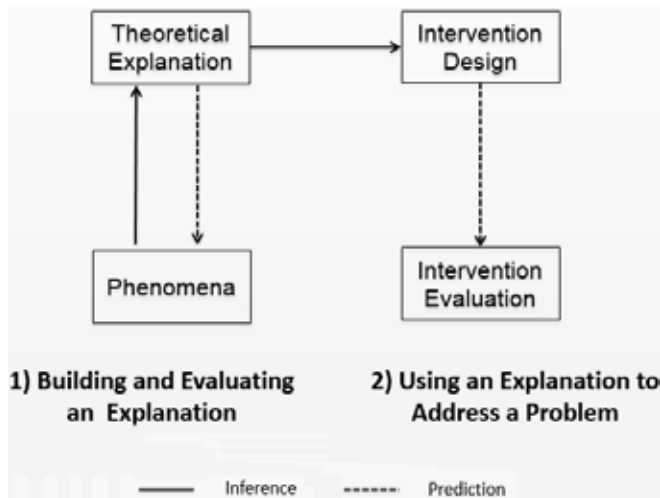


Figure 3. Integrating Phenomena-Focused and Theory-Focused Research to Design Effective Interventions: A 2-Step Process

And, both steps in the process require imagination, which is the theme of an article that Bobby and I recently published as a commentary on Jerry Zaltman's AMS article titled "Marketing's Coming Age of Imagination" (Calder and Tybout 2016). My current perspective is grounded in my earlier work, but my appreciation for the need to integrate phenomena and explanation and to think abstractly and with imagination about explanations and interventions has increased.

You may have noticed an emphasis on two Ps in my reflections thus far, the *Progress* we've made as a society and field and how my *Perspective* has evolved. One thing that I haven't yet mentioned but that has been a constant in my years on the Northwestern faculty is what I've taught. I started out teaching the core marketing MBA course and 41 years later I still teach the core marketing MBA course. All of you who teach the core know there are four Ps, not two! And indeed, I do have four Ps in mind today. My Progress and my Perspective are attributable to People and Place. I was blessed to have wonderful mentors as a doctoral student (a special thank you Jerry Zaltman and Sid Levy, but my thanks extend to each and every faculty member who taught me at Northwestern and at Ohio State). I also have been blessed with, fabulous colleagues and doctoral students since joining the faculty at Northwestern, and most especially, I am grateful to my numerous, brilliant coauthors. The interdisciplinary nature of the department and the spirit of comradery and mutual respect fueled my personal growth. Which brings me to place. Nearly all of my coauthors share a connection to Northwestern, which has been a very special place for me. In Evanston, we have shared the home called the Jacobs Center. What it lacks in aesthetics (it was built on the heels of campus riots in the 1960s and therefore is more a fortress than a structure designed to foster collaboration and lofty thoughts), it compensates for in the warmth and intellect of the people who work there. In January, Kellogg will move to our new Global Hub. Its open architecture and view of the lake and Chicago skyline promise a place that will fuel even greater imagination and collaboration.

On the people front, I also want to express a special thanks to dear friends who have been by my side on this journey. Carol Scott was there to calm my nerves and support me at that first ACR and we've shared ups and downs in our careers and personal lives ever since. Leigh McAlister joined us a few years into Carol and my journey and her energy, positive attitude and huge commitment to everything she does are a source of inspiration.

In addition, I want to acknowledge my husband Brian, who is also a colleague and coauthor (a trifecta), and our daughter Caroline. The two of you have provided an important work/life balance and brought me great joy. Finally, I want to thank my Dad who is 96 years young, a retired economics professor from OSU and an incredible, ongoing source of inspiration. Dad is still as sharp as ever and spends his time writing to advise President Obama on the correct stance to adopt on issues related to energy and foreign relations, giving humorous speeches at his chapter of Toastmasters, swimming and keeping on top of all family events with cards and calls of celebration and congratulation. My Dad set a standard for mindful engagement in professional and personal life that I may not be able to achieve but I'll keep reaching for.

Today my glass is neither half full nor half empty, it is overflowing with gratitude for this honor.

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Special Session Summaries

Customized Nudges: Choice Architecture for a Heterogeneous World

Chair: Kirstin C. Appelt, Columbia University, USA

Paper #1: Effective, Selective Choice Architecture: Checklists as a More Precise Tool

Kirstin C. Appelt, Columbia University, USA
Melissa A. Z. Knoll, Consumer Financial Protection Bureau, USA
Eric J. Johnson, Columbia University and Consumer Financial Protection Bureau, USA
Jon Westfall, Delta State University, USA

Paper #2: Encouraging Energy Efficiency: Product Labels Activate Temporal Tradeoffs

David J. Hardisty, University of British Columbia, Canada
Yoonji Shim, University of British Columbia, Canada
Daniel Sun, University of Calgary, Canada
Dale Griffin, University of British Columbia, Canada

Paper #3: Smart Choice Sets

Benedict G. C. Dellaert, Erasmus University Rotterdam, The Netherlands
Tom Baker, University of Pennsylvania, USA
Eric J. Johnson, Columbia University and Consumer Financial Protection Bureau, USA

Paper #4: Choosing Not to Choose: Consumers Are More Satisfied With a Product When It Is Determined by a Prediction Algorithm Than When They Personally Chose It

Yann Cornil, University of British Columbia, Canada
Anne-Kathrin Klesse, Erasmus University Rotterdam, The Netherlands

SESSION OVERVIEW

There is great interest in choice architecture interventions which can change behavior, usually termed nudges (Thaler and Sunstein 2008). To date, this research has focused largely on means (i.e., what is the average impact?) rather than variance (i.e., who is helped and how much? who is harmed and how much?). These papers look at a new generation of choice architecture tools that are customized to meet the differing needs of a heterogeneous population. They ask whether nudges can be both effective *and* selective—can choice architecture interventions have a large impact *and* be customized to individual circumstances?

Many first-generation nudges targeted choices where a single solution approximates most individuals' needs. For example, different individuals should save at different rates, but encouraging everyone to increase savings from near-zero rates benefits most individuals (Thaler and Benartzi 2004). Yet, even with these decisions, there are some people who may need or prefer different options. Further, many important decisions are complex and an intervention which nudges everyone toward the same choice option can hurt some individuals. For example, different individuals have different health needs and encouraging everyone to choose the same insurance plan may help some individuals (e.g., by saving money), but harm other individuals (e.g., by limiting access to specific types of care). This session explores choice architecture interventions designed for a world where individual consumers' circumstances, needs, and preferences may differ.

Our first paper explores whether *preference checklists* help consumers make better decisions that better match their individual needs. Specifically, preference checklists encourage consumers to consider choice-relevant factors that they might otherwise omit; list items are clustered so that reasons supporting one choice option precede reasons supporting other choice options. Appelt and colleagues find that preference checklists significantly influence choice *and* demonstrate selectivity compared to a standard nudge (i.e., a default).

Our second paper investigates whether activating latent goals helps people make choices more in line with their preferences. Specifically, energy-efficient products which cost more upfront but save energy and money in the long run are a better choice for most, but not all, individuals. Hardisty and colleagues find that “10-year energy cost” labels encourage individuals with latent long-term cost minimizations goals to purchase energy-efficient products.

Our third paper asks whether *smart choice sets* can overcome the curse of choice and improve choice outcomes. Specifically, smart choice sets sort choice options based on consumer preferences and partition options into top recommendations and other options (i.e., “the best and the rest”). Dellaert and colleagues find that smart choice sets balance preference-matching and choice costs to help consumers make better decisions.

Our fourth paper explores the interaction between customized choice architecture and the preference for free choice. Specifically, although consumers traditionally prefer free choice, the popularity of services using preference algorithms to provide tailored products suggests that consumers are willing to waive free choice when externally determined choices are based on their own preferences. Cornil and Klesse find higher satisfaction ratings for choices determined by preference algorithm than by personal choice.

Effective, Selective Choice Architecture: Checklists as a More Precise Tool

EXTENDED ABSTRACT

Nudges, or choice architecture interventions which can change behavior (Thaler and Sunstein 2008), have been shown to have large impacts on decisions about such diverse topics as organ donation (Johnson and Goldstein 2003), healthcare (Johnson et al. 2013), and retirement planning (e.g., Knoll, Appelt, Johnson, and Westfall 2015; Brown, Kapteyn, and Mitchell 2011; Liebman and Luttmer 2009; Thaler and Benartzi 2004). However, nudges may act as a blunt tool, affecting people for whom a behavior change would be welfare enhancing *and* those for whom it would be welfare reducing. Better interventions might customize their effects and be selective, depending upon the individual's circumstances and needs.

We introduce a new choice architecture tool, a *preference checklist*, which is a list of choice-relevant factors that consumers might want to consider when making a decision, but often do not due to various factors such as time pressure, lack of information, or output interference. As suggested by query theory (Johnson, Häubl, and Keinan 2007; Weber et al. 2007), checklist items are clustered into factors supporting one choice option or another. Because people tend to construct their preferences for a decision by considering options sequentially, to generate more arguments in favor of the first-

considered option, and thus to choose the first-considered option (Johnson et al. 2007; Weber et al. 2007), the order of the clustered checklist items should have an effect on consumers' choices. Unlike other interventions, such as defaults, checklists do not benefit from disengagement with the decision and instead ask people to more fully consider their options, thinking about which factors are relevant to them. Thus, this type of intervention may be more responsive to individuals' differing needs and have a customized effect.

We report the results of three studies investigating the age at which people prefer to start claiming their Social Security (SS) retirement benefits. The majority of Americans claim benefits early, with roughly half claiming benefits at the earliest possible age (Muldoo and Kopcke 2008; Song and Manchester 2007). For the average consumer, this is a financial mistake (Burtless and Quinn 2002; Coile et al. 2002): It reduces the amount of their monthly check as well as the amount of their overall lifetime benefits. At the same time, the optimal claiming age depends upon many factors, especially expected longevity, current income and retirement savings, and job satisfaction and security. Thus, successful interventions need to act selectively: delaying claiming age for those who should delay, but not delaying claiming for those who should claim early, such as those with a lower life expectancy.

In all three framed field studies, we use web-based samples of older Americans. To ensure the hypothetical benefit claiming decision is relevant to participants, we screen potential participants based on age and benefit eligibility. Participants are invited to continue the study if they are: (1) between the ages of 45 years old and 65 or 70 years old, and (2) either already eligible or expecting to become eligible for SS retirement benefits.

In study 1, we present 309 participants with two checklists constructed from thought listings from prior work (Knoll et al. 2015). The lists contain eight reasons supporting claiming benefits early and eight reasons supporting claiming benefits later. Participants are randomly assigned to see checklist items in one of three orders: the typical order in which people consider the decision (i.e., a checklist of pro-early items followed by a checklist of pro-later items), the reverse order (i.e., a checklist of pro-later items followed by a checklist of pro-early items), or a neutral order (i.e., two checklists of interspersed pro-early and pro-later items). All participants are then asked when they would prefer to claim benefits. Participants who respond to checklists in the reverse order significantly delay preferred claiming age, by 14 months compared to the typical order. The average claiming age in the neutral order is between that of the other two orders, suggesting that salience alone does not account for the effect.

Study 2 ($N = 344$) replicates this result and also examines whether output interference is responsible for the order effect, by examining the time participants spend considering each checklist item. Indeed, the difference in response time completely mediates the effect of checklist order on preferred claiming age: Participants spend more time interacting with the items in the first checklist, and, when this is the pro-later list, this encourages them to delay claiming.

Study 3 ($N = 451$) examines whether the "right" people are affected by the checklists and compares the checklist intervention to a default set at the latest claiming age. Using a standard set of questions, we estimate longevity to, in turn, estimate the optimal claiming age for each individual. We demonstrate again that the reverse-ordered checklist causes a significant delay in claiming relative to control, as does, to a lesser extent, the default. However, the default affects those who should claim early *and* those who should delay, whereas the checklist shows selectivity by reducing the average claiming "error" by 39% relative to control. In other words, the reverse-ordered checklist minimizes the difference between when

participants *should* claim benefits based on their life expectancy and when they *prefer* to claim benefits.

There is growing evidence that choice architecture can substantially improve outcomes for important decisions in a wide range of domains. However, there is also concern that these approaches may ignore individual circumstances and preferences and nudge everyone in the same direction. The current research offers hope that not all choice architecture interventions are blunt tools. Compared to defaults, preference checklists may work as a more selective tool that has the biggest impact on those who would benefit most. Preference checklists can easily be applied to other contexts where consumers struggle to make the right choice, such as saving for retirement, allocating a limited budget, choosing a health insurance plan, et cetera.

Encouraging Energy Efficiency: Product Labels Activate Temporal Tradeoffs

EXTENDED ABSTRACT

Many interventions designed to encourage energy-efficient choices are coercive or blunt. For example, energy inefficient incandescent lightbulbs were outlawed in several U.S. states and Canadian provinces because consumers kept buying them in spite of the large energy savings possible with energy-efficient CFL and LED bulbs. Likewise, defaults are a powerful tool (Dinner et al. 2011) but run the risk that they may nudge consumers in a direction they do not want to go -- more paternalistic than libertarian. Another class of energy efficiency interventions is designed to give consumers more information and thus to improve the quality of their choices without compromising personal freedom. However, these have a mixed record of efficacy (Anderson and Claxton 1982; Abrahamse et al. 2005; Min et al. 2014).

We demonstrate that informational nudges are effective when they tap into a latent consumer goal, such as long-term cost minimization. Normally, when consumers are making purchases, they do not think about long-term costs. However, through a "10-year energy cost" label, we activate this latent goal, thus dramatically increasing the proportion of energy-efficient choices without being coercive. This intervention taps into the latent goals of some consumers but not others (Study 2), and thus serves as a selective nudge (only influencing consumers that care about the attribute) rather than a blunt hammer.

Study 1a shows that 10-year cost labeling substantially increases the proportion of energy-efficient choices. In partnership with a local utility company, BC Hydro, a sample of 147 Vancouver-area residents made hypothetical choices about lightbulbs, TVs, furnaces, and vacuums, in which more energy-efficient products were more expensive upfront. For example, participants chose between two 60-watt incandescent bulbs for \$0.97 and two 13-watt CFL bulbs for \$17.99. In the "10-year cost" condition, we calculated the average dollar cost of each bulb pack over 10 years (using current electricity prices and average usage rates) and displayed this information directly underneath the upfront cost. Thus, in the "10-year cost" condition (a between-subjects manipulation), participants also saw that the 10-year cost of two 60-watt bulbs was \$239, while the 10-year cost of two 13-watt bulbs was \$52. Across all four product categories, this manipulation significantly increased the proportion of energy-efficient choices, from 50% to 79% on average.

Study 1b demonstrates the effectiveness of this method in a field study in five drug stores over a period of six weeks, with real purchase decisions made by naïve shoppers. Price labels for light bulbs on store endcaps were changed each week (balanced between stores). Shoppers purchased the energy-efficient bulb 12% of the

time with control labels and 48% of the time with 10-year energy cost labels, $p < .001$.

In Study 2 selective goal activation mediates the effect of “10-year cost” labeling on choice. As 242 MTurk participants considered the product pairs, they indicated their goals when shopping for that type of product. These goals were later coded to indicate whether they concerned long-term costs. Choice results replicated Study 1 results, and also demonstrated that 10-year cost labelling is more effective than 1-year cost or 5-year cost labelling. Furthermore, participants in the control condition rarely mentioned long-term costs, while participants in the 10-year cost condition mentioned long-term costs more frequently and prominently. These long-term cost goals strongly predicted choices and mediated the effect of labelling on choices. In other words, when participants were reminded of long term costs, some of them cared a lot about this, and the nudge had a strong effect on their choices, whereas other participants still did not care about this goal, and the nudge had little effect on their choices. This demonstrates the selectivity of the nudge, as it taps into the existing goals that some consumers have but others do not.

In Study 3, we used an alternative method to activate the long-term cost minimization goal. In addition to the control and “10-year cost” conditions used in earlier studies, we added a “subjective cost estimation” condition. In this condition, 245 MTurk participants saw the same information as in the control condition, and were asked to estimate the 10-year energy cost (in dollars) of each product before making their choice. The choice proportions of participants in this cost estimation condition were identical to those in the 10-year cost condition (and significantly higher than those in the control condition). Furthermore, the average energy costs estimated by participants in the estimation condition were fairly close to the actual energy costs (a “wisdom of the crowds” effect). Thus, it is NOT the case that the 10-year cost labeling simply provides participants with new information. Rather, the 10-year cost label works by activating the latent long-term cost minimization goal, and we demonstrate that alternative means of activating this goal similarly impact choices, even without the provision of new information.

In a sample of 254 MTurkers, Study 4 demonstrates the specificity of the long-term cost minimization goal: although consumers are sensitive to future dollar costs (Min et al. 2014), other frames such as energy savings or dollar savings do not have much effect on choices. Thus, the labelling techniques currently used on energy-efficient products (which emphasize dollar savings or energy savings) may not be very effective. Likewise, this explains why some previous informational interventions in the literature were not effective.

This intervention is more effective than all other known informational interventions, and is less coercive than other tools such as defaults or legal measures. It has broad potential application, because it can be used for all types of energy-using products, including those that have not yet been invented. It should be attractive to retailers because it can be used to nudge consumers towards more efficient, expensive products, and retail firms do not profit from energy costs. This intervention should also be attractive to consumers because it reduces their costs in the long run, and to society because it has the potential to reduce energy usage and environmental harm.

Smart Choice Sets

EXTENDED ABSTRACT

It is no news that consumers and other decision-makers are faced with a massive increase in available options. Increases in the ability of firms to generate more options and the use of online markets to present these options suggest the possibility of choice over-

load: that by presenting consumers with more choices, they will pick worse options, a phenomenon labeled in the popular media as the Curse of Choice.

Determining how many options to present to a decision-maker might be thought of as balancing two factors (for an excellent review, see Chernev, Böckenholt, and Goodman 2015). The first, which can be thought of as a blessing, is that more options may generate a better match between what the decision-maker wants and what is available. The second, representing the curse, is that adding options increases the cost of evaluating options. Since decision-makers have limited time and cognitive resources, the result may be that they either abandon search too quickly, or adopt a simplified rule or heuristic, leading to suboptimal choice. In this paper, we suggest that well-designed choice architecture (Johnson et al. 2012; Thaler and Sunstein 2008) can be used to deliver the benefits of increasing the number of options while minimizing its costs.

Specifically, in this paper we test one possible way of reducing the costs of search without decreasing the utility of the chosen option. We (1) explore the problem with an analytical model which shows the conditions under which our proposal helps, (2) present two online studies to test the utility of the mechanism, and (3) analyze field data from a large provider of health insurance.

Our model is a new synthesis of existing choice architecture tools: *Smart choice sets* are a non-binding choice architecture which helps overcome consumer information overload in large choice sets. Smart choice sets combine three existing techniques. The first is sorting the list of options. The second is to use a model of the consumer’s preferences and to use a prediction of how well each option fits those preferences as the basis of that sort. The third is to partition the set into two components, a primary and a secondary list. This focuses attention on a small set of top recommended options, but provides the possibility of clicking through to the full set of options. We present both theory and empirical evidence that smart choice sets improve the outcomes of choices and reduce effort.

Sorting by a single product attribute, for example price, has a significant effect on what is chosen, but this change is not necessarily an improvement. The typical result is that the sorting attribute is more heavily weighted, a result that may be good or bad (Lynch and Ariely 2000). In contrast, presenting products in order of predicted attractiveness can be an effective way to assist decision making (Dellaert and Häubl 2012; Häubl and Trifts 2000). However, even in sorted lists finding the best product can be daunting for consumers (Johnson et al. 2013). Decision-makers adopt simplification procedures that ignore information. They often eliminate options based on a single attribute, even when the number of options is small, and this can lead to inferior choices. In addition, the use of heuristics, can, paradoxically, cause consumers to search too much in sorted lists, which lowers their decision outcome quality (Diehl 2005).

Therefore smart choice sets provide decision guidance by presenting only the most highly recommended products (which we call the “recommended set”), with the option to click through to see the complete recommendation list with all available products (i.e., the “full set”). Behind smart choice sets is the idea that people can choose how to choose and use decision processes that vary in the quality of decision outcome and in the effort required to use them. Smart choice sets can focus the decision-maker’s limited cognitive resources on the best decision strategy and the best subset of alternatives. In this way, partitioning, modeling and sorting are important complements in helping individuals cope with information overload. Partitioning limits the number of options that are considered and encourages the use of better strategies to choose among the consider-

ation set. Sorting on predicted preferences ensures that only the best alternatives are in the partitioned choice set.

We examine the proposed effects in two online survey-based experiments and a field study in the domain of consumer health insurance product choices. In Study 1 (N=858) we find support for the predicted effects of sorting and partitioning. In a 2x2 experiment the quality of the recommendation's sorting and the presence of partitioning were manipulated. We find that both higher quality sorting and partitioning improve consumer choice outcomes. Study 2 (N=1,577) extends Study 1 by also introducing a close to random sorting condition; in addition in this study respondents were asked to choose on behalf of someone else according to a preset decision rule. This allows for objective benchmarking of decision quality. The results replicate the findings of Study 1. In addition, they highlight the important complementarity between sorting and partitioning, in that we find a reversal of the impact of partitioning for the near to random quality sorting condition, where consumers' choice outcomes were worse rather than better when presented with a partitioned list. In the field study (N= 43,632) we analyzed data from a large online health insurance product comparison website in the Netherlands that introduced a new choice architecture that closely mimics smart choice sets. Results from this third study provide external validity and further support for the proposed impact of sorting and partitioning on consumer choice outcomes. After the introduction of the new choice architecture, significantly more consumers chose one of the top recommended alternatives on the website.

We conclude by discussing the drivers of optimal smart choice set size. Partitions that are too large may harm decision outcomes, but partitions that are too small may unduly limit consumer choice. We generalize the insights from our research in terms of optimal smart choice sets size depending on recommendation list quality and consumer decision error.

Choosing Not to Choose: Consumers Are More Satisfied With a Product When It Is Determined by a Prediction Algorithm Than When They Personally Chose It

EXTENDED ABSTRACT

The main criticism lobbed at choice architecture interventions is that, while trying to nudge consumers to make "better choices" (e.g., Johnson et al. 2012; Thaler and Sunstein 2008), they actually restrict consumers' freedom of choice. It has repeatedly been demonstrated that individuals are more satisfied when they can choose themselves compared to situations in which they cannot (e.g., Burger 1989; Cordova and Lepper 1996; Langer 1975). According to past research, there are two main reasons why consumers value their freedom to choose. First, choosing is inherently rewarding (Botti and Iyengar 2004; DeCharms 1968) and, second, consumers feel that only they can choose products that match their personal preferences (Averill 1973; Bem 1967; Collins and Hoyt 1972).

However, recent advances in technology have increased companies' ability to suggest products that match consumers' preferences, without having them choose. For instance, Netflix or Spotify utilize "rating prediction" algorithms that track their users' consumption behavior in order to suggest songs or movies that their customers will like. In this research, we focus on such common business practices and demonstrate that consumers are actually more satisfied with an assigned (not-chosen) song rather than with a self-chosen song, as long as that song matches their preferences.

In doing so, our findings are in contrast with research highlighting the advantage of choice over no-choice for consumer satisfaction. Notably, existing studies have predominately focused on

situations where preferences are constructed on the spot (e.g., Botti and McGill 2011). For instance, individuals were presented with different formats for a photography museum, or a list of ambiguous dishes on a restaurant menu (Botti and McGill 2011). In contrast, our research focuses on situations where consumers have clearly pre-existing preferences (e.g., music). We hypothesize that in such situations, "assigning" a song that matches consumers' pre-existing preferences—through rating prediction algorithms—will yield greater satisfaction than if individuals choose it themselves. We further reason that this occurs because the preferred song was correctly predicted by the algorithm and not because it may have been assigned by chance (e.g., feeling lucky).

To test our hypotheses, we first developed a prediction algorithm. We asked 200 MTurkers to evaluate 21 preselected songs and 61 artists of various genres. We ran a factor analysis of the evaluations of the 61 artists, and identified eight factors each loaded by three artists (24 retained artists in total), with high eigenvalues and item-total correlations. These eight factors corresponded to eight distinct music genres (e.g., eighties-rap, hard-rock, modern-pop, etc.). Then, for each factor, we identified the "best song" (highest positive correlation with the factor), "worst song" (highest negative correlation with the factor), and "average song" (correlation closest to zero with the factor).

We then used our song prediction algorithm in an experimental study with 250 MTurkers. First, all participants evaluated the 24 artists. The survey software automatically calculated each participant's preferred genre. Then, participants were assigned to a 2(choice vs. no choice) x 2(target song: "best song" vs. "average song") between-subject design. In the "no choice" condition, participants received the target song. In the "choice" condition, participants could choose to listen either to the target song or to the "worst song." We selected the "worst song" as the non-target option for two reasons: First, such an easy choice task (a small choice set with a clearly dominant option) increases choice satisfaction (Botti and McGill 2006), allowing a conservative test of our hypotheses. Second, most participants in the choice condition should choose the target song so that the outcome is kept constant for all participants. Finally, participants rated their satisfaction with the assigned/chosen song. A regression analysis of satisfaction revealed a main effect of target song (participants enjoyed the "best" song more than the "average" song), and more importantly, an interaction effect of target song and "choice vs. no choice". As hypothesized, when the target song was the best song, non-choosers were significantly more satisfied than choosers. When the target song was an average song, choosers were directionally more satisfied than non-choosers.

This first study showed that when consumers can listen to a song that matches their preferences, they are more satisfied when it is assigned to them than when they personally choose it. Are they satisfied because their preferences were correctly identified, or because they felt lucky? We answered this question in a second study. 160 MTurkers first completed the artist evaluation survey. Then, they were assigned to one of three conditions. In a "choice" condition, participants could choose the "best" song or the "worst" song. In a "no-choice" condition, participants were assigned to the "best" song, which they were deceptively told was selected randomly. In a second "no-choice" condition, participants were assigned to the "best" song, which they were truthfully told best matched their preferences. Contrast analyses showed that participants were most satisfied when the song was assigned to them, reportedly based on their preferences. Satisfaction was significantly lower in the "choice" condition and marginally lower when the song was allegedly assigned randomly.

In conclusion, by demonstrating that assigned products which match consumers' preferences yield greater satisfaction than self-chosen products, our research challenges the assumption that the freedom to choose always increases satisfaction.

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Plugged In: How Consumers Choose and Use Technology

Chair: Jackie Silverman, Wharton, University of Pennsylvania, USA

Paper #1: Better to Have a Book in the Hand Than Two in the Cloud: Consumer Preferences for Physical Over Digital Goods

Ozgun Atasoy, Boston University, USA

Carey Morewedge, Boston University, USA

Paper #2: You are What You Track: The Effect of Failing to Log an Experience on Future Use of Tracking Apps

Jackie Silverman, Wharton, University of Pennsylvania, USA

Alixandra Barasch, NYU Stern School of Business, USA

Paper #3: “Coming Alive” Through Headphones: Listening to Messages via Headphones vs. Speakers Increases Immersion, Presence, and Liking

Alicea J. Lieberman, University of California, San Diego, USA

On Amir, University of California, San Diego, USA

Juliana Schroeder, University of California, Berkeley, USA

Paper #4: The Accessibility Liability: Digital Information Undermines Conceptual Understanding

Adrian Ward, University of Texas at Austin, USA

Shane R. Schwikert, University of Colorado, Boulder, USA

SESSION OVERVIEW

The context in which we make decisions has a huge impact in our decision-making process. For example, consumers sometimes make choices based on extraneous factors, including anchors (e.g., Ariely, Loewenstein, and Prelec, 2003), framing (e.g., Tversky and Kahneman, 1981), or how alternatives are grouped within a choice set (e.g., Huber, Payne, and Puto, 1982; Simonson, 1989). For decades, technological advancements have been constantly reshaping the context in which we make our decisions. Given that technological innovations are an inescapable aspect of our lives, it is important to further understand how they impact consumer behavior. What are the factors that affect how people select and interact with these technological advancements, as well as the possible consequences of these decisions?

Some research has started to examine how the use of 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). The four papers in this session build on this work and illustrate how new technological contexts can influence consumer preferences, behavior monitoring, perceptions of others, and information processing.

Electronic and digital options are now the norm within our choice sets; for instance, within 15 years of introduction, sales of high-tech options like digital cameras and smartphones have outpaced their traditional counterparts (Zhang, 2014; Lomas, 2014). The first two papers examine how people interact with technological products. **Atasoy and Morewedge** investigate why consumers often prefer physical products over digital alternatives. They show that for a variety of goods, physical versions are more appealing because they invoke psychological ownership. **Silverman and Barasch** examine how and why people use smartphone apps to track their behaviors. They find that missing the opportunity to log an activity—even when this “miss” is outside the person’s control—decreases the user’s likelihood of logging the next relevant activity in a tracking app.

Additionally, people often make decisions within technological environments. The final two papers focus on the consequences of consumers’ interactions with technology. **Lieberman, Amir, and Schroeder** show that attitudes and perceptions of a communicator and message depend on the method of listening. Specifically, people

who listen to messages through headphones, as opposed to speakers, are more immersed in the message and view the communicator more positively, which in turn increases donations in economic games. **Ward and Schwikert** investigate how the ability to easily access information at a later date through technology impacts consumers’ processing of information. They find that people remember fewer conceptual details when information is presented in a digital, prerecorded format, compared to a live, unrecorded format.

Together, this session highlights the diverse ways in which technology impacts our daily lives. Given the widespread applicability of the issues discussed, we expect this session to attract researchers interested in experiential purchases, information processing, sequential decision making, memory, product engagement, and consumer identity. Much like “Wanderlust” invokes a sense of exploration, we hope that these varied approaches to technology invoke a lively discussion.

Better to Have a Book in the Hand Than Two in the Cloud: Consumer Preferences for Physical Over Digital Goods

EXTENDED ABSTRACT

New technologies have given rise to digital versions of many goods, including photographs, books, music, and movies, which has eliminated the need to use a physical medium to store this content (Belk, 2013; McCourt, 2005; Odom, Zimmerman, and Forlizzi, 2011; Petrelli and Whittaker, 2010). We examined whether people ascribe greater value to physical or digital goods in self-report and incentive compatible designs. We report five experiments that elucidate the preference between these two formats, and identify greater establishment of psychological ownership for physical goods as the mechanism responsible for their differences in valuation.

We predicted that physical versions of goods would be valued more than digital versions. Our prediction was based on previous research findings that established (1) a connection between physically interacting with objects and perceived ownership for the objects, and (2) a connection between perceived ownership and valuation. Touching (Peck and Shu, 2009) or imagining touching (Peck, Barger, and Webb, 2013) an object, as well as physically interacting with an object for a longer time (Wolf, Arkes, and Muhanna, 2008), increases perceived ownership. As the (perceived) opportunities for physically interacting with physical goods are better than similar opportunities for digital goods, we predicted a stronger perceived ownership for physical goods and consequently a higher valuation, as a long line of research has demonstrated that perceived ownership increases valuation (Kahneman, Knetsch, and Thaler 1990; Thaler 1980; Morewedge et al. 2009; Maddux et al. 2010; Dommer and Swaminathan 2013). Some qualitative evidence also suggests that digital goods may be valued less, as well as less strongly connected to their owners’ sense of selves (McCourt, 2005; Giles, Pietrzykowski, and Clark, 2007; Petrelli and Whittaker, 2010; Siddiqui and Turley, 2006), although others disagree with this proposition (Lehdonvirta, 2012).

We found in five experiments that participants ascribed a higher value to physical than digital versions of the same photograph, book, and movie, whether measured in an incentive compatible pay-what-you-want paradigm, willingness to pay, or purchase intention.

Experiment 1 tested our hypothesis in an incentive-compatible field experiment using a pay-what-you-want design (Gneezy, Gneezy, Reiner, and Nelson, 2012). Tourists in Boston were given

as a souvenir either a printed photograph or a digital photograph (of higher quality) of themselves with a costumed historical figure at a historical site. They were then asked to make a donation for the souvenir photo to the organization that preserves the site, by paying whatever they wanted for the picture, including \$0. To control for potentially different beliefs regarding the production costs of physical and digital photographs, after collecting donations, participants estimated the average cost of producing their photographs. Participants paid more for printed photograph than digital photographs, even when controlling for the perceived cost of production ($F(1,82) = 5.89, p = .02$). Note that the photos had no resale value, and thus the effect cannot be explained by a difference in market value.

Experiment 2 found that this difference in valuation generalizes to other product categories including books, music, movies, and magazine subscriptions. Participants indicated a higher likelihood to purchase ($F(1, 198) = 13.69, p < .001$) and greater willingness to pay ($F(1, 192) = 13.48, p < .001$) for physical than digital versions of goods across all product categories.

The findings of **Experiment 3** suggest that these findings were not due to differences in perceived consumption utility. Although participants ascribed greater value to physical goods ($F(1, 196) = 7.05, p = 0.009$), they believed their digital counterparts were more useful on every dimension measured ($ps < .001$).

Experiment 4 ruled out a social signaling motive. Participants exhibited the same greater preference for physical than digital versions of both high and lowbrow goods. Experiment 4 also found that estimates of the retail prices of digital and physical goods cannot explain this preference.

Experiment 5 identified psychological ownership as a driver of the higher valuation ascribed to physical goods. College students reported their willingness to pay for buying or renting a digital or print copy of a course textbook. The willingness-to-pay gap between physical and digital versions of the textbook disappeared in the rent condition ($F(1, 271) = 2.27, p = .13$). Whereas students were willing to pay more to buy than rent a physical textbook ($F(1, 271) = 13.47, p < .001$), they were not willing to pay more to buy than rent the same digital textbook ($F(1, 271) = 0.084, p = .77$). Similar results were obtained in a replication in which participants considered textbooks that would have no resale value after their use. Renting reduced perceived ownership and thus valuation for the physical version. Renting had a much more limited effect on the valuation of the digital version, as perceived ownership is already low for digital items.

Together, these studies reveal how psychological processes, value, and technology are intricately intertwined.

You are What You Track: The Effect of Failing to Log an Experience on Future Use of Tracking Apps

EXTENDED ABSTRACT

Millions of people keep track of a large range of behaviors through smartphone apps. For example, over 15 million people catalogue their outdoor runs on MapMyRun and over 1 million people record what craft beers they drink on Untappd.

Though some research has investigated how tracking goal progress can affect goal achievement (Soman and Cheema, 2004; Cohran and Tesser, 1996; Etkin, 2016), little work has examined tracking behavior itself. This is especially important to understand since many of these apps assist people in tracking their behavior; the value of Untappd is not in helping people drink more beer, but in simply helping them track the beer they drink. Hence, apps like Untappd find it critical to maintain consistent consumer engagement.

In this work, we investigate how missing the opportunity to log an activity may influence the user's likelihood of logging the next relevant activity. On the one hand, research on licensing and aspirational pursuits suggest that people may try to balance their decisions (e.g., Huber, Goldsmith, and Mogilner, 2008; Dai, Milkman, and Riis, 2014). This would predict that missing a log would make people *more* likely to log their next activity. On the other hand, prior work suggests that people often choose options that reinforce previous decisions (e.g., Dhar and Simonson, 1999; Tykocinski, Pittman, and Tuttle, 1995). This would predict that missing a log would actually lead to consistency, or that people would be *less* likely to log their next activity.

Across four studies in three different contexts, we show that missing the opportunity to log an activity—even when this “miss” is outside the person's control—decreases the user's likelihood of logging the next relevant activity. We also suggest that this effect is due to users' perceptions that their activity log is a personal representation of themselves.

Study 1 ($n = 150$) tests how being unable to log an activity in a tracking app affects subsequent likelihood to use the app. Participants imagined that they were regular users of an app that allows them to log and rank beers, and that they had just tried several new beers at a festival. Participants were told either that they had logged those beers in their app (*log* condition), that they could not log any of the beers because their phone had died (*miss* condition), or were given no information about whether they logged their beers or not (*control* condition). A one-way ANOVA revealed an effect of condition on likelihood to log a beer consumed the following week ($F(2, 147) = 8.47, p < .001$). Participants in the *miss* condition were less likely to record their next beer ($M = 5.42$) than participants in the *log* ($M = 6.32; t(95) = 3.67, p < .001$) and *control* ($M = 6.23; t(101) = 3.45, p < .001$) conditions. Participants in the *log* and *control* conditions did not differ in their likelihood to log the next beer ($t(98) = .32, p = .75$).

Study 2 ($n = 180$) examines whether this effect also occurs when logging non-hedonic experiences. Students imagined that they regularly used a note-taking app, then were told that for the previous lecture, they either missed logging their notes in the app due to uncontrollable circumstances (*miss* condition) or successfully used the app (*log* condition). In addition, we manipulated whether the previous lecture covered a lot of material (*high impact* condition) or was a review (*low impact* condition). Overall, participants in the *miss* condition were less likely to use the note-taking app in future lectures ($M = 8.34$) than participants in the *log* condition ($M = 9.07; F(1, 176) = 4.56, p = .034$). However, there was no effect of impact on likelihood to continue logging ($F(1, 176) = 1.83, p = .178$), nor was there a significant interaction ($F(1, 176) = 0.75, p = .39$). These results suggest that this effect occurs even when the app is more utilitarian in nature, and regardless of the importance of the missed activity.

Study 3 ($n = 200$) replicates this effect with participants who imagined using an app to log their outdoor runs. They were told that they either logged their most recent run or missed logging due to uncontrollable circumstances. Participants who missed logging their last activity were less likely to log their next activity on the app (92.93%) than people who successfully logged their last activity (99.01%; $X^2(1) = 4.81, p = .028$).

Study 4 ($n = 176$) explores the mechanism behind this effect. Using the same stimuli as study 3, we also measured the extent to which participants felt like the activity log was a personal representation of themselves (e.g., wanting the running log to be an accurate portrayal of them, wanting the log to reflect a complete account of their runs; $\alpha = .825$). We again find an effect of previous logging on likelihood to log future runs ($F(1, 174) = 5.21, p = .024$). We also

find that this effect was mediated by beliefs that the log represents the self (indirect effect = $-.399$, $SE = .192$, 95% $CI = [-.824, -.068]$), such that missing decreased the level of personal representation felt from the app, which in turn decreased likelihood to continue logging.

Overall, we find that when people miss the opportunity to log an experience due to uncontrollable circumstances, they are less likely to continue logging that activity. This research adds to our current knowledge of how and why people track their behaviors and suggests that these app companies may increase customer engagement by instituting ways for people to get back on track after or “make up” for a missing activity.

“Coming Alive” Through Headphones: Listening to Messages via Headphones vs. Speakers Increases Immersion, Presence, and Liking

EXTENDED ABSTRACT

In recent years, individuals increasingly consume media messages, advertising, news, and entertainment through auditory mediums, such as podcasts. In fact, as of early 2013, Apple reported having over one billion podcast subscriptions (Mogg, 2013). Consumers listen to auditory media either via headphones or via speakers, yet little research exists on how these various forms of consumption influence consumer perceptions and subsequent behaviors. Oftentimes, auditory media includes appeals to make purchases or donations, requests that are heavily influenced by feelings of trust and generosity. Relative to speakers, listening to an auditory stimulus via headphones reduces felt social distance (Kallinen and Ravaja, 2007) and evidence demonstrates that decreased social distance leads to increased generosity (Charness and Gneezy, 2008). Recent studies have also shown that hearing an individual’s voice makes her seem smarter and more likeable, thus humanizing the communicator (Schroeder and Epley, 2015). We hypothesize that listening to an individual via headphones (versus speakers) will make the communicator seem more present, decreasing felt social distance and increasing trust and generosity.

In an initial experiment, we tested whether individuals anticipated that listening via headphones would result in different assessments of the communicator than listening via speakers. Participants ($n = 102$) imagined listening to a woman talking about a difficult time in her life via headphones (vs. speakers, order counterbalanced). Participants expected that listening to the message through headphones would lead to significantly greater feelings of communicators’ presence, ($M_{\text{speakers}} = 4.86$ versus $M_{\text{headphones}} = 5.18$; $t(201) = 2.09$, $p = .04$), and that they would be significantly more immersed in the story ($M_{\text{speakers}} = 4.49$ versus $M_{\text{headphones}} = 5.32$; $t(198) = 5.29$, $p < .001$). However, participants did not anticipate that the mode of listening would affect their attitude toward the communicators, ($M_{\text{speakers}} = 4.73$ versus $M_{\text{headphones}} = 4.82$; $t(198) = .617$, $p = .54$). We next tested whether these perceptions were accurate.

In Experiment 2, stimuli consisted of 3 real messages that were recorded from university students requesting tutoring help in a challenging course. Participants were randomly assigned to one of 6 conditions in a 2 (headphones vs. speakers) \times 3 (message requesting tutoring) study design. As participants in Experiment 1 had predicted, Experiment 2 participants who actually listened to a request to help via headphones, relative to speakers, indicated being more immersed ($B = .30$, $t(138) = 2.0$, $p = .05$) in the message. However, contrary to the predictions of Experiment 1 participants, individuals who actually listened to an appeal via headphones judged the communicator significantly more positively ($B = .29$, $t(138) = 2.2$, $p = .03$).

In experiments 3 and 4 we explore two potential behavioral consequences of these effects: increased generosity and persuasiveness. In Experiment 3, participants ($n = 586$) listened to the exact clip described in Experiment 1 via headphones or speakers. Participants who listened to the message via headphones reported feeling significantly greater levels of communicator presence, ($B = .21$, $t(555) = 2.13$, $p = .03$), and were marginally more immersed in the story, ($B = .15$, $t(555) = 1.66$, $p = .09$). Participants again judged the communicator significantly more positively—as both warmer and more competent—when listening to the message through headphones, ($B = .17$, $t(555) = 2.18$, $p = .03$). Further, the effect of mode of listening on communicator perceptions was fully mediated by perceived social distance. Finally, conditional on giving a donation, those who heard the message via headphones were marginally more likely to donate more ($B = .48$, $t(460) = 1.7$, $p = .09$).

Study 4 comprises a dictator game. Participants were placed in individual rooms, assigned the role of dictator and told that they may receive a \$10 endowment for participation and may choose to share it with their ‘partner,’ a participant from a previous session. Participants listened to a prerecorded scripted message from their ‘partner,’ requesting that the dictator share a portion of their sum. One-half of the participants listened to this message via speakers while the other half listened via headphones. Interestingly, the scripted communicator, who was not a genuine speaker as in the previous studies, was viewed as less warm in the headphones condition ($B = .33$, $t(367) = 2.97$, $p = .003$), an effect that moderated generosity: conditional on having donated any amount, participants who rated the speaker as warmer gave more money when the request was heard through headphones ($B = 0.50$, $t(290) = 2.1$, $p = .03$). These findings suggest an unexpected moderator: authenticity. Listening using headphones may amplify beliefs about a communicator, suggesting that only communicators who are authentic get a boost in likability and persuasiveness when heard via headphones. We are currently exploring this potential moderator in a follow-up study.

These findings make a significant contribution to understanding media consumption and how mode of listening influences consumer experience and behavior. Whether consumers listen via headphones or speakers affects how close they feel to the communicator and how positively they judge the communicator. Our results provide novel insights into auditory media consumption, applicable to communicators and consumers alike.

The Accessibility Liability: Digital Information Undermines Conceptual Understanding

EXTENDED ABSTRACT

The advent of the “Internet Age” has transformed the way consumers acquire, process, remember, and interact with information (e.g., Barr, et al., 2015; Macias, et al., 2015; Ward 2013a, 2013b). In parallel fashion, the rapid rise and proliferation of digital access has transformed the way firms—including educational institutions—deliver information. Digital materials such as videotaped lectures, textbooks, and online coursework complement classrooms at every level of education. More strikingly, digitally-delivered information is increasingly used as a replacement for traditional learning environments; over 5 million U.S. college students took courses online in 2013 (Allen and Seaman, 2015), and 35 million individuals enrolled in free massive open online courses (MOOCs) in 2015 (Shah, 2015).

In this research, we explore how the shift toward digital information may undermine the development of conceptual understanding. We propose that consumers’ implicit assumptions about the future accessibility of digital information may affect not just infor-

mation *storage* (memory for information), but also information *processing* (understanding of information). These assumptions about the persistent accessibility of digital information, combined with a tendency to offload responsibility for information to future-accessible external sources (e.g., Sparrow, Liu, and Wegner, 2011; Wegner and Ward, 2013), may cause consumers to devote less attention to digital information than to information communicated via traditional mediums. To the extent that encoding of factual information and development of conceptual understanding require different levels of processing, variations in depth-of-processing created by these differences in attention may undermine the development of conceptual understanding for digitally-delivered information, even when consumers are successful at storing this information in internal memory. Ironically, the same principles of accessibility that eliminate barriers to educational access may create barriers for reaping the full rewards of digitally-delivered educational interventions.

Our first experiment examines the effects of presentation format on depth-of-processing in the context of traditional (live) vs. digital lectures. We delivered three 7-minute lectures to 135 undergraduate students under one of four conditions: live, digital with future access (students watched the lectures on YouTube, and were told that they would be able to access the lecture in the future), digital without future access (students were told that they would *not* be able to access the lecture in the future), and digital baseline (students were given no information about future accessibility). Students were told that they would be tested on their “memory and understanding of the lectures,” and were prohibited from taking notes of any kind. Immediately following the lectures, participants completed a three-minute cognitive filler task designed to prevent explicit repetition and rehearsal of lecture content. Finally, participants completed a quiz assessing two key types of knowledge: memory for factual information (12 items, $\alpha = .65$) and conceptual understanding (18 items, $\alpha = .77$).

Planned contrasts revealed no differences between any of the three “digital” conditions on either conceptual understanding (all $ps > .40$) or factual memory (all $ps > .22$). Subsequent contrasts comparing the “live” condition to all three “digital” conditions revealed differences for conceptual understanding ($F(1,131) = 6.82, p = .01$, Cohen’s $d = .51$), but not factual memory ($F(1, 131) = 0.24, p = .63$). These results were confirmed by a supplementary analysis treating knowledge type (factual memory, conceptual understanding) as a within-subjects factor; a planned interaction contrast comparing within-subjects differences in knowledge type for the “live” condition vs. the three “digital” conditions was significant ($F(1,131) = 9.49, p < .01$, Cohen’s $d = .54$).

These results indicate that digitally-delivered information is associated with decreased conceptual understanding (relative to traditionally-delivered information), even in the absence of effects on memory for factual information. Whereas prior work has focused primarily on memory deficits associated with reliance on digital resources (e.g., Sparrow, Liu, and Wegner, 2011; Wegner and Ward, 2013), our results suggest that reliance on digital information may have negative consequences for consumer knowledge even when individuals are motivated to commit this information to internal memory (and are successful in doing so). In contrast to traditional learning environments, where students employ enhanced rehearsal strategies when attempting to internally encode information that they believe will be inaccessible in the future (Eskritt and Ma, 2014) and develop high levels of understanding by extracting conceptual themes while taking paper-based notes (Mueller and Oppenheimer, 2014), consumers of digitally-delivered information may fail to develop conceptual understanding because digital sources implicitly

promise unlimited future access without requiring consumers to engage in elaborative internal processing.

The results of our first experiment also suggest that implicit assumptions about digital permanence may override explicit information about future accessibility. Although we hesitate to over-interpret null effects, the equivalence of all three “digital” conditions on both outcome measures is consistent with prior research suggesting that implicit beliefs about digital permanence are resistant to explicit claims that information has been deleted (e.g., Sparrow et al., 2011). Pervasive implicit beliefs about the future accessibility of digital information suggest that explicit interventions may be ineffective at counteracting accessibility-related deficits in depth-of-processing for digital information.

We further develop this exploration of the effects of digitally-delivered information on consumer knowledge in a set of follow-up experiments focused on both expanded breadth (e.g., comparing processing of printed pamphlets to equivalent online text) and increased depth (e.g., assessing implicit/explicit beliefs about future accessibility, manipulating attentional resources). For example, we find that imposing high cognitive load during a reading task reduces conceptual understanding of print-based information ($F(1, 111) = 5.87, p = .02$, Cohen’s $d = .54$), but not digital information ($F(1, 111) = 0.95, p = .22$)—a pattern consistent with the idea that consumers devote less attention to digital information, and thus have more cognitive resources to spare.

This research suggests that consumers’ implicit assumptions about the future accessibility of digital information may affect not just information *storage* (memory for information), but also information *processing* (understanding of information). This work contributes to the emerging understanding of consumer knowledge in the “Internet Age” by suggesting that inherent features of digital information sources—specifically, ease of access and permanence of storage—may lead to unintended negative consequences.

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A 360° View of Patients' Experiences as Medical Consumers

Chairs: Tatiana Barakshina, University of Illinois at Chicago, USA

Karen Scherr, Duke University, USA

Paper #1: Coping with Fear and Regret in Online Health Communities

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Jelena Spanjol, University of Illinois at Chicago, USA

Alan J. Malter, University of Illinois at Chicago, USA

Paper #2: Empowering Patients as Decision-Makers in the Context of Early Stage Prostate Cancer

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Mary Frances Luce, Duke University, USA

Peter Ubel, Duke University, USA

Paper #3: The Neonatal Intensive Care Unit as an Assembled Servicescape: How do Technological Actors Affect Parent/Staff Decision-Making?

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Paper #4: Exploring Patient-Provider Relationships in Preference-Based Health Care Choices

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SESSION OVERVIEW

The rapid consumerization of healthcare calls for detailed exploration of patients' experiences as medical consumers. The papers in this session use multiple methodologies across a range of medical domains to explore the following questions: "How do patients navigate preference-sensitive decisions as medical consumers?" and "How do patients seek decision support during this process?" We define preference-sensitive decisions as contexts in which more than one treatment is medically justified and patients' personal preferences are important (Wennberg 2004). We examine patients' experiences throughout the consumption process, from outside the formal healthcare system (online medical communities and patient education materials) to clinical appointments communication to interactions with the overall medical servicescape. Our findings span over multiple cultures and systems including U.S. private healthcare, U.S. Veterans' Affairs, India, and Finland.

Barakshina, Spanjol, and Malter examine how pregnant women use online health communities to cope with negative emotions, to seek and receive decision support, and cope with negative emotions. Using qualitative analysis of 600 threads on a popular online medical community (Babycenter.com), they find that consumers' behavior is often driven by previously-experienced regret or fear related to a particular alternative. Patients use several coping mechanisms, including repressive coping, derogation of others (including healthcare providers), and transfer of decision responsibilities to others to cope during a high-stakes decision process.

Scherr, Ubel, and Luce examine the effectiveness of two interventions designed to empower patients with early stage prostate cancer. Using a mixed methods approach, they find that increasing

declarative ("what") knowledge about prostate cancer was not enough to increase patient participation in the decision-making process. Rather, they propose that patients may also require procedural ("how") knowledge regarding communication strategies to participate in clinical appointments and become truly empowered consumers.

DuFault et al. compare how parents with children in the Neonatal Intensive Care Unit (NICU) interact with the neonatal servicescape in the US, Finland, and India. Using an ethnographic approach, they find that the degree of technology in the servicescape (high vs. low) impacts how parents "medicalize" their infants, and describe the impact of this medicalization on parents' interactions with their infants and the medical system.

Finally, Zayer, Otnes, and Fischer examine the patient-physician relationship in the context of infertility treatment. They conduct in-depth, semi-structured personal interviews using grand tour questions with 26 informants (patients and their significant others), and propose a previously unidentified type of patient-physician relationship, the "Peripheral Model," in which the physician's role is perceived as rather inconsequential.

In sum, this session features multiple methodologies and collaboration between consumer and medical scholars to examine patients' experiences as medical consumers. This research demonstrates the potential for marketing researchers to provide unique insights, highlighting the need for continued collaboration between marketing and medical professionals.

Coping with Fear and Regret in Online Health Communities

EXTENDED ABSTRACT

According to National Vital Statistics reports, between 3.5 and 3.9 million women give birth in the U.S. annually, and approximately 500,000 of them face a decision to choose between having a Repeat Cesarean (RCS) or Trial of Labor after Cesarean (TOLAC) delivery. Each option offers benefits, but also poses risks to mother and baby. The scope of risks varies greatly: long-term complications, uterine rupture, infections, and maternal and fetal death. Yet, existing medical evidence does not favor one alternative over another (Cox 2014; Capogna 2015), which classifies the choice between RCS and TOLAC as a preference-based decision. In preference-based decisions more than one treatment option is medically justified (Wennberg 2004).

Ideally, physician and patient work as a team to arrive at an optimal solution for the patient. However, patients facing such difficult choices consider many factors that have little or no apparent relevance to clinical practice, such as living conditions, spousal work arrangements, religious beliefs, etc. As a result, medical consumers often seek external support from family, peers and other patients (Pescosolido 1992) who can help navigate the decision process. In this paper, we examine the effect of peer advice, received through on-line health communities, on consumer decision processes and post-decision outcomes for preference-based decisions. Emotional outcomes of decisions often depend on how well patients manage to cope with negative emotions during the decision stage (Luce 2005). On-line communities are studied here as a source of advice to supplement professional medical advice. In effect, we view online com-

munity peers as “non-medical experts” whose expertise comes from having gone through similar experiences.

According to Keeling, Khan, and Newholm (2013), it is not only information exchange that patients look for in online communities, but rather a complex “knowledge negotiation” process, which includes sense-making, information seeking and sharing, and emotional support seeking and provision. Given the importance such communities might hold for consumers facing difficult medical decisions, we focus on understanding how medical consumers (pregnant women) seek and utilize online peer advice. We examine the following questions: Do medical consumers seeking advice and decision support from online peers look for complete information about available options and related experiences, do they engage in confirmation bias (seeking out confirmation for existing preferences), or both? Are medical consumers driven by fear or anticipated regret, and are they turning to online community peers to cope with these feelings? Finally, in view of decision making as coping (Luce, 2005), which strategies for coping with difficult decisions drive consumers to participate in on-line health communities?

Methodology

We chose Babycenter.com (with about 4.6 million unique monthly visitors) as our data source. Consumers use this platform to create communities, or groups, on a variety of subjects, including getting pregnant (currently 2,220 groups), pregnancy (4,876 groups), and baby (4,370 groups). Each group includes a title, brief description and a message from the group owner. Groups are either subject-specific (e.g., breastfeeding support) or associated with a child’s birthday or due date (e.g., December 2015 Birth Club).

We employ content analysis of community posts (Spiggle 1994; Neuendorf 2002), focusing on two specific preference-based delivery decisions: (1) RCS versus TOLAC, and (2) delivering with or without epidural pain relief. These decisions were selected as representing different levels of associated medical risks and controversial patient views (Cox 2014; Parajian 2016), hence posing different decision difficulty to the patients. Within a 30-day window, we identified 1,400 threads directly relevant to the two decisions. A stratified random sample of 600 threads was drawn from the posts to form the dataset for analysis.

Using existing research (Zeelenberg and Pieters 2007; Koole 2009) combined with close reading of the excerpts, we identified categories related to our research questions. We coded for the following categories: indication of existing preference, change in preference due to community advice, emotions experienced during the decision-making process (fear, anxiety, regret), and coping strategies used to deal with negative emotions (decision justification, responsibility transfer, avoiding feedback about the forgone alternatives, etc.). A difference in proportions test was used to test for differences in dependent variables (procedure choice, emotions, types of support sought) across two independent variables: level of risk associated with the procedure and prevalence of the procedure in medical practice.

Results

Preliminary results indicate that patients often start a community thread with a planned course of action or a preference towards one option. In many cases, they are looking for both informational and emotional support, to confirm that they’ve chosen the right path. At times, participants draw on community emotional resources to understand and potentially disagree with a course of action set by a physician. Specifically, we find that consumers who prefer a non-prevalent childbirth choice are more likely to turn to online commu-

nities to seek information and support on how to deal with the formal health care system (medical doctors, hospitals, etc.), compared to consumers who prefer a more prevalent procedure. Thus, consumers tend to post in online health communities in order to gain support for already formed preferences, rather than to initiate a search for information with no clear a priori inclination.

In parallel to the above analysis, we scanned discussion threads to extract longitudinal data, defined as a sequence of multiple posts by a single participant, often over several years. This approach allowed us to track an individual’s decision journey from initial considerations, through consideration of decision alternatives, to the decision outcome and beyond (when moms evaluate their decision or offer advice to others). This approach provides an in-depth understanding of how engagement with online communities evolves over time.

Conclusion

Our research contributes to understanding of patient participation in online health communities. We aim to demonstrate which coping strategies, realized through online community participation, help medical consumers feel better prepared and more confident to take an active role in making difficult choices about their healthcare.

Empowering Patients as Decision-Makers in the Context of Early Stage Prostate Cancer

EXTENDED ABSTRACT

Sometimes, the right treatment choice depends on both medical factors and patients’ preferences, such as risk aversion and tolerance of ambiguity (Muller-Engelmann et al. 2011). For example, patients with early stage prostate cancer (the context of this study) must choose whether to receive active treatment or active surveillance, each of which is associated with unique risks and benefits. Active treatment can cause erectile dysfunction and may not be good for patients with a high interest in sex, whereas surveillance requires living with untreated cancer and may not be good for patients with high cancer anxiety (Thompson et al. 2007). In these settings, consumer behavior theory can help us better understand how patients evaluate their alternatives, interact with physicians, and choose treatments. Ideally, patients and their physicians work together to determine which treatment alternative best fits patients’ preferences (Karni 2009). In this way, patients become empowered medical consumers.

Unfortunately, baseline rates of patient empowerment are relatively low (e.g., Barry and Engman-Levitan 2012). This is partly due to information asymmetry between patients and physicians, such that patients do not feel qualified to participate during appointments (Gafni, Charles, and Whelan 1998). Decision aids (DAs), often in the form of information pamphlets, can educate patients and decrease this asymmetry. Unfortunately, within the context of prostate cancer, DAs fail to consistently improve key outcome variables, such as knowledge and decision confidence (Violette et al. 2015).

In this research, we use consumer behavior theory on information processing, learning, and types of knowledge to develop and test the effectiveness of two unique interventions that aim to empower patients as medical consumers.

Study 1

We conducted a randomized controlled trial to examine the effect of increasing declarative knowledge via an empowering (vs. standard) DA on patient participation in the decision making process. Both DAs provided similar clinical information but differed in three key ways. The empowering DA was written at a lower reading

level; utilized research on choice architecture and framing to better present information; and contained balanced patient testimonials about their decision making experience. In these ways, we followed the guidelines of “ethically responsible choice architecture” (Blumenthal-Barby, Lee, and Volk 2015). We predicted that patients who received the empowering DA would have higher knowledge and increased desire to participate in the decision making process. As a result, physicians’ recommendations would be more influenced by patients’ values (i.e., prostate cancer related anxiety and interest in sex) in addition to medical factors (i.e., age and cancer severity). We also predicted that the empowering DA would increase the frequency with which patients and physicians discussed sex, information that should inform patients’ decisions in this setting.

We recruited patients from four Veterans Affairs Medical Centers and randomly assigned them to an empowering or standard DA condition. Patients ($n = 285$) completed surveys prior to the appointments in which they learned their diagnoses but after reading their DAs. Clinical appointments were recorded, transcribed, and coded for physicians’ recommendations and discussions of sex using deductive content analysis. Treatment choice and medical factors were assessed via chart review. As expected, the empowering DA increased patients’ knowledge ($F(1, 248) = 5.41, p = .021$) and desire to participate in the decision making process ($F(1, 247) = 5.91, p = .016$). However, logistic regression revealed that, regardless of condition, physicians’ recommendations were heavily influenced by medical factors and not patients’ values. In addition, regardless of condition, physicians rarely discussed sex-related topics (13% of appointments).

Our results suggest that increasing patients’ knowledge and their desire to participate in decision making via an empowering (vs. standard) DA may not be sufficient to transform patients into truly empowered consumers. In Study 2, we drill down further into the decision process by considering whether adding procedural knowledge (*how* to participate in the decision process) to declarative knowledge (*what* the decision process entails) would more fully empower patients (Brucks 1986).

Study 2

We conducted another randomized controlled trial to examine the effect of increasing both procedural and declarative knowledge (empowering DA plus DVD) versus declarative knowledge alone (empowering DA only) on patient participation in the decision-making process. The DVD was designed to teach patients specific communication skills to interact with their physicians during clinical appointments. We predicted that increasing procedural knowledge would increase patients’ ability to actively participate during clinical appointments, and, ultimately, increase the likelihood that their treatment choices reflected their personal preferences.

We recruited participants from one academic medical center and randomized them to the procedural plus declarative knowledge or the declarative knowledge only condition. Patients diagnosed with early stage prostate cancer ($n = 208$) completed surveys prior to the appointments in which they learned their diagnoses but after reading/watching the DA/DVD. Clinical appointments were recorded and transcribed. Treatment choice and medical factors were assessed via chart review. As predicted, patients in the procedural plus declarative knowledge condition expressed higher confidence that they would participate in their upcoming appointment ($F(1, 190) = 7.61, p = .006$). Also as expected, actual knowledge did not differ between conditions ($F(1, 192) = .44, p = .51$), consistent with our conceptualization that the DVD intervention increased implemental (not declarative) knowledge.

We are now conducting qualitative analyses of the recorded clinical appointments to determine if patients in the procedural plus declarative knowledge condition actually had higher participation (e.g., information seeking) during the appointments. Through an iterative process, we have refined the coding system, established reliability and are currently coding the transcripts. We then plan on using a similar approach to Study 1 to examine the impact of the intervention on the likelihood that patients’ treatment choices incorporated their preferences, and, if so, will test whether this was mediated by increased participation during clinical appointments.

Conclusion

We designed and tested two interventions (inspired by consumer behavior research) that aimed to transform patients into empowered consumers. We thus bridge the gap between consumer behavior theory and medical practice, providing important insights into how we might empower patients in the context of preference-sensitive medical decisions.

The Neonatal Intensive Care Unit as an Assembled Servicescape: How do Technological Actors Affect Parent/Staff Decision-Making?

EXTENDED ABSTRACT

This study compares neonatal intensive care units (NICU) in three countries to analyze how variations in the presentation of medical technology in the servicescape impact parent/medical staff decision making. We conduct observations of NICUs in the U.S., Finland and India, interviews, in situ conversations, attendance at medical conferences, participation in an international multi-disciplinary NICU research group, and ethnography in process.

NICU and pediatric ICUs have been used as a context in the marketing and consumer behavior literature on difficult decision making at end-of-life (Botti, Orfali, & Iyengar 2009; Orfali and Gordon 2004; Luce, Bettman and Payne 2001). However, the vast majority of babies admitted to the NICU are discharged home to their families (Flacking et al. 2012; March of Dimes 2011). These parental medical consumers have received scant interest from marketing scholars. This is a surprising omission, given that >10% of births result in special care nursery stays in the US and Western Europe (Axelin et al. 2015; March of Dimes 2011). Studies have not explored from a marketing, consumer behavior, or managerial vantage, how these parents become proactively engaged decision makers around the materiality and design of the NICU technology before bringing their babies home.

The NICU staff faces the challenge of providing excellent care without compromising parent-child bonding during extreme care and stress-filled circumstances. All actors in the NICU—human and non-human—are interrelated and fluidly co-produce the servicescape (Bennett 2010; DeLanda 2006; Deleuze and Guattari 1987; Latour 2005; Sassen 2006, Joiner and Lusch 2016). Although medical professionals work in systems coproducing health and healing with their patients, their patients’ families, and a number of support circles (Arnould 2007; Joiner and Lusch 2016), and despite the “family-centered care” movement gaining ground since the 1990’s (Levin and Chalmers 2014; Chalmers 2002, WHO 2015), many parents in NICUs still feel a loss of personal control and limited understanding of what is occurring. Technology and advanced medical equipment looms large and often feels “scary” and “confusing.”

Our research question is: How do highly technical and stress infused servicescapes impact NICU parents’ ability to be active decision-makers with the medical team? And more specifically: How

can NICU servicescapes mitigate the impact of the medicalization of the infant to foster better healthcare decision making in the NICU and beyond?

Our data show that in the United States NICU where the medical technology is front-and-center, parents “medicalize” themselves to learn the machines, the medical language, and use the “medical gaze” to interact with their medicalized baby and medical staff (Foucault 2012/1973; 1977). The nurses and doctors often look not to the baby, but to the machines to see how the baby is doing and to make decisions. The parents follow suit. The medicalization process for parents includes assessing their child through the technological assemblage of monitors, alarms, electrodes, IV pump status, and ventilator settings, to name just a few. Upon release from the hospital, in fact, parents feel scared by the lack of equipment and objective ways to assess their baby. Although they can be heavily involved with medical decisions once they can “talk the talk” to be “part of the team,” parents have little to no say of when their baby is released, and often end their NICU stay with an ironic trepidation over the lack of technological entanglement.

In contrast, in the Finnish NICU, parents are taught to talk to their babies and not look to the monitors. They can hold their babies for skin-to-skin contact 24-7 if desired, and sleep in the room if there are available beds. Parents are also given an extended period of time to “room in” with their baby in bedrooms at the hospital—without any monitors—before they go home. They actively participate in decision making by telling staff when they feel comfortable going home. They stay on, rooming with their baby without monitors, in the unit, until they do. There is less of a sense of medicalization of parents and baby, and less angst upon discharge.

In contrast to Western NICUs, in India there is minimal focus on medical equipment and bedsides and unobtrusive monitors, which in many cases may be minimal or nonexistent. However, the parents cannot enter the NICU (which may not even be called a NICU) due to the hospital’s fear of sepsis (infection). The babies are brought out from inside the NICU to visit the extended family when staff feels the babies are stable enough, generally with minimal technological equipment at that point. The doctors and nurses become surrogate parents, staying highly engaged with the baby physically, preferring to interact with the child directly rather than interact with the technology, providing ritual massage, and holding or carrying the baby when it is fussy. Decisions involving referral and discharge are highly fluid, depending on available NICU capacity, the seriousness of the condition and the financial status of the family.

We find that parents in the US NICU make decisions more confidently when they achieve a Foucauldian medicalized state and could discuss their baby’s care with staff using formal medical terminology. Parents in the Finnish NICU made decisions more confidently when they were de-medicalized and taught to look to their babies as a baby, not a patient. Indian parents are never medicalized and have no part in medical decisions, with the occasional exception of termination of care when patients run out of funds.

In conclusion, our initial sample findings of three NICUs in the US, Finland and India reveal that parental decision making can be enhanced in a high-tech environment by assuring parents learn the medical terminology and procedures. However, whether it is beneficial to have parents act as medical staff and see their newborn with Foucault’s medical gaze remains to be seen. It also appears that parental decision making can be enhanced by toning down the technological equipment presence and teaching family how to parent a neonatal patient as they would a non-hospitalized baby. Further work is needed to study decision making in more stratified hospitals in each country.

Exploring Patient-Provider Relationships in Preference-Based Health Care Choices

EXTENDED ABSTRACT

Many health care related decisions can be complex because they are not always driven by evidence-based prescriptions from a health care provider, such as a physician, but are preference-based, where the patient often has a range of treatments to choose from. In such instances, the relationship between the physician and patient is even more consequential. Scholarship outside of consumer research has detailed different models of patient-health care provider relationships (e.g., Emanuel and Emanuel 1992; Ballard-Reisch 1990), differentiated patient roles in medical decision-making (Orfali 2004; Thomson et al. 2013), and measured patient autonomy in health care (Stiggelbout et al. 2004), among many other important aspects. For example, Emanuel and Emanuel (1992) identify four different models of patient-physician relationships. The paternalistic model advocates the primacy of the physician irrespective of the patient’s preferences while an informative model advocates for the physician to simply present factual information. In an interpretive model, information is presented but care is provided based on eliciting the patient’s values. Lastly, in a deliberative model, which the authors identify as “ideal,” the physician provides information, assesses patient’s values, and persuades the patient through dialogue on the best-perceived course of care. In contrast, Ballard-Reisch (1992) advocates for a model of participative decision making with four relational types with regard to the physician—patient abdication, collaboration, patient autonomy, and relationship termination. While this research from medicine and health communications is useful in shedding light on the different types of patient-physician relationships, they do not capture the full range of relationships that patients may have with providers, nor do they consider the role of the market. Moreover, in the last two decades, discourses regarding medicine, health care, and the role of the “consumer” in society have shifted. Factors such as vast online informational resources as well as online support groups serve to fundamentally change the way patients approach their health care.

Thus, in this research, we ask, what is the patient-provider relationship dynamic as consumers engage in difficult, preference-based choices with regard to their health care? We explore these questions within the context of individuals seeking infertility treatment, a context that often involves extended, emotionally laden, high-risk interactions (Boshoff 2002) that are both costly and often times physically taxing. According to the Centers for Disease Control, infertility is defined as the inability to conceive a baby within one year of trying (www.cdc.gov/ART). Average cost of treatments can start at thousands of dollars (Marchione 2012) and often require multiple tries, entailing a range of treatments that can be pursued by individuals and couples seeking to have a child.

In-depth, semi-structured personal interviews using grand tour questions (McCracken 1988) with 26 informants were conducted, which allowed us to acquire patients’ narratives of their experiences with health care providers. Interviews with 26 individuals (mostly women) generated over 450 pages of text. While seeking patterns in the data we reflexively read the relevant literature (i.e. dialectical tacking; Strauss and Corbin 1998). Using data from informants engaged with various types of infertility services, the researchers identified how consumers engage with health care providers as they make difficult choices in their health care.

Findings outline the saliency of many of the models of patient-provider relationships identified in past research (e.g., Emanuel and Emanuel 1992; Ballard-Reisch 1990). In addition, these decisions

are not made in isolation; thus, the research reveals other influencers on the choices consumers make in this context, as well as the tools that aid in making preference-based medical decisions. In addition to interactions with the physicians and key other health providers, close loved ones, information resources, as well as a belief in higher powers, such as God, were critical during the decision-making and coping processes.

However, what this research contributes is that a new type of patient-provider relationship is identified, not previously captured by these past studies. While past research has discussed patient-provider relations whereby the patient acts autonomously, "shopping" for doctors or treatments (Ballard-Reisch 1990) or engages in co creation of value (McCull-Kennedy et al. 2012), we illustrate how some consumers go even further to regard the health care provider as rather inconsequential, or what we label as the Peripheral Model. These patients' relationships with their providers are unique across four distinct dimensions that Emanuel and Emanuel (1992) identify as critical in understanding patient-physician relationships: 1. goals of the patient-physician interaction; 2. physician's obligations; 3. role of the patient's values; and 4. patient autonomy. Some consumers engage in entrepreneurial activities to diagnose, treat and even create consumer choices and marketplace options that did not previously exist for them. That is, if consumers do not attain what they seek from the physician in terms of what they perceive are the best chances for a successful outcome, they seek out other opportunities. The physician's role and obligation are minimized, the patient's agenda takes precedence and they autonomously seek out and/or create alternative options in the marketplace. Another manifestation of the provider in the Peripheral Model is when patients perceive that the physician played a largely limited role in their decision making process. One informant characterizes the role of the physician as, "just there to do the tests and leave." While in these cases, the patient may have hoped for more interaction, they perceive the physician as fulfilling the minimum obligation with little discussion of values, and thus, the patient relies on others (e.g. nurses) for support.

In sum, while patient-provider relationships are key in health care services, particularly in preference-based decisions, traditional models of patient-physician relationships previously identified in research do not always capture the full range of consumers' experiences. Thus, by identifying the Peripheral Model, the current research holds theoretical implications as it examines the saliency of typologies of patient-provider relationships from medicine and health communications while identifying a new model of relationship. Further, understanding the ways in which patients behave outside the traditional models of patient-physician relationships can help to illuminate ways to enhance the patient experience and well being in these contexts.

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From Sound to Text, the Wide Dependence of Consumer Decision Making on Language

Chairs: Ann Kronrod, Boston University, USA

Tina M. Lowrey, HEC Paris, France

Paper #1: Vipiz is Fast, Vopoz is Slow: Phonetic Symbolism is the Way to Go!

Stacey Baxter, University of Newcastle, Australia
Jasmina Ilicic, Monash University, Australia
Alicia Kulczynski, University of Newcastle, Australia
Tina M. Lowrey, HEC Paris, France

Paper #2: From Language to Behavior: Verbs Lead to Consumer Action

Yan Meng, University of New York, USA
David Luna, Baruch College, USA
Sandor Czellar, University of Lausanne, Switzerland

Paper #3: Everyone Likes This Movie! Consensus Language Increases the Influence of Weak Ties over Strong Ties in Product Recommendations

Jeff Lee, MIT, USA
Ann Kronrod, Boston University, USA

Paper #4: The Hidden Costs of Paying Your Reviewers: How Incentives Affect the Language of Online Reviews and Subsequently their Perceived Helpfulness and their Persuasiveness

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SESSION OVERVIEW

This session reflects the increasing interest and need for research on language in marketing. Advancing our understanding of the inseparable connection between language and consumer decision-making, the papers address the questions: How does language impact and sometimes *sway* consumption decisions and perceptions? What elements of language are the source of this influence? What conclusions can marketers derive from findings of language research in marketing? Together, the works illustrate how every word, and even every sound, can influence consumer perceptions, decisions, and actions. The four papers are organized by ascending order of language element size, starting with sounds, continuing with words, through phrases, and all the way to texts.

Baxter, Ilicic, Kulczynski and Lowrey will reveal novel discoveries in *sound* symbolism. The authors find that children with lower phonological ability (e.g. identifying word sounds) are less able to infer brand attributes based on the sounds of brand names, but this ability can be instantly improved through in-ad games. This finding is especially relevant today, when children are more involved in family consumption decisions, and when many brand names are meaningless and people infer their meaning based on their sound. Meng, Czellar and Luna focus on *words*. The authors demonstrate that using verbs in marketing communication (“grasp it with ease”) leads consumers to take immediate actions, such as clicking a link, whereas nouns (“easy grip”) lead to delayed action. The authors explain this link demonstrating that verbs activate an implemental mindset that leads to immediate action. Lee and Kronrod’s work takes us to the *phrase* level. This work focuses on the way consensus phrases used by social network participants, such as “everyone likes this movie,” change the way strong and weak ties influence our consumption decisions. While people usually rely on opinions of strong ties, when consensus phrases are used, weak ties achieve higher persua-

siveness than strong ties. The authors demonstrate that this is because a consensus expression is interpreted as relating to a larger group when mentioned by a weak tie, compared with a strong tie. Lastly, Willemsen, Verlegh and Zwinkels focus on *texts*. The authors find that, compared with small/no incentives, large incentives change the language consumers use in their product reviews, such as adding aesthetic elements, more emotional and less rational arguments, etc. However, readers deem these reviews less useful than unrewarded reviews, and they elicit lower purchase intentions. The authors make an exciting discovery which bears relevance to today’s practice of offering smaller and larger incentives to consumers to leave product reviews.

Together the works in this session highlight the dominant role of language in consumer behavior and propose important insights for marketing theory and practice on all levels of language inquiry. The developing interest in learning about consumers from analyzing textual Big Data promises a wide turnout for this session. As ACR2016 in Berlin reflects an especially multinational and naturally multilingual assembly, this session expects broad discussion among attendants interested in marketing analytics, communication, advertising, branding, and in particular those who got the Wanderlust virus.

Vipiz is Fast, Vopoz is Slow: Phonetic Symbolism is the Way to Go!

EXTENDED ABSTRACT

Marketing research on phonetic symbolism has studied both application (i.e., using sounds in brand names to enhance preferences and signal attributes) and process. Yorkston and Menon (2004) identified phonetic symbolism as an automatic phenomenon for adults. Recent research, however, shows these effects are developmental and rely on the acquisition of language-based skills. Baxter, Kulczynski, and Ilicic (2014) demonstrated that only older children (above 10 years old) possess proficiencies for phonetic-based judgments. This research contributes by examining developmental differences in children’s phonological awareness (an ability to recognize sounds in words) on phonetic-based inferences. It is proposed that an awareness of phonemes can be primed, enhancing phonetic symbolism effects in children with lower levels of phonological awareness.

Study 1 demonstrated the moderating effect of phonological awareness on product evaluations. It was expected that effects consistent with phonetic symbolism theory would strengthen as phonological awareness heightens. Participants were 161 Australian children (ages 6-16) in a between-subjects experiment (82 male, 79 female; $M_{\text{age}} = 9.45$). Participants were shown a print advertisement for a fictitious scooter (Vipiz/Vopoz). Participants evaluated the scooter’s speed/weight/size (7-point scales), then completed a phoneme-counting task to assess phonological awareness (3 practice words/20 test words, e.g., “butter has how many sounds in it?”). A Product Attribute Index (PAI) was created, combining participants’ judgments of speed/weight/size. Results (PROCESS, $n = 10\,000$, Model 1) demonstrated that neither product size ($\beta = .253, p = .221$) nor phonological awareness ($\beta = .014, p = .102$) were significant predictors of product attribute evaluations. However, phonological awareness was a significant moderator of judgments ($\beta = -.070, p = .031, R^2\Delta = .028$). Simple effects analysis showed that the ‘Vipiz’ scooter was perceived as faster/lighter/smaller than the ‘Vopoz’ scooter; however, this effect was not found in low phonological awareness children.

Study 2 examined whether exposure to a phonological awareness priming task influenced product evaluations. Participants were 184 Australian children (105 male, 79 female; $M_{\text{age}} = 9.40$) in a 2 (task-first vs. task-last) \times 2 (front- vs. back-vowel) factorial experiment. Participants in the task-first conditions completed a phoneme-counting task, were then shown a print advertisement for ice-cream (Fipple/Fupple), and asked to evaluate the ice-cream's hardness/smoothness/creaminess (7-point scales; creating a PAI). Participants in the task-last conditions viewed the print advertisement, completed the product evaluations, then completed the phoneme-counting task. It was expected that completing the phoneme-counting task prior to product evaluations would act as a prime, strengthening phonetic symbolism effects for children low in phonological awareness, by heightening their recognition of phonemes. An ANOVA model was estimated with a significant main effect for vowel sound ($F(1, 180) = 16.09, p < .001$). Consistent with theory, a product paired with a brand name containing a back (front) vowel was perceived as more (less) soft/smooth/creamy (Back Vowel: $M_{\text{PAI}} = 4.63$; Front Vowel: $M_{\text{PAI}} = 3.88$). No other significant main or interaction effects were observed. Next, results (PROCESS, $n = 10\,000$, Model 3) demonstrated that task order ($\beta = -3.96, p = .034$) and phonological awareness ($\beta = -.128, p = .046$) were significant predictors of phonetic-based judgments. As expected, a significant three-way interaction was observed between product size, task sequence, and phonological awareness ($\beta = -.317, p = .038, R^2\Delta = .022$). Results of simple effect analysis demonstrated that the interaction (brand name \times task sequence) did not have a significant effect on phonetic-based judgments for participants with higher levels of phonological awareness; however, it was significant at lower levels of phonological awareness.

Study 3 demonstrated the effectiveness of phonological priming in a marketing context, embedding aspects of a phonological awareness task in a game-based print advertisement. Participants were 186 Australian children (106 male, 80 female; $M_{\text{age}} = 9.51, SD = 2.57$) in a 2 (embedded task vs. absent) \times 2 (front- vs. back-vowel) factorial experiment. Participants were shown a print advertisement for a ball paired with a brand name (Inik/Onok). A phonological awareness task was absent or embedded in the advertisement. Participants evaluated the ball's hardness/lightness/size (7-point scales; creating a PAI). Participants then completed a phoneme-counting task. ANOVA results revealed a significant main effect for vowel sound ($F(1, 186) = 30.72, p < .001$). It was posited that the priming effect of an embedded phonological awareness task would be stronger for those who have lower levels of phonological awareness. Consistent with theory, a product paired with a name containing a front (back) vowel was perceived as more (less) small/light/hard (Back Vowel: $M_{\text{PAI}} = 3.46$; Front Vowel: $M_{\text{PAI}} = 4.10$). As anticipated, a significant interaction was found between vowel sound and task presence ($F(1, 186) = 5.72, p = .018, \eta^2 = .030$), whereby effects consistent with theory were strengthened for participants exposed to elements of a phonological awareness task (embedded in the advertisement) prior to providing product attribute evaluations. Further, results (PROCESS, $n = 10\,000$, Model 3) revealed that phonological prime ($\beta = .488, p = .048$) and product weight ($\beta = .610, p = .026$) were significant predictors of product judgments. As expected, a significant three-way interaction was observed between product size, phonological prime, and phonological awareness ($\beta = .044, p = .014, R^2\Delta = .011$). Consistent with Study 2, results of simple effects analysis demonstrated that the interaction (product weight and phonological prime) did not have a significant effect on product evaluations at higher phonological awareness levels, but was significant at lower levels.

In conclusion, this research builds on the current understanding of the process underlying sound symbolism effects. Results reveal

that children with lower levels of phonological awareness are unable to formulate phonetic-based judgments consistent with theory, but phonological awareness priming overcomes developmental language-based barriers, supporting phonetic symbolism effects in early developmental groups. Phonological awareness tasks encourage children with low levels of phonological awareness to become aware of sounds in words. For children high in phonological awareness, such priming had no impact on phonetic symbolism effects. These results provide marketers with a method to overcome boundaries of phonetic symbolism effects in branded communications targeted towards children.

From Language to Behavior: Verbs Lead to Consumer Action

EXTENDED ABSTRACT

Consider an online display ad for Aston-Martin with the tagline "Power. Beauty. Soul." Will it lead to more clicks than Jaguar's "Born to perform"? This research provides an answer to that question (verbs lead to higher click through rates than nouns), and explains the psychological process underlying the phenomenon (verbs activate an implemental mindset that leads to immediate action). The growing body of research on the marketing effects of language has devoted little attention to the direct influence of language on consumer actions or choice (for exceptions, see Cheema and Patrick 2008; Kronrod et al., 2012a; Schmitt and Zhang 1998). Our six studies provide empirical evidence that the type of words used by marketers can influence consumer actions. According to neuroscience research, verb processing should result in a pattern of brain activation similar to when individuals actually perform actions. This is because verbs are linked to the frontal lobe of the brain. The frontal lobe includes motor and premotor areas that process actions (Damasio and Tranel 1993; Daniele et al. 1994; Warrington and McCarthy 1987). Therefore, verbs, compared to nouns, should have a stronger mental association with actions and an implemental (vs. deliberative) mindset. In related research, Albarracín et al. (2008) describes how priming individuals with action-oriented words (e.g., *go, movement*) instead of inaction words (e.g., *stop, blockage*) leads to the activation of action goals, which results in a higher likelihood of individuals performing any action that is presented to them. We suggest this is not always the case, and that the lexical category of the action word (verb vs. noun) matters in choice situations because verbs lead consumers to acting now rather than later, even if acting later might include an action of greater magnitude. This is because verbs activate an implemental mindset vs. a deliberative mindset.

Study 1

We designed a study based on the Implicit Association Test (IAT; Greenwald, McGhee, and Schwartz 1998). As predicted, participants responded significantly faster when associating verbs to actions ($M=1282.49\text{ms}$) than when associating nouns to actions ($M=1525.34\text{ms}, t(133) = -7.00, p < .001$). They also responded significantly faster when associating nouns to objects than when associating verbs to objects ($d = .345, p < .001$).

Study 2

Respondents must choose the best of several mobile phone plans, given a scenario of how they supposedly use the phone. We investigate whether priming respondents with action verbs leads to choosing (a) the fast, easy option of a flat-rate, unlimited mobile plan, or (b) the optimal plan that fits their usage scenario. The latter option would require effort—that is, comparing attributes and analyzing the fit of the plan with the usage scenario. Choosing the unlimited plan

would be consistent with an implemental mindset and choosing the optimal option would be consistent with a deliberative mindset.

Method

Respondents are primed with one of four conditions in a 2 (Lexical category: verbs vs. nouns) x 2 (Goal activation: Action vs. Inaction words). Four mobile phone plans are presented to the respondents simultaneously and they are asked to choose one given a scenario specifying usage.

Results

A significant interaction ($\chi^2(1, N = 74) = 3.66; p < .05$) shows that action verbs priming made people choose the easy/default/no-effort option (62%) more often than the optimal plan (38%). The effect of action goals vs. inaction goals is moderated by lexical category: nouns do not experience an action goal effect. Verbs appear to lead to an implemental mindset. We provide evidence of the moderating role of lexical category on Albarracín et al.'s (2008) findings in a consumer choice context.

Study 3

Here we further investigate whether consumers exposed to a verb-intensive ad are more likely to take immediate action than consumers exposed to a noun-intensive ad. All verbs used are action verbs. We also examine the process underlying the effect. Because verbs represent actions, the activation of verbs will result in an implemental mindset (Gollwitzer and Bayer 1999), which will lead to consumer action.

Method

Participants saw an ad that consisted of an image of an identical pen accompanied by either verb-intensive copy (e.g. writes smoothly; grasp it with ease) or noun-intensive copy (e.g. smooth ink stream; precise grip). After seeing the ad, participants were told that they were about to make a real choice and would receive a pen from the experimenter. They could either (a) get the advertised pen right away by clicking on a button on the screen, or (b) click on another button to go to another screen where they could find information about a larger set of pens they could choose from. Our dependent measure was whether they chose the pen right away or delayed their choice to search for further information on the other pens. Clicking to choose the pen immediately would be consistent with an implemental mindset. Participants then listed the thoughts that came to their minds during the choice task. Next, they performed a lexical decision task (Lemhöfer and Dijkstra 2004), consisting of classifying stimuli on a computer screen as words (including several implemental verbs; e.g., decide and take) or non-words.

Results

In the verb condition, participants were more likely to choose the advertised pen right away compared with participants in the noun condition ($M_{verb} = 44\%$ vs. $M_{noun} = 29\%$; $\chi^2(1, N = 175) = 4.23; p < .05$). Also in the verb condition, implemental verbs were more accessible in participants' minds, as shown by the thoughts measure and the results from the lexical decision task.

Studies 4-5 (Field Studies)

Study 4 consisted of placing two versions of a display ad, verb- and noun-intensive, in the Google network. We found that the verb-intensive ad led to a higher click-through rate ($M_{verb} = .51\%$ vs. $M_{noun} = .44\%$; $\chi^2(1, N = 144,430) = 4.13; p < .05$). Study 5 found that consumers tended to pick up more often a printed flyer when it included a high incidence of verbs ($M_{verb} = 1.58, S.D. = .67$ vs. $M_{noun} = .91, S.D. = .94; F(1,21) = 3.96, p = .06$).

We make the connection between psycholinguistic theory and the behavior of consumers and qualify previous research on the ac-

tivation of general action goals in response to action words. We provide evidence that using verbs in marketing communications leads to immediate (versus delayed) action and product choice, sometimes resulting in suboptimal choices. Such verb-behavior connections predominantly exist when consumers are in low-elaboration purchase situations (e. g., high cognitive load). The effect of verbs on behavior is mediated by the activation of an implemental mindset.

Everyone Likes This Movie! Consensus Language Increases the Influence of Weak Ties over Strong Ties in Product Recommendations

EXTENDED ABSTRACT

When making decisions about products, people often rely on the opinion of close ties (friends, family) more than on weak ties (casual acquaintances) (Alvaro and Crano, 1997; Cialdini and Goldstein, 2004; David and Turner, 2001). But in some cases weak ties may be more influential (Granovetter, 1973; Kim, Zhang, and Li, 2008). We suggest that one such case is when a tie refers to public consensus (e.g. "everybody has seen this movie", Drew, 2003). We predict that in this situation, *weak* ties may be more influential than strong ties, because consensus expressed by a weak tie is perceived to convey the attitudes and behaviors of a larger network of individuals, implying greater consensus about the product. Further, we suggest that referring to consensus is useful in contexts where a person benefits from conforming to the norm. For instance, when recommending products that bear social risk, such as public consumption products (e.g. Fawcett and Miller 1975), weak ties that use consensus expressions may have an especially strong influence. In four studies, we examine the role of weak ties in influencing judgments and decisions on public consumption products (Studies 1 and 2) and public behaviors (Studies 3 and 4).

In **Study 1**, 206 MTurk participants were assigned to one of four conditions in a 2 (tie-strength: weaker/stronger) x 2 (consensus: yes/no) between-subjects design. Consistent with previous conceptualizations of tie-strength in consumer research (Ryu & Feick, 2007; Zhang, Feick, & Mittal, 2014), participants were first told to provide the first name of either their closest friend (stronger-tie) or a casual acquaintance (weaker-tie). Next, participants read a hypothetical tweet from the person about a new film, containing consensus or no-consensus language ("This is the film everybody is (my friends are) talking about"). Participants estimated the general consensus about the film (e.g. the percentage of the population that would eventually see it). A 2-way ANOVA revealed the predicted interaction ($F(1,202)=6.96, p<.01$): In the consensus language condition, weaker ties generated higher consensus in their statements ($M=64.1$) than stronger ties ($M=52.6; F(1,202)=6.92, p<.01$). However in the no-consensus language condition, participants did not differ in their consensus perceptions whether they read the phrase as tweeted by a weaker tie ($M=54.8$) or a stronger tie ($M=60.0; F(1,202)=1.19, p<.1$).

In **Study 2**, we hypothesized that weaker ties using consensus language would be more influential in the case of public (versus private) consumption. We assigned 340 MTurk participants to one of eight conditions in a 2 (tie-strength: weaker/stronger) x 2 (consensus: yes/no) x 2 (product framing: public vs. private) between-subjects design. Participants read about a hypothetical brand of cellphone cases. In the public condition, the case was described as a "trend setter," and with a "distinct, recognizable pattern;" in the private condition, the case was described as "durable," and with "advanced, protecting materials." As in study 1, participants first wrote the name of a weak/strong tie, and then imagined the person describing the phone case using/not using consensus language. Results revealed a three-way

interaction on behavioral intentions ($F(1,332)=7.59, p<.01$), product attitudes ($F(1,332)=4.95, p<.05$), and consensus ($F(1,332)=9.27, p<.01$). Specifically, participants who read consensus language from a weaker-tie expressed higher intentions to try the cell phone case ($M=5.39$) than participants who read such language from a stronger tie ($M=4.24$; $F(1,332)=14.00, p<.001$). However, this effect disappeared in the non-consensus language condition ($F(1,332)=0.14, p<.1$). A similar pattern of results was also found for product attitudes and consensus. Mediated moderation analysis (Hayes, 2013) suggests that perceived consensus mediates the effect of tie strength and language on product attitudes and on behavioral intentions.

In **Study 3**, we extend our previous findings to actual public decision-making. 185 undergraduate students in a lecture classroom participated in a 2 (tie-strength: weaker/stronger) \times 2 (decision: public/private) between-subjects design. Participants decided whether to pledge not to drink and drive, and depending on condition, their decision was either made public or remained private. Additionally, we told the students that we ran a preliminary survey on a few members of the classroom, and that a student next to them (stronger tie) or across the room from them (weaker tie) believed that “people are not signing this pledge.” Measures on closeness and frequency of interaction confirmed the effectiveness of our tie-strength manipulation. Furthermore, a log-linear analysis revealed a predicted interaction ($\chi^2(1)=4.55, p<.05$). In the public pledge condition, statements from weaker ties influenced the declining of the pledge ($M=16.3\%$) more than statements from strong ties ($M=4.1\%$, $\chi^2(1)=4.01, p<.05$). However, in the private pledge condition, students did not differ whether they read a statement from a weaker tie ($M=32.0\%$) or a stronger tie ($M=40.5\%$, $\chi^2(1)=0.67, p<.1$).

Study 4 builds on the results of Study 3 via a Facebook field experiment. 30 student confederates each sent Facebook messages to 10 strong and 10 weak ties, inviting them to click a link to a personality test; thus, messages were sent to 600 Facebook ties. Half of the students made a consensus reference (“everybody is talking about this test”) and the other half did not mention consensus. We created four “test” links according to the four conditions and counted the number of clicks on each link. While strong ties’ click rates nearly doubled (22.6% vs. 43.3%) when participants used consensus, weak ties’ click rates nearly quintupled with consensus reference (4.7% vs. 22.6%, $Z=-3.77, p<.001$). These results suggest that while weak ties may be less trustworthy in our link-forwarding context, their use of consensus expressions accelerates their social influence relative to similar use by strong ties.

Our findings suggest evidence of “the strength of weak ties” when weak ties use consensus language describing publicly consumed products or publicly-visible decisions. These findings hold across multiple, literature-based, conceptualizations of tie-strength and appear to be driven by the greater perceived scope of the consensus when expressed by weak ties. The moderation of the weak tie effect in public (versus private) contexts reflects the importance of weak tie consensus reference in contexts where impression management concerns may increase interest towards a product or a behavior.

The Hidden Costs of Paying Your Reviewers: How Incentives Affect the Language of Online Reviews and Subsequently their Perceived Helpfulness and their Persuasiveness

EXTENDED ABSTRACT

Online customer reviews (often referred to as eWOM) have a strong impact on product evaluations and sales (e.g., Babic et al., 2016). Such reviews are an important source of information for

consumers who are looking for information to assist them in their purchase decisions. Review platforms like Yelp!, Epinions and TripAdvisor, provide value to consumers as an independent sources of product information. To attract customer reviews, review platforms not only make it as easy as possible to provide reviews, but they may also provide incentives to consumers who place reviews on their website. But are such rewarded reviews equally helpful as unrewarded reviews? Recent research on incentives in word of mouth suggests that this is not the case: Verlegh, Ryu, Tuk and Feick (2013) have shown that rewarded referrals have less impact on other consumers than unrewarded referrals. Verlegh and colleagues suggest that this effect is due to a process in which the presence of rewards leads the audience to infer that the word of mouth was motivated by ulterior motives.

Of course, readers may not always be aware of the fact that a reviewer received a reward for placing a review. We argue, however, that this does not mean that rewarded reviews are equally effective as unrewarded ones, in this case. More specifically, we suggest that rewards may affect the language that is used by the reviewing consumers. Building on research on extrinsic versus intrinsic motivation, we expect that reviewers who are rewarded may invest less effort in the process (e.g., Deci & Ryan, 2012).

Several studies have examined the factors that make a review helpful to consumers (e.g., Pan & Zhang, 2011; Willemsen, Neijens, Bronner & de Ridder, 2011). This research has shown that reviews are regarded as more helpful when they are longer and contain more arguments (Pan & Zhang, 2011), and when they contain diverse arguments - similar to two-sidedness in advertising, are more balanced and *less* extreme, and make less use of rhetorical tactics aimed at persuasion (Willemsen et al., 2011).

In our **first Study**, we therefore investigate whether the extrinsic motivation that is induced by rewards may lead to reviews that are less helpful, because they are more extreme, contain less arguments and are shorter than unrewarded reviews. In addition, we will look at some of the textual characteristics that may result from investing less effort in one’s writing, such as grammatical errors, and a reduced use of structuring devices such as white spaces and appropriate punctuation. Such characteristics have been shown to reduce the value that readers attach to online comments (Otterbacher, 2011). Study 1 was a content analysis comparing reviews posted on an actual review website ($n=700$) during: (1) a period during which reviews were rewarded with a small incentive (5-dollar book voucher); (2) a period during which reviews were rewarded with a larger incentive (chance of winning an iPad); and (3) a non-promotional period. To analyze the content of the reviews, we developed a coding scheme based on prior research (Otterbacher, 2011; Willemsen et al., 2011), coding language use and other content characteristics. Two independent coders analyzed the reviews. We found that valence and average ratings were unaffected by incentives, but did find several of the expected differences in language use and paralinguistic features. Specifically, reviews from the large incentive period (vs. small and no-incentive) contained more paralinguistic elements that are commonly used to persuade an audience of a message. These included multiple punctuation (!!!), blank spaces, authority arguments (“I’m an expert”), and emotional arguments (“I love this product”). Also, these reviews were less likely to contain rational arguments (“the 4x-optical zoom gives vivid photos”).

Study 2 tested whether consumers are able to differentiate rewarded reviews from unrewarded reviews based on these linguistic characteristics, and furthermore, if these language differences affect review and product attitudes ($n=114$). To address this aim, we conducted a one-factor between-subjects experiment with two cells.

Participants were randomly exposed to a positive review from a restaurant with either (a) language characteristics from a rewarded review, or (b) language characteristics from an unrewarded review. Language characteristics were based on findings in study 1, and varied in the use of multiple punctuation cues (!!!), blank spaces, authority arguments (“*I have eaten in many similar restaurants*”), emotional arguments (“*I felt welcome*”), and rational arguments (i.e., discussing criteria for good food).

Results showed that rewarded reviews were considered less helpful than unrewarded reviews ($M = 4.43$ vs. $M = 5.12$, $F(1, 113) = 10.99$, $p < .001$) and raised lower purchase intentions ($M = 4.41$ vs. $M = 5.10$, $F(1, 113) = 12.32$, $p < .01$). Furthermore, helpfulness was found to mediate the effect of review type (rewarded/unrewarded) on purchase intention (estimate = $-.46$, 95% Bca = $-.80$; $-.19$), according to bootstrapping analyses (PROCESS, model 4, $n = 5000$).

Together these results suggest that rewarded reviews differ from unrewarded reviews in terms of linguistic and paralinguistic characteristics. These differences rendered rewarded reviews less helpful in the eyes of consumers, which has negative consequences for their intentions to purchase reviewed products.

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Fifty Shades of Sharing - Exploring the Darker Shades of Sharing

Chairs: Julie L. Ozanne, University of Melbourne, Australia
Ayalla Ruvio, Michigan State University, USA

Paper #1: Selfish Sharing

Russell Belk, York University, Canada

Paper #2: Mutually Assured Explanation: Advancing a Framework for the Sharing Economy

Alex Rose, Murray State University, USA

Paper #3: "People Like Us:" Negotiating Social Boundaries in House Swapping

Ye (Nicole) Yang, University of Melbourne, Australia
Julie L. Ozanne, University of Melbourne, Australia
Angela Paladino, University of Melbourne, Australia

Paper #4: Reciprocal Altruism as a Motivation for Sharing: Sharing Up versus Sharing Down

Ayalla Ruvio, Michigan State University, USA
Naomi Mandel, Arizona State University, USA
Elodie Gentina, Université de Lille, France

SESSION OVERVIEW

The concept of consumer sharing is attracting the attention of both researchers and practitioners given the growth of the sharing economy (Botsman and Rogers 2010; Gansky 2010). Sharing was originally defined as compassionate, socially inclusive, unselfish, communal behavior, reflecting our altruistic motives to help and connect with other people, with no expectations of reciprocity (Belk 2010; Benkler 2004). However, recent scholars question the adequacy of existing definitions and are noting a darker side of sharing (Arnould and Rose 2015; Appau, Ozanne, and Klein 2015; Botsman 2013).

This special session asks the question: how are different meanings of sharing socially constructed and when does sharing turn dark? By integrating a macro view of sharing in the context of the sharing economy with a micro view of sharing between individual consumers, and utilizing variety of methodological approaches, this session introduces new forms of sharing, expanding our knowledge about this important consumption phenomenon.

First, Belk explores selfish sharing, which addresses the darker side of sharing that moves away from its original definition of being a caring and inclusionary act. Belk posits that both providers and consumers exhibit utilitarian and selfish motives within many sharing economy services. He focuses on gated communities as a prototype of selfish sharing, showing that members of these communities use sharing within their communities to exclude others from enjoying the shared services.

Second, Yang, Ozanne, and Paladino explore the community of house swapping where strangers allow one another to live temporarily in their homes, arguably one of the most sacred possessions. Through their micro practices of cleaning and hospitality, consumers assert house swapping as altruistically driven exchange that exists outside market logics of commercial lodging services. Nevertheless, subtle practices exclude people who are not like us.

Third, Rose builds on work by Arnould and Rose (2015), Belk (2010; 2016), and Giesler (2008) in an effort to further disambiguate the breadth and depth of the sharing economy and its participants. By focusing on differences in actors (i.e. firms, consumers, workers) and modes of exchange of various contexts, the utility of the mutual-ity concept in both academic analysis of and business success in the sharing economy is demonstrated.

Finally, Ruvio, Mandel, and Gentina investigate the reciprocal altruistic motives of consumers when they consider with whom they share. In four experiments they demonstrate that sharing is a strategic social decision that leads people to share more with individuals perceived as superior (vs. inferior) to them in a specific domain of social comparison. This behavior is motivated by future expectations for gains, and similar to Belk's paper, questions the perception of sharing as an unselfish, nonreciprocal act.

Each of these papers highlights a different shade of sharing as a consumption phenomenon. Together they expand our understanding of consumer sharing and help push the boundaries of this emerging concept. This session offers potentially fruitful avenues for future research, and will appeal to ACR attendees interested in sharing, sharing economy, altruistic behavior, possessions and self-identity, among others.

Selfish Sharing

EXTENDED ABSTRACT

In the ideal form of "sharing in," inclusionary acts of allowing others to use our possessions as if they were their own are typically generous, caring, and even altruistic acts of kindness intended to help these other people. This is the sort of sharing that is found most often among family members, close kin, and sometimes among friends and neighbors (Belk 2010). At the opposite extreme lies egoistic sharing. While egoistic sharing is not necessarily intended to harm others, it is narrowly or grudgingly inclusionary and is often more concerned with getting "my share" and with excluding others who are not legally entitled to partake of the shared resources. One example is an antagonistic divorce in which each partner is intent on getting as much as they can and with having no further contact with the other party (McAlexander, Schouten, and Roberts 1993; McAlexander and Schouten 1996). This is one extreme of "sharing out."

Egoistic sharing also includes pseudo-sharing (Belk 2014) that involves mercenary short term rental. Such selfish pseudo-sharing uses "sharewashing" rhetoric to cloak the practice of rental in the more socially desirable, but unjustified, mantle of sharing (Belk 2014, forthcoming; Bardhi and Eckhardt 2015). The only differences between car rental companies like Avis and many "car sharing" companies like ZipCar is the length of rental, the places and process of gaining access, and the need for a membership. Both are selling temporary access and *not* the act of voluntarily sharing possessions with others in a caring and generous manner. Quite the opposite is true. Bardhi and Eckhardt (2012) found that ZipCar participants feel no sense of community with other members and fail to make an effort to return possessions prior drivers may have left behind in a vehicle. They instead want to penalize members who return a car later than promised or leave personal items inside.

It is not simply the act of charging a fee that differentiates altruistic sharing from more selfish pseudo-sharing. A small-scale neighborhood car sharing organization like Majorna in Göteborg, Sweden, operates without employees as its 300 members service the organization's 29 cars, run IT, and take care of day-to-day operations (Jonsson 2007). Members want to keep the organization small for fear that they would lose their ability to know all the other members. Similarly, it is not only the no-fee accommodation sharing service of CouchSurfing that provides social benefits to participants, but even

the fee-based service of AirBnB is found to often include sociality as well as a place to stay (Hellwig, Belk, and Morhart forthcoming). Nor, as the millions of participants in both CouchSurfing and AirBnB attest, is it the size of an organization that decouples caring from sharing. Rather, it appears to be the dominance of a utilitarian, egoistic, and selfish orientation among both providers and consumers of sharing services that makes the difference.

In this presentation I focus on a context where selfish sharing is the norm: gated communities. Although they are premised on sharing common resources like roads, swimming pools, landscaping, and guardhouses with fellow residents, gated community members focus more on uncaring exclusionary practices. This is true not only in the sense of excluding neighbors from outside the community like trick-or-treaters and Christmas carolers (National Report 2015), but they may even ban children living within the gated community from these neighborly caring practices (Ramirez 2013). The fears that attract people to buy into gated communities do not seem to abate once inside. Members feel little sense of community, install burglar alarms, and fail to participate in the homeowner associations to which they must belong (Choon-Piew 2007; Dinzey-Flores 2013), Low 2004).

Not only do residents of gated communities tend to engage in only selfish sharing, but developers and municipalities do as well. Because local governments can still collect property taxes without having to provide many services, gated communities are welcomed as cash cows (McKenzie 2006).

Using gated communities as an example, we can see how the growing global divide between rich and poor tends to promote selfish privatization in the name of sharing. Here too the retreat to egoistic “sharing” precludes caring and community. The promise of sharing is found to be inverted from being inclusionary to being another exclusionary neo-liberal practice.

Mutually Assured Explanation: Advancing a Framework for the Sharing Economy

EXTENDED ABSTRACT

As the name of this session, implies, the “sharing economy” has firmly positioned itself within academic discourse. Similarly, a perusal of the *New York Times* will reveal the extent to which the concept has reached a similar vantage point in the mainstream press. Despite this ubiquity, a great deal of the discussion seems to revolve around points of confusion with respect to the phenomenon. The argument presented here is that the theoretical framework of mutuality and possessive individualism introduced to consumer research by Giesler (2008) and elaborated in Arnould and Rose (2015) offers a comprehensive, accessible means of grasping, both analytically (e.g., for academics) and strategically (e.g., for managers), the sharing economy.

Before demonstrating the efficacy of the framework, it bears delving into four issues that seem to be consistently lost in the shuffle when discussions of the sharing economy occur. The first matter is to define what exactly it is that is being discussed, a definition of the subject matter as it were. That is, an economy—a system of resource circulation amongst a collection of actors. This rather elementary point is important because it fixes for us the often-elusive subject of our discussion: a group of people engaged in the activity of exchange. Second, what is being circulated? Money? Access? Obligation? Labor? Services?

The third issue, which follows from the first two, is an explicit recognition of the actors involved in the analysis. Again, this point seems more than a touch elementary, but many of the disputes one encounters in the literature seem to find their source in an ambiguity

about the actors involved in the specific analysis. Are we considering the role of exchange between consumers? Between brands and consumers? Between firms and workers? Between some combination of these?

Fourth, we must recall that economies do not occur in a vacuum. That is, none of these systems of resource circulation take place independently of a cultural context. Delineating the nature of that context sheds additional light on the issue. For instance, exchange of money between citizens of a country in the form of taxes might be viewed as a tyrannical imposition in one context, or in a benevolent cast as fair social redistribution in another.

The framework posits mutuality as a substitute for the nebulous sharing construct and juxtaposes it against another dominant trope, possessive individualism (Giesler 2008). Mutuality, otherwise identified as generalized exchange (Willer et al. 2011), is action that entails the assumption that another party would act toward the first in mutual fashion were their roles reversed. This assumption of mutuality rests on the actors’ understanding that they share a common sociality. Thus, mutuality is exchange action that rests on normative sociality, with the expectations attached thereto.

Opposite mutuality, the concept of possessive individualism is the normative underpinning of market exchange. Here, action entails the assumption that the actor maximize his/her own personal benefit. The obligation to receive dominates exchange and actions rest on an ethic of maximization. Possessive individualism lends itself to actions that disregard the shared social context, as its normative imperative is for the individual to control, own, and of course, maximize; it has given rise to conservative and capitalist agendas for these very reasons (Giesler 2008).

In her essay for *The Great Transition Initiative*, Schor beautifully articulates the potential of the theoretical framework, though not in explicit terms: “The key to making sharing economies just is to emphasize an explicit politics of sharing, as well as nurturing collective, public forms of sharing” (2014, p.11). In other words, sharing economies will succeed in their socially promising premise insofar as they are built on and foster mutuality, rather than possessive individualism. To illustrate, consider the following examples.

Lamberton and Rose examine commercial sharing programs, which they define as “marketer-managed systems that provide customers with the opportunity to enjoy product benefits without ownership” (2012, p.109). They find that consumers take a largely utilitarian view of services like Zipcar. Consider the actors: this is a consumer sharing system mediated by a firm. The resources circulating are filtered through an impersonal, private entity. That the possessive individualist norms dominate should thus come as little surprise, as the entire exchange is contextualized as a market transaction without any of the inscribed sociality one would expect from mutuality. Thus, social-like trust and cooperation had limited efficacy. Furthermore, the authors find that increasing familiarity with the sharing concept increases consumers’ propensity to participate. One might hazard to guess that this familiarity makes salient the sociality inherent in mutuality and thus shifts perceptions of the exchange.

On the other hand, my own field work in the craft beer industry reveals a network precisely the same: consumers, firms, and consumers. The difference, however, is that these craft brewers provide the social context for relationships develop; their market-mediated exchanges facilitate the grounds for sociality inherent in mutuality. As a result, I found solidarity amongst the consumers and favorable attributions about the brand by consumers, both to one another, to the brand, and to potential consumers. Each of these outcomes is theoretically consistent with the theory of the gift and accounted for by the fostering of mutuality by the firm.

In this manner, I explicate in depth these examples and several others in order to highlight the extent to which the mutuality and possessive individualism framework can help disambiguate the causes and consequences of the variance we see in different contexts of the sharing economy. Clearly identifying the actors and excavating the normative undertones of the exchange allows researchers to use the mutuality and individualism framework analytically as well as strategically.

“People Like Us:” Negotiating Social Boundaries in House Swapping

EXTENDED ABSTRACT

Recent studies find commercial sharing groups do not always produce in-group identity and solidarity (Bardhi and Eckhardt 2012). When the shared good is perceived as scarce, competitive relationships may arise in commercial sharing groups (Lamberton and Rose 2012). We examine the meaning of sharing among individuals who exchange their homes with strangers. Although a sense of solidarity emerges among members who swap homes as a travel lifestyle, subtle exclusionary forces are also at play. We focus on how micro social practices help people negotiate boundaries of inclusion and exclusion.

Home swapping is a well-established online lodging service, which enables members to temporarily stay in each other’s home for free. The majority of home swappers are educated couples who are keen travelers seeking authentic cultural experiences (Forno and Garibaldi 2013). This study involved the analysis of online archival data, interviews with 23 home swappers (varying in their level of experience), and home swapping materials (e.g., web profiles and house instructions). We also probed examples of extreme cases, such as best and worst home swaps, to establish the boundaries of our findings (Dion, Sabri, and Guillard 2014).

Many swappers were seeking out people who were like themselves. Jennifer captures this sentiment: “I’m into all sorts of sharing things, but I think it’s one of those things where it works best when it’s what I describe as PLU, ‘people like us.’ People with the same standards, same expectations, quite often same education level, not necessarily, but it helps.” Early in the home sharing negotiations, swappers even use a dating metaphor as they include and exclude potential swap partners. Sometimes this match making is practical (e.g., families who share similar school holiday dates or retirees who travel for longer period). But significant time is invested in researching potential partners and looking for subtle tells for compatibility (e.g., shared interests, furnishings that reflect similar tastes, or delayed replies suggesting lack of a commitment). Swappers who pass this vetting process often become friends and stay in touch: “It doesn’t feel like a business transaction... you feel like a friendship was developed (Ross).”

We find that mundane practices of cleaning are employed by home swappers to substantiate the swap transaction as a form of altruistic sharing. Through the micro-social negotiation of ‘clean enough,’ home swappers achieve a sense of ‘we-ness’ and differentiate themselves from commercial lodging services. The meaning of cleanliness is expressed and reproduced in everyday cleaning practices (Shove 2003). Cleaning practices symbolize and reproduce social boundaries and a sense of order in our everyday life (Douglas 1984). Through domestic cleaning, people come to realize and negotiate the difference between clean and dirty, inside and outside, and “create a sense of home out of the material house” (Douglas 1984, p. 69).

‘Over clean’ imposes stress and fear of contamination to swappers and hampers the pleasure of ‘being on holiday.’ As Michelle described: “They basically spent the whole day cleaning. We got to their house and it’s absolutely spotless. And I thought, ‘No, this is terrible.’” Excessive cleaning makes swappers more conscious about being in another’s home and reinforces the boundary between ‘inside’ and ‘outside,’ which in turn positions the swap more like an exchange between strangers. When homes are ‘over cleaned,’ it violates the shared expectation that swappers are a different group who are relaxed and adaptable. Homes that are too clean highlight the mismatch of expectations between swappers and symbolize characteristics of commodified hotel rooms (Dion et al. 2014).

Among experienced swappers, “clean enough” is the common expectation that marks a person as part of the community. Rather than making their homes “spotless” or “pristine and clean,” swappers do basic cleaning of bathrooms and kitchens and provide clean linens, but most leave the home as they normally live. They clear out space in closets but leave the clutter of daily life, which is part of the appeal of living in another person’s home. Certain dirt, like bread-crumbs and dirty towels in the hamper, are considered normal and tolerated by swappers (Dion et al. 2014). Thus, ‘enough clean’ helps swappers navigate potential symbolic pollution and highlights the unpaid nature of home swapping as a form of sharing (Belk 2010).

Finally, the ‘under-cleaned’ house revealed a sense of local disorder and mismatch of standards. Although some cultural differences are tolerated, swappers who ‘under clean’ are often considered as an outsider or newbie. Experienced home swappers such as Lucy, attributes the problem of under-cleaning to “the type of people.”

There is a downside to home exchange and that can include inconsiderate people who commit to home exchanges and then back out with idiotic explanations (e.g., “I changed my mind”). There are also the slob and people who do not maintain their homes, leaving you with a myriad of unpleasant problems during the exchange.

Although unusual, another informant left a home horrified at a flat that was “dirty” and “sticky” with bed linens that “looked grubby;” she equated it to living in council flats of the poor and a chaotic life.

These findings extend our knowledge on how and why some symbolic pollution is tolerated while others are not. It also shows that the meaning of cleanliness can be fluid and circumstantial (Dion et al. 2014). In home swapping, the alternative norm of ‘clean enough’ enables a sense of solidarity and affirms the spirit of altruistic sharing. However, the tolerance of dirt and ‘clean enough’ is conditional among people like us. This demonstrates that similar to cleaning practices, sharing as a cultural construct is built around distinctions of age, gender, and class (Douglas, 1984).

To summarize, our study shows that the micro social negotiation of exchange and cleanliness can be used by consumers to substantiate the altruistic face of sharing. Underneath its altruistic appearance, sharing implies an in-group practice. More importantly, this study demonstrates how meanings of sharing are actively constructed and reproduced by consumers in everyday practices. This important finding should help us better understand the contemporary sharing economy and consumers’ role within it.

Reciprocal Altruism as a Motivation for Sharing: Sharing Up versus Sharing Down

EXTENDED ABSTRACT

The consumer literature on sharing views it as a social phenomenon, and focuses on sharing with close others such as family and friends, portraying it as an altruistic, pro-social behavior with no

expectations of reciprocity (Belk's presentation). However, little is known about what drives people to share important possessions with acquaintances and strangers.

Our research explores the role of social comparison and reciprocity expectations in sharing. Social comparison theory (Festinger 1954) posits that people compare themselves to others who are either superior to them (upward comparison) or inferior to them (downward comparison) on dimensions such as intelligence, appearance, or status. Upward (vs. downward) comparison is often motivated by assimilation needs (Mussweiler 2003).

The extant literature suggests that when considering with whom to share, individuals may have conflicting motivations. On the one hand, individuals may prefer to share up due to reciprocity expectations. While sharing up and sharing down are both strategies that will result in reciprocal altruism, sharing up should be seen as more beneficial, because it has the potential to result in a larger amount of reciprocity. On the other hand, individuals may prefer to share down due to feeling better off, feeling empathy toward the target, or wanting their resources to go a longer way. Under normal conditions (such as when the comparison target is the same as the sharing target), we expect reciprocity concerns to be stronger than altruistic concerns, making people more likely to share up than to share down. However, under conditions in which reciprocity is less likely, we expect altruistic concerns to be stronger than reciprocity concerns, making people more likely to share down than to share up. In four studies, we demonstrate that due to expected reciprocity, individuals are generally more likely to share up than to share down. However, when expected reciprocity is removed from the equation, pure altruism takes over, and individuals become more likely to share down than to share up.

Study 1a investigated the effect of social comparison on the willingness to share, utilizing a 3 (comparison target: upward, downward, neutral) between-subject design with 501 business students. The participants read a scenario about Michael/Michelle, who was a very successful (upward comparison), very unsuccessful (downward comparison) or average (neutral) business student in the same class as the participant (Mussweiler et al. 2004). The gender of the target and the participants were matched to control for the effects of mating motives. Next, the participants read another scenario about the same person approaching them and asking them to share a possession relevant to the academic domain (class notes or a computer) with him or her. Participants indicated their willingness to share the items with Michael/Michelle and their reciprocity expectations (i.e., what they expected to gain) from the act of sharing. Participants were more willing to share-up versus down ($M_{\text{upward}}=5.01$ vs. $M_{\text{downward}}=3.25$), with neutral in the middle ($M_{\text{neutral}}=4.25$; $F(2,497) = 48.86, p=.00$). In addition, they had greater reciprocity expectations from sharing with an upward target than from the other targets ($M_{\text{upward}}=4.57$, vs. $M_{\text{neutral}}=3.90$ vs. $M_{\text{downward}}=3.43$; $F(2,497)= 32.27, p=.00$). Furthermore, their reciprocity expectations mediated the relationship between social comparison ($b=.20, p=.00$) and sharing ($b=.77, p=.00$). Study 1b replicated these results with a different social comparison scenario (a hypothetical workplace situation) among a sample of mTurk workers. Study 2 replicated these results with another academic scenario, across a variety of different possessions that were either relevant to the domain of comparison (computer and class notes) or non-relevant to the domain of comparison (sandwich and apartment). Participants were again more likely to share up than to share down across these different scenarios and product categories.

In study 3, we varied whether the sharing target (e.g., Jordan) was the same as or different from the comparison target (e.g., Mi-

chael). By doing so, we rendered the sharing decision irrelevant to the comparison act. In other words, Michael's class performance is irrelevant to the decision of whether or not to share with Jordan. We used a 2 (social comparison: upward vs. downward) x 2 (sharing target: same as comparison target vs. different than comparison target) between-subject design with 329 students and the same procedure of the previous experiments. The results showed a main effect of social comparison, with greater intentions to share-up ($M_{\text{upward}}=4.80$ vs. $M_{\text{downward}}=4.13$; $F(1,325) = 13.21, p=.00$), as well as a significant social comparison X sharing target interaction ($F(1,325) = 37.99, p=.00$). Specifically, when the sharing target was the same as the comparison target, the participants were more likely to share up than down ($M_{\text{upward}}=5.40$ vs. $M_{\text{downward}}=3.64$), replicating our previous findings. However, when the sharing target was different from the comparison target, they were more likely to share down than to share up ($M_{\text{upward}}=4.18$ vs. $M_{\text{downward}}=4.63$; $F(1,325) = 3.13, p=.08$).

Finally, Study 4 investigated the moderating effect of the comparison target relevancy, as reflected in the degree of which the comparison target was related to the participants' academic major. We reasoned that a comparison target who has the same college major would be much more likely and capable of reciprocating in the future. We used 2 (social comparison: upward vs. downward) x 3 (comparison target relevancy: high- business major; moderate- biology major taking one business course; low- biology major taking no classes in common with the sharer) between-subjects design with 656 business students. The results revealed a main effect of social comparison, with greater intentions to share up ($M_{\text{upward}}=5.00$ vs. $M_{\text{downward}}=3.83$; $F(1,653) = 79.74, p=.00$). However, this main effect was qualified by a significant social comparison X relevancy interaction ($F(2,650) = 8.84, p=.00$). In the high and moderate relevancy conditions, participants were more likely to share up vs. down ($M_{\text{high_relevancy_upward}}=5.39, SD=1.42$ vs. $M_{\text{high_relevancy_downward}}=3.60$; $M_{\text{moderate_relevancy_upward}}=4.89$ vs. $M_{\text{moderate_relevancy_downward}}=3.59$), replicating our previous findings. However, in the low relevancy condition, there were no significant differences between the social comparison conditions ($M_{\text{upward}}= 4.72$ vs. $M_{\text{downward}}=4.29$).

Taken together these studies suggest that expected reciprocity motivates people to share up versus down. However, in the absence of such motivations, people's sharing decisions become more altruistic.

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Human-like Robots and Robot-like Humans: Anthropomorphism and Dehumanization in Consumption

Chairs: Noah Castelo, Columbia University, USA
Johannes Boegershausen, University of British Columbia, Canada

Paper #1: Anthropomorphism and Anthropocentrism

Russell Belk, York University, Canada

Paper #2: Cyborg Consumers: When Human Enhancement Technologies are Dehumanizing

Noah Castelo, Columbia University, USA
Nick Fitz, University of British Columbia, Canada
Bernd Schmitt, Columbia University, USA
Miklos Sarvary, Columbia University, USA

Paper #3: The Undesired Discounting Effect of Budget Brands: How Brand Positioning Affects Perceptions of Customer Service Representatives' Human Qualities

Alexander Henkel, Maastricht University, the Netherlands
Johannes Boegershausen, University of British Columbia, Canada
Karl Aquino, University of British Columbia, Canada
Jos Lemmink, Maastricht University, the Netherlands

Paper #4: Anthropomorphism From Self-Extension and Self-Expansion Processes: An Assemblage Theory Approach to Interactions Between Consumers and Smart Devices

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Thomas P. Novak, George Washington University, USA
Hyunjin Kang, George Washington University, USA

SESSION OVERVIEW

The attribution and denial of humanness is a fundamental process of consumer behavior, one whose implications are becoming increasingly important in light of recent technological developments. Attributing humanness to non-human objects is known as anthropomorphism, and has been studied in the context of brands (e.g., Puzakova, Kwak and Rocereto 2013) and products (e.g., Kim and McGill 2011). Denying humanness to human beings is known as dehumanization, and has been studied in the context of ethnicity, race, gender, and more (Haslam 2006; Haslam and Loughnan 2014). In general, anthropomorphizing a product or brand improves consumers' evaluations of those things, whereas dehumanizing a person leads consumers to discriminate against and act antisocially towards that person. These processes can therefore play important roles in many domains of consumer behavior.

The papers in this interdisciplinary session enrich our understanding of the antecedents, interplay, and consequences of consumers' anthropomorphism and dehumanization. The papers approach these issues in the context of consumers' encounters and interactions with both novel consumption stimuli (e.g., smart devices, human enhancement technologies) as well as more common stimuli (e.g., brands and customer service representatives). In addition to shedding new light on the processes of anthropomorphism and dehumanization, each of the three empirical papers also demonstrates novel consequences of those processes for consumer behavior, while the conceptual paper raises several important questions about the future of these phenomena in light of rapid technological progress.

The conceptual paper, by Belk, begins our session by providing a sweeping view of how advances in artificial intelligence and robotics are creating anthropomorphic computers and robots, while simultaneous advances in human enhancement technologies are al-

lowing consumers to become more like machines or robots. The next paper, by Castelo et al., explores the consequences of enhancement technologies for perceived humanness in more depth, showing that currently available products can indeed lead the enhanced consumers to be dehumanized and that dehumanization has important marketing implications. The third paper, by Henkel et al., focuses on dehumanization in a more traditional marketing context, showing that brand positioning can lead to the dehumanization and mistreatment of the brand's employees. Finally, Hoffman et al. return to a theme that Belk introduced – that computers and machines are increasingly anthropomorphized – by studying “smart devices” in the context of the Internet of Things. They show that both features of the devices and characteristics of the consumer determine how such anthropomorphism occurs.

Taken together, the four papers provide multifaceted insights into perceptions of humanness (or lack thereof) of the self, products, other consumers, and employees. Collectively, they address the following questions: (i) which factors are important in shaping consumers' (de-) humanization of the self, others, or products and (ii) what are the consequences of such processes for how consumers see themselves, other people, and products. This session is of interest to a diverse audience as it appeals to those interested in what it means to be human, and how the answers to that fundamental question shape consumer behavior.

Anthropomorphism and Anthropocentrism

EXTENDED ABSTRACT

Justin Leiber (1985) provides the transcript of a meeting of the United Nations Space Administration Commission concerning a Humanico Corporation plan to shut down its space station. Over the period when the station was in operation, human astronauts came and went, but a female chimpanzee named Washoe-Delta remained for years and adapted to weightlessness. The human crew members taught her a portion of American sign language. She came to think of the space station as her kingdom. Also accompanying the astronauts on the space station was a Turing 346 computer that they called “A.I.”. It helped solve problems at the station and assist with official projects. It came to recognize astronauts individually and respond to them. The crews came to think of both A.I. and Washoe-Delta as persons and friends. When Humanico announced it would shut down the station and A.I., and let Washoe-Delta die in space (for she could no longer function in earth's gravity), Amnesty International and the International Civil Liberties Union objected before a dubious UNSA Commission. The organizations maintained that both A.I. and Washoe-Delta had the right not to be abandoned in space. Leiber's book is a record of the debates that ensued regarding the question of whether or not the computer and the chimpanzee could be considered to be persons with legal rights according to the UN charter.

Were the members of the space station crew and human rights organizations merely anthropomorphizing A.I. and Washoe-Delta? Or were the skeptical UN Commission members who objected to granting these entities personhood merely being anthropocentric in insisting on an uneven ontology in which only human beings can be persons and possess rights? After all, corporations, nations, and certain organizations are treated as legal persons. And it is clear from the

relatively recent historically momentous granting of full personhood and legal rights to women and slaves that societal views on who can be a person can change and evolve.

Traditionally humans have compared themselves to non-human animals as a way of understanding what it means to be human. During the Industrial Revolution people began comparing themselves to the dumb machines that were replacing them. And in the emerging age of computers and robotics we may be shifting to comparing ourselves to smart machines that are now replacing us. In each case we are coming to appreciate that abilities that we once thought were uniquely human -- strength, cunning, language, memory, emotions, intellect, sentience, forward thinking, and morality -- may not be exclusive to humans (e.g., Brooks 2002; Daston and Mitman 2005; Haraway 1991; 2003; Kurzweil 1999; Mazis 2008; Philo and Wilbert 2000). For example when IBM's Deep Blue beat world chess champion Garry Kasparov in Chess and IBM's Watson beat Jeopardy champions Ken Jennings and Brad Rutter in Jeopardy, these examples of unique human intellectual superiority fell by the wayside. Given such losses to machines, it is perhaps understandable that humans are beginning to adapt through aids and devices such as exoskeletons, distributed online memory through our devices, biological enhancements such as surgical implants and performance boosting drugs, and soon perhaps nanotechnology and genetic engineering of humans.

In this presentation I address the contention that our machines are becoming more human-like and we are becoming more machine-like. In the former case of machines becoming like us, this is aided by our anthropomorphism of human-appearing androids (or the female equivalent, gynoids) and animal-emulating robots. There is a growing literature suggesting that we respond better to such seemingly living creatures. Even sexbots are a part of the emerging robotics market (e.g., Levy 2007). But there is also a hypothesized "uncanny valley," where too great a similarity to humans creates discomfort. Moreover there are fears of "the singularity," or the point where our devices become smarter than us and potentially find us humans unnecessary (e.g., Kurzweil 1999; Moravec 1999). In these cases we are moving from mere anthropomorphism to the point where our smart machines are not only persons but super-beings with whom we can no longer compete. There are several different scenarios through which this could happen (e.g., Kurzweil 2013) as well as many science fiction portrayals of various outcomes. And the field variously labeled robot-, machine-, and computer-ethics is working both to attempt to instill morality in future machines and to consider the rights that such machines might be granted (e.g., Lin, Abney, and Bekey 2012).

Either in an effort to keep up with robots or out of a striving for perfection and even immortality, the human enhancement or human augmentation movement is proceeding apace with the developments in robotics and artificial intelligence (e.g., Chu 2014; More and Vita-More 2013). Whereas the attempt to make humans more like machines can be seen as dehumanizing (Belk 2014b), proponents of transhumanism envision making humans more god-like, with super strength, super intellect, and super longevity. The comparison to religion is often explicit (e.g., Cole-Turner 2011; Mercer and Trothen 2015).

Contemporary consumption may seem distant from these future scenarios, but it may be closer than we think; there is a postulated exponential growth in computer intelligence once our devices possess the equivalence of human intelligence and begin reprogramming themselves. Robots are in our factories and are entering our homes and offices. They can work for us or they can replace us. Envisioning the ethical and moral considerations of human-like machines and

machine-like humans is critical now if we hope to shape our future. I offer no solutions, but will layout these issues and attempt to engage consumer researchers in addressing them.

Cyborg Consumers: When Human Enhancement Technologies are Dehumanizing

EXTENDED ABSTRACT

We show that users of human enhancement technologies are dehumanized, even when the enhanced traits are central to humanness. The perceived naturalness of the means and outcome of the enhancement drives this effect. Dehumanization in turn decreases consumers' interest in using the technology themselves, and affects how the enhanced consumer is treated.

In our first study we focused on a technology called transcranial direct current stimulation (tDCS), because it is already available to consumers, and because it is capable of enhancing a range of abilities that are widely considered central to humanness (Cohen Kadosh et al. 2015; Haslam, Bastian and Bissett 2004). It works by passing a mild electrical current through a specific area of the brain to improve that area's functioning. 145 MTurk users read a vignette asking them to imagine that they had an acquaintance who had started using either tDCS or an herbal supplement to enhance their creativity and self-control. Participants then reported how natural and how artificial the enhancement seemed, how human the acquaintance seemed and whether they seemed more or less human than before they started using the enhancement, and finally how much they thought creativity and self-control reflect human nature.

We confirmed that participants considered creativity and self-control to be part of human nature ($M_{creativity} = 6.05$, $M_{self-control} = 5.11$, both significantly higher than the scale midpoint of 4, $t(143)'s > 9$, $p's < .0001$). We then showed that the acquaintance in the vignette was perceived as significantly less human when using tDCS ($M = 71.9$) compared to an herbal supplement ($M = 87.57$, $t(143) = 3.93$, $p = .0001$). Furthermore, compared to pre-enhancement, the acquaintance seemed *less* human when using tDCS ($M = 47.09$) but *more* human when using an herbal supplement ($M = 52.95$, $t(143) = 1.96$, $p = .052$), suggesting that enhancement technologies can be dehumanizing. We also showed that perceived naturalness of the enhancement mediated this effect: the bootstrapped indirect effect was -13.5 , 95% CI = -23.8 to -7.3 . Finally, perceived naturalness and humanness together mediated consumers' interest in using the enhancement themselves ($\beta = -8.12$, 95% CI = -16.7 to -3.4).

In our subsequent study, we sought to explore the concept of naturalness and its relationship to dehumanization in more detail. 237 MTurk users read one of four vignettes asking them to imagine a specific acquaintance, John, an ambitious, type-A personality who keeps up with the latest technology trends, and who had recently decided to enhance his mind using a supplement. The vignettes were organized in a 2x2 between-subjects design, in which the naturalness of the means of enhancement and the naturalness of the outcome of enhancement were manipulated independently. Means naturalness was manipulated by describing the natural supplement as made from ingredients extracted from plants and minimally processed, whereas the unnatural supplement was made from ingredients synthesized in a lab and highly processed. Outcome naturalness was manipulated by describing the outcome of enhancement as enabling vs. embellishing the user's true abilities (Williams and Steffel 2014). In the natural outcome condition, the supplement was described as allowing John to perform up to his true intellectual abilities, whereas in the unnatural outcome condition it allowed him to perform beyond his true abilities.

We confirmed that the natural supplement seemed more natural ($M = 70.4$) than the unnatural supplement ($M = 25.6$, $t(235) = 14.9$, $p < .0001$), and the “enabling” outcome seemed more natural ($M = 57.9$) than the “embellishing” outcome ($M = 45.0$, $t(237) = 3.7$, $p = .0002$). These two dimensions of naturalness also impacted dehumanization. An ANOVA using perceived humanness of the acquaintance as the dependent variable revealed main effects for both means ($F(1, 233) = 10.8$, $p = .001$) and outcome ($F(1, 233) = 7.6$, $p = .006$), but no interaction ($F < 1$). Specifically, the acquaintance seemed less human when the means were unnatural ($M = 70.1$) vs. natural ($M = 81.0$), and when the outcome was embellishing ($M = 71.5$) vs. enabling ($M = 80.6$). In both cases, perceived naturalness fully mediated the effect between means/outcome of enhancement and perceived humanness (indirect effect for means: 15.64 , $95\% \text{ CI} = 8.37$ to 23.96 ; for outcome: 6.32 , $95\% \text{ CI} = 2.73$ – 10.43).

For study 3, 58 undergraduate students came to the lab one at a time and were asked to evaluate an ad that was ostensibly developed for a new product, a tDCS brain-enhancement device. After evaluating the ad, participants met a confederate who was either wearing the enhancement device they just learned about or was not wearing the device. After briefly interacting with the confederate, participants completed a measure of dehumanization of the confederate. Participants also completed a measure of social distance that we thought might mediate any effect of dehumanization on prosocial behavior. Finally, as participants were signing a debriefing form the confederate “accidentally” knocked a jar of 20 pens off of the desk in front of the participant, and then discretely counted how many pens the participant helped him to pick up from the floor. This measure has been used in past research as a measure of prosocial helping behavior (Twenge et al. 2007).

When the confederate was not wearing the enhancement device, participants helped him pick up an average of 7.5 pens, compared to only 4.7 pens when he was wearing the device, $t(57) = 2.63$, $p = .01$. We identified a two-stage mediation process in which condition (presence vs. absence of device) predicted dehumanization, which in turn predicted how distant participants felt from the confederate. This felt distance measure in turn predicted how many pens they helped to pick up. The indirect effect was $.17$, $95\% \text{ CI} = .006$ to $.83$. This study therefore provides evidence for the notion that using enhancement technologies can result in negative social consequences for the enhanced consumer.

Ongoing studies generalize these results to include additional forms of enhancement, showing that technologies including Google Glass, Oculus Rift, genetic engineering, prosthetic limbs, and steroids are also dehumanizing, thus demonstrating the broad relevance of technological dehumanization for marketers.

The Undesired Discounting Effect of Budget Brands: How Brand Positioning Affects Perceptions of Customer Service Representatives’ Human Qualities

EXTENDED ABSTRACT

We live in a branded world; virtually not a single company operates without a brand name. Employees are crucial in making these brands come alive. In general, interactions with employees can provide rich information about brands to consumers (e.g., Matta and Folkes 2005), and employee–brand alignment might improve brand evaluations (Sirianni et al. 2013). Hitherto, research into brands and employees has focused exclusively on how perceptions of employees and their behavior influence consumers’ brand perceptions and evaluations. We argue that the effects also work in the opposite direction: brands shape consumers’ perceptions of the human qualities

of employees and social interactions between consumers and employees.

While brands may differ on many dimensions, one of the most fundamental positioning distinctions is budget (i.e., low-cost) versus non-budget (i.e., differentiated) (Porter 1980). The positioning of a brand exerts pervasive effects on consumer behavior. Neuroscientific research suggests that budget brands activate different brain regions than up-market brands (Schaefer and Rotte 2007). As budget brands inherently focus on economic aspects related to brand consumption, exposure to a budget (vs. up-market) brand induces consumers to spend less (more) in a subsequent task (Laran, Dalton and Andrade 2011). In line with other work showing that brand primes can lead to unintended outcomes (e.g., Berger and Fitzsimons 2008; Brasel and Gips 2011), we propose that a budget positioning exerts unintended effects on consumer–employee interactions.

Specifically, budget brands lead to a focus on market-pricing principles, which emphasize maximizing personal monetary gains, often at the expense of interpersonal sensitivity. Mere reminders of money may increase social distance and unethical behavior (Vohs 2015). A market-pricing approach to social relations thus may counteract recognizing others as humans and interacting compassionately (e.g., Molinsky, Grant and Margolis 2012). Consequently, we predict that budget brands may attenuate consumers’ perception and recognition of employees as fully human relative to employees of non-budget brands and individuals without any brand affiliation. This process is called dehumanization and entails attributing less mind (e.g., Gray, Gray and Wegner 2007; Kozak, Marsh and Wegner 2006) or denying individuals traits that make them human (Haslam 2006). We also examine the consequences of dehumanization for employees. Discounting others’ humanness leads to reduced prosociality toward them (Cuddy, Rock and Norton 2007). As interpersonal sensitivity decreases, we predict that consumers are less likely to offer support to employees in need when these work for budget (versus non-budget) brands. In sum, we predict that consumers are more likely to dehumanize employees of budget brands and are less likely to help budget employees in need.

Three studies tested these hypotheses. In study 1, 129 participants completed nine dehumanization items (Bastian et al. 2013). Following Laran, Dalton and Andrade (2011) Walmart and Nordstrom served as budget and non-budget brands, respectively, and participants indicated to which of the two brands the dehumanization items applied more (e.g., “I feel like employees are mechanical and cold, like a robot”, “I feel like employees lack self-restraint, like an animal”). As we used a nine-point scale with the brand logos as anchors, participants could attribute equal humanness to the employees of the two brands by choosing the midpoint of the scale. However, participants significantly dehumanized the employees of the budget brand ($p < .001$).

Study 2 ($n = 208$) tested the underlying mechanism of this effect. Participants were randomly assigned to a budget (Ryanair), non-budget (Lufthansa), or neutral control condition. After reporting their brand associations, participants received printed, photoshopped advertisements displaying the same flight attendant. The neutral condition rated the same person unrelated to a commercial context. Ratings on the stimulus’s capacity to think, feel, and plan served as our dependent measure of dehumanization (Kozak, Marsh and Wegner 2006). Consistent with our predictions, participants in the budget condition ascribed less humanness to the employee than those in the non-budget ($p = 0.006$) and the control condition ($p < 0.001$). Moreover, participants in the non-budget condition attributed less humanness to the person than subjects in the control condition ($p = 0.011$). Two independent raters coded whether the associations contained

market-pricing connotations. A mediation analysis with market-pricing focus as a dichotomous mediator (Imai, Keele and Tingley 2010) revealed that the increased market-pricing focus mediates 91.7% of the effect of the low-cost brand (vs. non-budget and neutral control) on dehumanization. A follow-up study (n=180) employing the same paradigm replicated the effect in a supermarket context.

In our final study, 75 participants were randomly assigned to the same two brands as in study 2. Subsequently, they were presented with a manipulated image depicting a budget or non-budget airline cabin. The image featured a stewardess, who had toilet paper stuck to her shoe, walking along the aisle. Our dependent measure of pro-social behavior was participants' intentions to help the stewardess by informing her about the toilet paper. In line with predictions, participants were significantly less likely to help the budget than the non-budget stewardess ($p = .025$).

Taken together, three studies suggest that a budget brand positioning has pervasive, unintended consequences for consumers' perceptions of the humanness of employees associated with such brands. Across different industries and measures, we consistently demonstrate that consumers fail to fully recognize the human qualities of budget employees and are also less likely to offer interpersonal support to these employees when in need. Additional studies are currently in progress, examining further control conditions (e.g., low-status brands), additional outcomes, and potential intervention strategies for budget brand managers.

Anthropomorphism From Self-Extension and Self-Expansion Processes: An Assemblage Theory Approach to Interactions Between Consumers and Smart Devices

EXTENDED ABSTRACT

Hoffman and Novak (2015) have proposed using assemblage theory (DeLanda 2006) to conceptualize consumer experience in the Internet of Things (IoT). Their framework formally identifies consumer experience as emerging from consumer interactions with smart devices in IoT assemblages. Paired capacities exercised in these interactions specify how consumers and smart devices can affect and be affected by each other. This conceptualization links self-extension (Belk 1988) and self-expansion theories (Aron and Aron 1986) in a larger theoretical framework, where anthropomorphism is an outcome of self-extension and self-expansion.

Recently, Connell and Schau (2013) noted there is some confusion in the marketing literature over the distinction between self-expansion and self-extension. Belk's (1988) self-extension theory largely deals with how brands can bring more meaning to consumers' lives through a process where the self is extended into those brands. Through the self-extension process, consumers invest the object with emotions or feelings, so that the object takes on significance beyond a mere possession. In self-expansion theory (Aron et al. 1991), people are motivated to form close relationships with others because it expands their ability to accomplish goals. Self-expansion through close relationships contributes to the formation of our own identities and is achieved by incorporating the resources, perspectives and identities of a close other into one's self (Aron et al. 2004). Connell and Schau (2013) and Belk (2014a) conclude that both self-extension and self-expansion are useful for understanding the relationships that people have with objects.

In our assemblage theory framework, the self-extension process captures the paired capacity of the consumer to affect smart devices and the capacity of smart devices to be affected by the consumer. Self-extension implies that the consumer is in control of the identity they project from themselves into the device. But paired capacities

can also operate in the other direction. The self-expansion process captures the paired capacity of the device to affect the consumer and the capacity of the consumer to be affected by the device. With self-expansion, the device is in control of the identity that the consumer absorbs into the self. Thus:

Hypothesis 1: When the consumer has more control in the interaction, self-extension will be greater than self-expansion; with less control, self-expansion will be greater than self-extension.

We propose that anthropomorphism is a key mediating emergent experience from the interaction among the paired capacities of the consumer with smart devices. Anthropomorphism is the tendency for people to ascribe human-like characteristics, emotions and behaviors to objects (Epley, Waytz and Cacioppo 2007). Waytz et al. (2010) found that more unpredictable devices were seen as more anthropomorphic. Greater unpredictability corresponds to less control, thus:

Hypothesis 2: When the consumer has less control in the interaction, anthropomorphism will be greater compared to when the consumer has more control.

Some research has suggested that anthropomorphism lies on a continuum from a minimal kind of anthropomorphism where you attribute human traits to an object, all the way to seeing the object as human with a "mind of its own" (Aggarwal and McGill 2007). We theorize that such device complexity could moderate whether anthropomorphism occurs through a self-extension or self-expansion processes. In the self-extension process, anthropomorphic experience more likely arises from the consumer's capacity to directly affect simple devices (so-called "long finger" interactions). Consumers might have an easier time extending their essence into the device when it is simple. However, in the self-expansion process, anthropomorphic experience more likely arises from a complex device's capacity to affect the consumer through autonomous, ambient interactions.

Hypothesis 3: For devices that the consumer has the capacity to effect (self-extension), anthropomorphism will be greater for simple compared to complex devices. For devices that have the capacity to affect the consumer (self-expansion), anthropomorphism will be greater for complex compared to simple devices.

Study 1 was a manipulation check for the control manipulation based on 101 participants. Across 32 devices (2 new scenarios and 30 of the devices based on Waytz et al. 2010), participants reported significantly less perceptions of control ($M=3.26$) when devices behaved unpredictably compared to when the participant could program the device ($M=5.34$; $F(1, 99) = 82.176, p < .001$).

Studies 2 and 3 tested H1-H3. In study 2, 201 participants evaluated the same 32 devices in a 2 (low vs. high control) x 2 (self-extension vs. self-expansion) design to test H1. For each device, participants indicated either their perceptions of self-extension ("to what degree do you have the capacity to affect [device]?") or self-expansion ("to what degree do you have the capacity to be affected by [device]?"). Results supported H1. Self-expansion ($M=4.23$) was greater than self-extension ($M=3.16$) for low control, and self-expansion ($M=4.61$) was greater than self-expansion for high control ($M=3.97$; $F(1,197)=51.243, p < .001$).

In study 3, 352 participants evaluated device anthropomorphism in a 2 (self-extension vs. self-expansion) x 2 (low vs. high control) x 2 (simple vs. complex device) design. Results supported H2 and H3. There was less anthropomorphism when control was high ($M=1.80$) compared to when it was low ($M=2.25$, $F(1, 344) = 10.13$, $p = .002$). In the self-expansion conditions, the complex device ($M=2.29$) was more anthropomorphic than that simple device ($M=1.89$ and in the self-extension conditions, the simple device was more anthropomorphic ($M=2.10$) than the complex device ($M=1.87$) with the corresponding two-way interaction significant ($F(1, 344) = 4.13$, $p = .043$).

Our studies support the idea that the self-extension and self-expansion processes can both lead to anthropomorphism. These results, plus an exploratory Study 4 that provides correlational evidence that consumers view interactions with smart devices in terms of paired capacities, lay the groundwork for additional experiments on anthropomorphism arising from paired capacities in different interaction scenarios. Consumers desire for devices to be more “real” than they actually are can satisfy effectance and sociality motivations (Epley et al. 2008). For example, we hypothesize that in the self-expansion process, consumers’ need to feel a sense of mastery over the interaction may increase feelings of anthropomorphism for complex devices. Additional studies are in progress to examine these effects.

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Resource Accumulation and Exchange: How Consumers Perceive, Monitor and Manage Scarce Resources

Chairs: Jonathan Berman, London Business School, UK
Eesha Sharma, Dartmouth College, USA

Paper #1: Passing the Buck to the Wealthier: Egocentric Judgments of Financial Resources Influence Donation Obligations

Jonathan Berman, London Business School, UK
Amit Bhattacharjee, Erasmus University Rotterdam, The Netherlands
Deborah Small, University of Pennsylvania, USA
Gal Zauberman, Yale University, USA

Paper #2: Financial Inability or Financial Savvy? Subjective Financial Well-being Shapes Preferences for Discounted Purchases

Eesha Sharma, Dartmouth College, USA
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Paper #3: Why Some Prices Are Fairer Than Others

Franklin Shaddy, University of Chicago, USA
Anuj Shah, University of Chicago, USA

Paper #4: The Negative Consequences of Petty Exchange

Tami Kim, Harvard Business School, USA
Ting Zhang, Columbia Business School, USA
Michael I. Norton, Harvard Business School, USA

SESSION OVERVIEW

In essence, the study of consumer behavior is the study of resource exchange. The consumption choices that consumers make are ultimately shaped by how they choose to relate to their resources, be it the income they earn, the spare hours in their day, or their willingness to exert effort.

In order to better understand this relationship, the present session explores the diverse ways in which consumers perceive, monitor, and ultimately, manage their resources. In doing so we seek to answer a number of questions regarding the way in which consumers think about resource accumulation and resource exchange: How do consumers perceive their own resources relative to the resources of others? How do consumers' perceptions of their resources affect their willingness to take a deal? To what extent do consumers feel that resource exchange accurately reflects their true preference for a good? And when do consumers feel it is appropriate or inappropriate to actively manage their resources?

In the first paper, Berman et al. investigate how people evaluate their own resources relative to the resources of others. They find that consumers believe that those who earn more than they do have more financial resources than what those higher earners evaluate for themselves. They explore one consequence of this divergent perspective by examining estimates of how much individuals believe that they and others should donate to charity.

In the second paper, Sharma and Keller examine how perceptions regarding subjective wealth affect consumer preferences for deals—purchases offered at a discount to consumer. They find that financially deprived consumers are less receptive towards discounted purchases as compared to their financially privileged counterparts. These effects are associated with feelings of embarrassment and shame towards deals, and are attenuated when deal adoption does not signal financial inadequacy but rather financial savvy.

Next, Shaddy and Shah examine how different expenditures of resources (such as money, time, and effort) reflect preference strength, or the extent to which consumers desire a given good. They find that resource expenditures are stronger signals of preference strength when (a) those resources are distributed more equally, and (b) when those expenditures are easy to quantify and understand. They further argue that the more that a price of a good reflects preference strength, the more fair that the price is seen.

Finally, Kim, Zhang and Norton investigate how individuals monitor resource exchange in social relationships. They find that individuals who more actively and precisely monitor the exchange of resources in social exchanges are seen as being petty, which is undesirable. This is because petty people are seen treating relationships in a transactional manner, which violates social norms.

Together, these papers offer unique perspectives on how consumers perceive, monitor, and manage their resources. We expect that this session will be of interest to a broad audience, not just those interested in consumer resource management, but will also appeal to those studying judgment and decision making, social cognition, policy making, and prosocial behavior as well.

Passing the Buck to the Wealthier: Egocentric Judgments of Financial Resources Influence Donation Obligations

EXTENDED ABSTRACT

How much do individuals believe that they and others should donate to charity? Diminishing marginal benefits from money suggests that as income rises, the value of a marginal dollar—and the pain felt in sacrificing it—should decrease. Simply put, the more money people make, the easier it should be for them to give. However, consumers must judge for themselves how much their earnings they feel that they ought to sacrifice to help others.

In this paper, we investigate how individuals form judgments of donation obligations across the income spectrum, for themselves and for others. We argue that when evaluating how much a given individual should donate to charity, people base their judgment in part on the amount of spare financial resources they perceive that individual has. However, we find that these judgments about others' spare financial resources depend on an individual's own income. In particular, people believe that others who earn more than they do have more discretionary income, than those wealthier others actually experience for themselves. In other words, people tend to perceive higher earners as more flush than those higher earners themselves feel, which then impacts judgments of appropriate levels of monetary donations.

We begin by examining beliefs about discretionary spending in general. Study 1 (MTurk, N=305) examines whether an individual's income influences how much money they perceive others spend on inessential (discretionary) versus essential (non-discretionary) expenses. Participants evaluated 5 target individuals who differed only in their yearly income (\$20k, \$40k, \$60k, \$80k, \$100k). For each target individual, they estimated the percentage of the target's spending money that persons uses towards essential expenses versus inessential expenses.

For each target individual, we created a relative income variable by categorizing participants according to whether they make either less than \$20k of the target or within \$20k of the target individual's

income. We find that the relative income of the participant in relation to the target determined how much the participants believed that the target spends on essential vs inessential expenses, $F(1, 1178) = 15.07, p < .001$. Those who earn at least \$20k less than the target believe that the target spends less money on essential expenses and more money on inessential expenses than what those who earn within \$20k of the target estimate. In other words, consumers believe that those who earn more than they do spend less on things they need (essential expenses) and therefore have more money left over to spend on the things they want (inessential expenses) than what those richer others estimate for a similar other. This pattern of results holds across all income levels and is robust to different specifications of relative income.

If consumers expect higher earners to have more money for discretionary spending, then they might expect that those higher earners should be donating a greater proportion of their income to charity. Study 2 examines whether an individual's income affects how much spare money they believe others have and whether perceived donation obligations follow the same pattern. This study was pre-registered (<https://osf.io/pm7dn/>), and utilized an online panel to recruit a balanced sample of participants who varied in their household income ($N = 1,023$). Participants again evaluated 5 target individuals, who differed in their yearly income. For each target, participants first evaluated the percentage of household income that they believe that the target should donate to charity. They then estimated how much spare money the target has by indicating the likelihood that each target would be able to make a one-time emergency payment of \$2k on a scale from 1 = "extremely unlikely" to 11 = "extremely likely".

We categorized each target individual by whether their household income was at least \$10k less than or within \$10k of the target individual's income. Results from a mixed model linear analysis show that participants who earn at least \$10k less than the target individual believed that the target would be more likely to make an emergency payment of \$2,000, $F(1, 2,355) = 37.45, p < .001$, and also should donate a greater percentage of their income to charity than participants who earn within \$10k of the target individual $F(1, 1,852) = 6.86, p < .01$. For instance, on average, those who make less than \$70k/year believe that someone who earns \$80k/year should donate 15.5% of their income to charity. However, those who make \$70k - \$90k/year (i.e. roughly the same amount as the target), believe that the same person should donate only 8.8% of their income to charity $t(728) = 3.91, p < .001$. Similarly, those who make those who make less than \$70k/year believe that someone who earns \$80k/year has more spare money ($M = 7.58, SD = 2.71$) than what those who earn about \$80k a year believe ($M = 7.02, SD = 2.62$), $t(728) = 2.23, p = .03$. These results hold for target individuals across all income levels and are robust to different specifications of the relative income variable.

Together, these studies show that consumers believe that those who have more income than they do have more spare money and discretionary expenses, and should therefore donate more to charity, than those higher earners report when evaluating for themselves. Across all income levels, consumers consistently pass the buck to the wealthier.

Financial Inability or Financial Savvy? Subjective Financial Well-being Shapes Preferences for Discounted Purchases

EXTENDED ABSTRACT

Within the retail marketing mix, sales promotions have one of the strongest effects on short-term consumption behavior. In par-

ticular, deals that take the form of price markdowns, coupons, and rebates give consumers opportunities to obtain promoted products at reduced prices. These deals may benefit retailers in several ways as well. For example, "two-for-one" offers are often used to trigger impulse purchases (Inman et al., 1990), encourage consumers to switch brands, and may increase long-term sales and loyalty in times of competitor activity (Neslin et al. 1985).

Despite the potential benefits to consumers and retailers, consumer uptake of discounts may fall short. In 2013, on average, every person in the United States was offered \$1,617 in coupon savings; however, consumers only took advantage of \$3.7 billion of these savings or \$11.60 per person (Inmar Trend Reports 2014). Accordingly, the current work investigated one consumer-level factor that may help explain consumer preferences for discounted purchases. Specifically, we investigated effects of consumers' objective and subjective financial standing.

Economically, one would expect the prospect of saving on expenditures to be especially appealing to those who feel pinched financially. However, several real world surveys suggest that wealthier individuals are more likely to price-comparison shop, seek deals, and use mobile coupons (e.g., Bhappu, Garf, and Lawry 2014; Nielsen 2010). The literature on subjective financial well-being and coupon usage is equivocal, with some studies suggesting a positive relationship between income and coupon usage (e.g., Laroche et al. 2003) and others suggesting a negative one (e.g., Mittal 1994).

The current research makes three main contributions. First, we establish that compared to a psychological sense being better off financially, feeling worse off (financially deprived) reduces the attractiveness of deals. Second, we show that feeling poor decreases (increases) feelings of shame (pride) associated with deals. Finally, we then examine contexts that minimize the unpleasant feelings financially deprived individuals have towards discounts and hence enhance their adoption of them.

Study 1 was conducted among 81 participants in a field setting: at either a check-cashing or pay day lender site. Participants imagined purchasing high-end shoes available at a 20% discount and reported their attitudes towards the offer (e.g., the extent to which they felt that paying full price was a waste of money). Participants reported their ability to spend money freely as a proxy for their financial standing. Results supported our predicted negative relationship between financial deprivation and deal receptiveness. The more people felt unable to spend freely, the less they felt that paying full price was a waste of money, $p = .02$.

Study 2 tested the causal relationship between subjective wealth and receptiveness towards discounts. We asked 242 participants on Amazon's Mturk to imagine the purchase of discounted shoes at a second-hand store, and to indicate how purchasing the discounted items would make them feel. Consistent with the results from Study 1, those who felt worse off financially ($M = 2.79, SD = 2.23$) indicated feeling more ashamed, relative to participants who felt better off financially, ($M = 2.24, SD = 1.81$), $F(1, 226) = 4.21, p = .041$). In addition, those feeling worse off financially ($M = 1.71, SD = .88$) indicated feeling more distressed while reading about the scenario, as compared to those led to feel better off financially ($M = 1.38, SD = .70$), $F(1, 226) = 10.02$. Together, Study 1 and 2 suggest a negative relationship between subjective wealth perceptions and the extent to which people are amenable to discounted offers. These effects occur both when the discount is available at "high end" and "thrifty" locations, mitigating the possibility that norms (e.g., appropriateness of spending, desirability of spending) contributed to the effect.

Study 3 investigated deal receptiveness in a different context. After manipulating participants' perceived financial standing, we

asked participants to imagine a buy one, get one (BOGO) offer for a more utilitarian purchase: their preferred shampoo. They indicated their agreement with two statements regarding the offer using a seven-point scale (1 = strongly disagree, 7 = strongly agree): (1) “The offer is a good deal” and (2) “I would accept the offer”. These measures were used as a proxy for consumers’ receptiveness to the deal ($r = .82, p < .001$). As expected, evaluations of the deal were lower in the financially deprived ($M = 3.93, SD = 1.79$) versus privileged condition ($M = 4.36, SD = 1.73; F(1, 287) = 4.39, p = .037$). Consistent with patterns found in Study 1 and 2, participants in the deprived condition ($M = 1.76, SD = .96$) reported feeling more ashamed and distressed than did participants in the privileged condition ($M = 1.53, SD = .81, F(1, 287) = 4.58, p = .033$, and participants in the privileged condition ($M = 2.13, SD = 1.03$) reported feeling more proud and excited than did participants in the deprived condition ($M = 1.87, SD = 1.04, F(1, 287) = 4.43, p = .03$).

Study 4 tested one method of boosting preferences for discounted offers. Previous work (Sharma and Keller 2016, unpublished manuscript) has shown that people who feel poorer are more amenable to opportunities to earn rather than save. Accordingly, we aimed to reframe discounted offers as opportunities to “earn / get” money rather than to “save” money. We tested this intervention using a sample of individuals who were led to feel financially deprived and found the anticipated results. Financially deprived individuals rated the discounted offer as more attractive in the “earn / get” condition as compared to the “save” condition, $M_{\text{earn}} = 4.27, SD = 1.92; M_{\text{save}} = 3.66, SD = 2.04; F(1, 232) = 5.38, p = .02$.

Results from ongoing follow-up studies provide preliminary evidence of two additional boundary conditions: (1) salience of wealthier peers and (2) attributions associated with the discount. When the context involves non-socially-threatening individuals (e.g., family), or when the use of discounts does not signal one’s ability to spend, receptiveness towards discounts increases.

Why Some Prices Are Fairer Than Others

EXTENDED ABSTRACT

When demand for goods and services increases, prices often follow. Airlines and Uber charge more during peak hours, some soda machines raise prices on hot days, and the cost of new prescription drugs can soar with demand. But monetary prices are just one way to ration things that are in short supply. For example, suppose a drought forces a township to regulate water permits. How should it decide who gets the permits? The township can set a monetary price or auction the permits to the highest bidders. It can allocate the permits on a first-come/first-serve basis, which sets a price on time because people must wait in line. It can offer the permits to those with social influence or political connections. It can offer the permits in exchange for labor. And so on.

Previous research has focused on how perceptions of fairness depend on factors related to the firm, such as whether prices change due to increased costs or increased market power (Kahneman, Knetsch, and Thaler 1986). But this overlooks how factors related to the consumer also influence perceptions of whether prices are fair.

Here, we show that consumers believe resources (e.g., time, money, effort) vary in how well they signal preference (i.e., the degree to which someone wants or needs something). For instance, offering a lot of money may not be a clear signal that someone truly wants or needs an item. But offering a lot of time or effort might be. Importantly, perceptions of fairness depend on these preference signals. And pricing and rationing strategies seem fair if they ensure

that the people who want or need something the most are the most likely to get it.

Two factors appear to determine how well resources signal consumer preferences:

(1) Equality. Resources that are equally distributed seem like better signals of preference. (2) Ease-of-use. Resources with scales, magnitudes, and purchasing power that are easy to understand seem like better signals of preference.

We tested this account across three studies.

In Study 1a, participants evaluated how well six resources signaled consumer preferences (money, time, mental energy, physical energy, community support, and social influence). Participants then evaluated how fair it would be to allocate housing according to people’s willingness to spend/use these resources. Across resources, the group-level correlation between perceived fairness and perceived preference signaling was strongly positive ($r = .97, p < .001$), as was the average within-subjects correlation ($r = .21, p < .001$). To rule out demand effects, in Study 1b we replicated the group-level correlation with a between-subjects design wherein participants rated either the fairness of rationing based on each resource or how well spending each resource signaled preferences ($r = .94, p < .001$).

In Studies 2a–b, we manipulated preference signaling directly. We presented scenarios in which flu vaccines, high-speed internet, or water during a drought would be offered to those who paid the most money or waited in the line the longest (i.e., spent the most time). We then asked participants to explain, “why the amount of [time/money] someone spends to get something is [not always] a good signal of how much they want or need something.” Finally, all participants evaluated the fairness of each policy.

As predicted, participants viewed policies as fairer when they first thought about why spending a resource was a good signal of preferences versus a poor signal of preferences (money: good-signal— $M = 2.57, SD = 1.73$ vs. money: poor-signal— $M = 2.01, SD = 1.36, t(458) = 2.90, p = .004$; time: good-signal— $M = 3.13, SD = 1.79$ vs. time: poor-signal— $M = 2.00, SD = 1.40, t(446) = 5.56, p < .001$).

Finally, in Studies 3a–b, we tested the two proposed factors that influence preference signaling: equality (i.e., whether the resources are distributed equally) and ease-of-use (i.e., whether the resource’s scales, magnitudes, and purchasing power are easy to understand).

Participants read scenarios that described how housing, enrollment for college courses, or leisure events would be auctioned off to the highest bidders. In Study 3a, we manipulated participants’ beliefs about whether resources were distributed equally or unequally. In Study 3b, we manipulated ease-of-use (e.g., a currency was volatile or stable, or people did or did not know the rules for using a currency). Participants then rated both the fairness of the auction and whether bids in the auction could be taken as a clear signal of consumer preferences.

In Study 3a, participants perceived the auction to be fairer in the equal condition ($M = 4.44, SD = 1.90$) than in the unequal condition ($M = 2.85, SD = 1.75; F(1, 566) = 107.32, p < .001$), and preference signaling mediated the effect of resource equality on fairness (95% C.I. = $[-.320, -.075]$). In Study 3b, participants perceived the auction to be fairer in the easy condition ($M = 4.06, SD = 1.77$) than in the difficult condition ($M = 3.00, SD = 1.65; F(1, 581) = 55.51, p < .001$), and preference signaling mediated the effect of ease-of-use on fairness (95% C.I. = $[-.513, -.248]$).

This research shows that consumers believe resources vary in how well they actually reveal one’s preferences. These beliefs, in turn, influence whether people perceive prices as fair, which has implications for how we consider a range of policies, from surge pricing

ing to the allocation of government assistance. Our findings, therefore, can better inform how marketers and policymakers alike might respond to spikes in demand.

The Negative Consequences of Petty Exchange

EXTENDED ABSTRACT

Informal exchanges of resources—including money and time—are prevalent in our daily lives. We may send gift cards for a favor received, split a bill from dinner, or spend time with a colleague to brainstorm. One factor deemed as important in these situations is the objective value of a resource: in other words, giving “more” improves the quality of interpersonal relationships (e.g., Cotterell, Eisenberger, & Speicher, 1992; Flynn, 2003; Flynn & Adams, 2009). We argue that the quality of interpersonal relationships does not solely depend on giving (and receiving) more; it also depends on how petty—being deliberately attentive over trivial details—the exchange feels.

We first establish a contextual boundary by demonstrating that the negative impact of pettiness is unique to interpersonal relationships. Study 1 recruited participants with Venmo or Paypal accounts, who were assigned to interpersonal or impersonal conditions. Those in the impersonal condition saw Venmo histories of two individuals: one listed petty money transfers to three companies (\$9.99, 34.95, 20.05), and another listed round money transfers to the same three companies (10, \$35, \$20), each summing up to \$65. Participants in the interpersonal condition also saw petty and round transfers—but to three individuals. When asked with whom they would rather be friends with, 81% in the interpersonal condition chose the individual with round payments, far more than those in the impersonal condition (50%; $p < .001$), suggesting that pettiness is unique to interpersonal exchanges.

Studies 2a and 2b further examined the effect of pettiness with money. In Study 2a, participants rated a person who paid \$9.99 for \$9.99 owed, \$10 for \$9.99 owed, or \$10 for \$10 owed when splitting the dinner bill. There was no difference in evaluations between the two \$10 conditions; however, the giver who paid \$9.99 was disliked more ($p < .001$), suggesting that people expect others to round up, rather than paying the exact amount owed.

But, could pettiness cause harm even when the amount given is objectively larger than a non-petty amount? Study 2b participants evaluated an individual who gave them a \$4.85, \$5, or \$5.15 gift card in return for a favor. Participants in both \$4.85 and \$5.15 conditions disliked the giver more than those in the \$5 condition ($p < .001$; $p = .03$ respectively), despite that \$5.15 was higher than \$5.

Study 3 examined whether pettiness can manifest through a different type of resource: time. Participants whose relationship status was single participated in an online dating simulation and saw a match. In addition to other information, they also saw what their match had responded to the following scenario—“Your friend is moving to a new home this Saturday and needs some help with moving large pieces of furniture. He/she texts you, asking if you are free to help. What would you text back?”—in one of three different ways: that he/she can help from 1-3pm, 1-2:56pm, or 1-3:04 pm. Those in the 3pm condition were much more likely to accept going on a date (61%) than those in the 2:56pm (35.7%) or in the 3:04pm (43.4%) condition, providing additional evidence that pettiness breeds social avoidance.

Studies thus far operationalized pettiness by manipulating the precision of the amount offered. Here, we operationalize pettiness in two additional ways: an explicit rationale that acknowledges one’s act of monitoring (study 4a) and an action that implicitly signals

one’s intention to monitor (study 4b). In study 4a, all participants read that they helped their neighbor by driving him to a wedding 3 hours away. They further read that the neighbor offered either to get premium gas for \$3.29 to make it the same price as taking a round trip bus ride, or to get regular gas for \$3.09. Despite that those in the premium condition received a clearly better option, participants liked the neighbor significantly less than those in the regular condition ($p = .01$) and found the relationship more transactional ($p = .001$). Perceived transactionality mediated the relationship between pettiness and liking (95% CI: .14, .60).

In study 4b, participants read about a friend who is spending an hour to help them. Those in the petty condition also read that she had turned a timer on to keep track of time. When asked which 5-minute task they preferred to complete—writing a positive note to the friend or responding to an essay prompt—those in the petty condition were less willing to write a positive note (55.8%) than those in the non-petty condition (69%, $p = .01$), despite that in each condition, participants received an hour of their friend’s time. Those in the petty condition also found the relationship more transactional ($p < .01$), which mediated the relationship between pettiness and preferred choice (95% CI: -.88, -.24).

Study 5 examined whether removing intentionality can mitigate the negative impact of pettiness. Participants evaluated a person who had given a \$10 or \$13.50 cafe gift card. They also saw that the café’s website listed \$13.50 as a default option or did not. If \$13.50 were a default option, one would infer that the giver did not intentionally give \$13.50. There was a significant interaction ($p < .001$): among those who did not see \$13.50 as a default, participants found the relationship more transactional after receiving \$13.50 over \$10, which led them to evaluate the giver more negatively (95% CI: .11, .31). However, this pattern reversed when participants knew \$13.50 was a default option, and perceived transactionality no longer mediated the relationship (95% CI: -.09, .09).

Six studies, featuring everyday exchanges of goods, money, and time, examined how pettiness can engender negative consequences, even when the petty amount is objectively larger. We also documented the process behind this effect: pettiness makes the relationship feel more transactional, reducing liking and social preference. With the rise of digital tools that facilitate exchanges of resources, we constantly face the question of “how much should we give?”. While one may intuit that being attentive to small details signals a more valuable relationship. However, our results indicate otherwise: choosing not to be petty could make your friendships healthier, and may even give you a second date.

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Choosing Healthy: Recent Findings on Environmental Factors that Shape Choice and Consumption

Chair: Kevin L. Sample, University of Georgia, USA

Paper #1: Ambient Music and Food Choices: Can Music Volume Level Nudge Healthier Choices?

Dipayan Biswas, University of South Florida, USA
Kaisa Lund, Linnaeus University, Sweden
Courtney Szocs, Portland State University, USA

Paper #2: Heavy Choices: Exertion and Food Choice Healthiness in Field Settings

Aner Tal, Cornell University, USA
Amir Grinstein, Northeastern University, USA
Mirella Kleijnen Frei, Universitat Amsterdam, Netherlands
Joshua Ackermann, University of Michigan, USA
Brian Wansink, Cornell University, USA

Paper #3: Healthy Diets and Empty Wallets: The Healthy=Expensive Intuition

Kelly L. Haws, Vanderbilt University, USA
Rebecca Reczek, Ohio State University, USA
Kevin L. Sample, University of Georgia, USA

Paper #4: Introducing the “Calories per Gram” Label to Promote Healthy Food Choices

Julio Sevilla, University of Georgia, USA
Brian Wansink, Cornell University, USA

SESSION OVERVIEW

The purchase and consumption environment for food choices provides a myriad of environmental cues for consumers to navigate. For example, prior research reveals that consumers miss important health information by allocating their attention toward certain labels and environmental information rather than more important health cues and caloric density (Wansink and Chandon 2006; Wansink 2004). Further, poor estimation of container volume leads consumers toward unhealthy food choices (Chandon and Ordabayeva 2009), and due to financial savings consumers will even sacrifice health goals (Haws and Winterich 2013).

So, how do consumers miss important information or deviate from planned health decisions? The various factors impinging on cognitive resources can severely alter or nullify healthy choices. Ambient music, the weight of a food tray, a higher or lower price than expected, and difficult to understand labels can all influence consumer decisions in regards to healthy choices, and this session seeks to shed light on each of these areas. As a whole, this session tries to answer the following question: How can factors apart from the food itself specifically impact healthy consumption behavior? Further, what can be done to mitigate poor choices when consumers are overwhelmed by environmental information? The papers in this session address these and other gaps in understanding environmental influences on health perceptions and healthy decisions by showing the following: 1) healthy choices increase in the presence of a low volume level of ambient music, 2) an increase in physical burden on consumers during a shopping episode leads to less healthy decisions, 3) consumers utilize pricing information when the healthiness of a product is ambiguous, and 4) presenting nutrition information in a new format (Calories per Gram) can improve food choices.

First, Biswas, Lund, and Szocs show that the ever present ambient music in eateries and stores plays a critical role for healthy decision making. Following, Tal et al. demonstrate the propensity

for physically depleted consumers, even if this depletion is somewhat minimal from such things as carrying bags, to make less healthy food choices. Next, Haws, Reczek, and Sample expose the intuition that healthy food is more expensive, and demonstrate how this belief affects perceptions of the healthiness of food and the importance of associated health claims. Finally, Sevilla and Wansink establish the usefulness of the presentation of nutritional information through a Calories per Gram label as compared to the ubiquitous Nutrition Facts panel. They show that the use of this format helps consumers understand the relationship between calories and serving size and leads to less caloric intake in subsequent consumption opportunities. Together these findings show that there are countless environmental factors that may alter healthy consumer behavior.

This session offers a new appreciation of consumers' health choices with respect to environmental cues. Not only do these papers provide insight into understanding the complexity of food decision making, they also move us further in our ability to market responsibly and protect consumer welfare by understanding how the environment is impacting and being utilized by consumers in relation to healthy food choices.

Ambient Music and Food Choices: Can Music Volume Level Nudge Healthier Choices?

EXTENDED ABSTRACT

We examine how ambient music might influence choices between healthy and unhealthy options. Our choice of a sensory factor, such as ambient music, to nudge healthful consumption is influenced by the fact that sensory cues tend to influence behavior in subliminal manners (Biswas et al. 2014) and hence such cues are non-restrictive in nature and as a result are often more effective than restrictive regulatory policies.

While prior research has examined several interesting factors that can influence choices between healthy and unhealthy options (Romero and Biswas 2016), no study, to the best of our knowledge, has examined how ambient music might influence choices between healthy/unhealthy options. Similarly, while extant research has examined effects of ambient music for a wide range of factors (Garlin and Owen 2006), the effects of ambient music on choices between healthy and unhealthy options have been unexplored.

Focusing on the effects of ambient music on food choices is practically and theoretically relevant, especially since ambient music is ubiquitous at almost all types of restaurant/retail outlets. While there are several dimensions to music, we focus on music volume mainly because from a managerial perspective, it is the easiest to change at very short notice and without much resource commitment. Also, examining cross-modal influences of an auditory-based sensory cue like ambient music loudness on eating behavior can provide interesting conceptual insights.

Loudness of any sound, including ambient music, is the energy associated with the sound. When music is played in the ambience, the sound waves get transduced into neural impulses by the inner ear and the neural information then travels through the brain system to reach the auditory cortex (Zatorre 2005). While it is still not clear as to how music loudness can influence physiological reactions through the neurophysiology system, one plausible explanation put forward is that music influences motor and physiological reactions through

sensory-motor feedback circuits (Zatorre 2005). Hence, loud music tends to make people lively and the loudness level of ambient music tends to have a direct effect on heart rate and arousal, whereby louder ambient music tends to increase overall heart rate and arousal level (Edgeworthy and Waring 2006). In essence, louder music tends to make people more excited and aroused (Witt 2008). In contrast, lower levels of music volume (in the range of around 50 dB) tend to make people relaxed and calm (Nilsson 2009).

Higher levels of excitement (and stress) tend to enhance preference for high energy and high fat foods (Oliver et al. 2000). This is probably because sweet and fatty foods help in reducing high levels of excitement (and stress) levels (Gibson 2006). Moreover, when emotionally charged up or upset, internal restraints and self-control break down, leading to greater eating of unhealthy foods (Baumeister 2002). The opposite pattern of effects occurs when people are in a relaxed state, whereby there is greater self-efficacy for controlled eating under higher levels of relaxation (Manzoni et al. 2009). This implies that lower (vs. higher) volume ambient music will lead to healthier food choices. Accordingly, we hypothesize that low (vs. high) loudness levels of ambient music will enhance choice likelihood of healthy food options. We empirically test this with three studies.

Study 1 was a field experiment conducted at a café in collaboration with the café management. The study had two manipulated conditions – low (55dB) versus high volume (70 dB) of ambient music being played on two random days. The volume levels were determined based on prior research (Witt 2008). The key measure was café patrons' food/beverage purchases from the menu. The items from the menu were a priori coded as healthy, unhealthy, or neutral. We focused only on the “healthy” and “unhealthy” items. A higher percentage of healthy items were sold when the ambient music loudness level was low (vs. high) (42.92% vs. 32.49%; $\chi^2 = 4.79, p < .05$). This supports our hypothesis.

Next, study 2 replicated these effects in a lab setting and also compared the outcomes to a control condition. The study had three between-subjects manipulated conditions (ambient music: absent vs. low volume vs. high volume). The choice options involved choosing between a fruit salad and a chocolate cake. The results of a logistic regression show a significant effect of ambient music condition on food choice (Wald $\chi^2 = 6.63, p < .01$). Follow-up tests show that consistent with our hypothesis and the findings of study 1, participants chose healthier options to a greater extent with low (vs. high) volume ambient music (86.36% vs. 56.52%; $\chi^2 = 4.87, p < .05$). Also interestingly, the choice outcome for the control (“no music”) condition was similar to the “high volume” condition (50.0% vs. 56.52%; $\chi^2 = .21, p = .65$) and significantly different from the “low volume” condition ($\chi^2 = 7.09, p < .01$).

Next, study 3 directly examined the underlying process. If our theorizing holds, then the effects observed in studies 1 and 2 should be weakened when relaxation is induced. Study 3 tested this hypothesis with a 2 (ambient music volume: low vs. high) X 2 (relaxation induced vs. not) between subjects experiment. The first factor was manipulated in the same manner as in study 2. The second factor was manipulated through a relaxation priming task. Fruit salad and chocolate cake were the healthy/unhealthy options.

The results of a logistic regression reveal a significant interaction effect ($\chi^2 = 3.88, p < .05$). When relaxation is not induced, consistent with the effects observed in studies 1 and 2, low (vs. high) volume ambient music leads to healthier choices (83.33% vs. 54.17%; $\chi^2 = 4.75, p < .05$). In contrast, inducing relaxation attenuates this effect (80.0% vs. 82.76%; $\chi^2 = .06, p = .81$).

The results of our experiments show that consumers tend to have higher preference for healthier options when ambient music is of low volume versus when it is high volume or absent. Relaxation induced by music volume seems to be the underlying process for these effects. Our findings have implications for cross-modal influences of auditory cues on food choices.

Heavy Choices: Exertion and Food Choice Healthiness in Field Settings

EXTENDED ABSTRACT

Food choices are determined by a variety of situational factors, with consumers' own physical states playing a central role. A broad range of factors from consumers' hunger (Tal and Wansink 2013; Wansink et al. 2012) to their emotional states (Oliver et al. 2000) alter food choice, and specifically affect healthiness and quantity eaten. In general, many consumer choices in the food domain are not deliberative, and so are prone to a variety of environmental influences (Wansink 2004).

One central factor that interferes with food choices is consumers' cognitive resources. Consumers have limited resources available to monitor and control choices (Baumeister et al. 1998). Resource depletion interferes with consumer choice in general (Baumeister et al. 2008). Generally speaking, reduced resources prevent consumers from exerting self control, and so result in increased impulse purchases (Baumeister et al. 2002; Faber and Vohs 2004).

In the context of food, resource depletion can translate to increased eating or choice of less healthy foods (e.g., Shiv and Fedorikina 1999; Hofmann et al. 2007). Resistance of tempting foods requires regulatory resources, such that even exposure to them can deplete regulatory resources (Muraven et al. 1998). Exposure to tempting foods in choice settings in turn presents consumers with a task that requires them to override the natural pull of the tempting foods by engaging regulatory resources to exert control. Consequently, when depleted, consumers engage in more indulgent eating behavior (Vohs and Heatherton 2000).

A range of activities can rob consumers of their cognitive resources. Suppressing thoughts, feelings, and engaging in cognitively demanding tasks can all deplete resources (Muraven et al. 1998). Even making effortful choices all deplete consumers regulatory resources (Vohs et al. 2014), and result in impairments in subsequent decision making.

Notably, most documented evidence demonstrating ego depletion demonstrates depletion following tasks that require cognitive, rather than physical, effort. However, it is now known that regulatory resources correspond to certain physical realities, such as the body's glucose levels (Galliot et al. 2007). From that perspective, anything that saps the body physically should lead to subsequent deterioration in self control. In the context of food, this would translate to increased eating.

In the current work, we explore whether physical depletion, generated by carrying heavy weights in the form of shopping bags (study 1), people's own backpacks (study 2), or serving dishes such as plates (study 3) does indeed lead to increased eating. Studies 1 and 2 provide field demonstrations of the phenomenon, whereby burdened consumers choose more caloric (study 1) and less healthy (study 2) foods. Study 3 explores the phenomenon in a more controlled lab setting.

In our first study, trained observers recorded the number of shopping bags held by shoppers (N = 178) at eight food courts across the US and estimated the calories in their meals. The researchers were blind to the hypotheses of the study, and recorded a series of

other variables to preclude guessing of the hypotheses. Though such estimates cannot be precise, prior to observation, researchers underwent training in calorie estimation. When possible, researchers used objective calorie measures for the foods ordered. Those carrying a greater number of packages ordered foods with a greater number of calories: $F(1, 176) = 5.47, p = .02$. The findings demonstrate that the extent of burden is associated with choice of higher calorie meals.

In study 2, we wished to focus on choice healthiness rather than quantity, and demonstrate that burden influences not merely caloric pursuit but general healthiness of food. Further, we also measured subjective exertion to show its role in influencing food choice, by measuring perceived heaviness of the bags they carried on a scale of 1 (light) to 7 (heavy). We recruited cafeteria attendants ($N = 87$), and recorded their choices among 7 dishes offered in the cafeteria, coded as healthy or not according to pre-set standards. We found that participants who perceived their bags as heavier chose less healthy foods: $p = .029$.

To test the results in a more controlled setting, we conducted two lab studies. In a follow up lab study utilizing heavier (1252 grams) and lighter (491 grams) plates, participants carrying heavier plates chose a greater number of unhealthy foods (2.64 vs. 1.81) in a binary choice task, $F(1, 51) = 6.63, p = .013$.

Burden appears to lead to choose less healthy and serve more food. Engaging in a physically effortful activity such as carrying a heavy backpack or even serving dish reduces regulatory resources, leading to increased food consumption. We demonstrated this across a range of stimuli that are prevalent in consumers natural environments, in both field and a lab setting, and with ecologically valid choices, demonstrating the importance of the phenomenon to actual consumer behavior.

Healthy Diets and Empty Wallets: The Healthy=Expensive Intuition

EXTENDED ABSTRACT

Is this food healthy? Tasty? Affordable? Satisfying? Consumer decision making regarding foods is a belief-laden, complex, and important issue significantly impacting overall health. Prior research examining consumer lay theories with respect to food consumption has shown this, such as the belief that unhealthy products are tastier (Ragunathan et al. 2006). Clearly, underlying beliefs in the relationships among the various factors driving food choices are critical in understanding food decision making.

Health and financial concerns are two factors subject to consumer beliefs that are often in conflict in consumer decision making, for example when offered super-sized pricing, consumers value finances over health by choosing larger sizes with lower unit-prices (Haws and Winterich 2013). Rehm et al. (2011) and Larson et al. (2009) have provided evidence suggesting that a healthier diet may indeed be more expensive, but Carlson and Frazao (2012) have demonstrated that unhealthier diets can be more expensive depending on how it is assessed. Therefore, an understanding of the beliefs behind these factors of health and cost is crucial in understanding food decision making. We examine beliefs about the relationship between the healthiness and expensiveness of food products at the level of the individual consumer in a series of experimental studies, proposing and demonstrating that consumers incorporate a lay theory that healthier products are more expensive, leading to intuition-based inference making, food choice, and more global evaluations of health claims.

In study 1, 108 MTurk participants were provided with information about the health grade of a granola product, with the grade being either an "A-" or a "C". Following this manipulation, partici-

pants were asked to rate how expensive they thought the product would be compared to other similar products on a 7-point scale. As expected, the product rated as healthier was perceived to be more expensive than the less healthy product ($M_{\text{healthy}} = 5.15$ vs. $M_{\text{unhealthy}} = 4.51, F(1, 106) = 6.29, p < .05$).

In study 2, we simultaneously examined how information about product price impacted perceptions of healthiness and how information about healthiness impacted perceptions of product price when the actual food product was consumed. After being provided with information about either the price (\$.25 or \$2.00) or healthiness level (independent health grade: A- vs. C), participants were asked to indicate the relative healthiness and expensiveness of the product compared to other similar types of products. We examined the contrast of healthiness perceptions based on the cheap versus expensive manipulation and found that the cheaper product led to lower perceptions of healthiness than did the more expensive product ($M_{\text{expensive}} = 4.77$ vs. $M_{\text{cheap}} = 3.83, t(137) = 2.97, p < .01$). Similarly, the less healthy product led to lower perceptions of expensiveness than did the healthier product ($M_{\text{healthy}} = 4.34$ vs. $M_{\text{unhealthy}} = 3.51, t(137) = 5.64, p < .001$). The results of this study suggest that the healthy = expensive intuition operates in both directions, that is, when an item is positioned as more expensive, consumers perceive it to be healthier, and when a product is positioned as healthier, consumers perceive it to be more expensive.

In study 3, we presented 38 participants a scenario in which they were in charge of choosing an entrée that would better meet a goal to be healthier. Following a health goal prime, participants were presented with two different chicken/pasta dishes selected to be similar in terms of healthiness, based upon actual nutrition information. We counterbalanced which option was more expensive, using price points of \$15 and \$22, and the order of presentation of the options was randomized for each participant. A chi-square test revealed differences in choice selections consistent with the notion that whichever option was more expensive was selected to be more likely satisfy the healthier goal (Chi-square = 5.16, $p < .05$). Essentially, choice shares between the options reversed such that whichever entrée was listed as the higher price was selected more than twice as often as the other option. Therefore, study 3 provides evidence that beliefs about the link between healthiness and expensiveness impacted choice.

In study 4, the 197 participants were asked to make a series of choices structured as a grocery shopping trip for a family of four. Half of the participants were explicitly told to imagine that they were on a budget. Participants were presented with 26 grocery choices, 13 of which were pairs pretested to differ in healthiness perceptions. An analysis of the number of choices of the less healthy products show that the participants in the budget condition were less likely to choose the healthier products ($M = 5.69$) than those in the control condition ($M = 7.17; F(1, 195) = 14.30, p < .001$), indicating that when given a goal to conserve money, participants chose less healthy options as a means to do so.

Finally, study 5 examines how beliefs that healthy=expensive impacts broader beliefs about healthiness. Specifically, 115 participants were shown a set of 4 trail mix options in which one mix was labeled as the "Perfect Vision Mix" and said to contain DHA for eye health. Participants either saw a price consistent with the other three options or 20% higher for the focal trail mix. In this case, the dependent measures were perceptions of the importance of DHA and intentions to take actions related to consuming DHA and protecting eye health. All four measures (i.e., "How important is it that a healthy diet include DHA?" 1 = not at all important, 9 = very important) showed that seeing the premium price increased perceptions of the importance of the DHA/eye health claim. For example, those

in the higher price condition thought that DHA was a more important part of their diet than did those in the average price condition ($M_{\text{high}}=4.93$ vs. $M_{\text{low}}=4.11$, $F(1, 114)=4.89$, $p < .05$).

In summary, we have established a basic link demonstrating a consumer lay theory linking healthiness and expensiveness. This intuition led to lay inferences regarding perceptions of health and price, differences in choice patterns, and more general perceptions of the importance of health claims, suggesting significant implications for food decision making.

Introducing the “Calories per Gram” Label to Promote Healthy Food Choices

EXTENDED ABSTRACT

Past research has shown that consumers tend to make unhealthy food choices even when they attend to caloric information and intend to make healthy decisions (e.g. Balasubramanian and Cole 2002). One factor responsible for such problem is manufacturers’ lenient following of the regulations provided by the Nutritional Label and Education Act (NLEA) of 1990, which establishes the portion size that constitutes one food serving. Despite this regulation, manufacturers regularly report smaller serving sizes than established by the NLEA, often with the intention to lead consumers to believe their products have fewer calories and are healthier than they actually are (Mohr, Lichtenstein and Janiszewski 2011). Given eating restrained consumers’ (Herman and Polivy 1980) tendency to look for licenses to indulge (e.g. Fitzsimons, Nunes & Williams 2007; Wilcox et al. 2009), it is not surprising that they tend to interpret the ambiguity of such caloric information in a way that allows them to maximize consumption (e.g. Aydinoglu and Krishna 2011). Furthermore, serving size issue aside, consumers often overvalue the importance of consuming a product containing an absolute lower number of calories (e.g. a small donut vs. a large bagel) to the detriment of attending to other important food attributes such as caloric density (e.g. Wansink 2004), that is, the relationship between the size of a food item and the absolute number of calories it contains. Caloric density has been shown to be an important predictor of caloric consumption (Rolls et al. 2004), as people become more full by the weight of a food than by the amount of calories it contains (Rolls, Bell and Waugh 2000; Rolls et al. 1998; Rolls, Morris and Roe 2002). Thus, this suggests that consuming foods that are high on caloric density often results in an overall higher amount of calories ingested.

These past findings suggest that consumers may benefit from cues or instruments that hint them towards consuming foods that have a lower number of calories per gram or a lower caloric density, even if they contain a larger amount of calories due to their higher volume (e.g. a large bagel vs. a small donut), since these are more satisfying and will likely decrease subsequent consumption. The current work aims to introduce and test the effectiveness of one such tool: the “Calories per gram” label. By introducing this instrument, we aim to teach consumers to make more informed and healthier food choices that may lead them to reduce their total caloric intake. We argue that this metric achieves this objective by allowing consumers to easily compare the caloric density across different options that may vary on their weight and total calories.

In four studies we show that the “Calories per gram” label leads consumers to reverse their choices in favor of healthier options that have a lower caloric density (fewer calories per gram) even when these have an absolute higher number of calories. Study 1 (N=288) showed initial evidence in favor of the effectiveness of the label in a design where participants selected a bagel or a donut. In this study the bagel had a higher number of calories than the donut but

a lower calories per gram ratio. We obtained that when participants only had access to the traditional nutritional information they were more likely to pick the donut ($M_{\text{donut}}=52.8\%$) and believed this item was healthier ($M_{\text{donut}}=53.5\%$). However, this pattern reversed in the presence of the label, as people were more likely to pick the bagel ($M_{\text{bagel}}=61.8\%$; $z = 2.49$, $p = .01$) and believed it was healthier ($M_{\text{bagel}}=62.5\%$; $z = 2.72$, $p < .01$). This suggests that using the label nudges consumers towards making healthier choices and helps them realize which item is healthier even if it has an absolute higher number of calories.

Study 2 (N=160) used a similar paradigm and replicated the effect with the use of packaged products: granola bars and chocolates. As expected, we obtained that the healthier item, the granola bar, was more likely to be chosen ($M=65.5\%$ vs. $M=34.2\%$; $z = 3.95$, $p < .0001$) and was perceived to be healthier ($M=90.5\%$ vs. 68.4% ; $z = 3.48$, $p < .001$) when presented with the “Calories per gram” label than when only featured with the traditional nutrition information. Furthermore, we showed that the effect of the label on choice was mediated by healthiness perceptions associated to the products [LLCI: .11 to ULCI: .82].

Study 3 (N=274) showed that merely featuring the label can improve a manufacturer’s choice share and healthiness perceptions. Specifically, in this design we compared two potato chips products that had the same nutritional information but that differed on how healthy participants perceived each brand to be: Cape Cod and Kettle. We showed that while Cape Cod was more likely to be chosen and was perceived as healthier when only calories and grams ($M_{\text{Cape-Cod}}=63.0\%$ vs. $M_{\text{Kettle}}=37.0\%$; $z = 3.54$, $p < .005$) or only calories were presented ($M_{\text{Cape-Cod}}=64.8\%$ vs. $M_{\text{Kettle}}=35.2\%$; $z = 4.00$, $p < .05$), this effect was neutralized in the presence of the label, as in these cases Kettle was perceived to be similar to Cape Cod in terms of choice share ($M_{\text{Cape-Cod}}=52.7\%$ vs. $M_{\text{Kettle}}=47.3\%$; $z = .74$, $p = .46$) and perceived healthiness ($M_{\text{Cape-Cod}}=54.9\%$ vs. $M_{\text{Kettle}}=45.1\%$; $z = 1.33$, $p = .18$).

While the initial studies showed the effect in a computer-based setting, study 4 (N=193) did this in a real context in which they chose between a bagel and a donut. Furthermore, this study confirmed our prediction that picking healthier items that have an absolute higher number of calories but a lower “Calories per gram” ratio due to the presence of the “Calories per gram” label leads consumers to ingest fewer calories in subsequent consumption opportunities. Specifically, we demonstrated that those that picked and consumed the bagel against the donut after being exposed to the label ate less granola trail mix when invited to consume such item freely ($M_{\text{Bagel}}=17.76$ vs. $M_{\text{Donut}}=29.07$; $t(103) = 2.78$, $p < .01$).

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Reinvestigating Fundamental Concepts of Marketing and Consumer Research—How Consumer Neuroscience Adds Additional Value to Our Discipline

Chair: Monika Koller, WU Vienna, Austria

Paper #1: Emotional Responses to Movie-Trailers Predict Individual Preferences for Movies and Their Population-wide Commercial Success

Maarten Boksem, Erasmus University Rotterdam, The Netherlands
Hang-Yee Chan, Erasmus University Rotterdam, The Netherlands
Vincent Schoots, Erasmus University Rotterdam, The Netherlands
Alan Sanfey, Behavioural Science Institute, Radboud University Nijmegen, The Netherlands
Ale Smidts, Erasmus University Rotterdam, The Netherlands

Paper #2: Neural Prediction of Market-level Crowdfunding Outcomes

Alexander Genevsky, Erasmus University Rotterdam, The Netherlands
Carolyn Yoon, Stephen M. Ross School of Business, University of Michigan, USA
Brian Knutson, Department of Psychology, Stanford University, USA

Paper #3: We Are What We Know: Using Consumer Neuroscience to Build a Better Understanding of Price Knowledge

Marco Hubert, Zeppelin University, Germany
Marc Linzmajer, University of St. Gallen, Switzerland
Peter Kenning, University of Düsseldorf, Germany
Mirja Hubert, Zeppelin University, Germany

Paper #4: Effectiveness of Print and Digital Media: Insights from Neuroscience

Vinod Venkatraman, Temple University, USA
Angelika Dimoka, Temple University, USA
Paul Pavlou, Temple University, USA
Khoi Vo, Duke University, USA

SESSION OVERVIEW

Since the early days of marketing, next to product- and distribution-related decision, marketing communications and pricing have always been of utmost importance. From a consumer research point of view, it is vital to understand the effects of any such marketing activity on the cognitive and affective information processing as well as on the decision-making of the consumer. Traditional methods of marketing and consumer research can capture those effects only to a certain extent. Consumer neuroscience, as a joint discipline between neuroscience and consumer research, provides an additional approach to add to our current understanding of why and how marketing actually works. Studies within the area of consumer neuroscience may support, help refine or reject established theories. Consumer neuroscience aims at extending our knowledge by adding biological data to complement our understanding of human consumption behavior. Currently, this understanding is predominantly based on behavioral and psychological data. While having started as a niche-phenomenon about two decades ago, today, consumer neuroscience has its fixed place in the consumer researcher's toolbox. In our special session, we want to provide examples of how consumer neuroscience can advance knowledge in regards to selected fundamental concepts of our discipline. In particular, we provide examples on how consu-

mer attitudes and preferences as well as consumer decision-making can be explained within a consumer neuroscience context. We discuss neural findings on consumer behavior-related phenomena as a result of cognitive (impact of pricing) and affective (effect of communications) information processing. The main objective of this special session is to broaden our horizon and way of thinking about fundamental concepts which have been relevant to marketing ever since (e.g., price knowledge and effectiveness of advertising). Our four papers presented in the special session will showcase empirical examples which provide a solid basis for a joint discussion on the added value of neural data to better understand fundamental phenomena in marketing and consumer research. We also want to discuss the potential difficulties and challenges that might come with applying neuroscientific methods to resolving questions relevant to consumer behavior. Hence, our four papers raise the following two joint questions for a comprehensive discussion:

What in particular can we learn about selected fundamental concepts of marketing and consumer research by using neuroscientific methods?

How does consumer neuroscience provide added value to our discipline and what can it not provide?

This special session was organized by Monika Koller, WU Vienna. In the following, we present the extended abstracts of the four papers included in our special session.

Emotional Responses to Movie-Trailers Predict Individual Preferences for Movies and Their Population-wide Commercial Success

EXTENDED ABSTRACT

Consumer neuroscience, applying neuroscience methods to marketing, has gained considerable popularity in recent years amongst scholars and practitioners alike (Smidts et al., 2014). As noted by Ariely & Berns (2010), there appear to be good reasons for this enthusiasm. First, because brain data are considered to be less noisy than data obtained through conventional marketing methods, it is thought that data from smaller samples can generate more accurate predictions, making neuroscience methods cheaper and faster than traditional methods. Second, it is believed that neuroimaging methods could provide marketers with information that is not obtainable through conventional marketing methods. This idea is based on the assumption that people cannot fully articulate their preferences when asked to express them explicitly, and that consumers' brains contain hidden information about their true preferences.

Indeed, several decades of research in psychology have shown that many important mental processes occur below the surface of consciousness (Dijksterhuis, 2004), leaving people very limited in their ability to predict their own future behaviour and to accurately identify their internal mental states through verbal or written self-reports (Nisbett and DeCamp Wilson 1977). These issues with self-report data are particularly problematic in the measurement of emotional responses. This is a particularly salient problem because marketing researchers have observed that the emotions evoked by marketing stimuli are important determinants of commercial success and sales. That is, advertisements that manage to evoke the strongest (usually positive) emotions are considered to be the most effective

(Batra & Ray, 1986). However, accurately measuring these emotions is not straightforward due to the limited capacity for introspecting on sub-conscious processes. Moreover, reporting on these processes with a high temporal resolution (for example every second for a video stimulus), might actually alter the ongoing emotional process (Wilson and Schooler 1991).

For the present paper, we set two goals: (1) decode the emotional experience from our participants' brains while they were exposed to marketing stimuli, without relying on self-report, and (2) use this decoded emotional experience to predict individual preferences and choices as well as sales in the population at large.

We had participants perform two tasks, while undergoing fMRI scanning. In the first task, participants passively viewed photographs selected from the IAPS database to represent the four quadrants of affective space (positive and negative valence, and high and low arousal). In the second task, participants viewed cinematic trailers of 18 movies that they had not previously seen. Movie trailers can be seen as advertisements for movies and play a crucial role in the marketing efforts by the movie industry (Gazley, Clark, and Sinha 2011). In addition, we collected both individual stated (willingness to pay) and revealed (choose three DVDs to take home) preference measures, as well as self-reported valence and arousal experienced during trailer-watching. Finally, we obtained US Box Office results of the viewed movies as a measure of population choice/real-world preference.

Our analyses of the data proceeded in several steps. First, we localized the brain areas most strongly associated with processing the emotional content of the IAPS pictures with a support vector machine (SVM) searchlight algorithm. Neural activations from these areas were subsequently used to train two emotion (i.e. valence and arousal) SVM classifiers to predict the emotional content of the IAPS pictures. Then, the trained classifiers were applied to the neural responses during movie-trailer watching to decode the pattern of neural activity at each brain volume into two emotion attributes (i.e. valence and arousal). That is, we classified every brain volume acquired during the viewing of the trailers as either positive or negative in valence, and high or low in arousal. Finally, we took the time course of decoded emotional brain states from every trailer, and tried to predict from this data (1) participants' self-reported emotional state, (2) their preferences and choices with regards to the movies they watched, and (3) the population response to the movies (US Box Office).

The results first showed that the trained SVM classifiers performed well in decoding the emotional content from the brain: using leave-one-out cross-validation, it could predict emotional valence with 57% accuracy (chance = 33%), and arousal with 65% accuracy (chance = 50%). Applying the trained classifiers to the neural data obtained during movie-trailer watching results in two time series (one for valence and one for arousal) of decoded emotional content per trailer and per subject. To test whether these time series actually represent valence and arousal, we tested whether the emotional response decoded from the brain was associated with the self-reported emotional experience. To do this, we aggregated each time series into a single measure of valence and arousal respectively. The results showed that indeed, self-reported experienced arousal could be predicted from our decoded neural arousal measure, while self-reported valence could be predicted from our neural valence measure.

Finally, we tested whether the decoded emotional response was predictive of preference and choice. We found that the neural valence measure was predictive of both stated preference (WTP), as well as revealed preference (the three DVDs they chose to take home). In addition, we found that both the decoded emotional valence, as well

as arousal significantly predicted choice in the population at large (US Box Office). Importantly, while self-reported arousal was also significantly associated with Box Office, self-reported valence was not and the variance in Box Office explained by self-report measures was relatively low ($R^2=15\%$). Adding our neural decoded response measures to this model showed that both decoded valence as well as arousal significantly added to the model and resulted in a significant increase in explained variance ($R^2=41\%$).

Our findings show that, using neuroscience methods, we are able to obtain an implicit measure of the emotional experience evoked by marketing stimuli, and that these measures can be used as a neural marker for commercial success. As such, we provide evidence that neural activations reflecting the emotional experience in response to marketing stimuli are related to real-world outcomes, and that such neural measures significantly add to prediction models of choice behaviour in the population at large.

Neural Prediction of Market-level Crowdfunding Outcomes

EXTENDED ABSTRACT

Although established economic and psychological theories (such as revealed preferences and behavioral) imply that past choice is the best predictor of future choice (Bernheim, 2008), there may be some fundamental elements of the decision making process that scale more effectively to predict behavior at the market level (Ariely & Berns, 2010). Recent neuroimaging research has demonstrated that neural activity measured in a small laboratory sample can augment behavioral predictors of aggregate behavior (Genevsky & Knutson, 2015). In this work we demonstrate that neural data can predict market-level outcomes in a large consumer marketplace significantly better than traditional behavioral methods.

Crowdfunding refers to the practice of using small financial contributions from a large group of investors to fund new products or ventures. The popularity of crowdfunding on the internet has grown exponentially in recent years, and in 2015 raised over \$34.4 billion (Massolution, 2015). Crowdfunding websites offer a unique opportunity for individuals to engage with products as both financial supporters and consumers. However, despite its growing popularity and economic significance, the neural and psychological mechanisms responsible for individual decisions to fund projects have not been explored.

Neural activity has been effectively used to predict individual choices in contexts of consumer purchasing (Knutson, Rick, Wimmer, Prelec, & Loewenstein, 2007) we investigated how people weigh these factors to make purchasing decisions. Consistent with neuroimaging evidence suggesting that distinct circuits anticipate gain and loss, product preference activated the nucleus accumbens (NAcc and financial risk preferences (Kuhnen & Knutson, 2005). Fewer studies, however, have used neural data to predict market-level behavior. For instance, researchers have found neural correlates of aggregate responses to popular music sales (Berns & Moore, 2012), public health message (Falk et al., 2011), and movie box office returns (Boksem & Smidts, 2015). In the present paper, we seek to identify which neural precursors to individual choice best generalize to forecast aggregate behavior. We investigate this question by using neural activity to predict individual and aggregate choices within a crowdfunding context.

To assess the ability of neural activity to predict funding success, thirty subjects (14 female, mean age=23.32) were recruited for a functional magnetic resonance imaging (fMRI) study and asked to make incentive-compatible decisions regarding 36 actual documen-

tary film projects which had been posted online on a crowdfunding website (www.kickstarter.com). We used neural data collected during the task to predict both individual decisions to fund and the real-world funding outcomes of these projects on the internet.

On each trial, participants were first presented with the image from each project page (2 secs), followed by a screen depicting the remainder of the project's brief text description (6 secs). Subjects then indicated whether or not they would like to fund the project using spatially counterbalanced (i.e., left or right) 'Yes' or 'No' prompts by pressing one of two corresponding buttons (4 secs). Finally, subjects fixated on a cross (variable 2-6 secs) until the next trial began. After scanning, subjects rated their liking of each project as well as their predicted likelihood of each project reaching its funding threshold (i.e., perceived project success). Subjects also rated their own affective responses to each of the projects using two scales: one indexing valence (positive–negative) and the other indexing arousal (highly arousing–not arousing).

Neural analysis contrasting whole-brain activity in trials in which subjects decided to fund versus trials in which they did not, indicated significant differences in a defined subset of regions associated with positive affect (i.e., nucleus accumbens or NAcc) and value integration (i.e., medial prefrontal cortex or MPFC). Greater activation in these areas while viewing the projects was associated with eventual decision to fund. This activity occurred before the choice phase of the trial, and thus preceded activity associated with the act of indicating a choice. We next investigated how well laboratory sample behavioral measures and neural activity could forecast market-level outcomes on the internet. A logistic regression model was used to forecast market-level funding outcomes for each of the projects, and included subject's self-report ratings of affect, project liking, and perceived project success, as well as actual funding choices, and neural activity. Of these predictors, only NAcc activity was significantly associated with internet funding outcomes. All other self-report variables and activity in other neural regions of interest were not associated with funding outcomes.

We examined whether affective neural mechanisms could forecast crowdfunding outcomes -- both in individuals, and at the aggregate level of an internet market. While activity in both NAcc and MPFC brain regions predicted individuals' choices to fund in a laboratory sample, only NAcc activity generalized to forecast aggregate funding success. Further, neural forecasts of market-level outcomes outperformed models incorporating self-reported preferences, affect, and even behavior. These results demonstrate in the context of crowdfunding that a subset of the neural mechanisms that predict individual choice can scale to forecast market-level outcomes. The findings also carry the applied implication not only that neural activity might add value to behavioral measures, but may also reveal otherwise hidden information relevant to forecasting aggregate outcomes (Ariely & Berns, 2010). These results highlight a need for marketers and neuroscientists to better understand when, where, and how neural activity can be leveraged to more accurately forecast aggregate choice.

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We Are What We Know: Using Consumer Neuroscience to Build a Better Understanding of Price Knowledge

EXTENDED ABSTRACT

Price knowledge (PK) is an important behavioral pricing theme in consumer research (e.g., Kukar-Kinney et al., 2012). However, re-

search neglects that PK should not depend solely on product-related or psychological factors, but should also consider neurobiological factors. This neglect is astonishing, given the understanding that PK is stored in consumers' brain memory system (e.g., Monroe and Lee 1999). In addition, there is evidence that PK depends on consumers' individual abilities to remember prices and consists of affective (implicit PK) as well as cognitive (explicit PK) capacities (Kenning & Plassmann 2005). Recent studies in consumer neuroscience show, that the interplay of these processes is at least partially determined by neurobiological processes (e.g., Plassmann & Weber, 2015). As there is at best inconsistent evidence on individual consumer characteristics that determine PK (e.g., Gaston-Breton & Raghurir, 2013), this research tries to answer the following question: Can the integration of neuroscientific methods (i.e., fMRI) lead to a better understanding of PK? The fMRI study was designed to justify the assumptions behind PK and its neural correlates. We propose to find neural activity changes in regions associated with cognitive and affective information processing due the fact that PK has an implicit as well as an explicit component.

In our study, subjects (N=20; 11 female, 9 male healthy, right-handed subjects; Mage=41.85 years, SD=3.88) participated in a product-price-decision task (modified task by Knutson et al., 2007) where they had to decide whether or not to buy a certain product for a given price. In order to focus on the processing effect of PK our study has two key aspects: First, we used a fixed product category and only varied decisions with respect to prices. Second, our user sample was pre-screened for consistently using and buying the products. The first parameter used in our study—"price differential"—refers to an explicit and direct integration of the price the consumer saw in the trial before and is defined as the difference of the seen price in t and the price they judged in $t-1$. The second parameter—"price average"—takes into account that participants develop a more implicit task-dependent PK in the course of the task. This parameter is defined as the average of all prices the participants judged until the current trial. Data analysis was conducted with the SPM8-freeware (Friston et al., 1994) using MatLab as a working base. A General Linear Model (GLM) models events of interest with a parametric modulator for the price phase and decision phase and the two task-dependent PK parameters "price differential" (D_{price_diff}), and "price average" of prices shown before ($P_{price_avg} / D_{price_avg}$). The parametric modulators were defined as follows: (1) $P_{price} / D_{price} = price(t)$; (2) $D_{price_diff} := price(t) - price(t-1)$; (3) $P_{price_avg} / D_{price_avg} := mean(price(1:t-1))$. We calculated the following first-level single-subject contrasts of interest: 1) decision modulated by D_{price} , 2) decision modulated by D_{price_diff} and 3) decision modulated by D_{price_avg} . Third, on second-level, for extracting differences of single-subject contrasts between subjects we computed a one sample t-test. Post hoc tests of neural activity changes in regions of interest (ROIs) identified by the second-level group analysis by contrasts of D_{price} and D_{price_diff} were computed by running three additional GLMs that separated regressors following the procedure in Litt et al. (2011).

To check for behavioral differences in positive judgments between the selected prices, we entered the shares of positive buying intention (pS_{price}) and gender as between subject factor into an one-way ANOVA (with price: [.66;1.24]) corrected for repeated measures using the Greenhouse-Geisser (GG) correction criterion, and found a significant main effect for price; $F(3.011, 54.189) = 26.150$, $p < .001$, but no main effect for gender; $F(1, 18) = 0.243$, $p = .628$, as well as no interaction effect of price*gender; $F(3.011, 54.189) = 0.074$, $p = .425$. For observing a possible integration of task-dependent PK for the given parametric modulators, we checked for inconsistent judgments for a given price level for each participant, which could be confirmed. Additionally, to control for behavioral differ-

ences in inconsistent judgments with regard to the different flavors we entered an interaction term of price shown and pS_{product} to model this possible acceptance bias into an one-way ANOVA (with flavor: [A, J]) and found no significant main effect for flavor; $F(9, 80) = 0.126, p = .999$.

Next, we generated statistical parametric maps for the given contrasts of interest (D_{price} , $D_{\text{price_diff}}$, $D_{\text{price_avg}}$) that displayed the t-value of each peak voxel meeting a $p < .001$ (uncorrected) significance level with an extent threshold voxel of $k = 5$. We found neural differences in brain structures associated with integrating background (price) knowledge, decision making and information processing in dependency of the seen product-price combination. In detail, we found that activation in the left medial prefrontal cortex (BA 10), the right and left anterior cingulate cortex (BA 24) and the right parahippocampal gyrus (BA 36) was negatively correlated with the price parameter within the decision phase. Furthermore, we found neural activity changes in brain structures associated with information and knowledge processing according to our task-dependent PK parameters ($D_{\text{price_diff}}$, $D_{\text{price_avg}}$) that differed from the results with regard to the absolute price-level parameter. In detail we found that activation in the insula was positively correlated with increasing price differentials within the decision phase and the parahippocampal gyrus and the caudate were negatively correlated with increasing price averages within the decision phase.

This research helps to provide further understanding of the different aspects of price-dependent decision making in consumers. We demonstrated the complexity of antecedents of price-dependent decision making. The results provide evidence that especially unconscious processes associated with the integration of background (price) knowledge, decision making and information processing influence the brain activation and behavior. First, the integration of explicit and implicit task-dependent PK leads to activity changes in brain regions associated with information processing and decision making and these activity changes differ from the findings with regard to absolute prices. This leads to the conclusion that the integration of PK is a rather complex and dynamic process, depending on various situational factors.

Effectiveness of Print and Digital Media: Insights from Neuroscience

EXTENDED ABSTRACT

Does it matter whether you are reading your favorite novel as a physical book or on a kindle? What are the implications for long-term memory? Given major advances in digital media over the past decade, there has been an emerging interest in comparing print (or physical) versus digital (or electronic) media across various contexts (e.g., Verdi et al., 2002; Terrenghi et al., 2007; Steimle et al., 2010; Kim and Anderson 2008; Millward Brown, 2009; Eden and Eshet-Alkalai 2012). This is a particularly important question in marketing where despite the growing popularity and complexity of managing marketing communications across physical and online media channels (often referred to as cross-media marketing), little is known about the effectiveness of each of these channels and their impact on the consumer buying process.

In this study, we used a novel experimental design involving multiple neurophysiological methodologies (traditional self reports, eye tracking, heart rate, skin conductance and functional neuroimaging, fMRI) to better understand how consumers process print versus digital advertisements. We focused specifically on the differences in cognitive processing across the two formats, both during exposure and retrieval. To overcome the practical difficulties involved with

experimental control when participants are interacting with physical stimuli, we conducted the study over two separate experimental sessions with the same set of participants. Both experimental sessions occurred approximately one week apart. A total of 56 participants completed both sessions of the study.

In the first session involving eye-tracking and biometric measures, participants were exposed to a mix of physical and digital ads. A total of 40 ads ranging across CPG products, services and restaurants were used in the study. They were split into two groups of 20 ads each, and randomly assigned to physical or digital condition across participants. Therefore, each participant viewed each ad only once during exposure, in physical or digital format. The digital ads were presented on a Tobii T60XL eye-tracker in the form of emails pre-loaded into offline gmail app. Participants could open the emails in any order and spend as much time as they desired viewing the ads. For the physical ads, they physically placed the ads onto a small platform where the processing could be captured using a combination of camera and eye-tracking system. Processing was measured after they positioned the ads into the platform. The size of the ads was controlled across both formats. At the end of the session, participants were re-exposed to the ads a second time in the same format, while seated in front of a computer. During re-exposure, traditional self-report measures were collected after each ad to measure preferences and attitudes about the ads and their contents. The order was counterbalanced across participants.

We found no significant differences in self-reported preferences and attitudes for the ads between the two formats. Participants spent more time when interacting with physical advertisements ($t = 5.807, p < 0.001$). Yet, their eye gazes tended to be more mobile (e.g., greater proportion of time spent on saccades) compared to digital ads ($t = 3.253, p = 0.002$). They also had a greater proportion of long fixations ($>150\text{ms}$) when looking at digital ads and spent more time per fixation when processing the ad ($t = -1.834, p = 0.072$). Finally, using frequency domain analysis of heart rate variability, we found that digital ads were also associated with greater parasympathetic tone (HF) ($t = 2.552, p = 0.015$). Together, these results suggest that digital ads were associated with greater attention and more systematic processing than physical ads (Venkatraman et al., 2014). However, the level of engagement to key components of the ads, such as the products and/or brands featured, showed no differences between the formats. It is possible that the extended exposure time in physical format compensated for lesser attention. We also found converging evidence for greater levels of arousal during exposure to physical ads. The average pupil size was significantly larger when participants viewed ads in the physical format ($t = 9.754, p < 0.001$). Similarly, the tonic and phasic skin conductivity were higher at the anticipation of looking at physical ads relative to digital ads ($t = 4.764, p < 0.001$).

In order to understand whether the differences in levels of attention and arousal between the two formats were associated with greater depth in processing and improved memory during subsequent purchase decisions, we used functional magnetic resonance imaging (fMRI) in Phase 2 to study memory (item and source) for each of the 40 ads, and purchase intentions (willingness to pay, WTP) for the products and services featured in the ads. We found that participants were more likely to remember an ad and its context if they were previously exposed to it in the physical format. This behavioral difference was corroborated by increased activation in the hippocampus and parahippocampal regions during memory retrieval for physical relative to digital ads. The parahippocampal region has been consistently associated with processing of scenes and places in previous studies (Epstein et al., 1998; Epstein and Ward, 2010).

Therefore, these differences could reflect superior recollection of the context surrounding the ad, when it had been exposed in physical format previously.

Using a BDM auction procedure, participants were asked to provide their WTP for the products and services featured in the ad. There were no differences in the self-reported purchase intentions or willingness to pay for the items featured in the ads based on prior exposure. However, we found increased activation in the ventral striatum when participants were estimating their WTP for items previously exposed in the physical relative to digital format. Based on prior results and the role of this region in reward processing and desirability (Venkatraman et al., 2015), we argue that exposure in physical format could lead to increased desirability for the products and services featured in the ad.

In summary, our findings have tremendous practical implications for marketers and marketing theory. By demonstrating the complementary nature of the two formats using a carefully controlled experimental design, we provide valuable insights for marketers to optimize their media mix.

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It's All Around You: The Pervasive Effects of Technology on Consumers' Lives

Chairs: Maura Scott, Florida State University, USA

Martin Mende, Florida State University, USA

Paper #1: Touching Versus Talking: Alternative Interfaces and the Extended Self

S. Adam Brasel, Boston College, USA

Paper #2: Personalized Advertising in Public Environments: Perceptions and Consequences

Nicole Heß, University of Passau, Germany

Jan H. Schumann, University of Passau, Germany

Martin Mende, Florida State University, USA

Maura L. Scott, Florida State University, USA

Paper #3: Understanding the Quantified Self: Effects of Self-Tracking on Mortality Salience and Health Motivation

Martin Mende, Florida State University, USA

Maura L. Scott, Florida State University, USA

Gergana Y. Nenkov, Boston College, USA

Paper #4: Thank You for Your Helping Hand! Ways to Avoid Negative Consequences of Customer Participation in Recovery of Technology Product Failure

Nicola Bilstein, Catholic Univ. of Eichstaett-Ingolstadt, Germany

Shashi M. Matta, The Ohio State University, USA

Jens Hogreve, Catholic Univ. of Eichstaett-Ingolstadt, Germany

SESSION OVERVIEW

Technological innovation is transforming many aspects of consumers' lives – how we shop, how we use services and incorporate them into our lives, how we work, how we obtain information, how we pursue our everyday goals (Manyika et al. 2013). Despite these transformational technologies, little consumer research has examined the effects of using and interacting with technology on consumers' lives. The goal of this session is to explore the various and often unexpected ways that interactions with new technologies can affect consumers' information-processing and decision-making. Together the four papers examine various dimensions of this question: the extent to which technology affects consumers' self-concept and becomes a part of their extended self, the extent to which it affects consumers' goal pursuit, purchasing behavior, and the reactions the technology triggers when it fails.

Specifically, in paper #1, Brasel examines which type of technological feature (i.e., touch versus voice interface) is more internalized into the self as consumers interface with technology-based offerings. In paper #2, Heß and colleagues explore the influence in-store consumer tracking technology can have on consumers' self-concept and downstream purchasing behavior. In paper #3, Mende, Scott, and Nenkov explore consumers' use of self-tracking technology (e.g., FitBits) and its impact on mortality salience and the pursuit of self-relevant goals. In paper #4, Bilstein, Matta, and Hogreve study what happens to consumers when the technology they purchase fails, and the consumer has to continue to interact with the source of technological disappointment to get back on track. Taken together, these papers raise some important questions for discussion during the session, including: (1) Does the influence of technology on consumer behavior vary depending on whether the consumer has selected the technology (papers 3 & 4) or when the use of the technology is imposed on them (papers 1 & 2). (2) How does the use of technology af-

fect self-identity and well-being, and what is the downstream impact on goal pursuit and consumption?

In sum, the papers in this session (all in relatively advanced stages) further our understanding of consumer decision-making in the context of technology interaction and usage - topics that are under-researched and likely to be of substantial interest to the ACR audience.

Touching Versus Talking: Alternative Interfaces and the Extended Self

EXTENDED ABSTRACT

As mobile devices such as tablets and smartphones become the modal form of computer interaction, the primary method of interface has shifted from mouse and keyboard. Touchscreens have come to dominate the mobile computing space, and both Google and Apple have also made strong pushes into voice-control in recent years. But are all interfaces created equal? Prior work suggests that the interfaces used to access content can strongly affect the way that content is experienced, explored, and viewed (Rokeby 1998).

This research explores how touch and voice interfaces can trigger different ownership perceptions and relational paradigms, which in turn color consumer perceptions of the online content accessed through the device. Touch is especially relevant as it remains under-explored in the consumer literature (Peck 2010), and most smartphone and tablet interactions are conducted through a touchscreen. As a more direct metaphor for actually touching online content (in comparison to the more abstract mouse), touch should be a more transparent interface to use, and awareness of the device as a mediator between the user and the content being accessed should decrease. Touch interfaces have also been shown to generate stronger levels of psychological ownership (Brasel & Gips 2014). In addition, prior work suggests that smartphones and tablets may have a more direct association with a consumer's extended self due to this 'transparency' (Hein, O'Donohoe & Ryan 2011), but this has seen little empirical testing.

In contrast, a voice-controlled interface makes the 'command' aspect of the interface highly salient; the consumer voices an instruction, which the device then executes. This positions the device as an assistant or partner, rather than encouraging incorporation of the device into the extended self. This may not only decrease any artificial increase in psychological ownership, it may trigger relational associations such as distributive justice and locus of control. And rather than blur the lines between self and device, it may blur the lines between device and content instead.

Two studies were conducted to explore the role of alternative interfaces in how devices get incorporated into the extended self, and how interfaces can trigger certain relational norms. In Study 1, participants used an Android tablet either through Google voice controls or through traditional touchscreen controls to navigate the process of buying new bath towels from Amazon.com. As voice-control is not yet fully integrated into all shopping apps and programs, primarily being limited to text input rather than menu navigation, the experimenter was also surreptitiously controlling the tablet from behind the participant, using a Bluetooth mouse and to execute participant commands such as "yes" or making selections from a menu. While touchscreen participants exhibited the same self-incorporation as seen in

Study 1, voice-control participants showed little self-incorporation. In contrast, voice-control participants rated the tablet higher on relationship dimensions, thinking of it more as a partner and assistant than did touchscreen participants. This reflects in the responsibility measures; much like Study 1 touchscreen participants gave little credit for a successful transaction to the device. In contrast, voice control participants gave more credit to the device than to the store. Follow-up questions suggest that unlike the self and device becoming blurred as with touch interfaces, voice interfaces instead blur the line between device and the content accessed.

In Study 2, we explored how errors were processed in both interfaces. Using a large touchscreen monitor to control for baseline touchscreen error rates due to smaller phone screens, and a hidden assistant to control the computer in the voice condition, the error rate was experimentally controlled. Participants engaging in a shopping search task either experienced a level of error consistent with current voice interfaces (5-10%), or no errors, regardless whether they were controlling the machine via touch or text. This exposure lasted either one minute or five minutes. When using the touch interface, consumers placed the locus of control for errors onto themselves, and did not assign blame to the computer. When using the voice interface, consumers placed the locus of control for errors onto the computer, and perception of the computer as a separate entity increase. When the exposure is increased to five minutes, the results of the voice interface do not change. For the touch interface, however, the increased prevalence of errors beyond the traditional touchscreen baseline experienced in everyday life makes the interface more salient, moving it from the extended self into separate entity status.

In conclusion, the results of two studies suggest that touch and voice interfaces change consumer reactions to online content, but do so in different ways. Compared to traditional mouse-and-keyboard interfaces, touchscreens strongly encourage the consumer to incorporate the device into their extended self, essentially making the device transparent in the online shopping process. In contrast, voice controls establish the device as a partner or assistant, and make the device an active intermediary in the online shopping process. Taken together, these results reinforce that all interfaces are not created equal, and that research must explore the interfaces used to access content to the same degree as content itself.

Personalized Advertising in Public Environments: Perceptions and Consequences

EXTENDED ABSTRACT

Personalized advertising has emerged as a major marketing trend. A steady growth of the collection and usage of personalized information not only characterizes the online world and the private lives of consumers, but increasingly expands into public life areas, such as retail stores or shopping malls, which presents new research questions. Extensive research has examined e-mail marketing, personalized online marketing and personalized postal and telephone marketing (e.g. Alreck & Settle, 2007; Goldfarb & Tucker, 2012; Pavlou & Stewart, 2000; Schumann, v. Wangenheim, & Groene, 2014; Speck & Elliott, 1997), but the results cannot be directly applied to the public context due to specific challenges faced in this field of study: in public, other shoppers are present. Unlike online advertisements where the consumer is the only one who sees the advertisement, personalized content shown in public can also be seen by other shoppers.

Study 1 investigates the interplay between personalization and the presence of others, with a 2(other shoppers present: yes/no) × 2(personalized advertisement: yes/no) between subjects experiment.

Participants read a scenario about shopping in a store that uses new consumer tracking technology (either with other shoppers or alone) and seeing an ad on a monitor in the store, which was personalized to consumers' personal physical metrics or not. Participants then indicated their attitude toward the store and behavioral intentions. ANCOVAs reveal 2-way interactions for attitude ($p = .03$) and behavioral intentions ($p = .008$). Contrasts reveal that under personalization, consumers are less favorable when others are present for attitude ($M_{\text{others}} = 3.98$ vs. $M_{\text{alone}} = 4.77$, $p = .01$) and behavioral intentions ($M_{\text{others}} = 4.01$ vs. $M_{\text{alone}} = 4.74$, $p = .01$); these effects are attenuated when the ad is not personalized ($ps > .20$).

Further, consumers have no influence on the content shown to them on public screens, meaning they cannot control the impression they make on other shoppers as a consequence of the content shown to them. Grounded in theory on self-concept congruity and research on impression management, we examine the perceptions and consequences of personalized advertising in public environments. Specifically, we address the question when and how the presence of other shoppers affects consumers' attitudes and behavioral intentions when exposed to personalized content.

We use a conceptualization of different ad-self-concept congruity states adapted from Sirgy (1982) to analyze the effects of perceived match or mismatch between the image of a personalized ad and the self-concept of targeted individuals in a public environment: *ad-self-concept congruity*, referring to a match between a product-image perception and a self-image belief; *positive self-incongruity* which is the comparison between a positive product-image perception and a negative self-image belief; and *negative self-incongruity* referring to the comparison between a negative product-image perception and a positive self-image belief. Research reveals impressions individuals try to construct in public depend on their self-concept (Latané, 1981; Leary & Kowalski, 1990). In doing so, individuals attempt to control the way others perceive them and try to leave the best possible impression when in public (Latané, 1981; Leary & Kowalski, 1990). Moreover, consumers are highly sensitive when in the presence of others (Bearden & Etzel, 1982; McFerran, Dahl, Fitzsimons, & Morales, 2010), even when these others don't interact with them (Argo, Dahl, & Manchanda, 2005). We propose, when consumers are exposed to personalized content in presence of other shoppers on a public screen and if others are aware of the fact that it targets a certain consumer, then the consumer can no longer control the way in which the other shoppers perceive him. We expect that presence of other shoppers will potentially impact consumers' attitudes, behavioral intentions and emotional reactions, depending on ad-self-concept congruity state, such that under positive advertising-image perception and a negative self-image belief (*positive ad-self-concept incongruity*) presence of others will negatively influence attitudes, behavioral intentions and emotional reactions, but not under negative ad-self-concept incongruity nor under ad-self-concept congruity.

We test the effects in study 2 which was a 2(other shoppers present: yes/no) × continuous (ad-self-concept congruity) between subjects experiment. Participants read a scenario about shopping in a retail store, which uses consumer-tracking technology. Participants were shown an exercise-clothing ad and were told that the ad was personalized towards them, based on their recorded metrics they provided at the beginning of the survey. We manipulated the presence of other shoppers both in the scenario language and in the visual depiction of the scene. Participants then indicated their attitude toward the store, behavioral intentions, and embarrassment.

ANCOVAs revealed other shoppers × ad-self-concept congruity two-way interaction on attitude ($p = .03$) and on behavioral inten-

tions ($p = .002$); the main effects of other customers and ad-self-concept congruity were non-significant ($ps > .41$). Spotlight analyses reveal that under *positive ad-self-concept incongruity*, attitude levels were lower with other people present (vs. no others present) ($M_{\text{Absent}} = 5.22$ vs. $M_{\text{Present}} = 4.58$; $B = -.63$, $t = -2.33$, $p = .02$) and behavioral intentions ($M_{\text{Absent}} = 4.95$ vs. $M_{\text{Present}} = 4.30$; $B = -.64$, $t = -2.81$, $p = .005$). Under ad-self-concept congruity and under negative ad-self-concept incongruity, the effect is attenuated ($ps > .19$).

Moderated mediation (Hayes 2013; model 8) revealed that under *positive ad-self-concept incongruity* embarrassment mediated the negative indirect effect of other peoples' presence on attitude ($\beta = -.46$, 95 % CI [-.81, -.17]) and behavioral intentions ($\beta = -.41$, 95 % CI [-.71, -.16]). This mediation pattern did not appear for *ad-self-concept congruity* or for *negative ad-self-concept incongruity* states.

Our findings expand research on personalized advertising (e.g. Goldfarb & Tucker, 2012; Pavlou & Stewart, 2000, Alreck & Settle, 2007; Speck & Elliott, 1997; Schumann, v. Wangenheim, & Groene, 2014) by providing evidence that personalization is perceived as negative in a store, especially when others are present. Further, we contribute to distinct types and conceptualizations of congruity (e.g. Sirgy et al., 1991; Sirgy et al., 1997; Kressmann et al., 2006) between self-concept and advertising (e.g. Hong & Zinkan, 1995). Prior empirical research on self-concept congruity did not differentiate between different incongruity states, but our results demonstrate that it is important to examine the direction of the incongruity.

Understanding the Quantified Self: Effects of Self-Tracking on Mortality Salience and Health Motivation

EXTENDED ABSTRACT

Propelled by an explosion of digital technologies, millions of consumers monitor the intricacies of their lives, using wearable devices and other tools to track themselves, a trend often referred to as the "quantified self" movement. Despite the fast-evolving impact that self-tracking has on consumer lives, no marketing research has examined the consumer experience of self-tracking and its psychological facets in detail. This research identifies a potentially unforeseen consequence of self-quantification—increased mortality salience, or accessibility of thoughts related to one's death (Greenberg, Solomon, and Pyszczynski 1997), which could have important implications for consumers' information processing and behavior. A significant amount of research has examined the consequences of increased mortality salience (Burke, Martens, and Faucher 2010; Greenberg et al. 1997), but less research has studied factors that might increase mortality salience in consumers' daily lives. In this research, we examine self-quantification as one such important factor. We propose that exposure to a self-tracking device has the unintended effect of increasing the salience of death-related concerns, which we show has a positive effect on consumers' health motivations, a boost that serves as a defense against the mortality salience threat. Moreover, we explore how a common marketing practice of encouraging consumers to anthropomorphize (i.e., imbue humanlike characteristics onto a non-human entity; Epley, Waytz, and Cacioppo 2007) their self-tracking devices (e.g., Adidas calls its device "My Coach") might interplay with the mortality salience effect we propose. We suggest that anthropomorphization might offer another mortality salience defense, making the health motivation boost we predict unnecessary, resulting in an undesirable backfire effect.

Exposure to a self-monitoring device should increase consumers' awareness of the possibility of their own vulnerability and ultimate death, which will activate proximal defenses to enable one to push the problem of death into the distant future (Greenberg et al.

2000). A common proximal defense used to remove death-related thoughts from focal attention is denying one's vulnerability to disease or premature death (Greenberg et al. 2000). We suggest that people would defend against the threatening awareness of their own mortality triggered by exposure to a monitoring device by increasing their motivation to lead a healthy (and hence long) life; that is, exposure to self-tracking devices should boost consumer health goal motivation.

Study 1. Participants evaluated a self-tracking band or a watch (a non-tracking device of identical design). Next, we measured mortality salience (4-item measure, e.g., "To what extent have you been thinking about death in the past several minutes?"; Van den Bos and Miedema 2000) and health motivation ("In the past several minutes, to what extent have you been thinking about: the importance of living a healthy life; making changes in your lifestyle to increase the likelihood that you will live longer"). Results revealed a main effect of self-monitoring on mortality salience and health motivation. Mediation analysis revealed a significant indirect effect of the self-monitoring on health motivation via mortality salience.

We next examined whether the association between self-tracking and health goal motivation might be influenced by the extent to which consumers anthropomorphize the tracking device. We propose that anthropomorphizing a self-tracking device can mitigate its effects related to mortality salience, as anthropomorphization "comforts people by providing relationships or companionship" (Wan and Aggarwal 2015, p. 122) and may be utilized to increase the predictability and comprehension of what would otherwise be an uncertain world, aiding one in constructing a meaningful and controllable worldview (Epley, Waytz, and Cacioppo 2007). Since construing oneself as a valuable participant in a meaningful universe is a well-established distal mortality salience defense (Greenberg et al. 1997), we propose that anthropomorphization could provide an effective buffer against death anxiety. If anthropomorphism indeed serves as a mortality salience defense, then people might not need to defend against mortality salience by boosting their health motivations.

Study 2. Using a 2 (self-tracking: yes/no) \times 2 (anthropomorphism: yes/no) design, we asked participants to evaluate either a tracking band or a watch. Procedure was identical to that in Study 1, except that participants in the anthropomorphism conditions were asked to personalize their monitoring band/watch by giving it a name and gender and using one word to describe its personality. We measured mortality salience as in Study 1 and measured health motivation asking participants indicate their motivation to engage in twelve everyday health-promoting behaviors (e.g., eat a well-balanced diet; get enough sleep; Moorman and Matulich 1993).

We found a significant main effect of self-monitoring on mortality salience, but no effect of anthropomorphization and no interaction between the two, showing that self-tracking increases mortality salience whether one anthropomorphizes their tracking device or not.

We then examined the health behaviors motivation index, and results revealed a significant self-tracking \times anthropomorphism interaction. In the no anthropomorphism condition participants reported significantly higher health motivation in the self-monitoring condition, replicating prior findings. In the anthropomorphism condition, however, these effects disappeared. These results support our contention that exposure to a self-tracking device (vs. a watch) increases people's health motivation as a defense against the threatening awareness of their own mortality. When participants have the chance to anthropomorphize their self-tracking device, however, these health motivation effects disappear, suggesting that anthropomorphism might be acting as a mortality salience defense, eliminat-

ing the need to deny one's vulnerability to dying by boosting health motivation.

Our studies offer novel theoretical insights, since prior research has not examined the effects of everyday consumer experiences (self-tracking) on morality salience, nor has it established anthropomorphization as a possible mortality salience defense. There is no evidence yet as to whether self-tracking devices might help consumers with the accomplishment of their health goals, as companies frequently claim. This research provides some much needed insight into the possible effects of self-tracking devices on consumers' lives.

Thank You for Your Helping Hand! Ways to Avoid Negative Consequences of Customer Participation in Recovery of Technology Product Failure

EXTENDED ABSTRACT

In this research we develop and test theory on the effect of customer participation in the recovery process on customer satisfaction after recovery for technology based services. By doing so, we extend prior research that has examined customer participation in recovery, most notably, Dong, Evans, and Zou (2008), and Roggeveen, Tsiros, and Grewal (2012). Dong and colleagues investigated customer participation in service recovery in the context of self-service technology (SST) and found that it had a positive effect on satisfaction with recovery, which in turn had a positive effect on customer intention towards future use of the SST. Roggeveen and colleagues expanded on the notion of customer participation by conceptualizing *customer co-creation of the service recovery* where "customers help shape or personalize the content of the service recovery through joint collaboration with the service provider" (p. 772). Those authors found that customer co-creation of service recovery positively impacts customer satisfaction with the recovery process and repurchase intentions.

In extending this stream of research we propose that it is necessary to differentiate between customer participation and customer co-creation in recovery. As co-creation in recovery includes an added value component, e.g., personalization of the recovery outcome, customers in these situations compare a personalized (co-created) outcome to a non-personalized (non co-created) outcome in assessing their satisfaction with the recovery process. In our research we focus on customer participation while holding the outcome of the recovery constant. In technologies based service contexts (e.g., Internet and cable TV service, cell phone service), the recovery process may consist of different options including customer participation or non-participation, whereas the recovery outcome remains the same. The recovery then may not lead to customized recovery outcomes. Even so, customer participation in the recovery process may be a viable option for the company and the customer. Take the example of Fiona, a smart phone customer, who has a problem with her smart phone after downloading an operating system update. To solve the problem, she calls customer service and is guided through several steps to fix the problem including multiple tasks to identify and diagnose the problem. Thus, she spends a significant amount of time and effort in participating in the recovery process. The alternative for Fiona would have been to go a retail outlet of the smart phone provider and get it fixed by the provider. Such instances of customer participation in recovery processes are increasingly common. We believe that it is crucial to examine customer participation in recovery when the recovery outcome is the same regardless of customer participation. For, in such instances of customer participation in recovery, customers evaluate their participation in the recovery process and their satisfaction differently than has been found in prior research (e.g., Dong et al. 2008, Roggeveen et al. 2012) examining situations in which the

recovery outcome shifts due to a customer's increased participation in the recovery process.

In a first study, we explore the prevalence of customer participation in the service recovery process. To understand if, when, and where such customer participation in recovery processes commonly occurs, we asked a representative sample of 300 adult U.S. consumers recruited by a professional market research firm using a consumer panel about their experiences with participation in recovery processes. We found that an impressive 76 % of consumers surveyed reported having participated in a recovery situation at least once. Consumers reported having experienced it most in telecommunications including mobile phones, cable TV and Internet service (38.7 %), computer hardware and software (32 %), restaurants (26 %), travel and hospitality including hotels and airlines (23.7%), and retail (23%). We then used the critical incident research method and asked respondents to recall an instance when they participated in a recovery process after a product or service failure and to describe the situation and what they did in that situation. 206 participants (68.67% of the total number of study respondents) elaborated on a recovery incident in which they participated. The content from these consumer elaborations inspired the construction of our experimental scenarios in the following studies. Our first study showed that customer participation in recovery processes is widespread and a correlation post-hoc analysis unveils that the extent of customer participation in recovery is negatively correlated with satisfaction after recovery.

Based on the additional experimental studies we advance the knowledge on customer participation in recovery in multiple ways. First, we develop and test theory on the negative relationship between customer participation in recovery and satisfaction after recovery (Studies 2 and 3). Second, we identify and test the role of customers' domain-specific expertise as moderator. We find that customers with high domain-specific expertise are more (less) satisfied with low (high) levels of customer participation in recovery, whereas no such difference exists for customers with low domain specific expertise (Study 2). Moreover, we are able to explain the underlying cognitive process by showing that the interaction effect of customer participation and customers' domain-specific expertise on satisfaction after recovery is fully mediated by customers' perceived procedural justice. Study 3 identifies main effects for customer participation and compensation on satisfaction after recovery while their interaction is not significant. This result again indicates lower levels of satisfaction in case of higher customer participation. In Study 4, we vary the framing of the acknowledgement of the customer participation by the provider (i.e., inconvenience, apology, gratitude). In doing so, we introduce the construct of gratitude, first studied in marketing by Palmatier et al. (2009), into the service recovery literature. Specifically, we posit that gratitude expressed by a service firm works better in restoring satisfaction after recovery involving customer participation compared to an apology, and test it empirically (Study 4).

Our studies included a wide range of respondents (N = 860) recruited from consumer panels. Thus, we provide new, meaningful insights on the consequences of customer participation in recovery for a wide range of services, especially for services with a technology component. Finally, our research advances practice by providing guidelines to service firms on how to effectively manage customer participation in the recovery process.

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My Heart on my Sleeve: Emotion as Information in a Social World

Chair: Yimin Cheng, Hong Kong University of Science and Technology, China

Paper #1: Please Don't Praise It: How Compliments on Identity Signals Result in Embarrassment

Lisa A. Cavanaugh, University of Southern California, USA
Joseph C. Nunes, University of Southern California, USA
Young Jee Han, Sungkyunkwan University, Korea

Paper #2: The Effects of Power on Emotional Responses to Self-Failure

Derek D. Rucker, Northwestern University, USA
Adam Duhachek, Indiana University, USA
Claire Heeryung Kim, Indiana, USA
DaHee Han, McGill University, Canada

Paper #3: Fun Signals Intrinsic Motivation: Observers Infer Motivation from Expressed Emotion

Yimin Cheng, Hong Kong University of Science and Technology, China
Anirban Mukhopadhyay, Hong Kong University of Science and Technology, China
Patti Williams, University of Pennsylvania, USA

Paper #4: The Two Faces of Innovation Adoption: How Envy Affects Consumers' Evaluation of Innovative Products

Jaeyeon Chung, Columbia University, USA
Leonard Lee, National University of Singapore, Singapore

SESSION OVERVIEW

Most early research on the informational value of emotion focused on its intrapersonal aspects. However, researchers have, of late, been looking more closely at its interpersonal aspects (Andrade and Ho 2009, Keltner and Haidt 1999, Van Kleef 2009). As Van Kleef et al. (2011) pointed out, "...if emotions were only functional at the individual level, why would they show on our faces?" The current symposium proposal highlights the social nature of emotions, and presents four papers that shed light on this important area from different angles. Two papers examine embarrassment and envy, two self-conscious emotions that are inherently social. The other two papers study anger and displayed enjoyment, which are not apparently social but have significant interpersonal implications.

In the first paper, Cavanaugh, Nunes, and Han study identity signals on products (e.g., brand prominence). Although such signals are usually meant to impress others, Cavanaugh et al. find that receiving a compliment related to an identity signal often results in embarrassment, an unforeseen negative consequence. A field study and controlled experiments establish this effect and find that it is mediated by heightened self-awareness.

Just as being complimented may not always be good, being in power may similarly have a counterintuitive downside. In the second paper, Rucker, Duhachek, Kim, and Han find that individuals having high (vs. low) power are more likely to feel angry after a failure experience, probably due to a heightened approach orientation. This effect is amplified in a group (vs. individual) setting, thereby highlighting the social nature of the effect.

Someone who approaches a given activity due to internal drives is usually enjoying that activity. Such displayed enjoyment can signal the approach motivation to observers. In the third paper, Cheng, Mukhopadhyay and Williams find that when people engaging in an activity display large smiles (vs. small smiles or neutral expressions), observers infer that they have greater levels of intrinsic motivation towards the activity. The converse is also true—people given a goal

to signal intrinsic (vs. extrinsic or control) motivation strategically display larger smiles to potential observers.

These informational effects of emotions may at times be highly sensitive to metacognitive effects. In the fourth paper, Chung and Lee study the effects of paying attention to one's feelings, and find that the consequence of even a prominent interpersonal emotion such as envy can be reversed when one pays attention to feelings. They show that envious consumers who are more inclined to attend to their feelings (vs. cognition) exhibit more positive (vs. negative) attitudes toward innovative products, due to stronger self-enhancement motives and lower concern of perceived risk.

This session discusses emotion from a social/interpersonal perspective. Bringing together researchers from five countries, this session proposal raises a lens to the interplay between emotions and their informational effects in social contexts, in domains that are new to emotion research, such as identity signaling, intrinsic motivation, and innovation adoption. We therefore believe that this session has the potential to be well-attended, and to raise interesting questions for debate and discussion.

Please Don't Praise It: How Compliments on Identity Signals Result in Embarrassment

EXTENDED ABSTRACT

As social beings, consumers seek approval from others and therefore frequently make an effort to communicate aspects of their identity, actual or ideal, with the intention of impressing those around them. In consumption, individuals regularly use possessions and brands to signal aspects of their identities (e.g., being athletic, stylish, or sexy) to others (e.g., Escalas 2004; Fournier 1998; Belk 1988; McCracken 1989). Consumers expect observers to make certain inferences about their identities based on which possessions and brands they choose to display and how they display them (Belk, Bahn, and Mayer 1982; Richins 1994a, 1994b). Consumers often anticipate the signal will be seen and understood by others. What consumers are less likely to anticipate is how they themselves might respond to feedback on their signals. In this research, we focus on the *signaler's emotional response* to a positive acknowledgment of an identity signal, i.e. a compliment. By focusing on interactions between individuals and the emotional consequences of compliments, this work links the literature on identity signaling in marketing with the literature on self-conscious emotions (Dahl, Manchanda, Argo 2001; Keltner and Buswell 1996; Parrott and Smith 1991; Tangney et al. 1996; Tracy and Robins 2004).

We show that compliments on identity signals often cause consumer embarrassment owing to heightened public self-awareness. We also show that the extent to which the signaler feels embarrassed by a compliment depends on characteristics of both the signal and the signaler. We observe a similar pattern of effects using a field study (study 1) and controlled experiments examining the effects of the signal and the signaler's self-beliefs using both deception (study 2) and self-identified gaps (studies 3 and 4), using both self-reported (studies 2-4) and observed measures of embarrassment (studies 1 and 2), as well as in studies in which consumers both self-selected (studies 1, 3, and 4) and were randomly assigned (study 2) their identity signal.

Study 1. In a field study, we tested the prediction that a signaler utilizing a self-chosen loud (vs. quiet) signal will experience more embarrassment. Participants carrying handbags were interviewed

and recorded with a digital voice recorder at a local mall under the auspices of a shopping survey. The researcher first asked generic questions and later delivered the same compliment to all participants: "I really like your bag. It is very nice." Finally, the researcher photographed the handbag, which was later rated by independent judges for brand prominence (Han et al. 2010). To measure embarrassment, each participant's voice recording was analyzed using Layered Voice Analysis. We found that consumers carrying louder signals exhibited greater embarrassment in response to the compliment ($\beta = .49, p < .01$); no such differences were found for any of the other emotions (i.e., happiness, sadness, anger).

Study 2. In a multi-confederate aided lab study, we tested if and how consumers' self-beliefs about an aspect of their identity—sexiness—would impact the level of embarrassment experienced in response to a compliment on a loud vs. quiet signal. Participants ($N=53$) were recruited under the auspices of a Victoria's Secret event, in which they received an individual consultation concerning first impressions and provided product feedback. After completing questionnaires and tasks, a specialist provided false feedback to manipulate participants' self-beliefs about sexiness. Next, they completed a product evaluation where self-beliefs were measured and actual product trial of Victoria's Secret signature line of "Very Sexy" lotion and perfume occurred. Each participant received a Victoria Secret goodie bag, which was branded quietly or loudly; at this point the event was ostensibly complete. During a final computerized assessment of overall session experience, an attractive male student (another confederate) paid the participant the following compliment: "Wow, I really like your perfume. Is that what you're wearing?" We found a Signal Strength X Self-Belief interaction ($p < .06$). Those in the loud condition were embarrassed regardless of Self-Belief. In the quiet condition, embarrassment in response to the compliment decreased as sexiness Self-Belief increased ($\beta = -.62, p < .01$). Additionally, we found a significant indirect effect ($\beta = .6726, 95\%CI = .1863, 1.2812$), providing evidence of moderated mediation by public self-awareness.

Studies 3 and 4 examined a broader range of self-selected identities displayed in a gender-neutral category (clothing). We held the loud signal strength constant while systematically varying the source of the compliment and type of remark made. In both studies, participants received a list of identities (e.g., athletic, smart, funny, rugged) and rated how important each was to them. They then selected one identity where a gap existed between their ideal and actual perceptions of self-identity at present; this identity was used in the compliment scenario. All participants viewed a navy blue t-shirt with the self-selected identity printed on it followed by a compliment scenario.

In Study 3 ($N=228$; 44% male), participants were randomly assigned to a 2(Source: friend/stranger) X 3(Remark: compliment/comment/unrelated question) design. They imagined wearing the shirt pictured and encountering a person "who looks at you, smiles, and says "I like your shirt. Is it new? [Is your shirt black or blue? / "Do you know if it is still light outside?]." They then completed multi-item emotion and self-awareness measures. We found a main effect for Remark ($p < .006$); neither the effect of Source or the interaction were significant ($F < 1$). Compliments produced significantly more embarrassment and anxiety than either comments or unrelated questions (all $p < .05$). We also found evidence that the mediational path predicting embarrassment from a compliment is explained by public self-awareness. Thus, compliments elicit these effects, whereas identical social interactions involving other feedback do not.

In Study 4 ($N=153$; 51% male), participants received one of four different types of compliments (person/product/identity-explic-

it product/control) and completed the same dependent measures. We found that product compliments (implied or explicit) produced significantly more embarrassment, anxiety, and public self-awareness than unrelated questions (all $p < .02$) and marginally more embarrassment and anxiety than person compliments (i.e., one's haircut; all $p < .10$). Product compliments also produced significantly less pride and happiness than person compliments (all $p < .001$). We found additional evidence that public self-awareness mediates the relationship between product-related compliments and embarrassment.

The Effects of Power on Emotional Responses to Self-Failure

EXTENDED ABSTRACT

Previous research suggests that power influences one's expression and experience of emotions (Berdahl and Martorana 2006; Keltner et al. 2003; Van Kleef et al. 2006). Specifically, high power results in increased positive emotions whereas, low power leads to elevated negative emotions. However, scant research has examined how power influences the experience of specific negative. To fill this gap, the current research finds a context, in which power actually influences discrete negative emotion with a focus on anger and suggests that high power leads to greater anger when individuals encounter self-failure. The current research focuses on anger because previous literature on anger in the context of self-failure suggests two competing predictions. Thus, the current research aims at resolving these competing predictions. Importantly, this research suggests these emotional differences elicited by different levels of power are contingent on whether the task is done individually versus as a group.

According to cognitive-appraisal theories of emotion (Lerner and Keltner 2001; Smith and Ellsworth 1985), individuals feel angry when they believe that others are responsible for negative outcomes or have high control over negative events (Averill 1983). Given that individuals in high power positions (i.e., leaders) feel more responsible for and control over a task than those in low power positions (i.e., employees, Anderson and Berdahl 2002), one may predict that high power will lead to reduced anger in the face of self-failure. However, given that increased power activates approach-related tendencies due to increased rewards and freedom whereas decreased power activates inhibition-related tendencies due to elevated threat, punishment, and social constraint (Keltner et al. 2003) and that anger is associated with an approach orientation (Labroo and Rucker 2010), one may posit that individuals in high power will feel greater anger when encountering self-failure. To resolve these two opposite predictions, the current research empirically examines the effect of power on anger in the self-failure contexts.

Furthermore, since individuals working as a group have a chance to blame other group members whereas individuals working individually do not, anger which is activated when perceiving other's responsibility over the negative outcome (Lerner and Keltner 2001; Smith and Ellsworth 1985) might be amplified. Based on these findings, we posit that in the group task failure context, the impact of power on anger will be strengthened. Across two studies, we demonstrate that individuals in high (vs. low) power are more likely to experience anger in the face of self failure. In addition, we reveal that this effect is exaggerated when individuals fail the task in a group context.

Study 1 examined the effects of power on anger when encountering the individual task failure to resolve the competing hypotheses. We predict that individuals in high (vs. low) power will be more likely to exhibit anger in the context of failure in the individual task. Although low (vs. high) power results in greater negative mood, we

argue that high power may amplify experience of anger when coupled with self-failure. It is because individuals in high power would be motivated to solve the problem of the negative events whereas those in low power would be less motivated (Keltner et al. 2003), and anger might help to solve the problem since it facilitates an effort to overcome the violation of what ought to be (Fischer and Roseman 2007). Participants were assigned to either the high or low power condition. We manipulated high (low) power by asking them to imagine to be a boss (employee) at a company. They read about the role and were instructed to vividly imagine that what it would be like to be in this role (Rucker, Dubois, and Galinsky 2011). After then, all participants were asked to solve five insight problems and were informed that their score would be reported to them after completion. After 30 seconds of completion, all participants read that they failed the test. Next, participants indicated the degree to which they felt angry after learning about their test results (frustrated, anger, and irritated; Richins 1997). A one-way ANOVA with power as the independent variable and anger as the dependent variable revealed that participants in the high power condition felt angry to a greater extent than did those in the low power condition ($p < .05$).

Study 2 investigated whether findings from study 1 would be amplified when participants experienced failure in a group task. Participants were randomly assigned to one of four conditions in a 2 (Power: high vs. low) x 2 (Task: group vs. individual) between-participants design. The power manipulation was identical to that in study 1. Next, in the group task condition, participants were assigned to a group of three members. Then, they were asked to come up with a fictitious brand's branding ideas for 10 minutes using the paper and pencil. In the individual task condition, participants performed the task individually. Upon completion, a proctor collected the idea sheets and told participants that judges would evaluate the ideas and provide the feedback after five minutes. While participants were asked to complete filler questions, confederates wrote negative comments on all idea sheets. After five minutes, participants received the feedback and indicated the degree to which they felt angry after learning about the result using the same scale used in study 1. A two-way ANOVA as power and task type as the independent variables and anger as the dependent variable revealed significant main effects of power and task type as well as a significant interaction ($ps < .05$). Simple contrasts revealed that in the high power condition, participants in the group (vs. individual) condition reported anger to a greater extent ($p < .05$). However, in the low power condition, there was no difference across group and individual task conditions ($p > .1$). In both the group and individual task conditions, participants in the high (vs. low) power condition reported greater anger ($ps < .05$).

Overall, our findings contribute to the consumer literature by providing evidence to understand the relationship between power and consumer's emotional responses to failure in a task as a function of a group size.

Fun Signals Intrinsic Motivation: Observers Infer Motivation from Expressed Emotion

EXTENDED ABSTRACT

Intrinsic motivation means doing something because it is inherently rewarding, whereas extrinsic motivation means doing something to achieve a separable outcome, such as money or fame (Deci, Benware and Landy 1974, Ryan and Deci 2000a). People value intrinsic motivation more because it indicates behavioral commitment or because it is authentic and morally desirable (Kasser 2002). Therefore, the nature of a person's motivation to engage in an activity can be useful information in a social context. However, it is

often difficult to tell what a person's motivation is, because a given behavior (e.g., getting married) often looks exactly the same to an observer, regardless of whether the motivation is intrinsic (e.g., for love) or extrinsic (e.g., for the person's wealth). Moreover, verbal claims related to motivation may simply be cheap talk.

Intrinsic motivation arises from basic psychological needs for competence, autonomy and relatedness, which are principal sources of enjoyment and vitality throughout life (Ryan and Deci 2000b). Deci (1975) argues that if an activity is internally rewarding, the end state should be positive affect. Indeed, intrinsic motivation is sometimes defined as doing something for its inherent enjoyment or satisfaction (Ryan and Deci 2000a). Therefore, we suggest that people may use a person's displayed enjoyment as a signal to infer his/her intrinsic motivation. Particularly, we focus on the facial expression of enjoyment because it is readily visible to other people and the "leakage" in facial expressions is often more diagnostic than verbally claimed emotions (Ekman 1993). We hypothesize that observers may infer stronger intrinsic motivation if they see a person who has engaged in an activity displaying a large smile, as opposed to a small smile or neutral expression (H1). Observers may also anticipate better long-term outcomes of an activity if people engaging in the activity display larger smiles, and this effect should be mediated by inferences of stronger intrinsic motivation (H2). Thirdly, smiling should be a diagnostic signal of intrinsic motivation only if the smile is a consequence of engaging in the intrinsically motivated activity. Hence, the proposed effects (i.e., H1 and H2) should be attenuated if the smile is observed before rather than after the focal activity (H3).

Study 1 tested H1 and H3. MTurkers (N=242) read a description of Karate and examined a group photo of a Karate Club. The photo featured 30 club members standing together, dressed in karategi. Participants randomly saw either a fun photo or a neutral photo that differed in the expressed facial emotions, such that the club members were either smiling (fun), or not smiling (neutral). We manipulated the timing of emotion display by saying that this photo was taken either before or after the Karate training. Participants then completed a 23-item scale adapted from the Sport Motivation Scale (Pelletier et al. 1995), which measured their inferences regarding the club members' intrinsic and extrinsic motivations for practicing Karate. The results showed a significant interaction of displayed emotion and timing of emotion, such that if they thought the photo was taken after the training, participants inferred higher intrinsic motivation if the club members displayed smiling rather than neutral expressions. The effect disappeared if the photo was purportedly taken before the training, because the fun is then less likely to be a consequence of practicing Karate.

Study 2 tested H1, H2 and H3 in a different context. College students (N=164) read about a newly married couple – the groom being a successful businessman and the bride a famous columnist – and saw a photo of them embracing, with either big smiles or small smiles. The photo was purportedly taken either on the day before or the day after their wedding day. After viewing the photo, participants answered 14 questions that measured the motivations they ascribed to this couple regarding their marriage, and four questions that measured the anticipated long-term quality of the marriage. When the photo was supposedly taken after the wedding, participants inferred stronger intrinsic motivation, and anticipated the marriage would be more successful, if the couple displayed large (vs. small) smiles. The effect disappeared if the photo was supposedly taken before the wedding. Inferred intrinsic motivation mediated the interactive effect of smile size and timing on anticipated long-term marriage quality.

Having investigated the inferences people make about smiling as communicating intrinsic motivation, we now turn to the question

of whether they proactively use smiling in their own non-verbal communication. As observers, people use smiles to infer intrinsic motivation, and hence as actors may strategically display larger smiles if they want to signal intrinsic motivation to potential observers (H4). We test this hypothesis in study 3.

University students (N=170) imagined that a real estate agent who once helped them find an apartment was soliciting previous clients' photos to promote her business. Participants imagined that they agreed to send a photo to the agent (control condition), and they wanted potential clients who would see their photo to believe that they really wanted to endorse this agent and had no reservation in doing so (intrinsic motivation condition), or felt an obligation to endorse her (extrinsic motivation condition). Participants used the built-in cameras in the lab computers to take headshot pictures. They were free to take as many pictures as they wanted, but could only send one. Two coders who were blind to the hypothesis and conditions coded the facial expressions in the chosen selfies. The results showed that participants proactively displayed bigger smiles when they were given a goal to communicate intrinsic motivation than to communicate extrinsic motivation or no specific goal.

Much past research has shown that affect can be used as information about the self (Schwarz and Clore 1983), and recent research suggests that emotion can be used as social information (Van Kleef 2009). Echoing the social-functional approach to emotion research (Keltner and Haidt 1999), the present research shows that people infer intrinsic motivation from another person's displayed smile that occurs after an activity. We also show that people use this signal strategically and display bigger smiles to communicate intrinsic motivation to potential observers.

The Two Faces of Innovation Adoption: How Envy Affects Consumers' Evaluation of Innovative Products

EXTENDED ABSTRACT

Innovative products can be highly appealing but also aversive to consumers. On the one hand, innovation adoption is associated with a number of positive symbolic qualities that are psychologically rewarding; it signals leadership, a sense of superiority, and a higher group status (Fisher and Price 1992). On the other hand, innovation adoption may also expose consumers to unanticipated risks, such as performance uncertainty, physical perils, and financial risks (Ram 1989).

In this research, we aim to examine which of these two aspects carry more weight in consumers' minds, particularly when consumers experience feelings of envy that arise from social comparison (Cohen-Charash 2008). While envious individuals may focus on the positive aspects of innovation as it allows them to repair their threatened self-image, they might also become more alert toward any risks that can further harm their already threatened self-image.

To understand whether envious individuals are driven by a compensatory self-enhancement motive or a precautionary self-protection motive, we draw upon research on dual-system models (Evans 2003). While people who attend to their feelings tend to process information more holistically and automatically, those who attend to their cognition tend to process information more analytically and deliberately. Based on these characteristic differences between the affective system and the cognitive system, we predict that envious individuals who attend to their affect are more motivated to repair their negative emotions and are more likely to perceive innovation adoption as an opportunity for compensatory self-enhancement. In contrast, envious individuals who attend to their cognition are driven by a greater self-protection motive; they are thus more likely to rec-

ognize the potential risks of innovative products and respond to these products more negatively.

Experiment 1 was designed to test the basic effect that we hypothesized. Participants (N = 143) either described an individual whom they envied (envy condition) or a person whom they knew (control condition) (Cohen-Charash 2009). Following this envy manipulation, in a purportedly unrelated study, all participants saw an advertisement for the "Smart Body Analyzer," a smart multi-function, health-tracking scale. Lastly, participants responded to the Attention-to-Feelings scale (Salovey et al. 1995). The findings suggest that envious (vs. non-envious) consumers who are dispositionally inclined to attend to their feelings respond more favorably to innovative products, whereas envious (vs. non-envious) consumers who are inclined to attend to their cognitive thinking respond less favorably to innovative products ($p = .009$).

Experiment 2 conceptually replicated the findings in experiment 1 by using a different method to manipulate envy: We asked 103 M-Turk participants to complete a Perceptual Ability Test. Participants were told that the goal of the test was to measure how well they processed visual information, and that people who performed within the top 15% would receive a reward of \$10. After completing a series of tasks, half of the participants (envy condition) read the following message on the screen: "Another M-Turk participant just before you won \$10 award! Your score is now entered into our database and your percentile is being calculated..."; the remaining half of the participants (control condition) only read the second half of this message without any mention of another M-Turk worker's performance. Subsequently, participants in both conditions were told that they did not win the \$10. (The validity of this manipulation was ascertained in a pretest.) In a purportedly unrelated study, all participants then evaluated an innovative multi-function global adapter and completed the Attention-to-Feelings scale. The results again revealed that envious (vs. non-envious) participants who were dispositionally inclined to attend to their feelings rated the global adapter more positively. In contrast, envious (vs. non-envious) participants who attended to their cognitive thoughts rated the product more negatively ($p = .024$).

Besides further replicating these basic results, the next two experiments provided process evidence for our hypothesized dual-process account. **Experiment 3** employed mediation analysis to show that envious individuals who attend to their cognitive thinking (vs. feelings) are more concerned with the potential risks of innovation adoption, hence resisting against adopting new products. Participants (N = 104) completed the same essay-writing envy-manipulation task from experiment 1 before evaluating an innovative finance-management app, Mint. They also responded to three risk-perception questions (Ram and Sheth 1989), followed by a short filler and the Attention-to-Feelings scale. Analysis revealed that not only were the findings from experiment 1 and 2 replicated ($p = .010$; Attention-to-Feelings floodlight region significant above 5.79 and below 3.80), there was a significant moderated mediation of envy and attention-to-Feelings on attitude toward the app through perceived risk (indirect effect $\beta = .18$, 95% CI = .04, .37).

Experiment 4 demonstrated that due to self-enhancement motives, envious individuals who attend to their feelings (vs. cognitive thinking) have a more favorable attitude toward innovative products; by testing a boundary condition where some participants had the chance to self-affirm before the innovative-product evaluation, we showed that these individuals who were self-affirmed of their positive self-image no longer exhibited such a preference for innovative products. Participants (N = 172) were randomly assigned to one of four conditions (Envy: yes/no) \times (Affirmation: yes/no). Participants

first engaged in the same essay-writing envy-manipulation task as before. Next, half of the participants (affirmation condition) wrote about their most important life value, while the remaining half of the participants described what a typical AAA battery looked like (no-affirmation condition) (Gao, Wheeler, and Shiv 2009). All participants then evaluated the Smart Body Analyzer (as in Experiment 1) and responded to the Attention-to-Feelings scale. Consistent with our hypothesis, among individuals who were not self-affirmed, we again replicated the crossover interaction from previous experiments ($p = .010$; Attention-to-Feelings floodlight region significant above 5.28 9 and below 4.27). Importantly, envious participants who were self-affirmed prior to the innovation-evaluation task no longer showed such a preference ($p = .999$).

This research contributes to the literature by highlighting the benefits and risks associated with innovative products. More importantly, we add to a limited but growing stream of work that examines how envy influences product consumption by suggesting the latent motives (self-enhancement vs. self-protection) that drive consumers' product attitudes.

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Threats to Food Well-being for At-Risk Consumers in the Marketplace

Chairs: Julie L. Ozanne, University of Melbourne, Australia

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Paper #1: Obesity and Sensitivity of Food Perceptions and Preferences to Marketing Actions

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Paper #2: The Effect of Chronic Dieting Goals on Auditory Perceptual Biases

Lauren F. Mayor, Baruch College, USA

Lauren G. Block, Baruch College, USA

Suresh Ramanathan, Texas A&M University, USA

Paper #3: Can Money Tip the Scale? Social Judgment of Overweight Shoppers and the Role of Form of Payment

Carrie Skinner, Florida State University, USA

Martin Mende, Florida State University, USA

Maura L. Scott, Florida State University, USA

Stephen M. Nowlis, Washington University at St. Louis, USA

Michael K. Brady, Florida State University, USA

Paper #4: You're Killing Me! Exploring How Consumers with Food Intolerances Navigate Eating Out

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Gergely Nyilasy, University of Melbourne, Australia

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SESSION OVERVIEW

Food is an integral part of a daily living full of nourishment and joy, comfort and pleasure, and kinship and social connections (Block et al. 2011). Yet, for some consumers, this taken-for-granted part of daily life is fraught with physical, psychological, social, and institutional dangers.

These four presentations are united in their focus on threats to food well-being for at-risk consumers. This session seeks to answer two questions: 1) What can we learn about threats to food well-being across diverse theoretical approaches, including the interplay between biological and psychological theory, perceptual theory, stigma theory, and institutional theory? 2) How can threats to food well-being for different at-risk groups be mitigated in the marketplace? This session explores novel at-risk groups—bariatric patients and consumers with celiac disease, unearths new phenomenon—wishful hearing and inter-individual effects of forms of payment, and employs novel methods—in the moment digital diaries using cell phones.

The first two presentations focus on environmental factors controlled by marketing. In the first paper, the research team compares emergent findings from a study of lean and obese women's sensitivity to marketing actions. They study consumers before and after bariatric surgery hypothesizing the intriguing outcome that overweight consumers will become less sensitive to marketing actions following surgery. These consumer researchers are likely the first to join the recent flurry of research exploring provocative links between intestinal microbial activity and cognitive processing (see [\[www.human-foodproject.com\]\(http://www.human-foodproject.com\)\). Mayor, Block and Ramanathan investigate how auditory processes—specifically the sounds associated with food products and marketing—can threaten food well-being. They draw on extensive data from a series of lab and field studies to show a novel phenomenon of “wishful hearing.” Specifically, ambient product sounds can lead to increased consumption of food products that contravene the goals of chronic dieters who are more vulnerable to these forms of auditory marketing.](http://www.human-</p></div><div data-bbox=)

The next two presentations focus more on interpersonal and institutional influences on well-being. Skinner, Mende, and Scott examine how the choice of payment method in a food retail setting—cash or credit—made by overweight consumers affects the inferences made by, and encounters with, retail employees and customers. Drawing on experimental data, they find that food purchases made by obese customers with credit cards triggered negative connotations, such as poor self-control, and stigmatizing behaviors in retail employees. Carrington, Nyilasy, and Ozanne reveal a range of institutional logics and tactics employed by consumers with celiac disease to also navigate dangerous and stigmatizing food and service encounters in restaurant settings. In doing so, they advance current theorizations of market dynamics to reveal various processes employed by at-risk consumers to maintain, change, or withdraw from the market.

These four presentations span diverse theories and employ a range of methods including lab experiments, field experiments, ethnographic interviews, and mobile digital diaries. This session will be of interest to scholars seeking an in-depth understanding of food well-being spanning diverse methods and theoretical approaches both with a theoretical and practical interest.

Obesity and Sensitivity of Food Perceptions and Preferences to Marketing Actions

EXTENDED ABSTRACT

The environment—and particularly the actions of food marketers—strongly influence the perception of food, which then impacts preferences and eating behavior (Chandon and Wansink 2012). Marketing claims (e.g., “good for you” claims, brand positioning), the size and shape of food packages, their labeling (“medium” or “large”) and the range of sizes on the menu all influence food consumption and the perception of food quality (“tasty,” “healthy”), quantity.

Research on how food marketing influences food perception and preferences has important limitations. First, almost all existing studies have been conducted with lean, healthy, educated, and young people rather than with the obese people who are most at risk. This is an important concern because research suggests that obese people have become insensitive to internal satiation signals (Bartoshuk, Duffy, Hayes, Moskowitz, and Snyder 2006; Yeomans, Blundell, and Leshem 2004) and to reward signals in the brain (Volkow, Wang, and Baler 2011). The second limitation is the lack of studies examining the effects of the most effective weight-loss remedy for obese people—bariatric surgery—and how it interacts with the effects of the marketing environment. About 200,000 Americans undergo weight-loss surgery (gastric bypass or banding) each year. Yet, only a handful of studies show that weight-loss surgery influences not only food intake, but also food preferences, hunger, and taste acuity (Behary

and Miras 2015; Scruggs, Buffington, and Cowan 1994). More generally, no research has, to date, examined how medical interventions like weight-loss surgery influence people's sensitivity to marketing actions when it comes to food perception and preferences.

The goal of this project is to examine the interplay of biological and psychological factors driving eating behavior before and after weight-loss surgery. Our hypothesis is that the drastic psychological and biological changes (e.g., the composition of the gut microbiota and the levels of metabolic gut hormones) caused by bariatric surgery reduce the impact of marketing factors on food perceptions and preferences.

The study was conducted with the collaboration of the university hospital of Pitié Salpêtrière in Paris. A total of 100 female participants were included in the studies. They were divided in two groups (based on BMI): the obese group and the lean group. The obese participants belonged to a clinical study conducted by the Institute of Cardiometabolism And Nutrition (ICAN). Both groups were matched in terms of socio demographic factors (age and employment). However, the obese sample had lower levels of education and income. Because of the slow recruitment of obese patients, the post-surgery data will only be available by the time of the conference in Berlin.

We first measured the effects of food stereotypes. Existing research has shown that people tend to categorize food as "good" or "bad" based on stereotypes, regardless of the actual size of the portion, and that these stereotypes strongly influence food perceptions and preferences (Oakes 2005; Rozin, Ashmore, and Markwith 1996). We selected "surprising" pairs of foods where the stereotypically "good" food actually contains more calories than the stereotypically "bad" food (e.g., a can of Minute Maid pure orange juice, worth 152 calories, vs. a can of regular Coke, worth 140 calories). Overall, we replicated both the "health halo" and the "health horn" effects (Chandon 2013; Chandon and Wansink 2007): participants underestimated the calories in the "good" foods by 17% and overestimated the calories in the "bad" foods by 30% ($p < 0.0001$). There was also a main effect of group: Lean participants generally underestimated calories by 8% whereas obese participants overestimated them by 21% ($p < 0.0001$). More importantly, there was a significant interaction ($p = 0.028$): Stereotypes effects were stronger in the obese group (where they led to a 60 percentage point difference in caloric estimations) than in the lean group (34 percentage points).

We also compared inter-temporal preferences for food and money between lean and obese participants. We asked the participants to imagine that they had four euros (or four candies worth one euro each), and asked them whether they would be willing to wait longer in exchange for more money (or more candies). 86% of the obese participants and 100% of the lean participants were willing to wait in exchange for more money. For the candies however, only 33% of the obese participants were willing to wait vs. 67% for the lean participants. This indicates that lean participants are approximately equally impatient when it comes to money or candies, whereas obese participants are more impatient for food than for money.

We also examined the effects of the branding of portion sizes (Aydinoğlu and Krishna 2011) and of the range of portion sizes available (Sharpe, Staelin, and Huber 2008). Here again, obese participants were more influenced by marketing actions than lean participants.

Obviously, the most interesting comparisons will be to compare the responses of the obese participants before and after weight-loss surgery. Finding that weight-loss surgery makes obese people less responsive to marketing actions would provide the first demonstration that weight-loss interventions, such as bariatric surgery, can influence

food perceptions and preferences. It would also suggest that differences in response to marketing actions might be one of the reasons for the higher BMI of the obese group. Alternatively, finding no effect of bariatric surgery would suggest that the higher sensitivity to marketing actions of obese participants is driven by personality or other stable individual differences, and thus that the drastic weight loss typically caused by bariatric surgery is not mediated by sensitivity to marketing actions.

The Effect of Chronic Dieting Goals on Auditory Perceptual Biases

EXTENDED ABSTRACT

The way in which we process sensory stimuli is guided by our underlying goals and motivations. For example, extant research exists exploring the existence of motivated visual perceptual biases, whereby people's internal states shape visual perceptions (Dunning and Balciotis, 2013), and a delicious muffin appeared larger to dieters than non-dieters (van Koningsbruggen, Stroebe and Aarts 2011). In general, the motivated visual perception research finds that desirable objects are perceived as closer to us than non-desirable objects (Balciotis and Dunning, 2009).

The current research extends this prior work by exploring how people's auditory perceptual processes are affected by their goals. We propose the existence of "wishful hearing," which establishes that ambient product sounds can be perceived as more spatially proximal when more desirable and thus lead to increased purchase intentions and consumption. In two lab studies, we tested how the goal of chronic dieting, as measured by Herman and Polivy's Restraint (1980) subscale Concern for Dieting, affected auditory perceptual processes, specifically, the spatial distance that exists between a person and a temptation after listening to the associated sound. In our third study, a field experiment, we explore how wishful hearing still exists even when the location of the product is known. To the best of our knowledge, this is the first exploration into how sound threatens food well-being.

In studies 1 and 2, participants were brought into a behavioral lab where they were seated at computer stations with a set of headphones set at the ambiguous volume of "25." Participants were instructed that they would be completing a series of studies. In study 1, seventy-seven participants (70% female, $M_{age} = 23$ years) rated their perceptions of distance from a tempting object (i.e., the ice cream truck) after listening to a 15 second clip of an ice cream truck jingle. To gauge distance perceptions, participants were presented with an image of a stick figure on the left and an image of an ice cream truck on the right with a continuous line with in between. Participants were asked to place an "X" on the line between the stick figure and the ice cream truck demonstrating how close or far they felt to the sound. Participants were then asked on a 7-point Likert scale to gauge how appealing the sound was and if they would like to hear the sound again. Participants were then given a filler task, and finally we measured Concern for Dieting.

A linear regression revealed that chronic dieters placed an "X" on the line that indicated that they felt closer to the sound of the ice cream truck ($b = .07$, $SE = .03$), $t(76) = 2.40$, $p = .02$) than non-chronic dieters. In addition, we also found that spatial proximity mediates how appealing the sound is and the desire to hear the sound again. Specifically, when chronic dieters feel closer to the sound of the ice cream truck, they find the sound to be more appealing (10,000 Bootstraps, 90% CI's: .0005, .0483) and they want to hear the sound again (10,000 Bootstraps, 95% CI's: .0001, .0853).

In study 2, eighty-four participants (49% female, $M_{\text{age}}=22$ years) provided their perceptions of distance after listening to the ice cream truck jingle used in study 1. After providing their distance estimates and rating how appealing the sound was, participants were led into the lab “Ice Cream Shop,” where they were allowed to scoop as much ice cream as they wished before returning to a conference room to enjoy their dessert.

Analogous to Study 1, we found that chronic dieters felt closer to the sound of the ice cream truck ($b=.08$, $SE=.037$, $t(83)=2.02$, $p<.05$) than non-chronic dieters. In addition, we find serial mediation where chronic dieters feel closer to the sound, which then leads this group to rate the sound as more appealing and subsequently increases willingness to pay (10,000 Bootstraps, 95% CI's: .0002, .0283, see Figure 1) as well as consumption (10,000 Bootstraps, 95% CI's: .0001, .0272, see Figure 2).

In order to identify how consumers would behave in a realistic setting outside of the lab, we designed a field study as our third experiment. Fifty participants ($M_{\text{AGE}}=41.3$ years, 57% male) were recruited for the experiment disguised as a marketing survey for the ice cream shop. In this study, consumers were intercepted after parking across the street from an ice cream shop. In return for their time, participants were awarded a coupon for \$1.00. Participants first listened to the same sound used in studies 1 and 2 via headphones connected to a laptop. Following the sound, they responded to questions to gauge their distal perceptions of the ice cream shop. For fear of disrupting business, we used one measured factor that acted as a proxy for chronic dieting. To gauge dieting, on a 7-point Likert scale, we asked: “How interested would you be in trying our Only 8 calorie ice cream?”

A linear regression revealed that customers interested in diet ice cream perceived themselves as closer to the ice cream shop ($b=.26$, $SE=.09$, $t(49)=2.02$, $p=.005$). In addition, spatial proximity mediated feelings of attraction towards the ice cream shop (10,000 bootstraps, 95% CI's: .0143, .2656). However, we did not find any significant differences in the amount of ice cream purchased or the amount of money spent, most likely because customers had already made the decision to go and have ice cream.

In conclusion, this research establishes the existence of a novel theoretical phenomenon we have termed “wishful hearing”, as well as an underexplored threat to food well-being. In studies 1 and 2 we find that when exposed to a desirable product sound, people wish to hear the sound again and find it more appealing when the sound is perceived as spatially close to them. Study 2 extends our findings to willingness to pay and consumption. In our third study, we provide field evidence that wishful hearing still exists even when you know the exact location of the product in question.

Can Money Tip the Scale? Social Judgment of Overweight Shoppers and the Role of Form of Payment

EXTENDED ABSTRACT

Overweight and obese consumers face the daily challenge of navigating an environment in which food is omnipresent, yet weight-based stigmatization is worsening (Andreyeva, Puhl and Brownell 2008). Many overweight consumers experience an emotionally-charged and difficult relationship with food (e.g., Kidwell, Hardesty, and Childers 2008; Mela 2001). Purchasing food can be a particular stressor to those individuals, and they may be stigmatized by other consumers. Paradoxically, overweight individuals tend to respond to stress with emotional eating, which causes weight gain and begets further stigmatization (Sinha 2015; Tomiyama 2014). In light of this

negative cycle, better understanding weight-stigma in the shopping context is crucial in overcoming potentially harmful consequences.

Overweight/obese status is often attributed to lack of self-control (e.g., over-eating) (Brochu and Esses 2011). The present research investigates whether such consumers can overcome negative judgements by signaling self-control through their form of payment. We theorize that obese people who pay with cash (vs. credit card) when purchasing food may attenuate negative inferences made about them, because the use of cash may suggest greater self-control (e.g., Prelec and Loewenstein 1998; Prelec and Simester 2001). Thus, we examine whether a consumer's form of payment and body weight interact in the formation of social inferences made about them, and how these inferences affect encounters with others. We propose a novel research perspective that focuses on the inter-personal effects of form of payment. Prior work has investigated intra-individual effects of form of payment (e.g., Bijleveld and Aarts 2014; Feinberg 1986; Vohs, Meade, and Goode 2006; Vohs 2015); for instance, studies have shown that consumers spend more when they themselves pay with a credit card or debit card (vs. cash) because cash is the most painful form of payment (e.g., Prelec and Loewenstein 1998; Prelec and Simester 2001).

In contrast, our inter-personal perspective focuses on the social judgments related to how consumers pay. This analytical lens provides new insights into the social perception of overweight consumers, as it reveals that how shoppers pay (i.e., cash vs. credit card) influences how they are perceived by others (consumers and employees) in retail settings. This is the first research to show such inter-individual effects of form of payment, a ubiquitous marketing phenomenon that hitherto has been studied with a strong intra-individual focus.

Our conceptual framework links three literature streams on: spontaneous trait inferences (e.g., McCarthy and Skowronski 2011; 2014), weight-stigma (e.g., Andreyeva, Puhl and Brownell 2008; Friedman and Brownell 1995; 2002), and psychological and behavioral effects of cash and credit cards (e.g., Feinberg 1986; Prelec and Simester 2001; Vohs, Meade, and Goode 2006; Vohs 2015). We theorize that credit card (vs. cash) payments for food trigger less favorable assessments when the target shopper is obese, because obese consumers are thought to lack self-control. The existing literature on form of payment suggests that cash is an indicator of self-control, because it is a relatively painful method of payment.

In a series of six experiments, we examine the effects of form of payment on obesity stigma. We find that obese consumers making a food purchase with a credit card (vs. cash) are assessed less favorably overall (Study 1a) and they are judged to be more gluttonous in consuming indulgent food (study 1b). The effects are robust across different food types (Study 2), and the effects are mediated by judgments about the target shopper's level of self-control (studies 1a, 2, 3, and 4) and moderated by the observer's self-control (study 3, study 4) and financial literacy (study 5). Notably, across all studies, judgments of the normal-BMI shopper were unaffected by form of payment.

Study 1a tested our main hypotheses that the overall assessment of an obese consumer would be less favorable when purchasing food with cash (vs. credit). Participants assessed the obese target more favorably when she paid with cash (vs. credit). There was no difference in the attitude toward the normal weight shopper paying in cash versus credit.

In study 1b, participants attributed less gluttonous consumption (eating less of the food purchased) to the obese consumer paying with cash than with credit; there was no difference in status level for the regular weight consumer.

In study 2, participants assessed their overall impression of the target shopper purchasing either virtue or vice food. A three-way interaction did not emerge. Thus, we collapsed across food conditions and found a consistent pattern: the assessment of the obese consumer was more favorable when paying with cash than with credit; there was no difference in attitude assessment for the regular weight consumer.

Studies 3, 4, and 5 investigate how an observer's own level of self-control and financial literacy moderate the impression formation process. In study 3 and 4, the results show that individuals with higher (vs. lower) self-control are more judgmental of obese consumers purchasing food. Similarly, in study 5, we find consumers with higher (vs. lower) levels of financial literacy judge obese consumers purchasing food with cash more harshly.

Our results have implications for understanding consumer food well-being. For overweight consumers, who may already experience a difficult relationship with food and for whom purchasing food may trigger emotional responses, feeling stigmatized in a retail setting when purchasing food may further threaten their well-being. Therefore, it is important to understand the mechanisms driving weight-stigmatization, which is often a perceived lack of will-power or self-control. We find that obese consumers making a food purchase may be able to offset these negative inferences by paying with cash because cash signals self-control. It is also important for observers to be aware of possible biases in their judgments of other consumers' payment methods, particularly vulnerable consumers such as those who are overweight.

You're Killing Me!

Exploring How Consumers with Food Intolerances Navigate Eating Out

EXTENDED ABSTRACT

Celiac disease (CD) is a genetic autoimmune disease affecting about 3 million Americans with diagnoses increasing globally. Within minutes of ingesting gluten, sufferers experience a range of reactions from no symptoms to abdominal cramping, spontaneous diarrhea, migraines, days of incapacity, and even hospitalization. Long-term consumption damages their small intestine, interferes with the absorption of nutrients, and can have serious complications including infertility, osteoporosis, and anemia (Ludvigsson et al. 2013). The only existing treatment for CD is a gluten-free diet. The 2013 FDA ruling, which set the meaning of "gluten-free" to be less than 20 parts per million of gluten, should have legitimized the needs of celiacs. Restaurants, however, remain a dangerous place. Gluten-free labeling is voluntary, no enforcement exists, opportunities for cross contamination abound, and gluten-free meals come with disclaimers. As Jenny, who has CD, says, "It's so restrictive, you can't go out and enjoy meals with people. You've always got to be thinking that someone's going to get me."

How do consumers with celiac disease engage in service encounters that not only fail to meet their needs but where eating may have severe health consequences? To explore this question, we focused on consumers with CD using four sets of data: in-depth semi-structured interviews, digital diary entries collected 'in the moment' using informants' mobile phones, online postings from a CD support group, and field notes at a gluten-free festival.

Recent consumer research investigates how the micro-practices of consumers can significantly impact the macro-level market dynamics (Geisler 2012; Martin and Schouten 2014). However, few studies consider the struggles of marginalized consumers for market inclusion. Sandikci and Ger (2010) show how Turkish women cre-

ated a parallel fashion market through the destigmatization of veiling practices. In contrast, Scaraboto and Fischer (2013) view stigmatized plus-sized consumers as institutional entrepreneurs seeking greater inclusion within existing mainstream markets. They leverage adjacent institutional logics, such as the logic of human rights and fat acceptance, seeking to expand fashion offerings for large women.

Celiacs similarly struggle with stigmatization and seek greater marketplace inclusion. Yet given the severe health repercussions and limited restaurant offerings that are celiac safe, many withdraw from the marketplace. Celine captures a service failure where she "gets glutened" providing ample justification for why some sufferers prefer cooking basic food ingredients at home:

"I was up half the night with gut wrenching cramps, diarrhea, chills, nausea. The next day I was so tired. Now, I'm super depressed and really just do not want to go on living in a world where someone would take advantage of people like us just to make a buck, and not even get it right. I know I was glutened by this place... I feel sick in my body, my heart and my soul over this." [Celine, Interview]

Still, complete exclusion is difficult, particularly from social dining out events, and our informants draw on a range of tactics and strategies, such as finding one or two safe items on the menu, packing their own contingency food, or patronizing a restaurant that is completely gluten-free. Our informants report that, upon interacting with service providers, sometimes restaurants just do not feel safe. Restaurants and employees have 'tells,' including statements servers make (e.g., "we added gf because it is popular" or "we have low gluten pasta"), nonverbals (e.g., long pauses, eye rolling), questions ("how gluten-free are you?"), and disclaimers ("We cannot be held responsible for 'normal' cross contamination that occurs during the preparation of foods in the kitchen."). A common strategy among informants was to go back stage and examine the food prep area and interrogate the chef. Stealth tactics were also employed, such as hiding a sugar packet at the bottom of a salad sent back to see if a new salad was brought or if the old salad was brought back sans croutons.

Communicating the dire importance of their gluten free needs was difficult because of a double invisibility; food service employees neither see the gluten nor its affects since our informants rush home to suffer in privacy if they get glutened. Our informants deftly employ different institutional logics within the service encounter. Drawing on the logic of food safety, they draw analogies to peanut allergies and food poisoning in their communication with restaurant staff: "Most people don't understand autoimmune diseases but they do understand allergies. Whatever it takes to get them to take me seriously (online data)." But they also distance themselves from the logic of customer choice and people who live a gluten-free lifestyle popularized by celebrities like Gwyneth Paltrow: "I am GF not by choice" and "it's a medical necessity." Ironically, recent surveys (Wong 2013) finding that 28% of consumers say they are cutting out or limiting gluten means that our informants have to work even harder to legitimize their claims: "I'm not taken seriously" (Bettina, interview).

In our analysis, we draw on elements of neoinstitutional theory as a useful analytical lens to theorize how marginalized consumers navigate the risk and stigma associated with mainstream markets in which harmful yet invisible food constituents are common and normalized (Dolbec and Fischer 2015). In doing so, we extend current conceptions of market dynamics (e.g., Scaraboto and Fischer 2013) to reveal multiple processes through which these at-risk consumers maintain, disrupt, or withdraw from the mainstream market.

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What Can Brains and Bodies Tell us That Consumers Won't? Neurophysiological Processes Underlying Consumer Judgment and Choice

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Paper #1: Neural Responses to Functional and Experiential Ad Appeals: Explaining Ad Effectiveness

Linda Couwenberg, Erasmus University Rotterdam, The Netherlands
Maarten Boksem, Erasmus University Rotterdam, The Netherlands
Roeland Dietvorst, Neuro Labs, The Netherlands
Loek Worm, InsightYou, The Netherlands
Willem Verbeke, Erasmus University Rotterdam, The Netherlands
Ale Smidts, Erasmus University Rotterdam, The Netherlands

Paper #2: Peacocks, Testosterone and Status Seeking: Single-dose Testosterone Administration Increases Preference for Status Brands and Products

Gideon Nave, California Institute of Technology, USA
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Paper #3: Cardiac Vagal Tone and Risky Decision Making

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Paper #4: Modulation of Judgments by Incidental Affect: the Dynamic Integration of Affect and its Temporal Sustainability

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SESSION OVERVIEW

Recent developments of neurophysiological measurement techniques and growing interest in their use in marketing research have advanced our understanding of how consumers process information and make decisions. The papers in this session showcase the variety and richness in accessible neurophysiological methods that can inform marketing theory, and provide novel evidence on important drivers of consumer behavior that are inaccessible to a marketing researcher using self-report measures or purely behavioral metrics alone. The current session will exemplify how multimethod approaches such as psychophysiological measurements (fMRI, ECG, respiration), pharmacological interventions, and facial affective encoding can illuminate how consumers process, value and decide among the wide variety of options they encounter in the marketplace.

In the first paper, Couwenberg, Boksem, Dietvorst, Worm, Verbeke and Smidts explore the neural processes evoked by functional and experiential ad appeals in television advertisements, using functional magnetic resonance imaging (fMRI). They demonstrate that functional and experiential ad appeals for the same brand engage different brain regions, and that these activation patterns predict subsequent advertisement effectiveness.

In the second paper, Nave, Nadler, Dubois, Camerer, and Plassmann investigate the causal relationship between testosterone and preference for status goods. Using double-blind placebo controlled

exogenous testosterone administration and subsequent hormonal measurements extracted from saliva samples, they reveal that testosterone drives status- but not quality- or power-seeking motivation underlying consumers' product evaluations.

In the third paper, Acikalin and Shiv explore the role of the physiological regulation of emotion in decision making under risk and uncertainty. By quantifying and manipulating vagal tone, a physiological marker of autonomic flexibility and stress vulnerability, they show that increased parasympathetic activity decreases risk aversion.

In the fourth paper, Ling, Shiv, and Plassmann use facial affective encoding in order to investigate the temporal dynamics of affect-as-information effects in consumer judgments. Online measurement of facial responses to incidental rewards during aesthetic evaluations allowed for rapid tracking of when incidental affect was being used as information.

Taken together, these papers provide an overview of how different types of neurophysiological measures can be applied to answer both theoretically and managerially important questions in the field of consumer behavior. In doing so, this session offers novel insights into the neurophysiological processes underlying judgement and choice, raising fundamental questions such as "What can we learn about decisions from consumers' neurophysiological states?". Thereby, not only do we advance the theoretical understanding of the drivers of behavior, but we also generate novel hypotheses for further research. Notably, these papers appeal to a broad audience, as they intersect in their utilization of neurophysiological methods and focus on consumer decision-making, but also tackle central questions in a variety of popular areas in consumer behavior such as advertising efficacy, conspicuous consumption, risky decision-making, and the role of affect in consumer choice.

Neural Responses to Functional and Experiential Ad Appeals: Explaining Ad Effectiveness

EXTENDED ABSTRACT

An advertising appeal - the central idea of a message that highlights specific attributes of the product - can be described in terms of its functional and experiential elements. Ads with a predominant functional appeal typically convey a message that relates to a rational or utilitarian focus on product features, by including references to the product attributes, its use and performance, as well as the benefits and value that come with these features (Abernethy and Franke 1996). In contrast, one of the key ideas of an experiential advertising appeal is that value does not only reside in the advertised good and its utilitarian and functional benefits, but that value also lies in the emotional, sensory and experiential elements associated with the good, and in the (indirect) experience of it (e.g., through advertisements; Holbrook and Hirschman 1982).

Despite the large body of research that has investigated the effect of ad appeals of television advertisements on consumers' internal responses and behavior, our understanding of how different ad appeals are processed remains limited. Neuroimaging methods, such as functional magnetic resonance imaging (fMRI), can serve as a valuable complement to conventional self-report methods, providing more implicit and immediate insights into ongoing mental processes that are typically difficult to access using other approaches.

In the present study, we explore how novel insights from neuroimaging techniques can advance our understanding of how functional and experiential ad appeals are processed by consumers and how these processes are, in turn, related to advertisement effectiveness.

We compared a unique set of eleven different television commercials for the same brand (i.e., a well-known muscle and joint gel) to investigate the influence of differences in advertisement appeal, in terms of functional and experiential executional elements, on brain responses and subsequent advertisement effectiveness. The selected commercials were of comparable professional quality, equal length (all 20 seconds) and did not differ in terms of lower-level visual features.

In our experimental design, we combine data from three independent samples: (1) an fMRI neural focus group ($N = 24$), to measure immediate neural responses to the television commercials; (2) a large sample of consumers in the population ($N = 1239$), to measure ad effectiveness for each commercial; and (3) a sample of advertising experts ($N = 9$) who assessed each commercial's appeal. We used the expert judgments scale from Zarantonello, Jedidi, and Schmitt (2013), which includes items that pertain to the functional and experiential dimensions of an ad. Advertising effectiveness was measured by the consumer's online information search behavior in direct response to a television commercial (i.e., click-through rate to the product website (CTR)).

To investigate the neural processes evoked by functional and experiential executional elements, and how these processes relate to ad effectiveness, we conducted a series of analyses. First, we assessed to what extent the expert-rated executional elements were related to population-level ad effectiveness. Results of a stepwise linear regression model reveal that ads that demonstrate the functional benefits of the product (i.e., focus on the advantages for the consumer), and appeal to imagination (i.e., thinking in a different, original and innovative way, approaching things from a new angle) were most effective in stimulating click-through behavior ($R^2 = .169$, $F(1,96) = 5.204$, $p < .05$).

As a second step, we examined the brain regions engaged by these effective functional and experiential executional elements. While the functional element was particularly associated with responses in the temporal cortex (i.e., inferior temporal gyrus (ITG) and middle temporal gyrus), the experiential element evoked neural responses in the dorsolateral prefrontal cortex (i.e., DLPFC: precentral gyrus, extending into inferior frontal gyrus and middle frontal gyrus). Results exceeded the threshold of $p < .05$ FWE corrected on the cluster-level.

Third, we analyzed whether activity in these specific brain regions in direct response to the commercials was predictive of CTR in an independent sample of consumers. Results of a multi-level linear regression model indicate that the extent to which the brain regions associated with the most effective functional element (i.e., activity in a region-of-interest within the ITG) and experiential element (i.e., activity in a region-of-interest within the DLPFC) were activated while viewing the commercials, predicted the successfulness of the commercials (i.e., DLPFC significantly: $b = .014$, $p = .013$; ITG marginally significantly: $b = .008$, $p = .086$).

Additionally, we conducted a psychophysiological interaction analysis to assess how functional connectivity between brain regions is altered in response to more effective commercials. Findings revealed interactions between the ITG and the DLPFC, and between the DLPFC and the amygdala, for higher levels of CTR.

Exploring the neural responses to different ad appeals, we dissociated brain regions responding to functional and experiential executional elements in television ads. We found that a functional appeal engaged the temporal cortex. Previous neuroimaging stud-

ies demonstrated that the temporal cortex is involved in higher-level perceptual processes, such as object identification, recognition and interpretation (e.g., Bar et al. 2001). The temporal cortex thus plays an important role in identifying 'what' things are, and constitutes an important hub in the so-called ventral stream, or the 'what pathway', of visual processing (Goodale and Milder 1992). This potentially indicates that effective processing of information on the product itself, but also of how the product should be used may lead to increased success of the commercial.

Moreover, we found that an experiential appeal engaged the DLPFC. The DLPFC has been related to sustained attention and working memory, processes which are critical for enabling creative thought (Dietrich 2004). Its functional connectivity with the amygdala, a brain structure associated with emotional processing (e.g., Davis and Whalen 2001), may potentially suggest higher emotional engagement for more successful ads.

Furthermore, we show that not only activation in, but also interaction between, the ITG and the DLPFC was related to higher ad effectiveness. Our findings generate hypotheses for a richer understanding of how consumers effectively process functional and experiential ad appeals.

Peacocks, Testosterone and Status Seeking: Single-dose Testosterone Administration Increases Preference for Status Brands and Products

EXTENDED ABSTRACT

Desire for social status is a universal human motive (Maslow, 1943) that is preserved across species, and should therefore have biological signatures (Kenrick et al. 2010). One way in which humans in complex societies obtain, maintain or display their social status is the consumption of status goods (Veblen 1899). Status products represent social markers that elevate humans in the social hierarchy, either through increasing status (respect in the eyes of others) or power (desire for control over valued resources, Magee and Galinsky 2008). Yet, the biological drivers of such (costly) preference for luxury goods remain poorly understood.

The androgenic hormone testosterone (abbreviated 'T') is produced in the male testes and in smaller quantities in female ovaries. T affects physiology, brain development and behavior throughout life. In many non-human species, T levels rise amid breeding season and facilitate behaviors such as intra-male fighting, mating and display of dominance (Eisenegger, Haushofer & Fehr 2011). In humans, T is released into the bloodstream and in the brain in response to external stimuli such as the presence of an attractive mate or in anticipation of a competitive challenge, modulating physiological and cognitive processes in a context-sensitive manner. Correlational studies have further showed that status-related behaviors, such as winning competitions (Booth et al. 1989) or driving Porches (compared to a family Sedan, Saad & Vongas 2009) also increase T levels, making it a prime biological candidate for modulating preferences for status goods.

In the current study, we hypothesized that (1) elevated T levels increase preferences for high status vs. low status goods and (2) that these effects are driven by T-induced status-seeking rather than quality-seeking or power-seeking.

We randomly assigned 243 male students to receive either topical T or placebo (P) gel in a double blind exogenous administration protocol. Participants returned to the lab five hours later, when the T group experienced stable and elevated T levels as compared to the P group ($p < 0.001$, manipulation was checked using saliva samples). Each participant took part in two tasks.

In the first task, subjects were shown five pairs of brands in a randomized, counter-balanced order. Pairs were chosen based on a pretest conducted in a demographically similar population ($N=387$), such that each pair consisted of pre-tested "high" and "low" social status brands (e.g., Levi's versus Lacoste), where the difference in status association between the two was reliably greater than the difference in quality association. Subjects indicated which of the two brands they preferred, and to what extent, using three 10-point likert rating scale.

In the second task, participants were shown text ads of six different products (e.g., sunglasses, a car), and indicated their attitudes towards the goods. For each product, we composed and pre-tested three different text ads that were identical, except specific phrases, that either emphasized the product's quality, power or status enhancing characteristics. We randomized each product's ads between subjects, such that every subject saw two quality, power and status ads in a counter-balanced fashion. This resulted a 2 (testosterone/placebo, between-subjects) \times 3 (quality/ power/ status, between-subjects) \times 6 (product, within-subject) design.

We estimated mixed-effect linear models with preference ratings as the dependent variable (such that higher rating implied greater preference for the high, over the low status brand) controlling for subject and brands pair random effects. In line with our main hypothesis, subjects who received T showed greater preference for the high status brands ($\beta=0.45\pm 0.24$, $p=0.04$). Further analysis corroborated the effect's robustness to control for age, mood, treatment expectancy, the 2D:4D digit ratio (a proxy of prenatal T exposure) and the levels of 14 other hormones (measured in saliva) that were not affected by T treatment.

In an analogous manner to task 1, we estimated mixed-effect linear models with products' liking as the dependent variable, controlling for subject and product random effects. We found that the T group subjects liked the products advertised as status-enhancing more than placebo ($\beta=0.63\pm 0.25$, $p=0.01$). On the contrary, there were no reliable differences between the two groups in liking of products advertised as high in quality or power. The effects (and their absence) prevailed when including additional controls for age, mood, treatment expectancy, 2D:4D and 14 other hormones that were unaffected by T treatment.

Our results show that preference for status enhancing brands and products in humans have indeed biological roots: pharmacologically elevated T levels increased consumer's preferences for status vs. non-status brands and goods. Our findings are the first to show a *causal* relationship between T administration and preference for status brands and products, and that T drives status- but not quality- or power-seeking motivation underlying consumer's product evaluations. The latter distinction is an important contribution for two reasons. First, most previous studies do not control for potential higher quality attributes of status products and are thus confounded. Second, as costly signals such as status brand consumption may contribute both to one's power *and* status in the social hierarchy, our results are the first to show that T acts specifically on status- but not power-seeking motivation.

Cardiac Vagal Tone and Risky Decision Making

EXTENDED ABSTRACT

When we make risky decisions, the possibility of undesirable outcomes can elicit negative emotional responses that influence our risk preferences (Loewenstein et al., 2001). For this reason, how we regulate these emotions can determine the how much risk we are willing to take. Emotions are regulated by both higher-level cogni-

tive and lower-level physiological processes. For instance, we can regulate how we feel at the higher-cognitive level by reappraising the source of an emotion or by suppressing it (Ochsner & Gross, 2005). Such regulation strategies have been demonstrated to influence decision-making (Gross, 2013). In addition to these cognitive strategies, which require conscious effort, emotions are also regulated automatically at the physiological level by the autonomic nervous system (ANS). The parasympathetic subdivision of the ANS down-regulates arousal, respiration, heart rate, and attention; aiding emotion-regulation by controlling visceral states (Porges et al., 1994). Unlike cognitive emotion-regulation strategies, the impact of which has been examined in various decision-making contexts, little has been documented about the role of the physiological regulation of emotion in decision-making. The primary goal of this research is to fill this gap in the literature. Specifically, our aim is to delve into the role of emotion-regulation on decision-making from a physiological perspective, focusing on the effects of parasympathetic activity on risk aversion.

In order to understand how the physiological regulation of emotion can influence decision-making, we draw upon the well-documented work on to the vagus nerve, the key component of the parasympathetic nervous system (Critchley & Harrison, 2013). We specifically focus on a non-invasive measure, cardiac vagal tone (VT), measured via respiratory sinus arrhythmia (RSA; Berntson et al., 2007). RSA is a non-invasive proxy for vagal—and thus, parasympathetic—activity and autonomic flexibility (Porges et al., 1994). The regulatory effect of vagal activity on emotional function is ubiquitous in the literature and, thus, VT is widely accepted as an indicator of parasympathetic involvement in the regulation of emotion by physiological means (e.g. Porges, 1996; Gottman & Katz, 2002). Naturally, VT is a strong predictor of stress vulnerability (Porges, 1995). For example, higher resting VT has been shown to protect children from marital conflict (El-Sheikh et al., 2001).

In this research, we examine whether the influence of VT extends to decision-making under risk and uncertainty. Akin to how cognitive reappraisal strategies reduce arousal (Sokol-Hessner et al., 2009) and loss-aversion (Sokol-Hessner et al., 2012) in risky decisions, we posit that increases in VT, indicating improved physiological regulation of emotion, ought to similarly predict reduced risk aversion. In three experiments, where we either measure VT as an individual difference or experimentally manipulate VT using specific breathing techniques, we assess risk preferences in two risky decision-making tasks with built-in incentive compatibility, the Balloon Analog Risk Task (BART; Lejuez et al., 2002) and the Gneezy Risk Task (GRT; Gneezy & Potters, 1997). Together, these experiments document the modulation of risk aversion by vagal activity, as indicated by VT.

In Experiment 1, a correlational study, by measuring VT of free-breathing participants while completing BART, we found that confirming our hypothesis, participants with higher levels of VT showed less risk aversion, indicated by a significant positive relationship between RSA and the adjusted number of pumps ($p < 0.0005$).

In Experiment 2, we manipulated VT experimentally by regulating the breathing of participants, randomly assigning them to a regular-breathing (control-normal VT) or a deep-breathing (high VT) condition. A manipulation-check confirmed that the breathing manipulations were effective. Participants in the deep-breathing condition had significantly higher RSA levels compared to the control condition ($p < 0.0001$), which did not differ from the average RSA of the free-breathing participants in Experiment 1 ($p > 0.36$). The results confirmed our hypothesis, and participants in the deep-breathing condition took significantly more risk than participants in

the regular-breathing condition in both BART ($p < 0.021$) and GRT ($p < 0.027$).

In Experiment 3, we investigated whether our breathing manipulations caused any mood effects using the Brief Mood Introspection Scale (BMIS), in addition to addressing whether our main finding in GRT holds controlling for mood measurements. The results replicated our GRT findings in Experiment 2 ($p < 0.04$). There were no significant differences between groups in the Arousal-Calm dimension ($p > 0.35$), or the Pleasant-Unpleasant dimension ($p > 0.60$) of BMIS. Controlling for mood effects, which had non-significant coefficients ($p > 0.30$ for both), breathing manipulation was still a marginally significant predictor of risk taking in GRT ($p < 0.09$).

These findings are congruent with previously limited and correlational research indicating that VT might predict how individuals deal with stressors in decision-making contexts. For instance, resting VT has previously been found to correlate with the magnitude of stress response to (Dulleck et al., 2011) and the likelihood of rejecting unfair offers in ultimatum games (Sütterlin et al., 2011). Further, this pattern of results is consistent with studies on risky decisions that focus on emotion-regulation from a higher-level cognitive perspective such as cognitive reappraisal modulating the experience of negative emotions and influencing loss aversion (Heilman et al., 2010).

Our experimental manipulation of VT using breathing exercises highlights how immediate the cognitive and behavioral consequences of a change in parasympathetic activity can be. Our participants started eliciting differential behavior in sophisticated decision-making tasks beginning merely a minute after a getting in sync with a deep-breathing rhythm, before they even detected any breathing-driven influences in their emotional states. This can have important implications in a myriad of consequential contexts, such as risky decisions in the medical, political, and business domains.

In sum, we demonstrate that the regulatory effects of VT on emotional function extend to risky decision making contexts. Put simply, how good our bodies are at handling the affective consequences of experiencing uncertainty predicts risk aversion.

Modulation of Judgments by Incidental Affect: the Dynamic Integration of Affect and its Temporal Sustainability

EXTENDED ABSTRACT

Consumer psychology research has suggested that affect plays a central role in consumers' judgments and evaluation processes. A substantial body of studies has found that even incidental affect, i.e. affect unrelated to the decision at hand, can execute a significant impact on judgments and evaluations. This has been known as the "affect-as-information effect" (AIE) (e.g. Pham 1998, 2014; Schwarz and Clore 1983). Specifically in a marketing context, the affect-as-information effect suggests that consumers evaluate products by inspecting their preexisting feelings rather than conducting attribute-based evaluations. For instance, Naylor, Raghunathan and Ramanathan (2006) reported that exposure to promotional stimuli would evoke a positive feeling and subsequently enhanced the evaluation of unrelated products. Since incidental affect is ubiquitously related to consumer evaluations, it is critical for marketing researchers to understand how exactly incidental affect could influence consumers' judgments and evaluations.

Despite decades of research, however, our understanding of the affect-as-information effects is still incomplete. For example, we have limited understanding of the dynamic processes of how incidental affect is integrated while consumers are making judgments

or evaluations. It is also unknown whether the integration of affect is purely a psychological process or underlies a neurophysiological foundation. These questions remain unclear because of the methodological limitations in manipulating affect, tracking affect and measuring evaluations in the previous research. Such methodological limitations might have resulted in further confusions in the past research concerning how sustainable the influences of affect on judgments and evaluations are. Some studies suggested that the affective influences fade away after a short period of time (e.g. Dutton and Aron 1974; Gneezy and Imas 2014; Isen, Clark and Schwartz 1976), whereas others suggested that they endure and persistent for hours or even days (e.g. Andrade and Arieli 2009; Ottati and Isbell 1996; Pocheptsova and Novemsky 2010).

In order to address these above questions, we conducted a series of studies to understand the dynamic integration of affect and its temporal sustainability using both neurophysiological and behavioral approaches.

We manipulated affect by delivering or not delivering incidental monetary rewards that was shown previously as an effective way to alter one's affective states (e.g. Eldar and Niv 2015; Isen, Daubman and Nowicki 1987) in each trial, and asked participants to subsequently make aesthetic evaluations of images in a seemingly unrelated task.

In the first study, we employed facial affective encoding using NOLDUS Facereader to track "online" affective alterations, which allowed us to examine the dynamic neurophysiological integration of affect during aesthetic evaluation processes. Behaviorally, the study replicated the affect-as-information effects showing that receiving vs. not receiving an incidental reward increased subsequent aesthetic evaluations of both positive and neutral images ($\beta_{\text{reward}} = 1.45$, $p < .001$). In addition, our findings revealed that the behavioral AIE were mediated by the online facial happiness responses triggered by winning money ($\beta = .061$, 95% CI = [0.016 0.152]). More importantly, analyzing the time courses of the facial happiness response, we further found that the affect integration took place rapidly (i.e. second-basis) and could be amplified and attenuated on a trial-to-trial basis.

In the next study, we examined the sustainability of AIE by introducing two different lengths of temporal delays (i.e. 2-min vs. 5-min) during the aesthetic evaluation task. After receiving money, participants evaluated images before and after an affectively neutral filler task. Both studies replicated AIEs such that participants liked images more after receiving vs. not receiving money ($\beta_{\text{reward, 2min}} = .342$, $p < .004$; $\beta_{\text{reward, 5min}} = .438$, $p < .001$). Critically, however, two moderated mediation analyses showed that the AIEs were preserved after a short period of delay ($\beta_{\text{2min-delay}} = .357$, 95% CI = [.217 .491]), whereas the AIEs were attenuated after a longer delay ($\beta_{\text{5min-delay}} = .14$, 95% CI = [-.161 .296]).

In the third study, we further examined the cause of attenuation of the affect-as-information effects. We reasoned that a long temporal delay did not dilute affect *per se*, but instead, it attenuated the perceived representativeness of affect (i.e. the affective state is less attended than other source of information) to subsequent evaluations. Using the same paradigm as in study 2, we asked participants to report their happiness of winning vs. not winning money either right after disclosure of the lottery outcome or after a 5-min delay. Conceptually, assessing the happiness of the lottery outcomes re-directed participants' awareness to their affective states. We first found that there was no effect of timing on reported happiness of winning or not winning money ($t_{\text{reward}(297)} = 1.52$, $p = .127$; $t_{\text{no-reward}(276)} = .5$, $p = .6$). This demonstrated that the induced affect was still preserved after a 5-min delay. We further found that by reminding participants of their affective states after the temporal delay, the perceived representativeness

of affect was reassumed, and the affect-as-information effects were recovered (moderated mediation analysis coefficients: $\beta_{\text{immediate}} = .423$, 95% CI=[.273 .587]; $\beta_{\text{short-delay}} = .461$, 95% CI=[.294 .614]).

Taken together, our research has contributed to understand the temporal mechanisms of the affect-as-information effects. Using facial affective encoding, we captured the online facial happiness during the occurrence of AIEs. We provided first evidence that integration of affect into subsequent evaluations is mediated by a fast neurophysiological dynamics on a trial-to-trial basis.

Exploring the temporal sustainability of the AIEs, we found that affective influences could be attenuated after 5min but not 2min interval. We further showed that this was not due to the dissipation of affect but because of the dissipation of the perceived representativeness of affect along the time course. By re-directing participants' awareness to their affective states, we showed that the affect-as-information effects could be recovered even after a long interval.

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Nonconsumption

Chair: Jacqueline Rifkin, Duke University, USA

Paper #1: Need and Intertemporal Choice: A Dual Goal Hypothesis

Xianchi Dai, Chinese University of Hong Kong, China
Canice M. C. Kwan, Lingnan College, Sun Yat-Sen University, China
Ayelet Fishbach, University of Chicago, USA

Paper #2: Postponement Specificity Differentially Affects Desire and Consumption

Nicole L. Mead, University of Melbourne, Australia
Vanessa M. Patrick, University of Houston, USA

Paper #3: How Everyday Items Become Treasures: Forgoing Usage and the Escalation of Specialness

Jacqueline Rifkin, Duke University, USA
Jonah Berger, University of Pennsylvania, USA

Paper #4: Saving It (and Us) For Later? Consuming and Saving Products that Reflect Our Selves

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SESSION OVERVIEW

Consumer research has investigated how various aspects of consumption—anticipation of consumption (Loewenstein 1987), frequency of consumption (e.g., Hamilton, Ratner, and Thompson 2011), and remembering consumption (e.g., Cowley 2007)—impact how the consumed object is evaluated. But what about *nonconsumption*? How does not consuming something, or deferring usage, shape downstream attitudes and behavior?

This session brings together a variety of perspectives to deepen understanding of nonconsumption. While a few papers have identified motivations for nonconsumption (e.g., Trocchia and Janda 2002; Wansink, Brasel, and Amjad 2000), little is known about how nonconsumption affects downstream attitudes and behavior pertaining to the nonconsumed (Dai and Fishbach 2013; Dai and Fishbach 2014). The papers in this session provide four novel perspectives on how nonconsumption impacts the value of, desire for, and future consumption likelihood of nonconsumed goods across several domains.

The first two papers examine how prolonged nonconsumption affects evaluations of goods we desire. Dai, Kwan, and Fishbach resolve inconsistencies in prior research on intertemporal patience by highlighting two competing goals that result from nonconsumption and are activated differentially across choice contexts: the goal to get the nonconsumed *now*, and the goal to get a *larger quantity* of the nonconsumed. Mead and Patrick explore the impact of nonconsumption specificity, show that unspecific but not specific postponement causes consumers to infer that they desire the temptation less, and are thus less likely to consume it.

The second two papers examine how nonconsumption affects perceptions and consumption of goods consumers already own. Rifkin and Berger demonstrate how deferring usage of everyday goods can spark a specialness spiral by which nonconsumed goods are perceived as more special, and thus are less likely to be used in the future. Finally, Sheehan and Dommer show that while self-relevant goods are more likely to be purchased, they are also more likely to be protected or more slowly consumed.

Taken together, these four papers shed light on how nonconsumption impacts evaluations and future behavior. The papers approach this topic across various domains and methodologies, and ad-

dress several questions that remain important to consumer behavior: First, when does nonconsumption increase or decrease desire for and evaluations of goods? Second, when might increased value lead to greater or lower likelihood of future consumption? Finally, what factors drive the inferences that consumers draw from nonconsumption, and how do these inferences impact subsequent consumption?

We believe that this session will have broad appeal to scholars interested in motivation and self-regulation, meaning transfer, identity-relevant consumption, and self-perception more broadly. Given staggering statistics hinting at the massive rate of nonconsumption worldwide—namely, that the average American home contains thousands of goods (MacVean 2014), or that shoppers worldwide spend \$1.2 trillion annually on non-essential goods (Whitehouse 2011)—we believe this session brings to light the incredibly relevant, and largely understudied, topic of nonconsumption.

Need and Intertemporal Choice: A Dual Goal Hypothesis

EXTENDED ABSTRACT

Consumer decisions are usually affected by transient changes in people's need states such as hunger, thirst, and sexual desire, as a consequence of non-consumption periods. Findings from existing research (Hoch and Loewenstein 1991; Kim and Zauberman 2013; Li 2008; Loewenstein 1996; Van den Bergh et al 2008) converge to the conclusion that higher need leads to greater impatience.

In this paper we propose and show that need states could *increase* patience under certain situations. Specifically, we distinguish between two types of choice, proximal choice and distal choice. By *proximal choice* we mean a choice between an option that is available immediately or now, and an option that is usually larger and available in the future (e.g., in 10 days). By *distal choice* we mean a choice between options that are both available in the future, and thus could not help satisfy the current need. We propose that need states 1) generally decrease patience in the former, as most existing literature has found (a thorough literature review confirmed that these papers used only proximal choices, and in rare cases, the smaller-sooner option was very close to “now”), and 2) decrease patience in the latter.

We explain such results by a dual-goal hypothesis. We argue that a need state activates two goals: an actualization goal and a quantity goal. The actualization goal concerns the feasibility of getting the need satisfying object. It suggests that a person of high need wants need satisfying target as soon as possible. The quantity goal concerns how much one can get the need satisfying object. A person of high need wants larger quantity of the need satisfying object than a person of low need. Thus, when making proximal choices, those high (vs. low) in need will base their choices on the tradeoffs between the two aforementioned goals. In this case, existing literature found greater preference for the immediate option. This suggests that the actualization goal was more prominent than quantity goal in most situations when the need is high (we take this as a fact and build it to our theorization). Alternatively, when making distal choices, actualization goal is irrelevant as both options are not immediately available (neither option can satisfy this goal anyway). Those high (vs. low) in need thus base their choices on the quantity goal, and show stronger preference for the larger-later option. In line with prior findings that need (e.g., hunger) instigates a general reward seeking tendency, we expect that the effects are similar for need relevant (e.g., food) and irrelevant (e.g., money) targets.

Five studies tested the above propositions. In study 1, participants from Amazon Mechanical Turk made eight decisions on either money or food – four proximal choices and four distal choices. Then all participants reported their hunger level. Consistent with our prediction, when facing distal choices, those who were hungrier were more likely to choose the larger-later options over the smaller-sooner options (i.e., more patient); in contrast, when facing proximal choices, those who were hungrier were directionally more likely to choose the smaller-sooner options (i.e., directionally less patient). Such conclusions were true for both food items and money. Study 2 was a field study in which we approached students who were either walking into (hungry condition) or out of (satiated condition) a university canteen. Participants made six decisions, either on money or food choices, half proximal choices and another half distal choices. As a manipulation check, those walking in the canteen were indeed hungrier than those walking out of it. Replicating the findings in study 1, hungry participants were more patient when making distal choices. For proximal choices, no significant difference in patience was found.

Study 3 directly manipulated hunger. Participants were instructed not to (hungry condition) or to have breakfast (satiated condition) before the study session (in the morning). To strengthen hunger manipulation, those in the hungry condition were given a tiny slice of bread (bite size) to taste and those in the satiated condition were asked to eat two large slices. In a subsequent unrelated study, they made eight food decisions on a computer. Their response time for each action was recorded by the Mouselab program. Results indicated that hungry participants were less patient when making proximal decisions, but more patient when making distal decisions. Hunger significantly decreased patience in this study but not in the previous studies because we had a stronger hunger manipulation (and thus the actualization goal became more prominent). These findings were further corroborated with attention measures from the Mouselab program.

To increase the generalizability of our result, study 4 manipulated sexual arousal instead of hunger. Following Li and Zhang (2014), half participants evaluated pictures of sexy female models (high sexual arousal) and another half evaluated pictures of sexually unattractive females (low sexual arousal). After this task, participants made eight money decisions, with half proximal and half distal choices. Similar to study 1 and 2, sexually aroused participants were more patient when making distal choices, but were not different from the satiated participants in their patience when making proximal choices.

Finally, in study 5 we examined the dual-goal mechanism. Similar to study 1, participants from Amazon Mechanical Turk first made proximal and distal choices of food items and reported hunger levels. Participants also reported the extent to which they would like to get as large piece of food as possible (quantity goal), and as immediately as possible (actualization goal). Results indicated a significant interaction between hunger and decision. Hunger significantly decreased patience for proximal choices but increased patience for distal choices. More importantly, bootstrapping analyses supported the moderated mediation effects of actualization goal and quantity goal. Specifically, both immediacy goal and quantity goal could mediate this effect (in opposite directions) for proximal and distal choices. However, actualization goal was a significantly stronger mediator in proximal choices and the quantity goal was a significantly stronger mediator in distal choices. A meta-analysis of all the studies confirmed that need states decreased patience in proximal choices and increased patience in distal choices.

Postponement Specificity Differentially Affects Desire and Consumption

EXTENDED ABSTRACT

Desires are a hallmark of daily life. Although they can be a source of great pleasure, they can also be a source of pain and torment as they derail people from achieving cherished goals. How can consumers tame unwanted desires?

It is generally accepted that specific goals are superior for facilitating goal completion (e.g., Locke & Bryan, 1969). However, in the present work we suggest that unspecific postponement is more effective for reducing unwanted consumption than specific postponement.

Our hypothesis were based an integration of two separate literatures. First, research suggests that plan specificity changes people's motivation to achieve the set goal, with specific plans strengthening commitment and motivation (e.g., Salancik 1977). Second, recent research suggests that people learn about their desires just as they learn about their attitudes and preferences, by observing and making inferences about their behavior (e.g., Bem 1972; Dai and Fishbach 2014). When taken together, we suggest that when people observe themselves postponing a temptation to an unspecific future time, they interpret their behavior as a signal that they do not strongly value that which they have postponed. In this way, postponement should only weaken valuation for the temptation when people are induced to postpone when postponement is unspecific (not specific).

Experiment 1 (N=108) varied the specificity of postponement and examined desire for the temptation in the heat of the moment by measuring performance on a reading comprehension task in the presence of the tempting cookies (e.g., Masicampo and Baumeister 2011). Before completing the reading comprehension task, participants formed an unspecific postponement intention or a specific postponement intention about the tempting cookies. Specifically, those in the unspecific (specific) postponement condition rewrote an intention to postpone the temptation ("If I have the urge to eat cookies, I will tell myself that I can eat cookies some other time [in exactly one week]!"). Hence, the unspecific and specific postponement intentions were identical except that "some other time" in the unspecific intention was replaced with "in exactly 1 week" in the specific intention. A baseline condition was included in which participants completed the reading comprehension task but were not exposed to the cookies.

Results supported predictions. Unspecific postponement participants reported being less distracted by the cookies and hence performed better on the reading comprehension task as compared to specific postponement participants. Additionally, unspecific postponement participants did not differ from baseline participants suggesting that unspecific postponement enabled participants to perform as though the cookies were not even there.

Experiment 2 (N=186) tested the differential effects of specific and unspecific postponement for liking of a temptation. If unspecific postponement weakens valuation of the temptation, then a change in liking – an affective evaluation – should be reduced by unspecific but not specific postponement. Experiment 2 also tested the hypothesis that individual differences in motivation to forgo the temptation moderate the effect of postponement on consumption. If unspecific postponement weakens liking because it leads people to infer lackluster valuation for the temptation then this should occur most strongly among participants who are motivated to interpret the ambiguous postponement intention as a signal of low valuation of the temptation.

Similar to Experiment 1, participants in the unspecific and specific postponement conditions were exposed to cookies in their cu-

bicles whereas participants in the baseline condition were not. All participants rated their liking for the cookies. Then, participants in the postponement conditions completed the same intention used in Experiment 1. After a distractor task, all participants completed their liking of cookies again. Motivation to forego unhealthy food was measured with the dieting subscale from (Herman and Polivy 1980).

Results supported predictions. An interaction between unspecific postponement (vs. baseline) and eating restraint emerged when predicting change in liking from pre-manipulation to post-manipulation. Dissecting the interaction revealed that unspecific postponement (vs. baseline) reduced liking for the temptation, primarily among participants who were highly motivated to forego tempting but unhealthy food. There was no interaction between specific postponement and eating restraint.

Experiment 3 ($N=235$) sought to test the differential effects of unspecific and specific postponement for consumption of the postponed temptation. Participants were asked to choose a food temptation and were induced to form an unspecific postponement intention (same as experiment 1), specific postponement intention (identical to experiment 1 except the time frame was “three days”), or no plan (same as experiment 1). Participants received a text message on their smartphone and were asked to click on the link the very next time they consumed the temptation, enabling us a precise measure of consumption delay. Results supported the self-signaling account for the effects of postponement on consumption. An interaction between motivation to forgo consumption and unspecific postponement (vs. no-plan control) but not specific postponement (vs. no-plan control) emerged. Among participants highly motivated to forgo consumption of the temptation, unspecific postponement (vs. no-plan control) delayed consumption. The effect of unspecific postponement (vs. no-plan control) was not significant among those who were not highly motivated to forgo consumption.

In summary, three experiments suggest that when consumers are trying to give up a temptation, unspecific postponement is a more effective strategy than specific postponement. The results imply that people’s desires for temptations are partially shaped by the interpretation of their behavior, and that desire modification can be an effective route toward self-control success.

How Everyday Items Become Treasures: Forgoing Usage and the Escalation of Specialness

EXTENDED ABSTRACT

Consumers own many unused items (e.g., Trocchia and Janda 2002; Wansink, Brasel, and Amjad 2003). Some things (e.g., fancy china or tuxedos) go unused because there are rarely occasions nice enough; others (e.g., wine from your wedding) go unused because of sentimental value; and still more things go unused because they are no longer liked (e.g., old clothes) or because usage opportunities rarely arise (e.g., baseball gloves). But are these the only reason items go unused?

A brief glance in one’s closet or pantry suggests that some items—such as inexpensive bottles of wine or t-shirts—are continually passed over, even though people like them and have ample opportunities to use them. Further, these “everyday” items didn’t come from a special event and don’t start with any sentimental value. So why do people continually forgo using them?

We suggest that merely *not* using an everyday item, like a bottle of wine, can lead people to avoid using it in the future. There are many inferences consumers can draw from nonconsumption (Bem 1972) and these inferences shape how non-consumed items are perceived and used (Dai and Fishbach 2013, 2014). In the absence of

salient external (i.e., I can’t access it) or negative (i.e., I don’t like it) attributions, however, we suggest that forgoing usage can lead an item to be perceived as *more* special. If one infers they passed up using something because they are saving it, for example, that suggests the item must be worth saving, and thus must have at least some special quality or aspect to it.

Perceiving an item as more special can in turn decrease subsequent use. Much like the way families restrict using china for special occasions, or wait to open champagne until a big job promotion, people are motivated to protect special items by restricting their use (Belk, Wallendorf, and Sherry, Jr. 1989; Zauberaman, Ratner, and Kim 2009). Thus, when everyday items become special due to being passed up, consumers will restrict future usage in two complementary ways: by reducing usage in normal, everyday occasions (e.g., a Tuesday) and by reserving for more extraordinary (i.e., rare or special) occasions (e.g., a birthday).

As non-consumed items are passed up in *subsequent* opportunities, they become even more special, and thus, further restricted from usage. Consequently, forgoing usage may spark a “specialness spiral” whereby items become more and more special, and less and less likely to be used. As a result, everyday items may become treasures: fenced-off gems, only to be used in the most extraordinary of occasions.

Studies 1a-c provide an initial test of this phenomenon. Whether examining tickets to a boat cruise (study 1a; $N = 181$), episodes of a television show (study 1b; $N = 205$), or a bottle of wine (study c; $N = 203$), compared to simply considering such items, forgoing decreased usage likelihood in everyday occasions, and increased likelihood of being reserved for extraordinary occasions (all $ps < .05$). By demonstrating that forgoing usage leads to reserving for more extraordinary occasions, study 1 casts doubt on the alternative explanation that forgoing decreases future use because people infer that they do not like the non-used item.

Study 2 ($N = 320$) tests our proposed mechanism. While people can draw various inferences about why they chose not to use a good (e.g., they don’t like it, it’s not a good fit for the situation), *saving* inferences should be most likely to enhance that good’s specialness. Consequently, if changes in the item’s perceived specialness are driving our effect, as we suggest, then encouraging such saving inferences should amplify the effects on future usage. Results confirmed this prediction: People who naturally made saving inferences perceived a non-used item as more special ($r = .56$) and intended to reserve it for a more extraordinary occasion ($r = .64$). Moreover, encouraging such saving inferences led to reserving for more extraordinary occasions ($p = .022$), mediated by increased perceived specialness ($p = .024$; 95% CI [.03, .48]).

Study 3 ($N = 402$) further tests the proposed process by manipulating both saving inferences and whether a subsequent usage occasion is ordinary or extraordinary. Consistent with our notion of everyday items becoming treasures, a predicted two-way Saving Inferences \times Usage Occasion interaction ($p = .086$) reveals that passed-up items that have become more special are restricted from everyday occasions (e.g., a normal dinner at home; $p = .001$), but not from extraordinary occasions (e.g., a celebratory dinner at home; $p = .35$).

Does increased specialness always lead to restricted use? Forgoing leads to future usage restriction due to consumers’ motivation to protect an items’ specialness; accordingly, we suggest that reducing how limited an item seems should attenuate our effect. Thus, study 4 ($N = 227$) manipulated both saving inferences and how limited an item was. As expected, the Saving Inferences \times Limited interaction ($p = .05$) revealed that when a non-used item is framed as less limited (and thus, needing less protection), increases in specialness

from forgoing usage did not lead to future restricted use ($p_{limited} = .05$; $p_{less\ limited} = .4$).

Finally, study 5 ($N = 103$) tests the additive nature of “specialness spirals.” In a within-subjects design, we find that the more times people pass up using an item, the more special it becomes (all $ps < .001$), and the less likely they were to use it in subsequent everyday opportunities (all $ps < .001$).

Across several domains, we demonstrate how everyday items become treasures: A single act of forgoing usage can spark a specialness spiral by which the item seems more special, and is subsequently less likely to be used in the future. This research advances understanding of nonconsumption, first by examining nonconsumption that is neither externally-imposed nor planned in advance, and second, by examining beliefs about *when* non-consumed items should be used; and to the work on meaning transfer, by introducing a non-active process by which goods can be imbued with specialness.

Saving It (and Us) For Later? Consuming and Saving Products that Reflect Our Selves

EXTENDED ABSTRACT

A vast amount of research has demonstrated that consumers prefer products and brands that express their selves and identities (Escalas and Bettman 2005; Fournier 1994; Kleine, Kleine, and Allen 1995; Reed 2004). While clearly consumers like products and brands that symbolize their selves, it is unclear whether/how consumers actually *use* these products. The present research examines whether these products that symbolize one’s self are protected (i.e., saved) or are consumed quickly after purchase.

Research in marketing and psychology makes opposing predictions regarding the likelihood of saving versus consuming self-symbolic goods. On one hand, consumers may be more likely to use products that symbolize the self. Research has shown that consumers will cease using products that are identity-inconsistent (Berger and Heath 2008) and often look for products with more identity-consistent characteristics (Ward and Broniarczyk 2011). More recently, research has demonstrated that consuming identity-consistent products, relative to those that are inconsistent, slows down satiation (Chugani, Irwin, and Redden 2015). On the other hand, self-symbolic products may help individuals affirm and protect various self-aspects (Gao, Wheeler, and Shiv 2009; Rucker and Galinsky 2008; Sivanathan and Pettit 2010); saving them for this purpose may prove beneficial in the long run.

We conducted our first study in a lab session to examine the degree to which a self-symbolic product would be consumed. We disguised the experiment as a taste test for a new bottled water offering. All participants were given a bottle of water from a fictitious brand to sample, but half of the participants were given a bottle of water with a custom label that included their name printed on it. All participants were asked to open, taste the water, and to evaluate the water. Participants were then told that the water bottle was theirs to keep, and they could drink the rest of the water whenever they liked. Then, participants completed a series of unrelated studies for the remainder of the 30-minute lab session. At the end of the lab session, a lab manager measured their water consumption as they were collecting other materials from the participants. Each bottle was measured to determine how much water participants drank from the bottle. We found that participants ended up consuming less of the water when the bottle had their name on it ($M_{name} = 14.87\%$ vs. $M_{plain} = 35.6\%$; $F(1, 82) = 5.94$, $p = 0.017$), suggesting that they may be more likely to save, rather than consume, self-symbolic goods.

In study 2, we wanted to replicate the conservation of self-symbolic goods while also testing whether and when consumers save such goods for later use. The study utilized a paradigm where participants received a notebook, which was either related to their university identity (i.e., “Notes of [school mascot]”) or a control notebook (i.e., “Notes”), as a “thank you” gift for participation. After receiving their notepads, students sat down at a computer station, where two pieces of scrap paper and a writing utensil were placed, to complete a series of computerized studies. Contained in these studies were some difficult problems that would require a pen and paper to solve (e.g., $8384 \times 1103 = ?$; calculator use was prohibited), and their use of the notebook would be examined. The session concluded by asking participants to rate their notepad on aesthetics and scarcity, as well as measures capturing their level of connection with the university.

As predicted, participants given the identity-related notepad were less likely to use the notepad than those given the plain notepad (17.24% vs. 45.45%; $\chi^2 = 10.51$, $p = .0012$). Importantly, the identity notepad was not rated as significantly better ($M_{identity} = 4.38$ vs. $M_{plain} = 4.25$; $F(1, 111) = .17$, $p = .68$), or more scarce ($M_{identity} = 5.66$ vs. $M_{plain} = 5.69$; $F(1, 111) = .02$, $p = .89$) than the plain notepad. Furthermore, a significant interaction term in a logistic regression that also included a participant’s notepad condition and connection to the university demonstrates that participants were less likely to use the identity related notepad when they felt more connected to that identity ($b = .41$, Wald $\chi^2 = 3.93$, $p = .047$). Moreover, there was a significant ($\alpha = .05$) Johnson-Neyman point at 4.4180, suggesting that those who reported connection scored greater than 4.4180 (75.22% of participants) were less likely to use the notepad when it was linked to their identity.

As consuming products has been suggested to reaffirm and protect the self (Larrick 1993), study 3 used a similar notepad paradigm, with a participant’s personal identity (i.e., “Notes of [participant’s first name]”). Those who have a strong desire to protect the self will be likely to use the self-symbolic (i.e., identity) good to serve their protection motives and therefore less likely to save the good for later use. Thus, we expected self-protection motives to moderate our effect such that the conservation of the self-symbolic good (relative to a plain good) will be stronger among those with low self-protection motives.

We found that participants with the named notepads were marginally less likely to use them (54.9% vs. 68.6%; $p = .077$, one-tailed) and more likely to take their notepads with them at the end of the lab session (78.4% vs. 47.1%; $p = .0011$). We also found that their self-protection motives interacted with notepad condition to predict the likelihood of using the notepad (Wald $\chi^2 = 2.99$, $p = .084$); individuals with low self-protection motives demonstrated a lower likelihood of using the named notepad compared the plain notepad, but there was no effect of notepad on usage at high levels of self-protection (Johnson-Neyman point at $-.46$ SD from the mean; $\alpha = .05$).

The results from three studies illustrate an interesting paradox. Although consumers prefer products that reflect their identities, they may actually be less likely to use these products. Furthermore, the results demonstrate that this relationship may be more pronounced for individuals who are highly motivated to protect themselves. These findings suggest that the relationship between one’s identity and their consumption goes beyond the initial purchase.

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No Pain, No Gain: How Pain and Constraint Influence Consumer Financial Decision-Making

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Paper #1: Is Cash Almighty? Effects of Hard vs. Soft Money on Saving/Investment Behavior

Rod Duclos, Western University, Canada
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Paper #2: Keep Your Money Close: Psychological Distance Influences the Perceived Value of Money

Avni M. Shah, University of Toronto, Canada
Samuel Maglio, University of Toronto, Canada
Anne Wilson, Harvard Business School, USA

Paper #3: Regaining Control by Ditching the Plastic: Why Abundance Increases Consumers' Aversion to Credit Cards under Conditions of Low Control

Daniel Brannon, Arizona State University, USA
Adriana Samper, Arizona State University, USA

Paper #4: The Effect of Stress on Consumer Saving and Spending

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SESSION OVERVIEW

Consumer welfare is strongly affected by savings and spending decisions. Consumers must make choices of how much to save for tomorrow, where to invest, and how to spend responsibly. The goal of this session is to investigate some of the external and internal factors driving these important decisions. We address: 1) How and why do external factors, such as the payment medium used and the pain of payment, impact savings and spending decisions? and, 2) Whether internal factors, such as feelings of low control and stress, can impact spending habits?

One of the most interesting aspects in the psychology of money literature is how payment mechanism affects consumer-spending patterns. Prior research has touted cash as more painful, leading to consumers to curb or avoid their spending altogether. However there are times when parting with money is necessary to save for the future. **Duclos and Khamitov** find that using cash may sometimes backfire in comparison to a less painful method of payment. In three experiments, they suggest that using painful forms of money can lead consumers to save less and/or forego future savings. **Shah, Maglio, and Wilson** dig deeper at why this cash backfiring effect may occur: consumers may be driven by a concrete bias. Cash is a psychologically closer and more concrete form, leading consumers to think of more concrete uses (versus card). This curbs spending both when it is financially prudent (a gamble with negative expected value) and financially irrational (a gamble with positive expected value).

Next we focus on how internal factors, such as perceived loss of control or stress affect subsequent savings decisions and spending habits? **Brannon and Samper** argue that when personal control is threatened, one way consumers may attempt to restore control was through the payment form that they chose to pay with. Across three experiments, they find that individuals who feel a low sense of control prefer making a purchase with a more effortful and tangible form of payment, such as cash, perceiving the payment experience as more empowering than if they used a card. In addition to payment preferences, **Durante and Laran** look at how subsequent saving and

spending is affected by low control. They find that consumers under stress strategically use money and make financial decisions in two key ways: consumers will save money because doing so guarantees that these resources will be available when needed; and consumers will spend money on necessities (vs. nonnecessities), which provides a sense of control.

Taken together, these four papers advance our understanding of how external and internal factors can influence consumer spending. Using a diverse set of methodologies these papers have incredible implications for policy and societal well-being, as well as basic scientific understandings of the psychology of money and financial decision-making. This session will appeal to researchers interested in the consumer welfare, judgment and decision-making, financial management, as well as those interested in policy or managerial decision-making. Thus, we expect that a diverse set of scientists, policymakers, and scholars will find value in the session.

Is Cash Almighty? Effects of Hard vs. Soft Money on Saving/Investment Behavior

EXTENDED ABSTRACT

Research on spending behavior suggests that paying in cash is more painful psychologically than paying via dematerialized money (e.g., credit cards). This holds true even after holding expenses constant (Prelec and Loewenstein 1998; Prelec and Simester 2001; Raghurir and Srivastava 2008; Soman 2003; Thomas, Desai, and Seenivasan 2011). A derivative of these important findings is the now-popular “cash diet”. To help curb spending, reduce debt, and improve saving rates, TV shows, newspapers, and blogs recommend consumers to operate on a cash basis. Indeed, since cash creates psychological barriers to spending (compared to softer, dematerialized forms of money), using cash makes consumers better savers and budgeters.

We readily agree that paying in cash is effective at curbing expenses. But focusing on saving/investment behavior (rather than *spending* behavior), we show cash may not be almighty. Indeed, extending the “pain of paying” paradigm to saving/investment situations, we find hard money (i.e., cash) may sometimes backfire (compared to soft/dematerialized money) and cause consumers to save less and/or forego lucrative investment opportunities they should seize.

To test our theorizing, experiment 1 recruited participants for a 10-minute study in exchange of \$5. Subjects were randomly assigned to one of two conditions (cash vs. card). Participants in the cash condition completed a filler task before receiving their pay, a \$5 bill. Counterparts in the card condition completed the same filler task before being offered a \$5-credit on their student card (student cards function like debit cards; they can be used to pay at any establishment on and around campus).

Just before processing their payment, however, we offered participants the following deal: (1) collecting their \$5 right away, or (2) collecting \$7 in a week. In essence, we turned our lab into a financial institution. Leaving money with us for a week guaranteed an incremental gain of \$2 (annualized, the rate of return of the \$7 option exceeds 2000%), thereby allowing us to assess participants' saving/investment behavior. As expected, participants in the cash condition

(49%) were less likely than counterparts in the card condition (78%; $p < .03$) to leave their money in the lab's vault for a week.

Experiment 2 sought to extend these findings by examining which consumers are more/less likely to follow this behavioral pattern. To this end, we considered subjects' *prevention* orientation. "Prevention focus" is defined as a mindset or personality dimension that relates to goal pursuit (Higgins 1997; Kruglanski, Pierro, and Higgins 2007; Lee and Aaker 2004). A prevention focus heightens concerns for safety, responsibility, and security. People with a chronic disposition toward prevention approach life with the goal of avoiding losses/negative events (this contrasts from a *promotion* focus whereby people approach life having in mind the pursuit of hopes, accomplishments, and general advancement).

While prevention orientation may be measured as an individual difference, we opted to manipulate it experimentally. Accordingly, experiment 2 followed a 2 (Money format: cash vs. dematerialized) by 2 (Prevention focus: baseline vs. high) between-subjects design. The procedure resembled study 1's with the addition of a writing task to manipulate prevention focus. The DV remained unchanged; participants chose between collecting \$5 right away or \$7 a week later.

Mirroring the results of study 1, a main effect of money format emerged. On average, participants compensated with cash saved/invested less than counterparts paid with dematerialized money. Importantly, this main effect was moderated by our prevention-focus manipulation (interaction term: $p = .031$). In the control condition (i.e., when subjects' prevention focus was at baseline), being compensated in cash (dematerialized money) led participants to save/invest less (more; $p = .001$). In contrast, when prevention focus was heightened, participants exhibited similar saving/investment behavior whether they were paid with cash or dematerialized money (NS). No main effect of prevention focus emerged.

Experiment 3 aimed to test the process underlying our findings. To this end, we adopted study 2's design and procedure but added a series of measures related to the "pain of parting from money". Once again, money format produced a main effect. On average, participants compensated with cash saved/invested less than counterparts paid with dematerialized money. As expected, however, this main effect was moderated by our prevention-focus manipulation (interaction term: $p = .047$). At baseline levels of prevention focus, being compensated with cash (dematerialized money) led participants to save/invest less (more; $p = .003$). In contrast, when prevention focus was high, participants' decision to save/invest remained equivalent regardless of money's form (NS). As in study 2, prevention focus had no main effect. Moderated-mediation analyses (Model 7 of the PROCESS macro; Hayes 2013) supported our theorizing. Parting from cash was more painful psychologically than parting from dematerialized money, which in turn caused subjects to save less/forego lucrative investment opportunities.

Theoretical & societal contributions: Theoretically, our findings contribute to the literature in at least two ways. First, unlike prior research, our mechanism based on the "pain of parting from money" (rather than "pain of paying" per se) is able to explain not only (i) why cash helps consumers in spending situations, but also (ii) why it paradoxically hurts them in saving/investment decisions. Second, by documenting the interactive effects of money-format and prevention-focus on saving/investment behavior, our results shed light on a personality dimension with great potential to foster/hinder consumers' financial welfare.

From a societal standpoint, understanding the factors that increase/decrease consumer savings is of great interest to government agencies, policymakers, financial-services firms, and consumers themselves. Our findings could thus offer significant insights for

retirement planning, a major issue across the world today. Indeed, with life expectancy ever increasing, citizens will undergo a fierce decrease in quality of life if/when they outlive their savings. This is particularly true for lower-income households who are, in fact, more likely to be paid in cash throughout their working lives (e.g. construction workers, service staff in hotels/restaurants).

Keep Your Money Close: Psychological Distance Influences the Perceived Value of Money

EXTENDED ABSTRACT

Judgments related to money have become as varied as they are ubiquitous. The modern economy presents innumerable options for the storage and exchange of money, and payment options now include cash as well as checks, credit/debit cards, check cards, and gift certificates. Moreover, money is no longer confined to a wallet or a cookie jar. Especially with the advent of the Internet, money can be stored at different locations (local bank branches or offshore holdings) and for different purposes (e-banking accounts, stock portfolios, PayPal). Ultimately, now more than ever, people face the issue of having multiple forms of money stored in a number of different locations. Rational decision models would predict invariance in the appraisal of each store of money, but mounting evidence suggests that this standard is often violated.

For example, recent research has demonstrated systemic psychological and behavioral biases in the way individuals evaluate the value of money based on the payment form (e.g., Raghubir and Srivastava 2008; Soman 2001). Paying with debit card (vs. cash) increases the propensity to evaluate products more favorably and to buy more unhealthy products (e.g., Chatterjee and Rose 2011; Thomas, Desai, and Seenivasan 2011). Research has argued that these differences are due to the amount of pain individuals feel when parting with money. However, could a concrete bias be at play? Could the psychological closeness of money lead to differences in perceived value and purchasing power, subsequently creating differences in spending?

Appraisal and fluctuations in monetary construal begin with the valuation of currency. Perceived valuation – or purchasing power – of a given unit of currency should be insensitive to contextual variations and, as such, evince dynamic consistency. However, a large body of research on this topic has uncovered the tendency of individuals to use heuristics to simplify valuation judgments (Tversky and Kahneman 1974). Building off of construal level theory, we argue that as a target becomes removed from a person's immediate experience, its concrete features become less salient and therefore comes to be represented more abstractly. This abstraction can influence the perceived uses of money—as money becomes more abstract, its perceived fungibility decreases as does its perceived purchasing power. We argue that this is effectively a concrete bias—more psychologically closer representations of money increase its perceived value. Across four studies, we manipulate the psychological closeness of money and investigate its impact on consumer spending behavior.

In Study 1, we develop preliminary evidence for this effect. We inform participants (N=200) that they spend \$20 on a pair of headphones, manipulating whether the payment was made via cash or by card. We then ask what else they could have purchased with the money as a measure of perceived fungibility. Participants listed significantly more items with cash than with card, suggesting that individuals believe that more concrete representations of money are more fungible.

According to CLT, concreteness can also be manipulated by physical distance. Thus, in Study 2 we investigated a boundary condition to test our theory. Participants located in New York City were

randomly assigned to condition in a 2 (cash or certificate) x 2 (NYC or LA) factorial design. Participants were asked to imagine that they had transferred all of their assets to an online bank, which stored their assets at the company's central bank either in NYC or Los Angeles, with the latter representing a physically more distant location. Participants were then presented with a list of 8 items, ranging from inexpensive to rather expensive. They were asked to indicate, in dollars and cents, how much of their assets they would be willing to spend on each of the items. Participants were willing to spend marginally less ($p = .10$) using funds stored as cash than they were to spend using cash-equivalent certificates. They were also willing to spend significantly less using funds stored in a near bank than in a far bank. These effects were qualified by a significant interaction between form of currency and location. Participants spent more freely from funds stored in an abstract (non-cash) form and when drawing from geographically far bank accounts.

Study 3 and 4 employed the use of field experiments to determine whether this concrete bias could impact financial decision-making and risk-taking behavior. In Study 3 we gave participants a chance to play as many gambles as they desired out of a set of gambles, using their own money. We varied the form of payment they gambled with (cash or 'plastic' student card). For each of the gambles, we also manipulated the buy-in amount in order to play the gamble (\$0.50 or \$1), the probability of winning (10%-90%), and the amount earned if the participant won such that the expected value of all gambles was equal to -\$0.50, meaning it was more financially prudent not to play. In Study 4, we used the same method except now the expected value of all gambles was equal to +\$0.50, meaning it was more financially savvy to play. In Study 3, we found that a more concrete form of money decreased the likelihood of gambling and decreased the number of gambles played. However, when the expected value was positive, people playing with cash were still less likely to gamble, despite it being more financially responsible. Thus, consistent with our hypothesis, individuals exhibited a concrete bias, subsequently affecting financial decision-making and potential earnings.

The present investigation provides support for the hypothesized comparability of abstract form and psychological distance in judgments involving mental construal of money. Psychologically closer representations of money, either through form or distance, lead individuals to perceive more fungibility and purchasing power of money. We also show evidence that this concrete bias can substantially influence spending decisions, regardless of whether spending money is financially prudent or not.

Regaining Control by Ditching the Plastic: Why Abundance Increases Consumers' Aversion to Credit Cards under Conditions of Low Control

EXTENDED ABSTRACT

What drives upper and middle income consumers to end their love affair with plastic in times of trouble? A recent report released by the Federal Reserve revealed a fascinating consumer trend following the 2007 recession. The report showed that, between 2007 and 2009, consumers shed credit cards and decreased debt by 7.8%. Surprisingly, this trend was most pronounced among upper-middle income consumers. Among lower income consumers, the report found no changes in credit card usage. We ask how threats to consumers' control caused by such events influences the way they pay for products and services.

When personal control is threatened, consumers experience discomfort and seek to restore control (Cutright 2012; Kay et al. 2008). One way to restore control is through effortful tasks (Olivola and

Shafir 2013). Consistent with this notion, consumers avoid low effort products when they experience low control (Cutright and Samper 2014). In this research, we propose that perceptions of effort associated with the way that consumers pay for products and services also influence preferences under low control. Specifically, we propose that because credit cards are perceived as a painless, low effort way to make a purchase (Prelec and Loewenstein 1998), consumers will have a decreased preference to use them under conditions of low (vs. high) control. Further, we predict that this behavior will only occur among consumers with abundant (vs. scarce) financial resources, as consumers with scarce resources are more debt-averse (Callender and Jackson 2005) and less likely to view credit cards payments as painless or low effort. Finally, we predict that our results will be mediated by feelings of empowerment associated with the payment. Specifically, among consumers with abundant (vs. scarce) resources, low pain of payment associated with using a credit card should decrease feelings of empowerment associated with making a purchase under low control.

Study 1

We conducted a 2 (control: high vs. low, between) x 2 (payment method: cash vs. card, between) x (financial resources, continuous) experiment. We measured financial resources using a 5-item measure from Sharma and Alter (2012). Next, we manipulated control by asking people to write about a time when they felt they had high (vs. low) control over a situation (Kay et al. 2008). We then presented participants with a \$50 clothing item from the university bookstore and randomly assigned them to imagine that the vendor only accepted credit card (vs. cash). We next asked them if they would purchase the item (1=yes; 2=no). We found a significant 3-way interaction on purchase intentions ($\chi^2=6.99, p=.01$). Among participants with abundant resources, those who imagined that the vendor accepted credit cards were significantly less likely to purchase the item under conditions of low (vs. high) control ($\chi^2=5.51, p=.02$). However, low (vs. high) control did not affect intentions when the vendor accepted cash only ($p=ns$). Among participants with scarce resources, there was no effect of low (vs. high) control on intentions when paying with credit card ($p=ns$) or cash ($p=ns$).

Study 2

We conducted a 2 (financial resources: scarce vs. abundant, between) x 2 (control: high vs. low, between) x 2 (payment method: cash vs. card, between) analysis on participants' satisfaction with a purchase. We manipulated financial resources by asking participants to describe 3-4 episodes where resources were abundant (vs. scarce) (Roux, Goldsmith, and Bonezzi 2015). We manipulated control by asking people to write about a time when they felt they had high (vs. low) control over a situation (Kay et al. 2008). We then randomly assigned participants to imagine that they were purchasing an identity-related product costing at least \$100 with either cash or credit card (Berger and Heath 2007). To measure purchase satisfaction, participants responded to an 8-item subscale of purchase emotions (Richins 1997), which measures feelings of joy, excitement, and contentment associated with making the purchase. We found a significant 3-way interaction ($F(1,390)=3.88, p=.05$). Among participants with abundant resources, those who imagined paying with credit card reported marginally lower satisfaction under conditions of low (vs. high) control ($t(390)=1.79, p=.07$). However, low (vs. high) control did not affect satisfaction when participants imagined paying in cash ($p=ns$). Among participants with scarce resources, there was no effect of low (vs. high) control on purchase satisfaction in either the credit card ($p=ns$) or cash ($p=ns$) conditions.

Study 3

We sought to replicate study 2 using another continuous measure of financial resources. We conducted a (financial resources, continuous) \times 2 (control: high vs. low, between) \times 2 (payment method: cash vs. card, between) analysis on participants' 1) purchase satisfaction 2) spending aversion. We measured financial resources by asking participants to indicate their weekly spending budget (1=\$0; 7=\$250+). We used the same control and payment method manipulations as in study 2. In addition to measuring purchase satisfaction, we also included a 3-item measure of spending aversion (Soster, Gershoff, and Bearden 2014). Next, participants responded to a 7-item scale indicating how empowered they would feel when making the purchase (Cutright and Samper 2014). We found a significant 3-way interaction on purchase satisfaction ($F(1,188)=6.37$, $p=.01$). Similar to study 1, among participants with abundant resources, those who imagined paying with credit card reported significantly lower satisfaction under conditions of low (vs. high) control ($t(188)=4.73$, $p<.001$). However, low (vs. high) control did not affect satisfaction when participants imagined paying in cash ($p=ns$). Among participants with scarce resources, there was no effect of low (vs. high) control on satisfaction when paying with credit card ($p=ns$) or cash ($p=ns$). Empowerment mediated this effect (95% CI [.03 to .80]) and contrasts revealed a similar pattern as purchase satisfaction. We found a similar 3-way interaction and mediation by empowerment on our spending aversion measure ($F(1,188)=5.49$, $p=.02$).

We find that feelings of low (vs high) control decrease the desire to pay with a credit card among consumers with abundant (vs. scarce) financial resources. This effect is driven by the fact that, among consumers with abundant (vs. scarce) financial resources, low (vs high) control individuals perceived paying with credit card as less empowering.

The Effect of Stress on Consumer Saving and Spending

EXTENDED ABSTRACT

Stress is ubiquitous, yet we know little about the impact of feeling stressed on consumer behavior. Some research suggests that stress decreases consumption (Torres and Nowson 2007). Other findings suggest that stress may also lead to impulsive spending (Burroughs and Rindfleisch 2002).

We propose that certain behaviors are negatively influenced by stress, whereas other behaviors are positively influenced. One characteristic of stress is that it leads people to perceive that they currently lack control over their environment (Cohen 1988). Thus, we predict that consumers may use their monetary resources strategically in order to restore control in situations of stress and do so in two ways: (1) consumers will save money because doing so guarantees that these resources will be available when needed; and (2) consumers will spend money on necessities (vs. nonnecessities), which provides a sense of control.

A pilot investigation asked participants to write about the things that stress them out in life right now, their typical day, or things that make them sad in life right now and were asked about saving money. Participants in the stress condition indicated that they wanted to save more money ($p < .05$).

Experiment 1 tested the effect of stress on saving, and the role played by control. Half of the participants went through a stressful situation (believing they were going to give a speech). Some participants, however, restored their sense of control after the stress manipulation by writing about something that happened to them because they had control over it. Participants were then asked to imagine that

they had \$300 and indicated how much they would save vs. spend on products. There was an interaction ($p = .03$). Participants in the high stress condition saved more money ($p = .01$). However, when control was restored, stress did not impact saving ($F < 1$).

Experiment 2 sought to examine the influence of current stress (measured) on willingness to spend on necessities. Participants were asked: "Right now, how important do you feel it is to acquire necessities (i.e., things you need on a day-to-day basis)?" (7pt scale). They also completed an established measures of current stress (Lovibond and Lovibond 1995) and perceived control (Cutright et al. 2013). There was an interaction ($p = .04$). Stressed participants indicated that acquiring necessities was marginally more important when they perceived they currently had low control than when they perceived they currently had high control ($p = .09$). There was no difference at low levels of stress ($p = .37$).

Experiment 3 allowed people to have control (vs. not) over the outcome of the stressful situation. The stress manipulation involved a speech. However, to manipulate low control, half were told they would get extra credit for the speech, but receiving the credit depended on the average performance of all participants. In the high control condition, participants were told that getting an extra credit would depend only on their performance. Participants then indicated how much out of \$250 they would save. There was an interaction ($p = .03$). Under low control, participants in the high stress condition were willing to save more ($p = .05$). Under high control, there was no difference ($p > .26$). In the high stress condition, participants saved more in the low control condition ($p < .01$).

Experiment 4 examined whether acquiring necessities is perceived as a way to restore control, and whether this drives the effect of stress on spending on necessities. The stress manipulation was identical to Experiment 3. Participants indicated how much (out of \$250) they were willing to spend on necessities and some participants did this for nonnecessities. We also measured the extent to which their spending behavior occurred as a means to restore control. There was an interaction ($p < .01$). Participants in the high stress condition were willing to spend more on necessities ($p = .04$) and less on nonnecessities ($p = .04$). Under high stress, those asked about necessities were willing to spend more than those asked about nonnecessities ($p < .01$). Spending as a means to restore control mediated the effect of stress in the necessities condition (CI: .32 to 12.52).

Experiment 5 sought to demonstrate that the nature of the stressor may shift perceptions of which products represent necessities. We predicted that stress related to starting a new job would lead to increased spending on nice clothing. The study involved people who were or were not starting a new job. Half of the participants wrote about stress related to their new job (vs. current job) and half wrote about a typical day at work. Participants reported how much out of \$300 they would spend on nicer, more expensive clothes and reported whether clothing is a necessity. There was an interaction ($p < .01$). We replicated our previous results in the current job condition. In the new job condition, however, participants in the high stress condition indicated that they would spend more money on nicer, expensive clothes ($p < .01$). For people starting a new job, perceptions that clothing is a necessity mediated the effect in the stress condition (CI: 2.16 to 15.57).

Experiment 6 tested whether a reversal of the effect of stress on saving would occur when people believe that attempts to restore control will fail. After writing about a stressor (vs. typical day), half of the participants read an article designed to diminish beliefs that one can restore control. Participants were then asked "Right now, how important do you think it is to save your money vs. spending it on products?" (9pt scale). There was an interaction ($p < .01$). Par-

ticipants in the high stress condition indicated that saving money was marginally more important ($p = .07$). But, when they were led to believe control couldn't be restored, participants in the high stress condition indicated that saving money was less important ($p = .02$).

These findings demonstrate that stress can have a multi-faceted impact on consumer behavior. Stress can lead consumers to prefer to save, but spend strategically on necessities as a means to restore control.

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How and When Consumers Make Tradeoffs

Chairs: Franklin Shaddy, University of Chicago, USA
Itamar Simonson, Stanford University, USA

Paper #1: Expectation-Based Effects of Common Attributes on Choice

Ioannis Evangelidis, Bocconi University, Italy
Stijn M.J. van Osselaer, Cornell University, USA

Paper #2: Scopophobia in Decision-Making: the Aversion to Being Observed During Decisions and its Impact on Consumers' Tradeoffs and Choice

Yonat Zwebner, University of Pennsylvania, USA
Rom Y. Schrif, University of Pennsylvania, USA

Paper #3: How Tradeoff Elasticity Affects Consumer Choice

Franklin Shaddy, University of Chicago, USA
Ayelet Fishbach, University of Chicago, USA
Itamar Simonson, Stanford University, USA

Paper #4: Acquisition Mode Effect on Consumer Product Evaluation and Tradeoff Making

Anastasiya Pocheptsova, University of South Carolina, USA
Ran Kivetz, Columbia University, USA
Ravi Dhar, Yale School of Management, Yale University, USA

SESSION OVERVIEW

Consumers need to make tradeoffs: Price is weighed against quality, risk against reward, the present against the future. And while previous research has examined many of these specific tradeoffs, in particular, less work has focused on *how* consumers make tradeoffs, more broadly. To that end, the objective of this session is to highlight recent advances in research examining how and when consumers make tradeoffs. Specifically, the papers in this session address the following questions: What factors systematically affect how consumers make tradeoffs? And when are consumers willing to make tradeoffs in the first place?

The first two papers examine *how* consumers make tradeoffs. Specifically, Evangelidis and van Osselaer study how people make tradeoffs in the presence versus absence of non-differentiating attributes (i.e., attributes along which all alternatives perform the same). While different streams of research make competing predictions about the effect of such attributes on choice, Evangelidis and van Osselaer show, across 10 studies, that a non-differentiating attribute can favor a particular alternative because consumers judge performance not based on face value (according to which all alternatives perform the same), but based on the difference between face and expected value.

In the second paper, Zwebner and Schrif examine another important, yet understudied factor that affects how people make tradeoffs: How does being observed impact processes, preferences, and ultimate choice? In a series of seven studies, Zwebner and Schrif demonstrate that consumers have a strong preference to avoid being observed by others during deliberation (especially when deliberations involve tradeoffs). Moreover, once observed, decision-makers distort their preferences and choice in a manner that will enable them to resolve the decision quickly and with as little conflict as possible.

The second two papers examine *when* and the extent to which consumers are willing to make tradeoffs. In particular, Shaddy, Fishbach, and Simonson argue that a number of seemingly distinct phenomena (e.g., variety seeking, licensing/balancing, the compromise effect) fundamentally implicate the degree to which people are willing to make tradeoffs, suggesting a common theoretical de-

nominator. To that end, across nine studies, the authors propose and test variables that affect tradeoff elasticity (i.e., willingness to make tradeoffs), which depends on the fungibility (i.e., exchangeability) of relevant attributes and can potentially account for a wide variety of otherwise unrelated phenomena.

In the fourth paper, Pocheptsova, Kivetz, and Dhar study another factor that affects whether consumers make tradeoffs: the distinction between renting and buying. Although the literature treats these choice processes as interchangeable, the authors, in a series of four studies, demonstrate that consumers actually adopt different mindsets when the decision task involves renting versus buying. These different mindsets, in turn, affect consumers' willingness to consider and make tradeoffs when renting, compared to buying.

Together, these papers describe recent advances in our understanding of how and when consumers make tradeoffs. We expect this session to have broad appeal, given that the theoretical contributions and practical applications of these findings provide significant new insights and speak to a wide range of domains.

Expectation-Based Effects of Common Attributes on Choice

EXTENDED ABSTRACT

Consumers often choose between alternatives that differ with respect to some attributes while performing equally well on others. For instance, consumers may be choosing between two camera brands that differ in price and optical zoom but have the same video capture resolution. Different streams of research make competing predictions about the effect of non-differentiating attributes on choice. First, choice theories such as the elimination by aspects model (Tversky 1972) predict that introducing a non-differentiating attribute should have no effect on choice because such attributes are edited out prior to choice. Second, cognitive psychologists (Nisbett, Zukier, and Lemley 1981) and information integration theorists (Anderson 1971; Troutman and Shanteau 1976) would predict that introducing a non-differentiating attribute should decrease the difference in utility between all alternatives because the impact of the differentiating attributes on choice lessens in the presence of information about a non-differentiating attribute. Third, some decision-making research (Mellers and Biagini 1994) inspires the prediction that introducing a non-differentiating attribute should increase the difference in utility between alternatives because in the presence of information about the non-differentiating attribute, differences in performance on the differentiating attributes are enhanced. Important work in consumer research has found evidence for both increases and decreases in the difference in utility between alternatives by considering attribute importance (Chernev 1997) as a key moderator.

In this paper we argue that earlier research has ignored the role of decision-makers' expectations when examining the effect of non-differentiating attributes on choice. We propose that, before choosing, consumers evaluate an alternative's performance on an attribute not only based on its face value (i.e., stated performance), but also based on the difference between face and expected value. Therefore, we argue that preference for an option can be contingent on one's own expectations about how that alternative should perform on the non-differentiating attribute, and further on the extent to which those expectations are confirmed or disconfirmed. In our studies, we find

that an alternative that was expected to perform worse than the competitor on the non-differentiating attribute is chosen more frequently when information about the non-differentiating attribute is added to the set. Conversely, we find that an alternative that was expected to perform better than the competitor on the non-differentiating attribute is chosen less frequently when information about the non-differentiating attribute is included.

Our empirical section comprises ten studies. All problems are pre-tested to ensure that consumers carry prior expectations that the two alternatives should perform differently on the non-differentiating attribute. Studies 1a-1d document the predicted effects of adding a non-differentiating attribute on choice in the context of various decision problems using actual and hypothetical products. In Studies 1a-1b, we randomly assign participants to one of two experimental conditions (two vs. three attributes). In the two attributes condition participants choose between two options in a tradeoff problem where each option scores higher than the other on one of two dimensions. In the three attributes condition participants solve the same tradeoff problem as their counterparts in the two attributes condition, with the only difference being the addition of information about a third non-differentiating attribute. We find that the option that was expected to perform better than the competitor on the non-differentiating attribute is chosen less frequently when information about the non-differentiating attribute is included. In Study 1c we replicate our finding in a choice problem with a large number of attributes (i.e., choice of a laptop), while in Study 1d we replicate our result when we add a non-differentiating review instead of a non-differentiating attribute.

Studies 2-7 provide evidence for the proposed account. In Study 2, we test whether the observed effect can be explained by an attribute importance account (Chernev 1997) rather than by an expectations account. We test our predictions in the context of a tradeoff problem where one attribute is more important than another. An attribute importance account would predict that in this choice situation, introducing a non-differentiating attribute should lead to further choice share polarization. In contrast, we find that introducing a non-differentiating attribute leads to significant choice share convergence, a result that is in line with our expectation-based account.

In Study 3, we provide direct evidence for the proposed account. When asked "how good" each alternative is on the non-differentiating attribute, we find a difference in perceived performance between the two alternatives even if actual scores are the same. In turn, perceived difference in performance on the non-differentiating attribute drives choice by favoring the alternative that performs better than expected.

In Study 4, we replicate our basic effect using a within- rather than between-participants design and provide additional evidence to our theoretical account by showing that the effect is moderated by the direction of expectancy disconfirmation. When the alternative that is expected to perform better than the other on the additional attribute has the same or worse score on that dimension (i.e., when the expectation is violated), preference for the alternative that is expected to perform better decreases. However, when the alternative that is expected to perform better than the competitor on the additional attribute scores higher on that dimension, preference for the former alternative does not decrease.

Finally, in Studies 5-7 we demonstrate boundary conditions to our effect. In Study 5 we show that the extent to which consumers, as a group, expect a difference in relative performance on the non-differentiating attribute moderates our result. We find that introducing a non-differentiating attribute influences choice only when our participant group holds a clear prior expectation about differences in relative performance between the two alternatives on that dimension.

In Study 6, we find that introducing a non-differentiating attribute influences choice only when the non-differentiating attribute is relatively important. In Study 7, we replicate our effect in joint but not in separate evaluation, presumably, because consumers cannot assess whether one alternative performs better than expected relative to another when they have information about only one of the two options. Our work contributes to work on context-effects, multi-attribute utility theory, and choice architecture.

Scotophobia in Decision-Making: the Aversion to Being Observed During Decisions and its Impact on Consumers' Tradeoffs and Choice

EXTENDED ABSTRACT

The conflict associated with trading off between different attributes is often a central and important component of many decisions that we make throughout our lives. The current paper explores a straightforward yet important and understudied question: how does being observed by others while making tradeoffs impact consumers' choice processes, preferences, and ultimate choice? First, we find that consumers have a strong preference to avoid being observed by others during the deliberation phase especially when such deliberations involve tradeoffs and conflict. Second, we find that once observed, decision-makers distort their preferences and choice in a manner that will enable them to resolve the decision quickly and with as little conflict as possible.

We argue that this research question is important from both theoretical and applied perspectives. First, contributing to a vast body of literature, this paper explores a relatively understudied aspect of social influence. In particular, when examining social influence (in the context of decision-making) one facet, which had been extensively studied, is how observing others shapes the observer's preferences (see Cialdini and Goldstein 2004 for a review). However, an equally important and understudied question is to understand how being observed by others changes one's preferences and choice.

Second, understanding consumers' reactions to being monitored and observed while making decisions is an increasingly important topic in the marketplace today. Companies nowadays invest growing amount of resources in tracking, monitoring, and analyzing consumers' marketplace activities, which leads to an increase in consumer privacy concerns (Malhotra et al. 2004; Peltier et al. 2009). By better understanding the source for these concerns and how consumers react in the face of being observed, companies and policy makers can address these issues to the benefit of consumers.

In a series of seven studies, we first find that decision-makers are averse to being observed while experiencing conflict in choice. In addition, we find that once observed, decision-makers find ways to avoid having and portraying conflict. In particular, we find that decision-makers reduce the conflict they experience and therefore, the conflict that others may detect, by (i) preferring default options, (ii) constructing more polarized preferences (which decreases tradeoffs in choice), and (iii) by altering their pre-decision activities (such as information search and consideration time). It is important to note that research relating to accountability and justification had examined several aspects relating to the impact of being observed by others. In the current paper we control for such motives, and demonstrate that the aversion to being observed during deliberation as well as consumers' reactions to being observed go beyond the heightened motivation for being accountable.

The goal of Study 1 was to examine whether being observed while making an online decision will lead to uncomfortable feelings and privacy concerns. Further, we examined concerns that may

arise when one's decision-process is being monitored (i.e., observing decision-process but not ultimate choice) and compared these with concerns when one's choice is being monitored (i.e., observing ultimate choice but not decision-process). In a two-cell between-subject design, we found that being monitored during the deliberation phase triggered significantly greater privacy concerns ($p = .001$) and feelings of intrusion ($p = .001$) compared to when only the outcome is being monitored. In several additional studies we replicated this effect across different contexts (Studies 2-4) and found that, indeed, people that were being observed had a strong preference to being observed while announcing a decision as opposed to deliberating it, compared to when observing others (Study 2; $p = .018$). Further, this aversion to being observed during a deliberation phase was found to be more pronounced when one faced a difficult and conflicting decision as opposed to an easy decision (Study 4; $p = .005$).

In Study 5, participants were offered a new online book-commerce portal. We manipulated (between-subjects) the portal's phase of monitoring (decision-process vs. decision-outcome vs. no-monitoring). We measured interest in using the book-commerce portal using six items (Cronbach's alpha = .87). Again, being monitored during the decision-process reduced individuals' interest in the online commerce portal. Participants were significantly less interested when their decision-process was monitored compared to when their decision-outcome was monitored ($p = .008$), or not monitored at all ($p < .001$).

After validating across different domains and contexts that consumers prefer environments in which their decision-processes are not observed or monitored, we turned our attention to examine how consumers actually react to being observed. That is, if consumers indeed dislike being observed while experiencing conflict, one would expect to see them behave in a way that reduces experienced conflict when being observed. In Study 6, participants were engaged in a real lottery for a T-Shirt. They were offered a choice between a "Default-T-shirt" and a "Create-Your-Own-T-shirt." If participants chose to create their own T-shirt, they would have to engage in a deliberation process which included choosing their preferred color, collar type, logo and style. In one condition participants were informed that their decision-process would be observed by a research assistant. In another condition, participants were informed that they would be observed while stating their choice. As expected, participants assigned to the process condition were much more likely to choose the default option compared to those in the outcome condition ($M_{\text{process}} = 51\%$, $M_{\text{outcome}} = 30\%$, $p = .001$). That is, decision-makers reduced the experience conflict and shortened their deliberation phase by shifting their choice to a default option.

Study 7 examined whether being observed during the deliberation phase changed decision-makers' attribute importance-weights. Consistent with our predictions, we find that decision-makers reduce their experienced conflict by constructing more polarized preferences (which decreases tradeoffs in choice).

To summarize, consumers are often observed or monitored during their consumption activities. In this paper we argue that being observed by others, especially while making tradeoffs, impacts consumers' choice processes, preferences, and ultimate choice. Seven studies validate the impact that being observed has on consumers and demonstrate that consumers prefer to avoid being observed during the deliberation phase, and that once observed, they have predictable ways in which they reduce experienced conflict by distorting preferences and choice.

How Tradeoff Elasticity Affects Consumer Choice

EXTENDED ABSTRACT

Decisions require tradeoffs. Consumers consider price and quality, employees weigh money against free time, dieters balance health and taste, and most everyone faces ethical dilemmas (e.g., honesty vs. self-interest). Various phenomena examining these tradeoffs have been studied. Variety seeking (Simonson 1990), licensing (Monin and Miller 2001), balancing (Fishbach and Dhar 2005), and the compromise effect (Simonson 1989) are several well-known examples.

In this research, we argue that these and other seemingly distinct phenomena fundamentally implicate the degree to which people are willing to make tradeoffs, suggesting a common theoretical denominator. As such, we propose that willingness to make tradeoffs, or *tradeoff elasticity*, can potentially account for many otherwise unrelated phenomena.

We further hypothesize that tradeoff elasticity depends on the fungibility of relevant attributes. For example, price and quality are likely to be more exchangeable than honesty and self-interest. You might be willing buy a smaller television to save a few bucks, but lying to get a discount would be more questionable. In other words, sometimes consumers are willing to make tradeoffs, and sometimes they aren't.

So, when do people make tradeoffs?

We identify two factors that affect the extent to which attributes can be "traded off" and, hence, affect willingness to make tradeoffs:

1. Core values. When attributes are construed as reflecting core values or meaningful principles, prioritization occurs, and willingness to make tradeoffs decreases (i.e., tradeoff elasticity falls).
2. Quantifiability. When attribute levels are quantified, comparisons become easier, and willingness to make tradeoffs increases (i.e., tradeoff elasticity rises).

We tested this account across nine studies, systematically manipulating core values and quantifiability across three phenomena: variety seeking, licensing/balancing, and the compromise effect.

Studies 1a-1c examined the core values moderator. We used a scenario in which participants decided whether to skip work to meet a friend.

Study 1a tested the compromise effect. Participants read that their friend would be in town for a week. In the *baseline* two-option set, participants chose between: "don't skip" or "skip a day." In the *baseline* three-option set, we also included the option to "skip a week." Moreover, in the *core values* conditions, we added meaning to each option: "be honest—don't skip, be carefree—skip a day," or "be crazy—skip a week." The compromise effect (i.e., the increase in choice share of the second option, relative to the first, in the three-option set) was larger in the *baseline* condition (23.9%) than in the *core values* condition (5.4%; $t(181) = 3.67$, $p < .001$).

Study 1b tested licensing/balancing. We manipulated participants' beliefs about whether they had made progress at work. Participants then chose between "don't skip" and "skip a day," and in the *core values* condition, we labeled the options (e.g., "be honest" vs. "be carefree"). We observed more balancing (i.e., choosing to skip work after making progress) in the *baseline* condition (36.2% increase from the no progress to progress condition) than in the *core values* condition (2.8% decrease; $z = 2.46$, $p = .014$).

Finally, study 1c tested variety seeking. We told participants that their friend would be in town twice. Participants made two choices, and we again manipulated core values by labeling the options. Those in the *baseline* condition chose more variety (69.7%

chose one of each option) than those in the *core values* condition (31.3%; $\chi^2 = 9.61, p = .002$).

Studies 2–4 examined the quantifiability moderator. Specifically, we provided either the relative position of options on attributes (*baseline* condition) or the relative position of options on attributes and added absolute values (*quantities* condition).

Specifically, study 2a tested the compromise effect for choices of a baseball ticket. Those in the *baseline* condition saw relative values (e.g., “lower row number, higher price”), while those in the *quantities* condition saw the same relative values in addition to absolute values (e.g., “row 5, \$28”). The compromise effect was larger in the *quantities* condition (15.8%) than in the *baseline* condition (–12.9%; $t(185) = 3.19, p = .002$). Study 2b, meanwhile, tested licensing/balancing. We manipulated participants’ beliefs about whether they had made progress toward a savings goal before they chose a ticket, and we observed more balancing (i.e., choosing the expensive ticket after making progress) in the *quantities* condition (17.3% increase from the no progress to progress condition) than in the *baseline* condition (15.0% decrease; $z = 2.78, p = .005$).

Study 3a tested the compromise effect in a dictator game scenario. Those in the *baseline* condition saw relative values (e.g., “give a below-average amount”), while those in the *quantities* condition also saw absolute values (e.g., “\$4”). The compromise effect was larger in the *quantities* condition (34.0%) than in the *baseline* condition (3.6%; $t(191) = 5.59, p < .001$). Study 3b, meanwhile, tested variety seeking for two allocation choices, and we observed more variety seeking (i.e., choosing one of each option) in the *quantities* condition (22.9%) than in the *baseline* condition (7.7%; $\chi^2 = 4.54, p = .033$).

Finally, study 4a examined licensing/balancing in choice of a grocery store. Those in the *baseline* condition saw relative values (e.g., “below-average environmental rating, below-average prices”), while those in the *quantities* condition also saw absolute values (e.g., “2/5 stars for environmental policies, 4/5 stars for affordability”). We manipulated participants’ beliefs about whether they had made progress toward an environmental goal before they chose a store, and we observed more balancing (i.e., choosing the less environmentally friendly store after making progress) in the *quantities* condition (26.6% increase from the no progress to progress condition) than in the *baseline* condition (1.6% decrease; $z = 2.02, p = .044$). Study 4b, meanwhile, tested variety seeking for two choices, and we observed more variety seeking (i.e., selecting one of each store) in the *quantities* condition (43.8%) than in the *baseline* condition (32.1%; $\chi^2 = 3.76, p = .052$).

In short, we propose that tradeoff elasticity can account for a wide variety of otherwise unrelated phenomena. Thus, these findings not only provide a new theoretical insight regarding how consumers make tradeoffs, but also create significant implications for marketers.

Acquisition Mode Effect on Consumer Product Evaluation and Tradeoff Making

EXTENDED ABSTRACT

In a growing number of product categories, consumers have the opportunity to buy or to rent the same product. This new way of consuming has received substantial attention in the business community and in the popular press. Surprisingly, almost no research to date has examined how consumer decision processes for renting and buying might differ systematically. In fact, most research on consumer decision-making has treated various ways of acquiring a product interchangeably. We propose that consumers adopt different

cognitive procedures or mindsets when the decision task is seen as renting in comparison to buying a product. Several related findings in the literature suggest why decision processes for renting and buying may differ systematically. Compared with outcomes of buying decisions, outcomes of renting decisions are perceived by consumers to be less permanent. The relative permanence of a decision heightens anticipated feeling of decision regret (Tsiros and Mittal 2000) because permanent decisions are associated with higher costs if the decision turns out to be suboptimal. For instance, when decision is permanent, consumers forfeit the opportunity to acquire a superior product or a lower priced item in the future. By contrast, when the decision appears to have lower long-term consequences such as a rental decision, consumers experience a lower level of regret (Wood 2001).

Therefore, we expect that consumers facing a buying decision are more motivated to find the best possible alternative during the decision process as compared to consumers who are making a renting decision. As a consequence, we propose that consumers facing a renting as opposed to a buying decision (with regard to the same product offered at the same price) would: (1) inspect fewer alternatives and less information about each alternative, and (2) place lower weight on negative product information. These distinct decision processes should lead to differences in acquisition decisions, such that consumers are more likely to accept the same product for renting but not for buying.

In study 1a, we used a sequential choice paradigm to investigate information acquisition in buying versus renting decisions. Respondents were presented one alternative at a time in a predetermined order and had to decide when to stop inspecting additional alternatives. This design reflects a tradeoff between selecting a current alternative or continuing to search for more alternatives that may become available. We find that the participants in the buying condition reviewed on average two additional alternatives than did participants in the renting condition before making their decision ($M_{\text{rent}} = 5.82$ movies vs. $M_{\text{buy}} = 7.45$ movies, $t(102) = 2.02, p < .05$). In study 1b, adapting a process-tracing technique (Payne et al. 1988), we allowed participants to examine additional information about each choice alternative (a movie) by clicking on a link to a webpage with reviews and trailers. We measured the total time participants spent on this webpage. We find that participants in the buying condition spent, on average, almost 15 seconds examining information about each of the five movie titles ($M_{\text{total time}} = 74.23$ seconds). In contrast, participants in the renting condition spent on average about only 9 seconds per movie title ($M_{\text{total time}} = 45.81$ seconds; $F(1, 264) = 4.95, p = .03$).

Study 2 examines differences between renting and buying decisions in evaluation of alternatives, namely the extent to which consumers weigh negative attributes of the choice options. To test the hypothesis that consumers assign relatively more weight to negative product features in buying than in renting decisions, we presented consumers with two options and varied the extent to which one of the product attributes (focal attribute) was negative. We measured the relative weight assigned to the focal attribute. A 2x2 ANOVA revealed the predicted interaction between acquisition decision and valence of attribute information ($F(1,340) = 6.80, p = .01$). When the focal attribute was negative, participants in the buying condition assigned significantly more weight to this attribute ($M = 15.89$) than did participants in the renting condition ($M = 10.62$; $F(1,340) = 9.38, p = .002$). In contrast, when the focal attribute was positive, there was no significant difference between participants assigned to the renting and buying conditions in the weight they allocated to this attribute ($M_{\text{buy}} = 12.40$ vs. $M_{\text{rent}} = 13.18$; $F < 1$). These results demonstrate how

acquisition mode can affect tradeoffs between product attributes in the decision process.

Study 3 tests our hypothesis that consumers would be more likely to acquire the same product for rental than for purchase. Participants were asked to express their interest in participating in a deal of paying one dollar for a movie regularly listed at \$4.99 for purchase or for rental. 41% of participants in the rent condition accepted the deal, whereas only 26% of participants in the buying condition accepted the deal ($c^2 = 4.32, p < .05$). Study 4 introduces an experimental condition in which a buying decision is seen as more transient and thus more similar to a renting decision by drawing attention to the retailer's free return policy. A one-way ANOVA revealed a significant effect of condition ($F(2, 502) = 5.71, p = .004$). Planned contrasts demonstrated that participants were more likely to acquire the mini-fridge in the renting condition ($M_{\text{rent}} = 5.04$) than in the buying condition without a return policy ($M_{\text{buy without returns}} = 4.66; t(500) = 1.92, p = .056$). Further, participants in the buying condition with an explicit return policy were significantly more likely to acquire the mini-fridge than were participants in the buying condition without the return policy ($M_{\text{buy with returns}} = 5.32; t(500) = 3.36, p = .001$).

A series of studies demonstrate that consumers adopt different mindsets when the decision task involved renting as opposed to buying; this finding held even when the price of acquisition and the length of consumption were the same for the renting and buying conditions. Considering growing consumer demand for temporary ownership options (e.g., renting, leasing, and sharing options), both marketing practitioners and researchers will benefit from a better understanding of how consumers make such choices.

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Narrative Consumption in a Digital World

Chairs: Tom van Laer, City University London, UK
Jennifer Edson Escalas, Vanderbilt University, USA

Paper #1: Navigating Narratives and Altering Time: Consumption Practices in the Digital Age

Stephanie Feiereisen, City University London, UK
Dina Rasolofarison, University of Southampton, UK
Cristel Russell, American University, USA
Hope Schau, University of Arizona, USA

Paper #2: Reviewing the Review: A Text Analysis of Why Online Experience Reviews Receive Positive Feedback

Tom van Laer, City University London, UK
Jennifer Edson Escalas, Vanderbilt University, USA
Stephan Ludwig, University of Westminster, UK
Ellis A. van den Hende, Delft University of Technology, Netherlands

Paper #3: Brand Story-making and Digital Conversations

Luca M. Visconti, ESCP Europe Business School, France
Tom van Laer, City University London, UK

Paper #4: Transformative Digital Storytelling: A Framework for Crafting Stories for Social Change Organizations

Laura A. Peracchio, University of Wisconsin–Milwaukee, USA
Melissa G. Bublitz, University of Wisconsin–Oshkosh, USA
Jennifer Edson Escalas, Vanderbilt University, USA
Pia Furchheim, HEC Lausanne, Switzerland
Stacy Landreth Grau, Texas Christian University, USA
Anne Hamby, Hofstra University, USA
Mark Kay, Montclair State University, USA
Mark Mulder, Pacific Lutheran University, USA
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SESSION OVERVIEW

It is difficult, if not impossible, to imagine a time in history not permeated by stories (Van Laer et al. 2014a). As we move into the digital era, stories are more prevalent than ever. Narratives are traditionally defined as an account of an event or a sequence of events leading to a transition from an initial state to a later or end state, which a storyteller conveys to a story-receiver (Bennett and Royle 2004). Social media presents challenges this definition, as the demand for content rises and the modality of consumption changes. All four of the papers in this session explore the interaction of narrative communication in the digital era. In the first paper, the authors explore how the use of digital devices fundamentally affects how consumers navigate TV narratives. Two key dimensions emerge in how consumers navigate serial narratives: time and depth, both of which enable consumers to engage in either condensation or augmentation practices. The second paper looks at online consumer reviews: the narrative structure of experience reviews enhances positive feedback from consumers reading them, which is supported through the refinement of text analysis techniques and an automated text analysis of over 190,000 reviews on TripAdvisor.

Additionally, consumer research in this arena has focused primarily on two stages of: (1) ‘storytelling’ (i.e., the communicational provision of a story from the storyteller to the story-receiver, Escalas 1998) and (2) ‘story-receiving’ (i.e., the interpretation of a story by its audience and the transformative effects exerted on that audience, Green and Brock 2000). Thus, consumer research misses the ‘story-making’ stage, that is, the design of a story preceding storytelling and story-receiving. The two remaining papers in this session help

to further fill this gap. In the third paper, the authors use a structural approach to narratology to develop a better understanding of story-making, putting forward a set of comprehensive guidelines to help consumer researchers understand how stories work and how they are conceived. Finally, the fourth paper provides an integrative framework to guide story construction for Social Impact Organizations (SIOs), focused around an SIO’s metanarrative, an overarching mission-focused story about the SIO and why it exists.

Two questions that each paper in the session answers are:

RQ1: How is the consumption or creation of stories affected by changes due to digital devices and social media?

RQ2: How is digital storytelling conducted by those cast in the role of story-maker, that is, the stage prior to storytelling and story-receiving?

Navigating Narratives and Altering Time: Consumption Practices in the Digital Age

EXTENDED ABSTRACT

The digital era is fundamentally affecting how consumers watch TV. While for decades families would gather to watch TV in the living room, the TV set is now irrelevant in the eyes of many. Changing viewing habits mean that at least 63% of US consumers use digital devices more than once a week to stream videos or watch on-demand features (Crosett 2013). Consumers have always been able to control narrative pace when reading, a self-paced medium. Consumer control is now spreading to a wider range of media, including TV programming, movies, but also radio podcasts that, traditionally, were externally paced. Today’s digital environment affords consumers navigational tools that open narrative possibilities for the receiver at all levels (Drucker 2008). A topical question is: How does greater ability to navigate narratives affect the temporal unfolding of the story receiver’s experience?

Navigational devices affect the temporal unfolding of the narrative and thus alter how consumers experience it. From Genette’s (1980) foundational work to Barthes’ (1975) structural analysis of narratives, narratologists concur that basic structural elements of narratives affect how they are read or viewed. Genette’s notion of narrative duration is particularly useful to understand the interplay between time and narrative consumption: Genette (1980) defines narrative speed as the “relationship between the duration of the story and its length” within a narrative and distinguishes between *narrative* time, i.e. the amount of time devoted to the representation of a scene and *narrated* time, i.e. the amount of time that passes within the diegetic scene. From the reader/viewer perspective, perceptions of time vary according to the narrative’s inherent structure or speed: when a story unfolds slowly, narrative time expands in relation to narrated time and this extending of time due to “empty spaces” may create boredom (Tucker 2007). In contrast, when an interesting event happens, narrative time contracts (Tucker 2007).

Prior work has identified that storytellers and readers can control narrative pace at three levels: story, discourse, and narration (Baetens and Hume 2006). When consumers have control over the calibration, as is the case with digital devices to view TV narratives, they can alter the temporality between the real world and the narrated world. In this research, we explore how navigational practices affect narrative and narrated time and how the pace of delivery alters the

narrative experience, taking note of the inherent characteristics of narratives as containing 1) the temporal unfolding of events, 2) the structural and material fact of texts, images, etc. and 3) the narrativizing, the action taken by the story receiver (Drucker 2008). Prior work in the cyber-literature borrowed the term *noema* developed by Husserl (1962) to distinguish between *noematic* and *extranoematic* efforts (Aarseth 1997). While *noematic* efforts allow the reader to participate in the unfolding of the story but not modify how it develops, *extranoematic* efforts reflect when the viewer is able to alter the narrative rather than simply being guided by it.

Method

In line with recommendations about using contexts to extend theory (Arnould, Price, and Moiso 2006), we use TV series viewing as an empirical context. We conducted 36 interviews with TV series watchers using a mix of grand tour questions and floating prompts (McCracken 1988) to yield first-person accounts of participants' viewing practices and experiences of serial narratives. An initial identification of themes was developed, and theoretical categories were elaborated on during open and axial coding procedures. We then began a process of dialectical tacking, moving back and forth between our findings and the literature to deepen our understanding of the practices associated with TV series consumption.

Results

We find that consumers navigate the temporal unfolding of the narrative by engaging either in *noematic* practices, i.e. actively choosing not to transform the narrative, or *extranoematic* practices i.e. altering the narrative. We categorise *extranoematic* practices into two categories: 1) condensation and 2) augmentation practices. For instance, one informant reports using *extranoematic* augmentation practices by piling up episodes of his favorite series to watch several episodes in a row, in order to create a more immersive viewing experience, which would be hindered by having to wait one week in between episodes. Contrarily, other *extranoematic* practices condense time. For example, an informant reports saving time by reading online summaries of the second season of *Homeland* before watching selected scenes only, as well as skipping all scenes featuring a specific character from the series *24*, because it is perceived as unrelated to the main storyline. Interestingly, these two strategies lead to opposite outcomes: While the first strategy triggers a reduced pleasure from viewing the series and an inability to evaluate its quality, the second strategy is a gratifying experience, as skipping the side story of a character he reports hating enables the informant to devote himself to the main storyline. Therefore, while Genette (1980)'s semiotic work studies narratives as linguistic objects, detached from production and reception, we intend to examine how consumers navigate and transform the narrative, and to disentangle the outcomes derived from such actions. After delineating the narrative navigational practices viewers engage in when watching TV series, we identify the impact on emotional outcomes, along with boundary conditions including the social viewing context.

Implications

We also discuss the implications of our work for our understanding of narrative consumption in the digital age, and develop recommendations for the construction and release of serial narratives. In particular, our analysis suggests that TV writers targeting digital natives should be wary of using a slow narrative pace, as young viewers are likely to fast forward through slow scenes which may lower their enjoyment. Moreover, we find that releasing a full season on-demand enables viewers to monitor their viewing pace.

If the channel broadcasts the episodes weekly, many viewers wait until several episodes are available to watch them in a row to avoid the frustration of having to wait one week in between each episode. Broadcasters could avoid this by releasing all episodes in one go.

Reviewing the Review: A Text Analysis of Why Experience Reviews Receive Positive Feedback

EXTENDED ABSTRACT

Seventy percent of consumers indicate that they base purchase decisions on consumer online reviews, thus marking these reviews as the highly influential form of word of mouth (WOM) (Nielsen 2013). Most hosting sites offer consumers the option to submit a second-order review, which evaluates the focal review. This positive feedback raises a review's ranking and visibility on the site, thus increasing its influence on consumers' purchase decisions (Moore 2015). In this article, we propose and find support for an overlooked feature of reviews that helps generate positive feedback from consumers.

Prior research provides a valid description of positive feedback on reviews of (hedonic and utilitarian) material purchases. "Material purchases are those made with the primary intention of acquiring a material good" (Van Boven and Gilovich 2003). In contrast, "experiential purchases are those made with the primary intention of acquiring a life experience" (Van Boven and Gilovich 2003).

In contrast with reviews of material purchases, we define positive feedback on reviews of experiential purchases as a vote for reviews that are narratively structured, which describes the experience consumed and recounted by the reviewer. Not all reviewers are equally capable of narratively structuring their reviews, and this inequality is likely to contribute to additional variance in positive feedback. Organizing an experience review around a narrative structure is likely to increase positive feedback. By investigating the content of experience reviews, this research aims to contribute to the narratology and WOM language literature streams by fulfilling three objectives: (1) organizing the relationships among words in experience reviews, which are manifold and indeterminate, in a narrative structure; (2) empirically demonstrating novel links between narrative structure elements and positive feedback; and (3) providing an instrument for determining the development of emotions over sentences and examining whether there are intertextual differences in this shape.

Method

We highlight seven narrative structure elements: (1) landscape of affective consciousness, (2) landscape of cognitive consciousness, and (3) canonicity, (4) temporal embedding, (5) spatial embedding, and (6) drama, and (7) genre. In social psychology, Gergen and Gergen (1988) develop a genre taxonomy that allows for the elaboration of a specific, testable hypothesis on story genre. Their genre taxonomy's five basic types are progressive, regressive, stable, comedy, and tragedy.

The corpus stemmed from TripAdvisor. Our procedure mined 190,461 reviews of 989 experiences consumed in Las Vegas. The reviews averaged 89 words (SD = 89.74; ranging from 3 to 2,335 words), seven sentences (SD = 4.56; ranging from 1 to 148 sentences), and .77 positive feedback (SD = 2.01; ranging from 0 to 103 votes).

In support of our automated text analysis, we relied on the Linguistic Inquiry and Word Count (LIWC) software program. LIWC measures the intensities with which word categories, classified in

dictionary entries, are used in a given text. We used validated LIWC dictionary entries as a starting point from which to operationalize our narrative structure elements, except for drama for which we developed a dictionary from scratch.

Results

To account for the excess number of zero positive feedback (Vuong's $Z = 41.45, p < .001$), we conducted zero-inflated Poisson regression analysis. The first model consists of control variables, which explain 14.20% of the variance in positive feedback (Wald's $\chi^2_{(24)} = 20694.75, p < .001$). In the second, third, and fourth model, we entered the landscapes and canonicity (Model 2: Wald's $\chi^2_{\text{Change}(2)} = 3137.17, p < .001$), temporal and spatial embedding, and drama (Model 3: Wald's $\chi^2_{\text{Change}(2)} = 2595.16, p < .001$), and genre (Model 4: Wald's $\chi^2_{\text{Change}(2)} = 93.94, p < .001$). These explain additional significant proportions of variance in positive feedback (14.82%, 15.32%, and 15.37%, respectively).

For the narrative structure elements, we find that landscape of affective consciousness ($\beta = .15, SE = .02, p < .01, IRR = 1.17$), landscape of cognitive consciousness ($\beta = .11, SE = .02, p < .01, IRR = 1.12$), canonicity ($\beta = .09, SE = .01, p < .01, IRR = 1.10$), temporal embedding ($\beta = .31, SE = .01, p < .01, IRR = 1.36$), and spatial embedding ($\beta = .04, SE = .01, p < .01, IRR = 1.04$) have significant, positive effects on positive feedback. Furthermore, reviews coded as comedies ($\beta = .07, SE = .02, p < .01, IRR = 1.07$) or tragedies ($\beta = .09, SE = .03, p < .01, IRR = 1.10$) receive more positive feedback than reviews with a progressive ($\beta = .01, SE = .06, p = .950$), regressive ($\beta = -.06, SE = .03, p = .068$), or stable shape; thus, we find support for hypothesis 3. However, a significant, negative effect emerges for drama ($\beta = -.02, SE = .01, p < .05, IRR = .98$).

Implications

Our newly developed instrument helps extend current knowledge of how to analyze corpora of big data. When the World Wide Web was made available to the general public, it was heralded as "the Great Equalizer" (Dugan 1996) because it democratized communication: Everyone could share information and tell stories. Today, making sense of the millions of words posted in review form 24/7 (<http://www.internetlivestats.com/>) is critical to understanding the effect of narratives on consumers. For any (collection of) digital text(s), our tool can construct between-sentence emotional change to determine the development of emotions over sentences and examine whether there are intertextual differences in this shape.

Brand Story-making and Digital Conversations

EXTENDED ABSTRACT

Recently, Intel and Toshiba (2012) developed "The Beauty Inside", a film about a man who wakes up every day with a new body and a new face. Its distribution on social media gave audience members the opportunity to film themselves and play the main character throughout the narrative, which resulted in many storytellers producing the narrative. Google is another company that has overcome the idea of simply being an information provider to claim its ability to deliver stories in a digital world. While remaining true to their business, many more brands have turned their communication from analytical (Petty and Cacioppo 1986) to narrative persuasive messages (Van Laer et al. 2014a).

Built on extensive literature review and the authors' former research, this conceptual paper aims at fostering scant academic works providing guidance about does, don'ts, and risks of brand story-making in digital conversations. Since the definition of narrative trans-

portation (Gerrig 1993), rich academic works, mostly grounded in cognitive psychology, have investigated the profound mechanisms of story reception. Such works help understand the need behind story consumption (Van Laer, Visconti, and Feiereisen 2014b), how an audience receives a story (Escalas 2004), what variables are likely to transport it (Van Laer et al. 2014a), and the engrossing effects of transportation (Green and Brock 2000; Phillips and McQuarrie 2010). Yet, these contributions are often too theoretical to be directly applicable to digital brand conversations, which remain mostly grounded on a 'trial and error' approach. As an illustration, though consumers check their smartphones dozens of times per day, a lot of brand content online remains unobserved due to a lack of storytelling (Vigneaux 2015).

Conceptual Development

To date, academic works have been mostly focused on two stages of brand digital conversations: (1) 'storytelling' (i.e. the communicational provision of a story from the storyteller to the story receiver, Escalas 1998) and (2) 'story-receiving' (i.e. the interpretation of a story by its audience and the transformative effects exerted on that audience, Gerrig 1993; Levy 2006). However, research on the 'story-making' stage—the design of a story preceding storytelling and story-receiving—is scant. Through story-making, story providers decide strategically and practically on issues as varied as: which audience is likely to be persuaded through a story; what are the key structural components of a story to design; how should these components be designed to prove effective; and what principles can guide these decisions? This paper aims to advance current understanding of the story-making stage and provide comprehensive answers to similar questions. These answers will contribute to our understanding of the function of digital marketing more broadly.

Implications

Four questions lead to corresponding contributions. First, in line with Barthes' (1975) structural approach to stories, we question the structural components for successful digital brand stories and discover four: (1) identifiable characters (i.e. characters whose thoughts, feelings, and behavioral motivations are clearly understandable, Van Laer et al. 2014a) feelings', and behavioral motivations are clearly understandable', </Prefix><DisplayText>(i.e. characters whose thoughts, feelings, and behavioral motivations are clearly understandable, Van Laer et al. 2014a; (2) imaginable plot (i.e. a spatially embedded sequence of events thematically and symbolically interconnected, Thompson 1997); (3) climax (i.e. an emotional and narrative construction leading to a key turning point, which may result from rhetorical deployment of different story genres, Stern 1995); and, (4) outcome (i.e. a clear learning favoring appraisal of a brand's contract and memorization, Stein and Albro 2010). Second, we question the guiding principles for strategic story-making in a digital world and discuss four of them: (1) historical fit with ongoing acute social contradictions (Holt 2004); (2) connectivity between the online story text and offline texts (intertextuality, Kristeva 1986); (3) gestaltic storytelling (Diamond et al. 2009) derived from a concerted use of multiple storytellers through social media; and (4) usefulness versus entertainment as the two main content types that online consumers are likely to consider (Vigneaux 2015). Third, by observing how brands successfully engage online customers, we unveil the different inspirational sources brands exploit for their story-making: (1) brand heritage; (2) brand's charismatic leader; (3) existing myths and famous stories; (4) consumers' narratives; (5) brand characters; and (6) distinctive product ingredients. Fourth, we inspect limits and risks of adopting brand stories in the digital world. In particular, we

identify three pitfalls of brand stories online: (1) content strategies; (2) temporary campaigns by the latest hotshot; and (3) influencer marketing programs. We comment on possible drifts that stories are susceptible to take online whenever brand managers lose control of story-making and/or contradict an established brand contract. Finally, we identify ethical risks related to story-making and -telling.

Acknowledged as art within the precincts of literature and philosophy, story-making is not requested to stand as art within the precincts of the digital world. Yet, it demands way more than current ‘bricolage’. This paper is meant to improve theoretical understanding of how stories work and how they should be conceived, particularly for an online audience.

Transformative Digital Storytelling: A Framework for Crafting Stories for Social Impact Organizations

EXTENDED ABSTRACT

Building from the rich interdisciplinary literature on narrative processing, we provide a framework to guide authentic communication for Social Impact Organizations (SIOs) including non-profit organizations, public policy entities, and enterprises engaged in solving important social problems such as poverty, hunger, homelessness, sustainability, and racism. For SIOs to alleviate these complex and multi-layered social problems, it is crucial for them to engage their many audiences including clients, donors, volunteers, and the community. Storytelling is a powerful and creative tool SIOs can use in their efforts to address pressing social problems. Additionally, recent advances in social media offer a growing opportunity for SIOs to tell and share stories, creating pressure to ensure the stories they propagate are engaging, memorable, and strategically consistent with their mission and objectives.

Conceptual Development

A story must contain three essential elements: Characters, Chronology, and Causality (Bruner 1990; Stern 1995). Stories contain characters that interact with each other and serve as agents of cause and effect (Zwaan, Langston, and Graesser 1995). Chronology or time is configured in stories as episodes, each with a beginning, middle, and end, providing a temporal sequence for events (Schank 1995). Finally, causality refers to the relationships among story elements that allow for inference making; i.e., the characters’ goals lead to actions that result in outcomes (Pennington and Hastie 1986). Given the important, often emotional, issues faced by SIOs, their stories may be powerful and emotionally charged. But, for a SIO’s stories to be compelling and effective, they must also communicate strategic content about the SIO and its mission.

We propose that SIOs can best leverage the power of individual stories when these stories are linked to a broader, overarching mission-focused story about the SIO and why it exists. We term this overarching story the organization’s *metanarrative*. Stephens and McCallum (1998) define a metanarrative to be a story about a story, encompassing, explaining, and uniting other “little stories” into an integrated whole. An SIO’s metanarrative serves as a guide for the construction of each story the organization uses in its outward facing communications program, which are intentionally crafted with a specific audience in mind and designed to yield a specific behavioral outcome, for example, an increase in program attendance.

A mission-focused metanarrative is itself a story and thus must possess character, chronology, and causality. The main character, the protagonist, of the metanarrative is the organization itself. In a metanarrative, the organization is treated as a protagonist that has a history, undertakes actions, and hopes to achieve future goals. A

metanarrative also has chronology, conveying the organization’s past, present, and future. The organization’s past may encompass its history, founder’s story, or the societal issues that the organization addresses. The organization’s present consists of the SIO’s mission, values, programs, and strategic objectives: what the organization does and why. Finally, the metanarrative includes the organization’s long-term vision for the future, the road map of how the SIO hopes to achieve its organizational objectives and goals. The third component of a compelling metanarrative is causality, or plot. A metanarrative should present characters with goals who follow a course of action to achieve those goals, resulting in a final outcome. The mission-focused metanarrative should highlight the most important challenges facing the organization, including a few critically important past failures and successes.

We recommend that SIOs develop a rich metanarrative in order to anchor and guide the stories they construct to reach the multiple audiences they serve and hope to rally into action. Our conceptual framework also provides detailed advice for crafting these stories, because stories vary in the extent to which they are engaging, compelling, and memorable. Certain features of stories contribute to capturing the audience’s attention, engaging them in the story, and calling an audience to action (Green and Brock 2000; Van Laer et al. 2014a). Specifically, we explore several important story features: a hook, character development, a climactic plot, a mission motivated message, and crafting the story.

Implications

Our framework offers a strategic structure for the practice of SIO storytelling, beginning with the crafting of a mission-focused metanarrative. The metanarrative becomes the point of connection for each individual story crafted by the SIO, which must also be cognizant of the key features of a good story including a hook, character development, and a climactic plot.

One challenge SIOs may face in implementing this storytelling framework is deciding which stories to tell. While it may seem wise to craft stories that illustrate an SIO’s success, stories that lead directly from a problem to a solution may not paint an authentic portrayal of many SIOs’ history and experiences. Further, if only success stories are told, it may undermine the SIO’s ability to portray challenges in a way that is relatable to others who struggle or demonstrate an ongoing need for support.

A second practical consideration in crafting a story for SIOs is selecting the appropriate length. Due to consuming information on digital technologies, consumers’ attention span for longer stories appears to be waning. Thus, many stories crafted by an SIO will need to be relatively short. However, consumers have shown a renewed interest in longer form drama, but on their own terms, such as binge watching streaming content. Thus, storytellers need to assess the audience’s attention span as well as the best media for communicating an engaging story.

In sum, our transformative story framework is a tool that bridges academic research on narrative construction to enrich SIO practice. Although not the focus of this research, other entities, such as government agencies, that might also benefit from our framework, which promotes authentic communication of pressing social problems and seeks to move people to action— such as volunteering and engaging in desired behavioral outcomes. We will end our presentation with directions for collaborative research by consumer researchers and SIOs to refine storytelling best practices, so that we may develop a broader set of tools to guide SIOs as they unlock the transformative power of storytelling.

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Money on our Minds: Unraveling Consumers' Complex Relationship with Money

Chairs: Quentin André, INSEAD Europe Campus, France

Klaus Wertebroch, INSEAD Europe Campus, France

Ziv Carmon, INSEAD Asia Campus, Singapore

Paper #1: A Sense of Wealth or Poverty Can Help or Hurt Charitable Giving

Bob M. Fennis, University of Groningen, The Netherlands
Lan-Nguyen Chaplin, University of Illinois at Chicago, USA
Silviu Terean, Erasmus University, Rotterdam, The Netherlands
Kathleen D. Vohs, University of Minnesota, USA

Paper #2: Invoking the Responsible Self and Enhancing Subjective Competence: Nudges to Increase Financial Engagement

Shannon White, University of Chicago, USA
Abigail Sussman, University of Chicago, USA

Paper #3: Meaning Transforms Money: How Job Satisfaction Affects Consumers' Perception and Use of Their Earnings

Quentin Andre, INSEAD Europe Campus, France
Ziv Carmon, INSEAD Asia Campus, Singapore
Klaus Wertebroch, INSEAD Europe Campus, France

Paper #4: Tuition Aversion: Impatience Impaired Financial Decision Making for Higher Education

Haewon Yoon, Boston College, USA
Yang Yang, University of Florida, USA
Carey K. Morewedge, Boston University, USA

SESSION OVERVIEW

Money is central to almost all aspects of consumers' life: people seek to acquire it through their participation in the workforce, use it to manage their image and their social relationships, spend it to acquire valuable goods and services, and save it or invest it in the hope of a better future. Because of its numerous uses, money is extremely complex, and a significant source of influence on consumer behavior by inducing feelings as diverse as fear, hope, envy, competence or alienation (Furnham and Argyle 1998). It is as much the cornerstone of all market transactions as a social and cultural item (Nelms and Maurer 2014), and as such it is best understood through a multidisciplinary perspective which incorporates social, cultural, and economic aspects (Aarts and Bijleveld 2014).

In the proposed special session, we present four research projects which explore the interplay between the psychological and economic aspects of money. In the first paper, **Fennis, Chaplin, Terean and Vohs** explore circumstances under which the poor are more generous than the rich. Reconciling conflicting findings in the literature, they show that charity appeals focusing on others make the poor more generous, while those focusing on the self make the rich more generous. In the second paper, **White and Sussman** develop behavioral interventions to help consumers manage their investment more responsibly, and show the impact of such nudges on consumer financial decision making in a series of lab and field studies. In the third paper, **Andre, Carmon and Wertebroch** shows that consumers who are more satisfied with their jobs attach greater intrinsic value to the money they earn, and as a consequence have a harder time letting it go. Finally, **Yoon, Yang and Morewedge** show that educating consumers about the return that they get on education can backfire by making them pick less advantageous loans.

Collectively, the four papers of the session present recent contributions from leading scholars in the field of money and financial

decision making, and paint a compelling picture of consumers' relationship to money, from the moment it is earned to the moment it is used. The session covers important aspects of consumers' life (job satisfaction, college choice...), and offers promising behavioral interventions to improve consumers' management of their money. Because the session considers both the economic dimension of money and its psychological and sociological aspects, it would appeal to a large audience, and bring researchers with diverse trainings and research interests together to further our understanding of money.

A Sense of Wealth or Poverty Can Help or Hurt Charitable Giving

EXTENDED ABSTRACT

Are the rich more generous, or the poor? Myriad perspectives on this question have been offered – with supportive findings on both sides. Such disparate findings suggest that both a sense of wealth and poverty can promote generosity, albeit under different circumstances. Therefore, a key objective of the present research was to identify the conditions under which wealth and poverty produce generosity (as measured by charitable giving), and to validate these findings in controlled and naturalistic settings. To that end, we measured willingness to donate time to a fictitious cause, and solicited monetary donations to an existing charity. Finally, we examined whether our findings are limited to the adult population, or extend to children as well, which gave us insights into the universal nature of the phenomenon described.

The literature on how social status and material well-being affect charitable giving is fraught with conflicting findings. On the one hand, there are grounds to infer a positive association between having money and donation behavior. First, charitable donations typically flow from the more fortunate to the less fortunate rather than the opposite (Hong and Bohnet 2007). Extensive research on the behavior of consumers in the top income brackets (households with tens to hundreds of millions of dollars) spanning 20 to 50 years indicates that as wealth levels increase, so does charitable giving (Schervish and Havens 2002).

On the other hand, some findings have found generosity to decrease in the level of income. For example, a survey that tracks philanthropic behavior reported that households earning more than \$100,000 donate a smaller fraction of their income to than households earning less than \$25,000 (Gardyn 2003). In addition, reminding people of money has been shown to reduce generosity, both in the form of charitable donation and helping behavior (Vohs, Mead, and Goode 2008).

Previous research therefore suggests that having money might sometimes promote and sometimes hinder generosity. Complicating matters still, the same results has been found with regard to lacking money, which can sometimes reduce prosocial behavior (Gasiorowska, Zaleskiewicz, and Wygrab 2012; Vohs, Mead, and Goode 2006) or conversely promote it (Cialdini 2001)

We propose a reconciliation of these seemingly conflicting findings. We predicted that the relationship between possession of monetary resources and displays of generosity might depend on whether the person is self-oriented (versus other-oriented) when faced with charitable opportunities. Indeed, previous research has identified

that the behavior of those with money appears to largely be driven by self-focused considerations, whereas those without money are guided by the choices and behaviors of others (Kraus et al. 2012). By implication, we argue that in order to favor charitable behavior, the charitable appeal should be in line with the orientation of the potential benefactor. For people reminded of money, self-focused appeals will produce increased levels of generosity, and other-focused appeals will decrease it. For people primed with lacking money, the reverse will be true. In three experiments conducted in the lab and on the field, we provide support for this hypothesis, and show that the effect holds both for young children and adults.

Study 1 used a 2 (mindset: having versus lacking money) x 2 (focus: own versus others' behavior) between-subjects design in which participants read an essay and imagined themselves as the main character. The story described either a relatively wealthy individual who led an affluent life (having money condition) or someone with few financial means who lived a modest life (lacking money condition; 6). Next, participants were either asked to describe an event in which they behaved generously toward someone or an organization requesting help (own behavior condition) or in which someone else behaved generously toward someone or an organization (other's behavior condition). Finally, participants were asked to indicate the amount to hours they would be willing to volunteer towards the University Student Fund, and their answer served as a measure of generosity.

Results showed that when participants had been reminded of how they personally acted generously in the past, people in the mindset of having money signed up to donate more of their time than those in the lacking money condition. Among participants reminded of the generosity of others, the pattern reversed — as expected.

Study 2 extended these findings by including a control condition to assess the directionality of the effects found, and focusing on generosity with money instead of time. Participants in this study were first primed with having money, lacking money or a neutral state using a sentence unscrambling paradigm. Next, the experimenter indicated that she was soliciting monetary donations for the World Wildlife Fund (WWF). When the focus was on the self, she asked participants whether they agreed that the WWF is an important enterprise for a green and sustainable planet (all participants agreed). When the focus was on the choices of others, she mentioned that many participants had already donated money to the cause. Results showed that, compared to the control condition, participants in the mindset of having money only donated more when the charitable appeal was focused on participants' opinion about the charity. The reverse pattern was found for participants in the mindset of lacking money, who were only susceptible to the appeal to others' behavior.

The last study, involving children aged 8-11 used the same design and procedure of Experiment 1 and found similar results thus showing that, even among young children—who might not yet have extensive experience with and a full understanding of the meaning of money—a sense of financial wealth or poverty can help or hurt charitable giving depending on whether the behavior of the self or of others is made salient.

Invoking the Responsible Self and Enhancing Subjective Competence: Nudges to Increase Financial Engagement

EXTENDED ABSTRACT

With millions of senior citizens living below the poverty line in the US (Short 2014), researchers, policymakers, and practitioners have sought ways to improve savings and investing decisions earlier in life. In addition to saving more, individuals can also improve their

long-term financial prospects by making wiser financial decisions using the money they have already saved. However, far from focusing on improving their financial decisions, many individuals disengage from decisions about their financial futures. For example, people tend to stick with their company's default retirement plan (which may not have an ideal contribution rate or distribution of funds), fail to rebalance their portfolios over time, and use naïve diversification strategies (e.g., 1/n heuristic) rather than making thoughtful choices about their portfolios (Benartzi and Thaler 1995, 2007; Samuelson and Zeckhauser 1988). Each of these tendencies can be costly to consumers in the long run, significantly impacting their wellbeing during retirement.

One potential method for helping individuals become better financial decision makers is to provide financial literacy training, which has been linked to participation in the stock market and better planning for retirement (Lusardi 2008). However, financial literacy programs have had mixed results (Boshara et al. 2010; Fernandes, Lynch Jr, and Netemeyer 2014). Perhaps more concerning, some research even suggests that some components of financial literacy training may highlight gaps in knowledge, unpleasantly underscoring individuals' ignorance and leading to a decrease in willingness to participate in the market (Hadar, Sood, and Fox 2013). Although there are many potential reasons for low levels of financial literacy and engagement, one potential factor is that individuals avoid seeking information about topics which they find unpleasant to think about, especially if they do not feel competent or on track to meet their goals and learning more would make those shortcomings salient (Golman, Hagmann, and Loewenstein 2015; Sweeny et al. 2010; Townsend and Liu 2012).

Thus, our research aims to design nudges that increase individuals' engagement with their finances (i.e., increasing willingness to learn more or become proactive decision makers with respect to finances) by increasing perceptions of financial competence and personal responsibility for the financial outcomes. Our research draws from earlier work which suggests that invoking a sense of identity can motivate behavior (Bryan et al. 2011; Bryan, Adams, and Monin 2013; Bryan and Hershfield 2012) and that self-affirmation exercises can lead to improvements in program participation (Hall, Zhao, and Shafir 2014). We propose and test interventions to increase financial engagement across 3 online studies and one large field study, using a variety of metrics to measure financial engagement. Studies 1 and 4 aim to evoke a sense of financial responsibility to oneself or others, while studies 2, 3, and 4 aim to boost perceptions of financial competence in an investing domain. Because women have lower levels of financial literacy and stock market participation (Lusardi and Mitchell 2008), as well as traditionally different social roles, we anticipated gender differences in the effectiveness of different interventions.

Study 1 (N=525) aimed to invoke identities that instilled a sense of financial responsibility to oneself or others. Subjects randomly viewed control instructions or one of three "responsible self" instructions, which read as following: "As Chief Financial Officer of [your life/ your future life/ your family], you're responsible for making wise financial decisions." Relative to control, subjects in the "future self" condition spent more time on a page where they could learn about investment options before proceeding to a hypothetical allocation decision ($p=.004$ for log-transformed measure with outliers dropped).

Studies 2 and 3 tested the effect of boosting self-efficacy in a financial domain. In study 2 (N=493), subjects completed a self-affirmation exercise, either writing about a wise purchase decision, a wise saving decision, a wise investment decision, or their daily eating routine (control). All self-affirmation conditions boosted self-

assessed ability to make wise financial decisions ($p < .05$), and subjects who wrote about a wise investment decision were significantly more likely to express interest in learning more about finances and investment options ($p < .05$). In study 3 ($N = 510$), subjects took a fabricated financial personality quiz and were told either that they already had the skills to be good investors or that they would need to invest significant time in learning about investing in order to become good investors. The confidence-boosting manipulation significantly increased a within-subject measure of confidence ($p < .0001$), and women (but not men) in the high confidence condition spent significantly more time on a page where they could learn about investment options before making a hypothetical investment decision ($p = .028$ for log-transformed measure with outliers dropped).

Study 4 ($N = 45,196$) aimed to test the effect of similar marketing messages in a large field study conducted on existing customers of a large financial advisory firm. The firm sent emails encouraging customers to stay on top of their long-term financial goals and click on a retirement planning tool. Our test included four conditions: control ("learn more"), responsibility to family ("CFO of your family"), responsibility to self ("CFO of your own life"), and confidence ("You're a better investor than you think"). We used click rate minus unsubscription rate as a measure of financial engagement. The responsibility to family manipulation was effective on women (family vs. control: women only, $p < .01$; men only, ns), while the responsibility to self manipulation was effective on men (self vs. control: men only, $p < .1$; women only, ns). The confidence boost manipulation was directionally less effective than control. We suspect this is due more to ineffective phrasing than to a lack of connection between confidence and engagement, which is an area to explore in future studies.

These studies suggest that well targeted messages invoking individuals' financially responsible selves, as well as interventions inducing subjects to feel more competent specifically in investing-related domains, can impact individuals' engagement with their finances and investments. That inducing a sense of competence can increase interest in learning more about investments may be counter-intuitive to investment or financial education professionals. Future research can explore whether confidence-boosting messages can improve uptake of such services in a real-world settings.

Meaning Transforms Money: How Job Satisfaction Affects Consumers' Perception and Use of Their Earnings

EXTENDED ABSTRACT

Past research has highlighted important differences in the management of financial resources across consumers. Notably, while some consumers exhibit patterns of overspending (Shah, Mullainathan, and Shafir 2012), others oversave (Carroll 1998). Similarly, important differences have been highlighted with regard to risk-taking and gambling (Holt and Laury 2002). In the present research, we propose that such differences can in part be attributed to the circumstances in which consumers earn money. In particular, we hypothesized that when consumers derive greater pleasure and satisfaction from their job, they view the money that they earn from this job not only as a medium which allows them to acquire valuable resources, but also as a symbol of their achievements and success. In turn, this greater intrinsic value attached to their earnings makes these less fungible, which in turn makes consumers more conservative in their use of money. In contrast, when consumers work dissatisfying jobs, they do not attach such symbolic value to their paycheck: the money

has no intrinsic value and is more fungible, which makes consumers less conservative in using their earnings.

Past research has suggested that that money can both function as a medium or as a good (Lea and Webley 2014). The first aspect, money as a medium, corresponds to the way microeconomic theory describes money: it is viewed as a quasi-universal and fungible medium of exchange, which does not possess intrinsic worth but derives its value from its ability to acquire valuable goods and resources (Jevons 1875). The second aspect, money as a good, speaks to the fact that money is at the heart of numerous social and cultural practices, through which it can acquire intrinsic value. According to this second perspective, not all "monies" are the same, and consumers can attach special value to money as a function of the context in which it was acquired (Carruthers 2010; Zelizer 1989). In the present research, we hypothesized that when money is acquired in a job which reflects favorably on people's self, the money would be more likely to be treated as a good than when the money does not reflect such favorable associations.

In the first study, we sought basic support for the effect of job satisfaction on the perception of money: a survey administered to MechanicalTurk respondents showed that people who are satisfied with their jobs are also more likely to report "a sense of personal connection with their paycheck", are more likely to agree that "they view their paycheck as special", and are less likely to agree that "they would not distinguish between their paycheck and money earned from other sources".

In the second study, we established a causal validation of our correlational results. We recruited currently employed respondents on MechanicalTurk and gave them a list of changes to their job that would increase (vs. decrease) their job satisfaction before asking them to imagine working in that environment. Our manipulation successfully replicated the results of the first study: participants who had been asked to imagine a more (vs. less) satisfying job reported that they would feel a greater (vs. smaller) sense of personal connection with their earnings, would treat the money as more (vs. less) special, and would view the money as more (vs. less) fungible.

In the third study, we aimed at replicating the results, provide support for our hypothesized mediator, and rule out an alternative explanation. We hypothesize that the change in the perception of the money stems from a sense of competence that the earnings have become associated with. However, an alternative explanation could be that lower job satisfaction triggers a sense of disgust with the money (Di Muro and Noseworthy 2013). Job satisfaction was first manipulated by asking participants to generate changes which would improve or degrade their work environment, and imagine that such changes would be implemented. This manipulation replicated our results on the participants' perception of money. We then measured participants' disgust by asking them to imagine touching, rubbing and handling close to their face the money from their paycheck, and to report how attractive (vs. repulsive) doing so would be. There was no difference in disgust between conditions, which does not support disgust as a mediator for our effect. Finally, we asked participants whether they would feel competent in the job that they had imagined, and whether they felt that their paycheck would reflect this sense of competence. The projected sense of competence significantly mediated people's attitude toward the money, which supports the hypothesized psychological process.

In the fourth study, we investigated the behavioral consequences of treating the money as a good (as opposed to a medium). We recruited participants to work on a task purportedly meant to measure their creativity, and asked them draw an alien. Twenty-four hours after completing the task, participants were contacted by email, and

told that we had decided to reward them with a \$1 bonus. The reason for the bonus was manipulated between subject: participants were either told that the bonus was because we had an extra budget available for the study (control condition), because the average quality of the drawings exceeded our expectations (small competence condition) or because the quality of their drawing exceeded our expectations (strong competence boost condition). Participants were given the opportunity to get the bonus as is, or to gamble the money in a double-or-nothing bet. As expected, participants were more conservative when the bonus was framed as strongly linked to their competence than when it was weakly linked to their competence or framed as a gift. Further laboratory studies are currently being run, investigating other downstream consequences of job satisfaction on saving, spending and investing behavior.

Tuition Aversion: Impatience Impaired Financial Decision Making for Higher Education

EXTENDED ABSTRACT

Student loans are one of the largest sources of consumer debt in America, second only to home mortgages. In response to the mounting cost of college, government, for-profit, and non-profit agencies including the Department of Education, Payscale, and Money magazine, have attempted to aid students and parents with the financial planning of their higher education. These efforts attempt to steer consumers to consider their choice of higher education, in part, as an investment decision. In other words, in addition to other factors such as school rank, location, and recreational opportunities, students should consider the costs and long-term financial ramifications of attending each of the colleges they consider.

The assumption of these agencies is that students do not consider higher education as an investment decision because they lack information about the true costs and returns of attending different colleges. Consequently, decision aids in this domain typically provide information about prospective colleges such as their average annual cost (tuition and expenses), graduation rate, and starting salary post-graduation. These efforts assume that students will reduce their debt load and increase their lifetime earnings if they are simply provided with all of the relevant information.

We suggest that the primary complicating factor is the temporal structure of when consumers will incur the costs of higher education (i.e., immediately or in the near future) and when they will reap its rewards (i.e., in the more distant future). This disjunction between the payment of the investment and start of its return makes the choice of higher education a choice over time—an intertemporal tradeoff. In this case, the problem impairing the consideration of college as an investment decision may lie within the decision maker (her impulsivity) rather than in the manner in which information regarding the decision is presented.

In five experiments, we examined how providing financial information affected financial decision making in the context of college choice. Specifically, for pairs of colleges, we provided student and convenience samples of participants with various mixtures of information including: the total cost of tuition, expected annual salary, and 30-YR return for pairs of real colleges taken from a recommended aid, College Scorecard. We then examined whether this information would lead participants to make more financially savvy choices when faced with a choice between a low cost but low return school (School L, hereafter) and a high cost but high return school (School H, hereafter). In our experiments, School L was always cheaper to attend than School H, but a less prudent choice, as its to-

tal return would be substantially smaller over the course of 30 years (even when accounting for its higher tuition).

We first tested whether simple decision aids, and trust in the information they contained, would increase consideration of both the financial costs and benefits of higher in Studies 1 and 2. In Study 1, we compared students' college choices when provided with information about the costs, returns, or both the costs and returns of higher education in various formats to see whether simply providing students with better information would be sufficient to improve their financial decision making. In Study 2, we examined whether students who did chose the low return school simply did so because they did not trust return information. If these students did not trust they would earn the projected returns, their choice might rationally be based then on the more certain cost of tuition and expenses.

In Studies 3-5, we tested our proposed and alternative psychological explanations underlying the tendency to underweight the long-term financial consequences of higher education decisions. Our assumption is that temporal discounting is a root cause of the preference to minimize immediate expenses rather than maximize total earnings. We tested our discounting hypothesis against a simple heuristic to choose the cheapest option in Study 3. We tested our discounting hypothesis against the possibility that participants were instead considering return on investment (ROI) in Study 4. In Study 5, we examined where individual participants' discount rates predicted their overall preference to minimize tuition rather than maximize total returns.

In all studies, we found strong evidence of a "tuition aversion." Participants exhibited strong tendency to prefer low return schools (School L) when compared to high return schools (School H), which was present in virtually all cases in which tuition costs were provided (whether alone, and alongside expected annual salary information, and/or alongside 30-YR aggregated expected income information). Several process studies found that tuition aversion was not explained by uncertainty or mistrust of the financial information provided. Even people who preferred School L believed that they would earn more money over their lifetime if they attended School H instead (Study 2). It was also not explained by the different ratios of tuition costs and total returns or percentage ROI for the two schools (Study 4).

Instead, the results point to temporal discounting underlying preferences for the dominated option (School L), suggesting that different perceptions of immediate costs (i.e., tuition) and long-term returns (i.e., income) play a substantive role in college choice. This hypothesis was tested directly in Study 5, which found that more impatient participants were more likely to prefer School L's, implying that high impulsivity inflates the perceived immediate cost bigger and undervalues the long term benefit of preferring School H's. Our findings demonstrate a new anomaly in a consequential financial decision faced by millions of students, and provide evidence for the process resulting in these suboptimal decisions.

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Beyond the Present Experience: Enhancing Past and Future Utility from Experiences

Chair: Kristin Diehl, University of Southern California, USA

Paper #1: Consumers' Reliance on Imagination Moderates the Effect of Information on Anticipated Satisfaction

Samuel Franssens, London Business School, UK
Simona Botti, London Business School, UK

Paper #2: Cultivating Gratitude and Giving Through Experiential Consumption

Amit Kumar, University of Chicago, USA
Jesse T. Walker, Cornell University, USA
Thomas D. Gilovich, Cornell University, USA

Paper #3: Celebrate or Commemorate? A Material Purchase Advantage when Honoring Special Life Events

Joseph K. Goodman, Washington University in St. Louis, USA
Selin A. Malkoc, Washington University in St. Louis, USA
Brittney Stephenson, Sierra Club, USA

Paper #4: Expected and Actual Reliving of Experiences Through Different Types of Photos

Alixandra Barasch, University of Pennsylvania, USA
Kristin Diehl, University of Southern California, USA
Gal Zauberan, Yale University, USA
Ting Zhang, Columbia University, USA

SESSION OVERVIEW

Consumers invest both time and money in experiences, from the ordinary (e.g., watching a movie), to the special (e.g., vacations), to the extraordinary (e.g., skydiving; Bhattacharjee and Mogilner 2014; Celsi, Rose, and Leigh 1993). In fact, spending on experiences is often encouraged (e.g., Dunn and Norton 2013) as a growing body of literature has demonstrated that experiences, compared to material purchases, increase satisfaction with the purchase and overall happiness (e.g., Van Boven and Gilovich 2003).

Much of the work examining these benefits has done so by identifying different characteristics of experiences that contribute to increased happiness, such as reduced hedonic adaptation (Nicolao, Irwin, and Goodman, 2009) or fewer unpleasant social comparisons (Carter and Gilovich 2010). However, given that experiences are so important to consumers, there is much more to learn about the ways consumers interact with experiences, particularly beyond consuming those experiences in the present. *What factors are active both before and after an experience that affect how consumers anticipate and reflect on those experiences?* In this session, four papers explore these factors, revealing how enjoyment of experiences can be extended over time and into other important downstream consequences.

In the first paper, **Franssens and Botti** examine the role of receiving information prior to the experience. They show that such information may not enhance, and may even reduce, anticipated satisfaction when an individual derives a sense of control from imagining upcoming experiences. In the second paper, **Kumar, Walker, and Gilovich** demonstrate downstream consequences that emerge from the gratitude that experiences foster. They find that thinking back to experiences can trigger greater pro-social behavior towards strangers down the road.

Moreover, enjoyment from experiences can also be extended over time, as people derive utility from their memories of those experiences. In the third paper, **Goodman, Malkoc, and Stephenson** investigate how the enjoyment of special milestones (e.g., college graduation) can be amplified in the future. They find that tangible,

as opposed to experiential, purchases activate more meaning and greater enjoyment in the long run, an effect that is not anticipated by consumers. Finally, **Barasch, Diehl, Zauberan, and Zhang** examine situations where people create tangible memory cues during the experience by taking photos of their surroundings and the people they shared the experience with. They show that people mis-predict which kinds of photos allow them to best relive the experience.

As a whole this session provides novel and important insights in the area of experiences which should be of interest to a wide range of consumer researchers, from those interested in experiential consumption, to those interested in materialism and even memory processes. All projects are in advanced stages with multiple studies conducted and represent a range of methodologies from text analysis, to field studies and economic games.

Consumers' Reliance on Imagination Moderates the Effect of Information on Anticipated Satisfaction

EXTENDED ABSTRACT

Research has shown that having information (vs. not) about upcoming experiences enhances people's expected satisfaction because it gives them a sense of personal control (Averill, 1973; Schulz, 1976) as well as accelerated physical decline--are at least in part attributable to loss of control. A field experiment in which institutionalized aged were randomly assigned to one of four conditions was carried out to assess the effects of increased control and predictability upon the physical and psychological well-being of the aged. Individuals in three of the four conditions were visited by college undergraduates under varying contingencies, while persons in the fourth condition were not visited and served as a baseline comparison group. Subjects in the control condition could determine both the frequency and duration of visits they received. A second group of subjects (predict. We predict that this positive effect of information on anticipated liking of experiences decreases, and may even reverse, for consumers in an imaginative (vs. non-imaginative) mind-set (Thompson & Hamilton, 2006). Based on research linking positive fantasies to an inflated sense of attainability (Oettingen & Mayer, 2002), we propose that the process of imagining desirable experiences enhances consumers' sense of self-determination. This heightened sense of self-determination reduces the need for information as a source of control. Consequently, providing information (vs. not) will have a smaller effect on anticipated satisfaction for consumers in an imaginative (vs. non-imaginative) mind-set. Information about future experiences may even negatively affect anticipated satisfaction when this information constrains consumers' ability to imagine and lowers their perceived self-determination. Three experiments test this hypothesis with different manipulations of imagination and information.

Experiment 1

Procedure

601 female U.S. citizens were recruited from Mturk.com. The introduction informed participants that they would be asked a few questions about a gift voucher for a spa. We expected that participants would be more likely to rely on their imagination while evaluating the ad when their visit to the spa was hedonic ("to relax and pamper themselves") vs. utilitarian ("to get treatment for their physical ailments"), because hedonic consumption is more conducive to fantasizing than utilitarian consumption (Holbrook & Hirschman, 1982).

The voucher included a picture of a massage room and stayed on the screen for thirty seconds. Participants were then asked to imagine that they would use the voucher for the “Revitalizing therapy”. Some participants were told which specific treatments would be included in the therapy whereas others were not. Participants then responded to four questions measuring how satisfied they would be with the spa (1-5 scale).

Results

The four measures were averaged into one measure of satisfaction ($\alpha=.92$). The interaction between motivation and information was significant ($F(1,597)=7.05, p=.008$). In the utilitarian condition, information had a positive effect on satisfaction (4.13 vs. 4.5, $t(308)=4.22, p<.001, d=0.48$), but, as expected, in the hedonic condition, information had no effect on satisfaction (4.2 vs. 4.24, $t(289)=0.4, p=0.69, d=0.05$). This provides initial evidence for our hypothesis that the value of information is diminished for consumers in an imaginative mind-set.

Experiment 2

Procedure

142 citizens from the UK, the US, and Canada (71 men, $M_{\text{age}}=29.6$) were recruited from prolificacademic.co.uk. Participants were told they would be asked a few questions about a real estate ad that would remain on their screen for 30s. All participants saw a picture of the same house. Participants were then instructed to rely on their imagination (vs. not) while evaluating the house. Participants in the *imagery* condition were asked to visualize, imagine, and dream about making the house their own, whereas participants in the *no imagery* condition were asked to “take a closer look at this place” (based on Petrova & Cialdini, 2005). The presence of information was manipulated by showing the house either furnished or unfurnished. Then, participants indicated how much they liked the house and how much they would want to live there (1-9 scale).

Results

The two dependent variables were averaged into one composite score of satisfaction ($r=.87$). One participant scored three standard deviations below the mean of her experimental group and is not included in the following analysis. The interaction between furniture and imagery was marginally significant ($F(1,137)=3.73, p=.055$). Participants who were not asked to use their imagination, were more satisfied with the furnished house than with the unfurnished house (5.61 vs. 7.01, $t(73)=3.82, p<.001, d=0.89$). Participants who were asked to use their imagination, however, were not significantly more satisfied with the furnished house than with the unfurnished house (6.24 vs. 6.79, $t(65)=1.42, p=0.16, d=0.35$). Again, this provides evidence for our hypothesis that the positive effect of information decreases when people are in an imaginative mind-set.

Experiment 3

Procedure

134 English speakers from various countries (70 men; $M_{\text{age}}=26.1$) were recruited from prolificacademic.co.uk. The introduction informed participants that they would be asked a few questions about a vacation ad that would remain on their screen for 30s. The ad displayed the same picture of an island for all participants. Some participants were instructed to use their imagination (vs. not) while viewing the ad. The instructions to imagine were similar to those of Experiment 2. Then, participants in the *information* condition read two sentences about the island that mentioned the view from the most visited spot on the island and which other activities

visitors could engage in during their stay. Participants in the *no information* condition did not read anything about the island. Participants indicated how much they liked the island and how much they would want to spend their vacation there (1-9 scale).

Results

Two participants scored three standard deviations below the mean of their experimental group on the satisfaction measure (average of two dependent variables, $r=.80$) and are not included in the following analysis. The interaction between imagery and information was significant ($F(1,128)=6.58, p=.01$). In the no-imagery condition, results are directionally consistent with the first two studies in that satisfaction was greater when information was present than when it was absent (6.09 vs. 6.63, $t(65)=1.47, p=0.14, d=0.36$). In the imagery condition, however, information had a negative effect when participants imagined their stay on the island (7.17 vs. 6.38, $t(63)=2.15, p=0.033, d=0.54$).

Three experiments show that having more information does not always have a positive effect on consumers’ anticipated satisfaction, and may even have a negative effect, when consumers are in an imaginative mind-set. Further research will focus on demonstrating the proposed process that imagination heightens people’s sense of self-determination and therefore fulfils a need for control. Further research will also investigate why, in the imagination conditions, information had no effect in Experiments 1 & 2 and a negative effect in Experiment 3. We speculate that the information in Experiment 3 was too constraining such that participants’ sense of self-determination was undermined.

Cultivating Gratitude and Giving Through Experiential Consumption

EXTENDED ABSTRACT

Research on material consumption—buying for the sake of *having*—and experiential consumption—buying for the sake of *doing*—has predominantly focused on differences in the satisfaction consumers derive from each. A growing body of evidence argues that consumers tend to get more satisfaction, and more enduring satisfaction, from the money they spend on experiences than the money they spend on material possessions (for a review, see Gilovich and Kumar, 2015). Here, we focus on another downstream consequence of buying experiences, in addition to the more enduring satisfaction that results from doing so: facilitating a grateful emotional state. Gratitude promotes well-being and prompts pro-social behavior (Bartlett and DeSteno, 2006; Emmons and McCullough, 2003). In the present research, we examine a novel way to cultivate this beneficial emotion. We demonstrate that these two different types of consumption differentially foster gratitude and giving. In six studies we show that reflecting on experiential purchases (travel, meals out, tickets to events) inspires more gratitude than reflecting on material purchases (clothing, jewelry, furniture), and that thinking about experiences leads to more subsequent altruistic behavior than thinking about possessions.

In Studies 1-2b, we empirically test our main hypothesis: that people are more grateful for what they’ve done than what they have. In Study 1, we employed a counterbalanced within-subjects forced-choice paradigm to examine whether participants reported that their recent experiential purchases prompted greater feelings of gratitude than their recent material purchases. Indeed they did, $\chi^2(1, N = 95) = 6.06, p = 0.01$. To rule out demand effects, we replicated this finding using more conservative between-subjects experiments (Studies 2a-2b; N ’s = 75 and 100). In these studies, participants rated their experiential purchases as having fostered more gratitude than their

material purchases when responding on continuous scales, t 's > 2.8 , p 's < 0.01 . These studies address the possibility that participants in Study 1 felt they were *supposed* to say that their experiences prompt more gratitude than their material goods, or that saying so might cast them in a more favorable light. The between-subjects design used prevents direct comparisons between experiential and material consumption in the minds of participants. The methods used in Studies 1-2b also allowed us to rule out other artifactual concerns about the differences we found; our results could not be explained by factors like the price of the purchases in question or the amount of time that had passed since the purchase had been made.

Study 3 finds evidence for this effect in a real world-setting: online customer reviews ($N = 1,200$). Consumers are more likely to spontaneously mention feeling grateful for experiences they have bought than for material goods they have bought, $F(1,1192) = 52.17$, $p < 0.0001$. We investigated this by utilizing a large data set of reviews posted on materially-oriented websites (i.e., *CNet*, *Amazon*) and on experientially-oriented websites (i.e., *TripAdvisor*, *Yelp*). After randomly sampling 1,200 distinct comments from these sites, reviews were then coded for expressions of gratitude by two independent raters who were blind to our hypothesis. Far removed from the laboratory, and even in the context of consumer reviews where mentions of grateful feelings are uncommon, people tend to be more inspired to comment on their feelings of gratitude when they reflect on the trips they took, the venues they visited, or the meals they ate than when they reflect on the gadgets, furniture, or clothes they bought.

Might the gratitude elicited by experiential purchases extend their benefits outward to other people as well? In our final two studies, we explore a significant behavioral consequence that stems from the greater gratitude people tend to feel as a result of their experiential purchases by showing that experiential consumption also makes consumers more likely to be generous to others. In these experiments (N 's = 48 and 60), participants who contemplated a significant experiential purchase behaved more generously toward anonymous others in an economic game (when assigned the role of allocator in the standard "dictator game;" see Camerer, 2003) than those who contemplated a significant material purchase, p 's < 0.05 . These results indicate the benefits of experiential consumption extend beyond the purchase itself and even beyond the experiencer: they flow outward to others as well. It is particularly noteworthy that participants who were prompted to think about an experience they had bought were more generous to anonymous strangers, recipients they knew they would never meet or interact with, and who would never know they had acted generously. Buying experiences instead of "things" not only cultivates gratitude, it also facilitates one of gratitude's most beneficial effects: pro-social behavior. It thus appears that shifting spending towards experiential consumption can improve people's everyday lives as well as the lives of those around them.

Gratitude may not be the first thing that comes to mind when thinking of "consumerism." But what we have shown here is that a certain type of consumption—experiential consumption—is more likely to foster feelings of gratitude than the consumption of material items. And by prompting feelings of gratitude, it also leads to more pro-social behavior. It is especially notable that these results were obtained using a variety of different types of studies, thereby providing convergent evidence for our central claim. Together, this research demonstrates that shifting some personal consumption toward "doing" rather than "having" may increase feelings of gratitude and, in so doing, leads people to act more virtuously by being more generous to others.

Celebrate or Commemorate? A Material Purchase Advantage when Honoring Special Life Events

EXTENDED ABSTRACT

Moments that mark a special life events are rich in meaning and often inspire people to spend money to signify their importance. In doing so, consumers can either *celebrate*—making a purchase with the primary intention of creating an experience (such as a wedding reception, graduation party, or a trip to Europe)—or they can *commemorate*—making a purchase with the primary intention of acquiring a material object (such as a wedding or class ring, watch, or framed picture). Though little is known about how these two purchase types might better achieve this goal of honoring a special life event, consumers seem to favor celebrations over commemorations. For instance, the average amount spent on graduation celebrations in 2015 was \$985 (www.graduationparty.com) compared to \$230 on class rings (<http://staugustine.com>). Weddings are the same: wedding receptions cost \$15,000 on average and engagement rings \$6,000. Further, in terms of maximizing happiness, research supporting an *experiential advantage* agrees: Celebrate because experiences lead to more happiness than comparable material goods (e.g., Nicolao et al. 2009; Pham 2015; Van Boven and Gilovich 2003).

Yet, honoring a special life event is often not about maximizing happiness with a purchase; instead, it increases meaning in life by connecting an important event in the past with the future. Whereas happiness is a present-oriented feeling signaling satisfaction with one's current needs and goals, meaningfulness comes from feeling connected with one's past accomplishments and significant moments, like weddings, graduations, births, or promotions (Baumeister et al. 2013; Belk 1988; Deci and Ryan 2008; MacKenzie and Baumeister 2014; Wildschut et al. 2006). As such, an important role of purchases that mark special life events is to facilitate the connection between the past special event and one's future self.

We propose that when consumers are marking special life events, material purchases reveal an advantage over experiential purchases as time passes. Further, we propose that consumers do not predict this material advantage because they fail to appropriately consider the permanent nature of material goods. Across seven studies we (1) provide evidence for a material (i.e., commemorative) advantage over experiences (i.e., celebrations) when marking a special life event, (2) demonstrate that consumers do not accurately forecast such an advantage (and thus choose experiences), and (3) provide an explanation for this misprediction by demonstrating a way to mitigate the preference for experiential purchase (i.e., when permanence is salient).

In study 1 we asked married participants to describe either their wedding reception (celebratory experience) or their wedding ring (commemorative material good). They rated their connections between the purchase and this special occasion and how long they had been married. We found a significant purchase type by time since marriage (logged) interaction on connection to the special event ($b = .25$, $t(127) = 2.88$, $p < .01$). Participants who focused on their reception reported a declining connection to the past event ($b = -.41$, $t(127) = -3.03$, $p < .01$); however, those who focused on their ring had a non-significant positive slope ($b = .1$, $t(128) < 1$).

Study 2 extended our findings to positive affect and graduations. We asked participants to think back to their most important graduation, and then asked them to either recall how they commemorated or celebrated. They then responded to seven positive affect measures, indicated the connective value of the purchase, amount spent, and years since graduation. We found the same significant purchase type by time interaction on connective value ($b = .33$, $t(144) = 2.31$, $p < .05$).

A test of mediation showed a significant indirect effect of connection to the event on positive affect (95% CI=.0083,.1300), suggesting that over time material purchases provided stronger connections to past special events, which enhanced the feelings experienced when consumers thought back to their event.

Studies 3A-3C, 4, and 5 explored whether and why consumers (mis)predict advantages for material goods. Study 3a asked participants to imagine they received a \$1000 gift card to either a jewelry store or a vacation website (between subjects) as a way to honor graduation. We then asked how well they expected to feel seven positive emotions in 1 or 20 years. Participants believed that their emotions would fade over time, (p 's<.05); however, they did not expect the advantage to commemorating over celebrating (F <1) that we found in previous studies. We found the same effects for expected memory (study 3b) and in a choice task participants chose more experiences than material goods (study 3c).

Studies 4 and 5 tested our proposed mechanism: Whether these mispredictions are due to consumers failing to consider the permanence of material purchases. In a 2(Purchase Type: Experiential vs. Material) x 2(Permanence: More vs. Less) between subjects design, study 4 asked participants to write about a purchase that would either last in their possession for a long (more permanence) or short (less permanence) time. They then were asked to imagine spending a \$1000 gift card to either a jewelry store or a vacation website to honor a graduation and to rate their happiness. Participants expected to be happier with an experience ($M=5.98$) compared to a material item ($M=4.33$, $F(1,197)=84.50$, $p<.001$), and it was moderated by permanence ($F(1,197)=6.85$, $p=.01$): The difference in predicted happiness was smaller in more ($M=1.18$) than less ($M=2.13$) permanence. Study 5 was a similar design but used an open-ended dependent measure and a subtler permanence manipulation: Participants viewed advertisements that either highlighted a permanent or a non-permanent aspect of the advertised product (e.g., "a diamond is forever" vs. "a diamond is sincere"). The permanence condition chose gifts that were rated as a more material than experiential ($M=3.53$) compared to control ($M=4.09$, $F(1,141)=3.98$, $p<.05$). In sum, when permanence was salient, consumers better appreciated the long-term advantages of material items, diminishing their mispredictions.

The results suggest a potential exception to the widely accepted experiential advantage, while providing important implications for how purchases contribute to meaningfulness in life. Though consumers tend not to appreciate the long-term advantages of material items when choosing to celebrate or commemorate, the results suggest that people can increase their long-term happiness by giving themselves permanent reminders of special life events—which are often the very experiences that have been shown to increase happiness.

Expected and Actual Reliving of Experiences Through Different Types of Photos

EXTENDED ABSTRACT

Recalling memories of one's experiences increases positive affect and meaning in one's life (e.g. Wildschut et al. 2006; Holbrook 1993). While memories can be a source of enjoyment, people are aware that memory fades and that they may forget aspects of an experience (Flavell and Wellman 1975). Consequently, people try to counteract memory loss either by recording significant parts of the experience (e.g., filming videos, writing diaries) or by investing in specific memory cues that they believe will allow them to relive the experience later (e.g., souvenirs, Zauberman, Ratner, and Kim 2009).

Because experiences are fleeting, one must decide *which* memory cues to invest in for the future. Yet, even though these decisions

are made strategically, they may not maximize enjoyment as intended. People are poor predictors of what will optimize their future feelings (Gilbert et al. 2002) and mispredict which experiences they will enjoy revisiting (Zhang et al. 2014). People also sometimes choose memory cues that in the long term create regret, rather than enjoyment (Abendroth and Diehl 2006).

While prior literature has examined the efficacy of different *externally provided* memory cues for *accurate recall* (e.g., Herz 1998), the literature has mostly neglected how the *choice or creation* of such cues affects the *ability to relive* the experience. We assess people's *expectations* about which memory cues will be useful for reliving and hence which cues they invest in at the time of the experience. Then, we examine which cues *actually* help people to best relive an experience.

We explore this question in the context of photos as memory cues, in particular we examine whether people capture photos of people or scenery. We propose that at the time of the experience people will capture more photos of the surroundings, since those are the aspects of the experience that seem distinct and unique in the moment. However, at the time of revisiting, people will enjoy photos that include people in them more than scenery photos. This is consistent with work showing that people are drawn to and pay particular attention to social content in photos (Birmingham, Bischof, and Kingstone 2008) and that they are better at correctly recognizing photos of people as opposed to objects (Isola et al. 2011).

In two studies, we examine people's photo-taking behavior and expectations about these photos shortly after an experience and their actual reliving enjoyment when looking at these photos after one or four months.

Study 1 examines the types of photos people take on a field trip to an arboretum, and which photos they actually enjoyed looking back at either one or four months later. Visitors ($N = 94$) took more photos that include scenery (61% of all photos; $M = 12.82$, $SD = 17.81$), than photos of people (39% of all photos; $M = 34.17$, $SD = 54.09$), $F(1, 93) = 13.37$, $p < .001$.

After the trip, participants uploaded four photos of each scenery and people. One month and four months later, participants ($N = 38$) saw one randomly selected photo from each category (scenery and people) in random order. A repeated-measures ANOVA with enjoyment of the photo as the dependent measure and photo contents (scenery vs. people) and time (1-month vs. 4-months) as within-subject factors revealed a main effect of photo contents. Individuals enjoyed viewing photos of people more ($M = 75.71$) than photos of scenery ($M = 69.29$), $F(1,37) = 6.53$, $p = .02$. The same analysis with the extent to which the photo helped participants relive the moment as the dependent measure, also revealed a main effect of photo contents, such that photos with people helped individuals relive the experience better ($M = 74.78$) than photos of scenery ($M = 67.37$), $F(1,37) = 6.86$, $p = .01$.

Interestingly, in the moment, visitors took many more photos of the surroundings than of people, however, those photos were not the ones that best allowed them to relive the experience. One may argue that in an arboretum the surroundings are particularly focal and salient which could have contributed to these findings. Hence in Study 2 we examine the creation of memory cues in a different, less nature-focused context: during Christmas celebration.

In **Study 2**, participants ($N = 172$) uploaded one photo of just scenery and one photo that included people (as well as other "distractor" photos) that they had taken during Christmas. They also reported how much they expected to enjoy looking at each photo in the future. Four months later, participants were shown the two focal

photos and rated how much they enjoyed looking at each photo and how much it allowed them to relive the experience.

A repeated-measures ANOVA with enjoyment of the photo as the dependent measure and photo content (scenery vs. people) and timing (predicted vs. actual) as within-subject factors revealed a main effect of photo content ($M_{\text{Scenery}} = 76.60$, $M_{\text{People}} = 80.66$), $F(1,171) = 12.36$, $p = .001$, and a main effect of time ($M_{\text{Predicted}} = 82.94$, $M_{\text{Actual}} = 74.32$), $F(1,171) = 40.72$, $p < .001$. More importantly, however, we find a significant interaction, $F(1,171) = 11.08$, $p = .001$. Participants expected to enjoy scenery and people photos similarly when they took the pictures, $F(1,171) = .13$, $p = .72$. However, four months later they enjoyed looking at the people photo more ($M_{\text{Scenery}} = 70.48$, $M_{\text{People}} = 78.17$), $F(1,171) = 16.68$, $p < .001$.

Since we did not want to reveal the purpose of the study to participants, we directly measured reliving only at Time 2. Paralleling the findings for photo enjoyment, people felt that the people photo they had taken ($M = 76.70$) allowed them to relive the experience to a greater extent than the scenery photo ($M = 66.78$), $F(1, 171) = 37.16$, $p < .001$.

In sum, although individuals expect to like scenery and people photos equally well in the future, and oftentimes take more photos of scenery, photos with people are enjoyed more and allow the photographer to better relive the experience.

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Connections: The Social Nature of Consumption

Chair: Sarah Lim, Cornell University, USA

Paper #1: Reducing Consumer Alienation: The Effect of Making Product Producers Personal

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Martin Schreier, WU Vienna University of Economics and Business, Austria
Ulrike Kaiser, WU Vienna University of Economics and Business, Austria
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Paper #2: Made for You: The Effect of Consumer Identification on Consumer Preference

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Christoph Fuchs, Technical University Munich, Germany and Erasmus University, The Netherlands
Martin Schreier, WU Vienna University of Economics and Business, Austria

Paper #3: A Relationship Account of Marketing Rewards: The Effect of Conditional vs. Unconditional Rewards on Self-Brand Connection

Andrea Bonezzi, New York University, USA
Monika Lisjak, Arizona State University, USA
Scott Neslin, Dartmouth College, USA

Paper #4: Partner or Servant? When Relationship Type Affects Trait Expectations and Evaluations of the Brand

Ping Dong, University of Toronto, Canada
Pankaj Aggarwal, University of Toronto, Canada

SESSION OVERVIEW

Understanding interactions between customers and firm has received growing attention from both marketing scholars and marketing practitioners. This special session aims to examine the interpersonal aspects of consumer experience by focusing on consumers' relationship with producers or brands. In this session, four papers address the important question of how to create a sense of connectedness between consumers and the companies that produce the products they buy.

The first two papers in this session study consumers' alienation from producers and ways to reduce this alienation. In the first paper, Fuchs and colleagues examine the effect of providing personal information about producers. Six studies demonstrate that "personalizing" producers increases consumers' preferences for products by inducing feelings of closeness with the producers. In the second paper, Lim and colleagues investigate how providing personal information about consumers to producers can affect consumers' preferences. They show that consumers expect that identifying them by their names would lead producers to treat them in a less objectifying manner, which in turn leads to a greater preference for a product. Together, these two papers shed light on how personal identification, of either producers or consumers, create a meaningful connection between the two entities.

The next two papers focus on the specific relationships that form between consumers and brands/firms. Bonezzi, Lisjak, and Neslin explore how conditional versus unconditional rewards can have a different impact on consumer-brand connectedness. Across two lab experiments and a field study, they demonstrate that unconditional rewards (vs. conditional rewards) are more effective to strengthen consumer-

brand connection, but only when these rewards signal communal relationship norms. Finally, Dong and Aggarwal examine the role of hierarchy in consumer-brand relationships by examining the effect of positioning the brand as a servant versus a partner. They find that people expect servant brands to be high on competence, and partner brands to be high on warmth. In addition, they show that the brands are evaluated more extremely – more negatively and more positively – when these expectations of competence for servant brands and warmth for partner brands are respectively violated or upheld.

In summary, this session provides a window into consumer behavior by illuminating research that investigates consumers' relationships with producers/brands. By bringing together the papers that examine the issue of consumer relationships from diverse perspectives, this session will enrich and sharpen our understanding of psychological mechanisms that affect perceptions of connectedness between consumers and firms.

Reducing Consumer Alienation: The Effect of Making Product Producers Personal

EXTENDED ABSTRACT

Since the time of the industrial revolution, technology has improved the well-being of both producers, whose incomes could rise through greater productivity, and consumers, who benefit from greater availability and lower prices of consumer goods. This, however, has come at the cost of separation and alienation between consumers and producers. Accordingly, in an era of mass production, consumers rarely know anything about the persons who have created the products they use on a daily basis. New developments in the marketplace have led some firms – deliberately or not – to reduce the separation between consumers and producers of products. In particular, firms have started to introduce the persons behind their products to their customers. Information about producers is now featured on firms' websites, or even included on or with the products. Commercial platforms such as Etsy even enable consumers to directly get in touch with a product's producer.

This study is a first attempt to shed light on this emerging phenomenon by examining the psychological consequences of providing consumers with personal information about product producers – a practice that we refer to as "personalizing". Drawing on analogies from Karl Marx's theory of alienation of the worker (1844), we introduce a theory of alienation of the consumer and posit that consumers feel less alienated from the producer if they see the person behind the product. We thus theorize that providing personal information about the producer – personalizing the producer – should facilitate the creation of a psychological connection between consumers and the producer. This feeling of connection to the producer should have positive effects on consumer wellbeing and on the way consumers perceive both the producers and their products. A series of six studies documents the existence of this personalizing effect on product preference, provides process evidence, and rules out alternative accounts.

Study 1A provides initial experimental evidence that making product creators personal has positive effects on product preference. The study deployed a choice-based experiment in which information on the product producer was manipulated (personal information on the producer present vs. not present). We find that consumers have a significantly higher preference for the same product if non-diagnostic personal information about the product producer is provided

(i.e., the information describes the producers as a person, without giving direct indications of expertise or product quality). Study 1B replicates the personification effect and rules out the possibility that the effect is caused by demand artifacts or is caused by perceived similarity to the described person. The study (and a pilot study) also rules out the alternative explanation that participants expect higher quality because the personified producer can be held more accountable for her products.

Study 2 shows that consumers have a higher preference for the same products if the producer described is the actual producer of their product but not if the producer described did not produce the consumer's actual product. This finding suggests that the effect is not simply caused by providing positive information nor by merely providing more (versus less) information. In addition, this study casts doubt on the common practice of giving examples of a brand's producers without certifying that this specific producer produced a customer's product (for example, describing a farmer who supplies a brand without any indication that a specific consumer actually receives the product from that specific farmer). Study 3 uses a free association task to test our predicted process account. Consistent with our theoretical account, we document that the increased preference for products of firms that personalize their producers is mediated by feelings of closeness to the product creators. Study 4 shows that the personalizing effect materializes only if information on the producer (but not on a customer) is provided. The observed moderation is mediated by feelings of closeness with the product producers.

Study 5 shows that the personalizing effect is largely unaffected by the neediness of the focal producer. The personification effect remains highly significant if the producer is additionally described as being well off (and thus not in financial need). Thus, we rule out the possibility that the effect is driven by an attempt to "help out" a specific person in need (similar to an 'identified victim' effect account; Jenni and Loewenstein 1997). Importantly, the study also provides empirical evidence for the full process chain: providing consumers with personal information about the producer facilitates feelings of closeness to the producer, which increases trust in the producer and makes the product appear less of a commodity. These two positive perceptions pertaining to the producer (trust) and to the product itself (de-commodification) drive the preference for products of firms that feature personal information about their producers.

Study 6 takes our work outside the lab and to a different product category (cookies), a different dependent variable (a taste test of cookies) and to different settings (private vs. commercial). The study shows that consumers perceive the same cookies to be more tasty when the baker was personalized (versus not). This effect is observed in both a commercial and a private setting. Also in this setting, it is shown that the increase in taste can be explained by increased trust in the producer and by the perception that the product is not a commodity.

Taken together, this set of studies provides a first step towards understanding the consequences of personalizing product producers. It also advances our understanding of the alienation concept in a consumer context. The work has implications for theory and practice, and might stimulate further research on this timely topic.

Made for You: The Effect of Consumer Identification on Consumer Preference

EXTENDED ABSTRACT

How can we make consumers' experiences more personal and meaningful? This research suggests that one effective way to do this is to allow consumers to give their name to product producers, that is, by making producers know who they are making their products for.

Previous research has documented that identifying a person causes others to perceive that person more as a tangible and relatable being and to readily feel emotional and social connectedness toward him or her. For instance, people tend to donate more money for an identified victim than for a non-identified one (Jenni and Loewenstein 1997; Small and Loewenstein 2003). Similarly, allocators in a dictator game were likely to split the money more generously when their partner's name was provided to them (Charness and Gneezy 2008). Together, these results suggest that identifying a person induces positive responses from others.

This research examines the effect of identifying consumers' names to producers on consumers' evaluation of products by introducing the concept of consumer objectification. Building on Nussbaum's conceptualization of objectification (1995), we define *consumer objectification* as consumers' perception of being treated by a producer or seller as an interchangeable object rather than an individual person. We argue that consumers would believe that identifying their names leads producers to perceive them in a less objectifying way, which in turn would increase preference for those producers' products.

Study 1 tested whether consumers evaluate a product more positively when the product producer knows their names. Two hundred undergraduate students read descriptions of two similar coffee shops, differing in whether a barista saw customers' names or order numbers on their coffee cups. We counterbalanced which coffee shop was described as identifying consumers across participants. Results showed a "Starbucks effect", that is, participants significantly preferred to go to the coffee shop where customers were identified to the barista ($t(198) = 9.23, p < .01$, Cohen's $d = 1.30$).

Study 2 was designed to achieve two objectives. The first objective was to replicate the effect of consumer identification across various products. The second objective was to provide evidence on the underlying mechanism of de-objectification. Five hundred and forty-six Mturkers were randomly assigned to one of eight conditions in a 2 (counterbalancing of which producer identifies its customer by name) x 4 (product replicate: cake, desk, fountain pen, dress shoes) between-subjects design. The procedure of this study was identical to that of Study 1, except for the fact that sense of objectification and perceived product quality were measured in addition to the preference measure. Consistent with Study 1, participants indicated a greater preference for the company when the producer was given the customers' names ($F(1, 538) = 50.14, p < .01, \eta_p^2 = .09$). This effect was significantly mediated by perceived objectification [5,000 samples; 95% CI: 0.87, 1.42] even after controlling for perceived product quality.

Study 3 sought to examine whether more identification induces a greater impact on consumer preference by manipulating the amount of personalizing information given to a producer. Three hundred and fifty-six Mturkers were randomly assigned to one of four conditions in a 2 (counterbalancing of identification) x 2 (amount of identifying information: low vs. high) between-subjects design. Similar to studies 1 and 2, participants read descriptions of two patisseries. In the low identification condition, one of the patisseries was described as identifying customers' names to the baker, whereas in the high identification condition it was described as identifying consumers' name and additional personalizing information that customers wanted the baker to know. Again, we found that participants exhibited a greater preference for the product when the producer was given their name ($F(1, 352) = 4.08, p < .05, \eta_p^2 = .01$). This effect, however, did not become stronger with additional personalizing information ($F < 1$). Further analyses revealed that the additional information leads participants to feel not only a lower sense of objectification but also a greater risk of privacy violation, resulting in the null effect of iden-

tification level. Together, these results suggest that adding more personalizing information beyond a first name would not always be better and it can cause greater concerns for privacy violation.

In conclusion, this research demonstrates that identifying consumers to producers increases product preferences by making consumers feel less objectified (i.e., more like a person). By doing so, this research suggests a novel way to make consumers' experiences more meaningful.

A Relationship Account of Marketing Rewards: The Effect of Conditional vs. Unconditional Rewards on Self-Brand Connection

EXTENDED ABSTRACT

Developing and nurturing a connection between a brand and consumers is one of the most important goals bestowed upon marketing managers. Indeed, a strong consumer-brand connection ultimately translates into increased profitability for the company (Kalwani and Narayandas 1995; Pine II et al. 1995; Price and Arnould 1999). As a result, marketers employ various tactics to develop strong connections with consumers. In particular, a commonly used tactic involves awarding customers with rewards for engaging with the brand. To illustrate, consumers might be promised a reward after a certain number of purchases. Importantly, these rewards are typically given conditional on consumers engaging in behaviors that meet terms and conditions specified by brands, and thus are referred to as *conditional rewards*.

In this research we argue that the widely adopted practice of using conditional rewards may be unsuited to foster consumer-brand connections. Instead, we propose that *unconditional rewards* may be more effective at fostering consumer-brand connection. We use the term unconditional rewards to refer to rewards that are perceived not to be contingent on consumers performing certain behaviors that meet terms and conditions specified by a brand, but given out of the company's benevolence.

We postulate that conditional and unconditional rewards might be differentially effective in fostering brand-self connection, because they signal different relationship norms (Clark and Mills 1979, 1993; Aggarwal 2004; Aggarwal and Law 2005). In particular, we suggest that unconditional rewards heighten the salience of communal norms, compared to conditional rewards. Importantly, the salience of communal norms influences how psychologically connected consumers will feel towards the brand (Aron et al. 1991; Liu and Gal 2011). Three studies support this hypothesis and provide evidence for the proposed theorizing.

Study 1 demonstrates that unconditional rewards are more effective than conditional rewards at fostering brand-self connection. Participants were given the opportunity to complete a survey for the chocolate brand Milka. In the conditional reward condition, participants were told that if they chose to fill out the survey, they would receive a Milka chocolate bar for their input. In the unconditional reward condition, participants were not told anything, but still received a Milka chocolate bar upon completing the survey. Furthermore, to compare how receiving a conditional or unconditional reward affects self-brand connection relative to receiving no reward, we asked a third group of participants to simply report brand-self connection towards Milka. Consistent with our predictions, the results revealed that participants who received an unconditional reward felt more connected to Milka compared to participants who received a conditional reward ($t(154) = 1.96, p = .05$), and to participants in the baseline condition ($t(154) = 2.29, p = .02$). Furthermore, brand-self connection did not differ significantly between the conditional reward and baseline conditions ($t(154) = .34, p = .73$).

Study 2 served two main goals. First, we wanted to rule out the possibility that the effect observed in study 1 was merely driven by unconditional rewards eliciting higher levels of surprise relative to conditional rewards. To do that, we kept surprise constant across conditions, by inducing all participants to expect to receive a reward. Second, we wanted to test whether the effect observed in study 1 operates via salience of communal relationship norms, as per our proposed theoretical account. To do that, participants were randomly assigned to conditions in a 2 (reward: conditional vs. unconditional) \times 2 (persuasion knowledge: salient vs. not salient) between-subjects experimental design. We reasoned that, to signal communal relationship norms, an unconditional reward needs to be attributed to the benevolence of the company, rather than to self-interest. Thus, by making persuasion knowledge accessible, the attribution of the unconditional reward to the company's benevolence should be undermined, and as a consequence an unconditional reward should lose its effectiveness as a signal of communal norms. The results revealed a significant reward type \times persuasion knowledge ($F(1, 162) = 6.1, p = .03$). Participants for whom persuasion knowledge was not salient felt more connected to the brand when the reward was unconditional than when it was conditional ($t(162) = 3.42, p = .001$). However, for participants for whom persuasion knowledge was salient there was no difference between receiving an unconditional and conditional reward ($t(162) = .28, p = .78$). A moderated mediation analysis further revealed that communal norms mediated the effect of type of reward on behavioral intentions, only when persuasion knowledge was not salient.

Study 3 aimed to probe the external validity of our findings, by showing the effect of conditional vs. unconditional rewards in a consequential setting. This study was a field experiment, conducted in a grocery store. Shoppers were approached by a research assistant who posed as a Coca Cola representative and asked shoppers to participate in a short survey. In the conditional reward condition participants were told that they would receive a free can of Coca Cola for their input. In the unconditional reward condition participants were not informed they would be receiving a reward for their input. After participants completed the survey, they were rewarded with a can of Coca Cola. Participants then continued with their grocery shopping. At the cash register, we collected each participant's shopping receipt. The results revealed a significant main effect of reward type on purchase behavior ($\chi^2(1) = 23.39, p < .001$), such that 61% of participants who received an unconditional reward subsequently bought Coca Cola, compared to only 21% of participants who received a conditional reward.

In sum, this research provides a first systematic examination of the effects of rewards on self-brand connection. Across three studies we show that rewards might indeed foster brand-self connection, but the way they are awarded influences their effectiveness at doing so. In particular, we compared and contrasted conditional to unconditional rewards and found that unconditional rewards are more effective than conditional rewards at fostering brand-self connection, because they increase the salience of communal relationship norms. These findings contribute to the literature on relationship management and self-brand connection and provide practical suggestions for how to design rewards that are effective at nurturing a connection between a brand and its customers.

Partner or Servant? When Relationship Type Affects Trait Expectations and Evaluations of the Brand

EXTENDED ABSTRACT

Marketers often position their brands around distinct social roles (Aaker, Fournier, and Brasel 2004; Aggarwal 2004; Fournier 1998). For instance, Allianz (one of the world's leading financial or-

ganizations) emphasizes its core mission of being a trusted *partner* to its customers whereas Scrubbing Bubbles stresses its role of being a dependable *servant*, as reflected in its advertising taglines “We work hard so you don’t have to”.

Essentially, these two positioning strategies emphasize equality (“brand-as-partner”) and hierarchy (“brand-as-servant”) respectively – two distinct and fundamental social relationships (Fiske 1992) and moral motives (Rai and Fiske 2011). Despite the practical prevalence of these two brand positioning strategies, there is little empirical research investigating the theoretical underpinnings of pursuing these relationship types, and if they might result in different responses from consumers facing positive and negative outcomes. The only prior research that we are aware of that looked at the distinction between partner and servant brands used it as a moderator to test an unrelated hypothesis (Aggarwal and McGill 2012). Drawing on the stereotype content model (Fiske et al. 2002), we posit that much like human relationships, brands’ social roles – partner versus servant – may lead to differential expectations toward the perceived warmth and competence of the brand, which would impact consumers’ brand evaluations.

Research in social relationships suggests that people expect their partners to be warm and caring and be “someone who were always ‘there for you’ when you needed a favor” (Walker 1995). Thus, much like the warmth traits they expect from their close relationship partners in a social context, consumers may expect similarly higher warmth traits from their partner brands relative to servant brands. In contrast, as hierarchies emphasize rank in social groups and consist of roles that imply division of labor, people higher up in the hierarchy expect those below them to follow directions and complete assigned jobs competently (Yukl and Fu 1999). Analogously, in consumer-brand relationships too, we argue that servant brands would be expected to do the job proficiently and hence exhibit more competence than partner brands.

Based on the reasoning above, we propose that relative to servant brands, partner brands are expected to be higher on warmth compared to competence. Drawing on the role congruity theory which suggests that the (mis)fit between the perceived target’s performance and the presumed beliefs or expectations about the social role to which the target belongs could lead to (un)favorable inferences (Eagly and Diekmann 2005), we further propose that consumers would express more favorable attitude for partner (servant) brands that exhibit high level of warmth (competence) – the domain in which the brand is expected to excel. Moreover, they would also express more unfavorable attitude for partner (servant) brands that perform poorly on warmth (competence) traits. Five studies were conducted to test these propositions and underlying mechanisms.

Before commencing a full test of our hypotheses, a pilot study (N=200) was conducted with 20 real brands. The results confirmed a significant relationship between brand role and trait expectations such that consumers tend to associate warmth traits more with partner brands ($r_{\text{partner-warmth}}=.41$ vs. $r_{\text{servant-warmth}}=.28$; $Z=9.08$, $p<.001$), but associate competent traits more with servant brands ($r_{\text{partner-competence}}=.33$ vs. $r_{\text{servant-competence}}=.38$; $Z=3.50$, $p<.05$).

In Experiment 1 (N=96), participants rated a fictitious brand ascribed a partner role as possessing more warm traits ($M_{\text{partner}}=6.96$, $SD=1.42$; $M_{\text{servant}}=6.29$, $SD=1.62$; $F(1, 94)=4.68$, $p<.05$), while they rated the same brand ascribed a servant role as more competent ($M_{\text{partner}}=6.55$, $SD=1.42$; $M_{\text{servant}}=7.10$, $SD=1.25$; $F(1, 94)=4.01$, $p<.05$). Together with the pilot study, results from Experiment 1 suggest that warmth and competence are respectively associated with a partner and servant role that is assigned to brands.

Having demonstrated the association between brand trait and brand role, Experiment 2A (N=210) tested whether consumers polar-

ized their evaluation for partner brand in *warmth* judgment domain while Experiment 2B (N=176) examined the polarizing effect for servant brands in *competence* domain. In Experiment 2A, we first presented an advertisement of a fictitious fitness club ascribing either a partner or a servant role. Subsequently, participants read a scenario describing either positive or negative staff service (rated as the most typical warmth feature through a pre-test) encountered at the fitness center. Finally, participants reported their evaluations of the fitness club. As expected, when the brand warmth was high, participants evaluated the brand more positively if it was positioned as a partner compared to a servant brand ($M_{\text{partner}}=5.88$, $SD=1.55$; $M_{\text{servant}}=5.27$, $SD=1.59$; $F(1, 204)=4.30$, $p<.05$). However, when the brand warmth was low, participants evaluated the brand more negatively when it was positioned as a partner than as a servant brand ($M_{\text{partner}}=3.76$, $SD=1.12$; $M_{\text{servant}}=4.34$, $SD=1.67$; $F(1, 204)=3.93$, $p<.05$). Together, this suggests that consumers’ evaluation toward the partner (vs. servant) brand was more extreme both when exhibiting high and when exhibiting low warmth.

In Experiment 2B we first described a laptop brand as either a partner or a servant to the consumer. Participants then manipulated high and low competence by describing the laptop’s positive or negative functional performance, which resulted in them completing an onerous assignment much faster or slower than expected. As predicted, when the brand competence was high, participants evaluated the brand more favorably if it was positioned as a servant than as a partner ($M_{\text{partner}}=7.30$, $SD=1.60$; $M_{\text{servant}}=8.13$, $SD=1.63$; $F(1, 172)=4.29$, $p<.05$). However, the reverse was true when the brand competence was low ($M_{\text{partner}}=6.07$, $SD=2.08$; $M_{\text{servant}}=5.29$, $SD=2.07$; $F(1, 172)=3.89$, $p=.05$).

Finally, Experiment 3 (N=299) replicated the findings of Experiments 2A and 2B within the same 2 (brand role: partner vs. servant) \times 2 (brand trait: warmth vs. competence) \times 2 (brand performance: positive vs. negative) between-subjects study in a different context (i.e., hotel service evaluation). Furthermore, expectancy violations in “perceived warmth” [95% CI: 1404, .5679] and “perceived competence” [95% CI: -.4931, -.0200] mediated the outcome \times trait interaction effect on evaluation for partner and servant brands respectively.

Taken together, this research reveals the theoretically meaningful role of consumers’ expectation from partner versus servant brands in shaping their brand evaluations, and offers new insights for marketers to manage their brands and its relationship role more effectively.

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Beyond Utility: Psychological Antecedents and Consequences of Considering Present and Future States of Wealth

Chair: Anja Schanbacher, London Business School, UK

Paper #1: The Power to Know What You Have: Feeling Powerful Increases Money Monitoring

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Anne-Kathrin Klesse, Erasmus University Rotterdam, The Netherlands
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Paper #2: Debt Aversion and the Trajectories of Psychological Pain

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Paper #3: How Does Future Income Affect Present Discretionary Spending? The Role of Future Self-Continuity

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David Faro, London Business School, UK
Simona Botti, London Business School, UK

Paper #4: Examination of the Sampling Origin and the Range Hypothesis of Loss Aversion in 50-50 Gamble Settings

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SESSION OVERVIEW

Among different aspects of wellbeing, financial wellbeing tends to be one of the most problematic (Brown and Sharpe, 2014). For this reason, there has been an increasing interest among consumer behavior researchers in examining how financial decision making can improve consumer welfare and life satisfaction (e.g. Dunn, Gilbert, and Wilson, 2011; Fernandes, Lynch, and Netemeyer, 2014; Hershfield, 2011; Sussman and Alter, 2012).

This session examines a particular component of the consumer financial decision making process: The consideration of one's current and (potential) future state of wealth. The four papers demonstrate that considerations of states of wealth have important psychological consequences that go beyond their monetary utility and that can influence choices in the financial domain.

The session examines both psychological antecedents and consequences arising from different ways in which consumers think and feel about their current and future states of wealth. The antecedents include factors that motivate consumers to monitor their money. The consequences include consumers' intentions to take out loans, their likelihood to base present spending on future income expectations, and the propensity to accept risky gambles.

The paper by Garbinsky, Klesse, and Huang examines the effect of a psychological sense of power on money monitoring. They show that power can increase the extent to which consumers monitor their money due to enhanced perceived instrumentality of money.

The paper by Greenberg and Hershfield investigates how the trajectory of anticipated pain associated with taking out a loan affects consumers' likelihood to do so. They find that consumers who expect the psychological pain to increase over time are less likely to take out a loan than those who expect pain to decrease over time.

The paper by Schanbacher, Faro, and Botti examines how consumers' expectations of future income affect present discretionary spending. They find that consumers are less likely to spend at present when expecting an income decrease but are not more likely to spend when expecting an income increase. However, consumers expecting an income increase are more likely to spend when the sense of psychological connectedness to the future self is enhanced.

Finally, the paper by Jung, Critcher, Wong, and Nelson examines how the consideration of different sets of potential gains and losses shapes the subjective valuation of a particular gain or loss. They demonstrate that the range of gain and loss values in recently considered gambles impacts subjective valuation, and thus loss aversion.

This group of papers includes hypothetical studies as well as experiments with consequential behaviors. Questions raised for discussion include: How can the extent to which consumers track their money be increased? When do emotional responses to expected wealth help and when do they hinder consumer wellbeing? And related to that, how can consumers be encouraged to think about potential or expected future states of wealth in a way that fosters welfare enhancing choices? Interest in such questions is expected to connect researchers from diverse areas such as consumer financial decision-making, consumer welfare, affect, and behavioral economics.

The Power to Know What You Have: Feeling Powerful Increases Money Monitoring

EXTENDED ABSTRACT

How much money do you have? According to a recent survey, only half of all Americans would be able to correctly answer this question (Rossman, 2011). Knowledge of how much money one has is needed to avoid overspending. It is surprising that individuals fail to monitor their money considering that simple actions such as checking monthly bank statements, logging into online bank accounts, or counting the money in one's wallet could easily accomplish this task. With numerous vehicles available to help individuals monitor their finances, why are most people failing to do so?

While existing research has predominantly focused on dispositional factors and demographics (Bertrand, Mullainthan, & Shafir, 2006; Chen, 2013; Cole, Paulson, & Shastry, 2014; Vohs & Faber, 2007), we move beyond these stable factors to propose and test a psychological factor that contributes to money monitoring – the feeling of power. The advantage of examining a psychological factor, such as power, is that it is more malleable in nature and thus lends itself more easily to potential intervention strategies.

On the surface, it might appear that power, which leads to increased optimism and greater risk taking (Anderson & Galinsky, 2006), will be associated with decreased money monitoring. We, however, provide empirical evidence that power actually increases money monitoring because it increases the perceived instrumentality of the money one owns. To test our hypotheses, we conducted fifteen studies in total, ten of which yielded significant results consistent with our predictions. Below, we report five studies that best tested the proposed theory, and conclude with a meta-analysis of all studies.

S1: Power and Money Monitoring. The objective of Study 1 was to test whether manipulating how powerful one feels affects money monitoring tendencies. Participants were placed in the *high*

power, low power, or control condition, and expressed money monitoring intentions by indicating their likelihood of engaging in money monitoring behaviors (e.g., organize the money in their wallet). Participants differed in money monitoring tendencies, $F(2, 116) = 3.53$, $p = .033$; those in the high power condition ($M = 5.85$) monitored more than those in the low power ($M = 5.16$), $t(116) = 2.48$, $p = .015$, and control condition ($M = 5.35$), $t(116) = 1.95$, $p = .053$.

S2: Actual Money Monitoring and Financial Accuracy. The primary objective of Study 2 was to explore whether the effect of power on money monitoring intentions that was observed in Study 1 translates to actual money monitoring behavior. The second objective was to demonstrate the importance of engaging in money monitoring behaviors by showing its downstream effects on financial accuracy. Participants were placed in the *high power* or *low power* condition before playing Monopoly. When ready to play, we took a picture of their Monopoly money set-up, and assessed financial accuracy (i.e., “indicate how much money you had”). Those feeling powerful ($M = 6.26$) monitored their money more than those feeling powerless ($M = 5.30$), $t(101) = 2.45$, $p = .016$, as assessed by coders that rated pictures of their money set-ups. This increased monitoring enhanced financial accuracy, $t(102) = 2.251$, $p = .026$.

S3: The Mediating Role of Money Instrumentality. The objective of Study 3 was to shed light on the underlying mechanism of money instrumentality. Participants were placed in the *high power* or *low power* condition before playing Monopoly, and expressed money monitoring intentions (e.g., I would check how many bills I have of each kind). To assess perceived instrumentality, they indicated how many properties, houses, and hotels they thought they could buy. Those feeling powerful thought their money was more instrumental (i.e., they could buy more) than those feeling powerless, $t(99) = 3.431$, $p = .001$. This increase in instrumentality mediated the effect of power on monitoring (95% CI: .1211, .6026).

S4: Unpacking Money Instrumentality. The primary objective of Study 4 was to shed further light on the mechanism of money instrumentality by measuring this variable directly. The second objective was to rule out feelings of responsibility and subjective wealth as alternative explanations. Participants were placed in the *high power* or *low power* condition, and expressed money monitoring intentions. To more realistically assess instrumentality, participants expressed how much they could buy with their own money (e.g., “I can buy a lot with my money.”) We also measured responsibility and subjective wealth as alternative explanations. As predicted, instrumentality (CI = .0359, .4170), rather than responsibility (CI = -.1163, .3048) or subjective wealth (CI = -.3210, .0589), mediated the relationship between power and monitoring.

S5: Manipulating Money Instrumentality. The objective of Study 5 was to provide further evidence for the mechanism by directly manipulating it via a moderation-of-process approach (Spencer, Zang, & Fong, 2005). Focusing only on those feeling powerful, we directly manipulated instrumentality by varying financial feedback that participants received. Those in the *high instrumentality condition* saw a list of six products (product A, product B, etc.) and were told they could afford product A or product B, etc. Those in the *low instrumentality condition* randomly saw one of these six products. Those in the *no feedback condition* did not receive any feedback. Participants differed in money monitoring tendencies, $F(2, 147) = 4.247$, $p = .016$; those in the high instrumentality condition ($M = 5.91$) monitored more than those in the low instrumentality condition ($M = 5.14$), $t(147) = 2.89$, $p = .004$, and those in the no feedback condition ($M = 5.63$) monitored (marginally) more than those in the low instrumentality condition, $t(147) = 1.87$, $p = .064$.

In addition to these studies, a meta-analysis of the fourteen studies that tested the main effect utilizing META XL software (Study 5 was not included because it does not examine the effect of power on money monitoring) confirmed that feeling powerful increased money monitoring relative to feeling powerless, with $d = .35$. Theoretically, our findings add to research on power and financial decision making (e.g., Garbinsky, Klesse, & Aaker, 2014). In addition, our research provides valuable insights for financial institutions: Financial advisors should create an environment that makes customers feel “at power.”

Debt Aversion and the Trajectories of Psychological Pain

EXTENDED ABSTRACT

Although research has supported the claim that consumers are averse to taking on debt (Prelec and Loewenstein 1998), little attention has been given to understanding the reasons why they might do so. When considering taking on debt, people must consider the ways their financial well-being will change (or not) as a result, and these considerations can ultimately influence the choice to take out or avoid debt. The aim of the current investigation is to understand what consumers think about when making this decision. In particular, we explore how projecting psychological pain from taking out a loan or holding on to a loan impacts the tendency to take on debt. Theoretically, if consumers anticipate an especially high level of pain in the near term (i.e., at the time a loan is taken out), they may be deterred from taking out the loan. However, we find that expecting a higher level of pain in the long term (i.e., after holding on to a loan for some time) generates a greater aversion to debt. In some cases, this pattern of projecting future pain could cause consumers to make decisions that fail to serve their long-term financial interests.

Consumers might predict that the pain from a loan is worst at the beginning. Many prefer to delay pain for as long as possible (e.g., Frederick, Loewenstein, & O’Donoghue, 2002), and thus might avoid experiences that they expect will cause them pain sooner rather than later, even if they will adapt it over time (Frederick & Loewenstein, 1999). People might perceive taking out a loan as a painful action since it typically involves immediately realizing a large debt. Findings on future anhedonia suggest that when considering a loan, consumers might expect the pain they will experience will be more salient when taking out the loan (Kassam et al., 2008).

Alternatively, consumers might project that psychological pain grows over a loan’s lifecycle. An affective-forecasting account suggests that when projecting the psychological pain a loan will cause, consumers might overweight future negative emotions they will experience (Wilson & Gilbert, 2003, 2005). In addition, if consumers are pessimistic, they might set low expectations to cope with inherent anxiety about the future (Norem & Cantor, 1986), causing them to believe they will have more negative feelings as time goes on so that the pain does not become debilitating.

As an initial examination (Study 1), we asked a sample of adults to graphically plot “pain” levels over different parts of the lifecycle of a multi-year loan. The two main points in time participants identified as most painful were the latest point in time—one year after the loan was taken out—and the exact time the loan was taken out. Importantly, participants in the former group projected a rising trajectory of pain while those in the latter group projected a declining trajectory.

Study 2 documented that these perceived trajectories of pain have important implications for the decision to take on debt. In Study 2a, participants were shown two graphs depicting the perceived trajectories of pain found in Study 1—one in which pain peaked at the

time the loan was taken out (immediate pain trajectory) and another in which pain reached its peak a year in to the loan (growing pain trajectory). After indicating which graph represented their own perceived trajectory of pain, they were asked to indicate how likely they would be to take out the loan. Participants who chose the growing pain trajectory were more loan averse than those who chose the immediate pain trajectory. Study 2b replicated these findings using a different scale. Study 3 showed that the growing pain trajectory does, in fact, cause loan aversion.

In Study 4, using a task in which participants had to list the first five thoughts that came to mind after focusing on either the immediate pain trajectory or the growing pain trajectory, we found that participants who focused on the immediate pain trajectory had more thoughts related to consumption than those who focused on one year in to a loan and fewer thoughts related to repayment than those who focused on the growing pain trajectory.

Study 5 demonstrated that these thoughts have important relevance to consequential behavior. Compared to those who had not considered a personal loan in the past, those who had thought less about the pain of repayment and more about the consumption the loans could afford them. These findings suggest that perceiving a growing pain trajectory heightens the anticipated pain of repaying the loan (Prelec & Loewenstein, 1998; Rick, Cryder, & Loewenstein, 2008; Soman, 2001).

Across six studies, we showed that consumers view the psychological pain resulting from a loan as following an immediate pain trajectory or a growing pain trajectory. Importantly, the view that the pain follows a growing pain trajectory causes loan aversion, in part because thinking about such a trajectory causes people to focus on the pain of repayment as opposed to the pleasures of consumption. These results provide an account for one way that debt aversion might arise, and suggest that perceived pain trajectories are important determinants of financial decision-making.

How Does Future Income Affect Present Discretionary Spending? The Role of Future Self-Continuity

EXTENDED ABSTRACT

How does future income affect present consumption? Economic theory (Friedman, 1957) posits that consumers maximize utility by anticipating lifetime earnings and spreading them evenly across the lifespan. Consequently, a person who expects her income to increase in the future should increase present consumption and someone who expects income to decrease in the future should reduce it, relative to no income change. However, empirical evidence of such consumption smoothing is inconsistent (e.g. Wilcox, 1989). Explanations for observed lack of consumption smoothing have focused on economic factors, such as liquidity constraints (Wilcox, 1989).

Taking a psychological approach, we propose that future income is more likely to influence present spending on discretionary purchases, such as specialty coffee or a better laptop model, when consumers perceive high future self-continuity – i.e., when they feel that their future self is at core the same person as their present self (Bartels and Urminsky, 2011; Hershfield, 2011; James, 1890). We argue that people tend to perceive higher future self-continuity when expecting an income decrease (vs. increase). This is based on the argument that future self-continuity is enhanced by mental future simulation (Prebble et al., 2013; Tierney et al., 2014), and people are more likely to simulate negative than positive changes (Bilgin, 2012; Dhar and Wertenbroch, 2000). Thus, consumers should reduce spending when expecting an income decrease, but be less likely to boost spending when expecting an income increase. Enhancing the

sense of future self-continuity should attenuate this asymmetry by boosting discretionary spending among consumers expecting an income increase.

Study 1a tested the prediction that discretionary spending is more likely to be affected by future income decreases than by increases. We varied current and future income in a scenario and examined the effect of future income on desire to make discretionary purchases at present. Specifically, participants imagined being a student who either lives on a low income, or receives generous financial support and lives on a high income. Participants further imagined that graduates from their course of study typically earned a high or low income. We found that among participants with high present income, the expectation of a decrease reduced the desire to buy, compared to no change. However, among participants with low present income, desire to buy did not differ between those expecting no change and those expecting an increase.

Study 1b tested the impact of real income increases and decreases in the lab. Ostensibly before the actual study, participants were informed that payment for study participation would be increased, decreased, or remain unchanged in the new budgeting period. Participants then had the option to spend some of their present payment on specialty chocolates. Results show that they were less likely to buy chocolates after learning that payment would decrease in the future than when expecting no change, but were not more likely to buy when expecting payment to increase.

Study 2 tested the proposed process. Starting from their actual current income, participants imagined an increase or decrease in three years, or unchanged income. Participants either read a brief description of their future financial situation (control) or were additionally encouraged to mentally simulate their future with the help of images (simulation). Simulation was intended to increase future self-continuity. Participants then rated their likelihood of making discretionary purchases at present. The control condition replicated the results from Study 1: Compared to no change, consumers were less likely to buy when expecting an income decrease but equally likely to buy when expecting an increase. In the simulation condition, however, expectation of an income decrease lowered, and importantly, expectation of an increase heightened the likelihood of buying.

Study 3 used an identity continuity prime to manipulate self-continuity. Participants completed a task requiring them to focus on either stability or change in identities of brands. This was intended to prime high vs. low self-continuity, as brands are commonly perceived to have human qualities (Aaker, 1997; Van Rekom et al., 2006). In an ostensibly unrelated survey, subjects were then presented with income scenarios and buying opportunities as in Study 1. The low-continuity condition replicated the results from Study 1: among participants with high current income, those expecting a decrease reported lower likelihood of buying than those expecting no change; among participants with low current income, those expecting an increase were equally likely to buy as those expecting no change. In the high-continuity condition, participants with high current income who expected a decrease were again less likely to buy than those expecting no change. Importantly, in support of our predictions, here a future income increase (compared to no change) raised the likelihood of buying when current income was low.

Study 4 manipulated self-continuity directly, and examined natural variation in future income and real choice. Student participants read a passage stating either that individuals' core identity changes (low self-continuity condition) or that it is stable (high self-continuity condition) around university graduation (adapted from Bartels and Urminsky, 2011). Next, participants completed measures of current income and expected income after graduation. Participants then

made hypothetical choices between basic and pricier purchasing options (e.g. basic vs. gourmet meal). In addition, participants were informed that they would be entered into a lottery for a voucher and indicated their preference for a massage (discretionary item) or groceries voucher (necessity). On the hypothetical and the behavioral measure, future income was positively related to the likelihood of choosing the discretionary options in the high, but not in the low self-continuity condition.

Previous research has linked increased future self-continuity to reduced present spending. This research examined direct trade-offs between the present and future (Bartels and Urminsky, 2011; Hershey, 2011). We provide evidence that future self-continuity moderates the impact of future income on present spending. We show that increased future self-continuity can boost present spending in the case of future income increases.

Excessive restriction of indulgent behaviors can have detrimental effects on consumer wellbeing (Kivetz and Keinan, 2006). Our findings suggest that people expecting significant future income increases may excessively restrict present discretionary spending based on low future self-continuity.

Examination of the Sampling Origin and the Range Hypothesis of Loss Aversion in 50-50 Gamble Settings

EXTENDED ABSTRACT

Walasek and Stewart (2015) showed that people were more sensitive to losses over gains when they made choices with a wider range of gains and a narrow range of losses. In particular, typical loss aversion experiments test preference for gambles formed by combining a wide range of gains (widely spaced apart, \$12, \$16, \$20...\$40) with a narrow range of losses (narrow spaced, \$6, \$8, ...\$20) to produce lotteries. Consistent with decision-by-sampling, people are sensitive to the rank of the values given a set sampled from their memory. However, there still remains much ambiguity about how and when these values of varying ranges and increments in people's memory operate to influence the sensitivity to losses over gains. In three studies, adopting the original and modified experimental designs used in Walasek and Stewart (2015), we examined how and when decision-by-sampling operated to influence the sensitivity to losses over gains.

It is possible that the asymmetric spacing of losses and gains in the studies in Walasek and Stewart (2015) led people to be more sensitive to shifts in losses, which looks like loss aversion. In Study 1 we replicated the original findings of Walasek and Stewart (2015) and tested whether the increments of values differentially influenced decisions from the range variation. We used a 2(Big Range: gains or losses) X 2(Interval Equivalence: yes or no) factorial design. The Big Range factor indicates whether gains or losses ranged from \$12 to \$40 (big range). The other outcome always has a small range (\$6 to \$20). The Interval Equivalence factor indicates whether we made the interval between adjacent payoffs equivalent (at \$2) or not equivalent (\$4). Only the main effect of Big Range was significant such that the loss aversion coefficient was greater when gains were shown over a big range, suggesting that the range variation moderated loss aversion regardless of the interval equivalence.

In Study 2 we examined whether it is the mere exposure to the range of values that participants make decisions about or it is the context in which they consider the values that are part of their choices influenced their sensitivity to losses over gains. We varied the gain range from \$6 to \$20 or \$6 to \$32 on number lines, but in one condition with the large range, the values over \$20 were selected to be considered to accept or reject, whereas in another condition with the

same large range, the values over \$20 were never selected but merely presented. Participants were significantly more loss averse when they saw a larger range of gain values *and* those values were selected to be considered than when the values were merely presented on the number line, suggesting that loss aversion was not driven purely by the mere presence of high gain values.

In Study 3 we examined how much people have to "engage with" gain values in order to show a greater relative sensitivity to losses over gains. Participants engaged with higher gain values three different ways: 1) they actively thought about the values—more than just seeing them on a number line—by typing in the selected values. 2) they considered the subjective value of the lottery by indicating how attractive each gamble is. 3) they considered the full question of whether one will accept or reject those lotteries. Participants who indicated the attractiveness of the gambles were more loss averse than those who typed the high gain values. Furthermore, participants were more loss averse when they actually considered accepting or rejecting lotteries than engaging with higher gain values by typing the value or by indicating the attractiveness of the gambles.

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Affective and Contextual Influences on Charitable Behavior

Chairs: Alexander Genevsky, Erasmus University Rotterdam, The Netherlands

Carolyn Yoon, University of Michigan, USA

Paper #1: Request Framing Moderates Affective Preferences in Charitable Giving

Alexander Genevsky, Erasmus University Rotterdam, The Netherlands

Brian Knutson, Stanford University, USA

Carolyn Yoon, University of Michigan, USA

Paper #2: Understanding and Overcoming Overhead Aversion in Charity

Elizabeth Keenan, Harvard Business School, USA

Ayelet Gneezy, UCSD, USA

Paper #3: Voting for Charity: The Benefits for Firms of Direct Consumer Involvement in Charitable Campaigns

Grant Donnelly, Harvard Business School, USA

Duncan Simester, Massachusetts Institute of Technology, USA

Michael Norton, Harvard Business School, USA

Paper #4: Signaling Emotion and Reason in Human Cooperation

Alixandra Barasch, University of Pennsylvania, USA

Emma Levine, University of Pennsylvania, USA

David Rand, Yale University, USA

Jonathan Berman, London Business School, UK

Deborah Small, University of Pennsylvania, USA

SESSION OVERVIEW

Charitable giving and socially responsible initiatives are pervasive across consumer contexts. Research in these areas has explored the affective influences on individual giving decisions (Aknin, Dunn, & Norton, 2012; Genevsky, Vastfjall, Slovic, & Knutson, 2013; Small & Verrochi, 2009), as well as the effects of socially responsible initiatives by firms on consumer responses (Bodur, Gao, & Grohmann, 2014; Torelli, Monga, & Kaikati, 2012). Despite this work, the field is lacking a cohesive framework that connects the affective and contextual factors in prosocial behavior across different levels of analysis.

The four papers in this session incorporate a complimentary set of research questions and methodologies to explore charitable giving at the individual level, as well as with regards to customer engagement with firms. This session will advance our understanding of the roles of affect and context in charitable giving behavior. Specifically, this set of presentations explores questions about charitable behavior that span the consumer-firm relationship. How do features of donation requests interact to influence charitable giving decisions? How do features of the organization affect giving behavior? How can communication of motives and charitable initiatives be optimized to increase giving and improve customer engagement?

The first presentation by Alexander Genevsky, Brian Knutson, and Carolyn Yoon addresses a core question in the study of prosocial behavior: are affective influences on giving absolute, or are they moderated by contextual features? Across six studies they demonstrate that request framing moderates the influence of affective facial expressions on charitable giving. Further, they demonstrate that experienced positive affect of potential donors is the psychological mechanism that underlies this effect. These findings have important implications for the effective crafting of donation requests.

The second presentation by Elizabeth Keenan and Ayelet Gneezy uses a combination of laboratory and field experiments to examine how aversion to overhead costs of charitable organizations

affects donations. They find that overhead costs diminish donations, but the effect disappeared when donors are not responsible for these fees. In a field study, they find that informing donors of a seed grant covering organizational overhead increased subsequent donations. Their findings contribute to our understanding of decision making in the prosocial sector and make practical suggestions for improved solicitation practices.

The third presentation by Grant Donnelly, Duncan Simester, and Michael Norton presents a unique perspective on the effectiveness of firm's social responsibility initiatives. By asking customers for input regarding the recipient of the firm's donations, rather than simply informing them, they find significant increases in both purchasing behavior and membership renewals. These findings highlight the economic benefits of empowering customer roles in firm's socially responsible initiatives.

The final presentation by Alixandra Barasch, Emma Levine, David Rand, Jonathan Berman, and Deborah Small explores the roles of emotion and reasoning in cooperation. Across a series of studies they demonstrate that emotional decisions are correlated with cooperation, and that players are able to accurately identify emotion as associated with cooperative actions. Intriguingly however, they find that emotion is not strategically used to communicate cooperative intent.

All presentations are unpublished work. Presentations 1 and 3 have completed data collection and analysis, and are preparing drafts of working papers. Presentation 2 is a working paper. Presentation 4 has completed data collection and analysis.

Request Framing Moderates Affective Preferences in Charitable Giving

EXTENDED ABSTRACT

Objective

Affective features of requests for charity can influence donor behavior (Genevsky et al., 2013). Affective features are not presented in isolation, however, since they necessarily occur within the context of other features of solicitations. Thus, request framing may moderate the influence of affective features on donor behavior. While some research has investigated the influence of affective features of aid requests (Genevsky et al., 2013; Small & Verrochi, 2009) and message framing (Chang & Lee, 2009) on charitable giving, no work has fully explored the interaction between these factors, or the psychological mechanisms responsible for these relationships.

Studies of predictors of prosocial behavior suggest that emotions might influence giving, but they have now begun to examine the limits of these influences. This research has generated a number of compelling but competing hypotheses. On one hand, some findings suggest that appeals evoking negative emotions (e.g., guilt or distress) may promote charitable behavior (Carlson & Miller, 1987; R B Cialdini et al., 1987; Robert B. Cialdini, Darby, & Vincent, 1973; Small & Verrochi, 2009) negative-state relief, attentional focus, and responsibility/objective self-awareness, are examined in an expanded analysis of published research. For this purpose, judges assessed for each of 85 negative affect conditions the contextual levels of the variables relevant to each theory by reading relevant material that was excerpted from the method section of each article. Higher

order partial correlations were then calculated between each variable and the 85 helpfulness effect sizes. The results are consistent with the attentional focus and the responsibility/objective self-awareness models. Both increased perceptions of responsibility for causing the negative event and attentional focus on another (as opposed to one-self. Alternatively, other evidence indicates that inducing positive affect (e.g., joy or warmth) can promote charitable behavior (Aknin et al., 2012; Andreoni, 1990; Carlson, Charlin, & Miller, 1988; Genevsky et al., 2013).

Drawing from a rich literature on message framing grounded in prospect theory (Kahneman & Tversky, 1979) indicating that framing can influence individual decisions (Chen, Monroe, & Lou, 1998; Heath, Chatterjee, & France, 1995; Levin, 2013; Puto, 1987; Sinha & Smith, 2000), we hypothesize that the framing of donation message may moderate the impact of affective features on charitable giving. In a series of studies utilizing online and in-laboratory samples, and hypothetical as well as incentive compatible paradigms, we investigate whether message request framing moderates the influence of affective facial expressions on charitable giving.

Methods

In six studies, we explored the role of positive and negative affective features, request framing, and their interaction on charitable giving behavior. In all studies, affect was manipulated with respect to the facial expressions of potential donation recipients depicted in images accompanying the aid requests. In study 1, we directly assessed the influence of positive and negative facial expressions on charitable giving as well as the potentially moderating effect of request framing as an opportunity or threat. In studies 2 and 3, we tested the limits of these effects by exploring multiple novel aid scenarios (study 2) and directly manipulating the framing of a single aid scenario (study 3). In study 4, we expanded on the previous binary preference design with a willingness-to-pay assessment of charitable giving. In study 5, we recruited community members to the laboratory and replicated the findings with an incentive-compatible donation task. Finally, in study 6, we directly assessed affective responses in potential donors. We then conducted mediated moderation analyses to assess the ability of experienced affect to account for the influence of affective facial expressions of potential recipients as well as request framing on charitable giving.

Results

In study 1, participants donated more to individuals with happy expressions than sad and neutral expressions. This preference was significantly moderated by the context framing of aid scenarios. Specifically, direct comparison of happy and sad expressions indicated that participants gave more when expressed affect and request framing were congruent. Studies 2 and 3 replicated these findings with a series of threat and opportunity scenarios, as well as by reframing a single aid scenario. These replications suggest that the observed framing moderation generalizes to different scenarios of opportunity versus threat framing.

Study 4, extended the binary choice designs utilized in studies 1, 2, and 3 to a willingness to donate assessment. Request framing again moderated the influence of affective stimuli on charitable giving. Study 5 utilized an incentive compatible donation paradigm and recruited participants to the laboratory to verify further generalizability of these findings. Study 6 included affect ratings, to assess the role of experienced affect as a potential mediator of these effects. Analyses indicated fully mediated moderation, such that the level of positive aroused affect elicited in potential donors across request

framing conditions explained the moderating role of message content on affective stimuli.

Conclusions

In six studies utilizing online and in-laboratory samples, and hypothetical as well as incentive-compatible procedures, we investigated the influence of affective facial expressions of potential recipients and request framing on charitable giving. Across studies, we found reliable interactions of affect and framing, such that framing of requests moderated the influence of affective features on charitable giving. Utilizing a mediated moderation framework, we further identified experienced affect as the psychological mechanism driving the influence of emotional expression and framing on charitable giving. These findings extend previous efforts to understand the factors that influence prosocial behavior by linking affective features and request framing. The findings thus have significant implications for enhancing charitable giving and informing best practices in crafting persuasive messages.

Understanding and Overcoming Overhead Aversion In Charity

EXTENDED ABSTRACT

In this research we explore individuals' aversion to overhead spending and its effect on charitable giving. While concerns about charity overhead spending receive ample media attention, only a handful of studies have looked at the extent to which individuals' behavior is influenced by overhead spending information, and no research has investigated the factors underlying this relationship.

Individuals are averse to overhead such that donations decrease as overhead increases, though only when donors' personal contributions are used (in part) to cover overhead (Gneezy, Keenan, and Gneezy, 2014). Gneezy et al. (2014) suggest that donors are motivated to give based on the impact they feel when they know they are helping the cause directly, rather than when their contribution is used to cover overhead costs. As a result, informing donors that initial large donations have been used to cover overhead costs, making their potential donation "overhead-free", significantly increases giving compared to traditional fundraising techniques (2014). While effective, the "overhead-free" approach simply bypasses individuals' reluctance to donate due to overhead-related concerns rather than targeting the aversion itself. As noted by the authors, "this method could lead to a growing unpopularity of overhead costs among donors, causing a race to the bottom among nonprofit organizations soliciting gifts to cover overhead costs." Charities already struggle to communicate to donors the importance of overhead costs and the overhead-free approach may undermine ongoing communication efforts. Moreover, the approach may not be practical for charities without access to large gifts to cover overhead costs.

The current research aims to gain insight into the mechanisms underlying the relationship between overhead and giving, and to explore ways to overcome overhead aversion more directly. We focus on two fundamental factors that have been previously identified as drivers of giving—to do good and to feel good. Given the aversion donors have for overhead, we propose that if a portion of a donor's gift is used to cover overhead it will interfere with her sense of doing good and feeling good. In particular, individuals may be more likely to feel they have made a positive impact when they know they have helped the cause directly rather than contributed to the salary of a charity's staff member. This reasoning is consistent with the theory of impact philanthropy, which proposes that some donors—the impact philanthropists—are motivated by the opportunity to personally

make a difference (Duncan, 2004). According to this model, the impact philanthropist would prefer to target a specific charitable cause rather than overhead because she perceives that the former is more impactful. Moreover, if her donation is used to cover overhead, not only will she feel less impactful, she may also feel less happy about her donation (Cryder, Loewenstein, & Seltman, 2013). Ultimately, the negative effect of overhead on donors' perceived impact and happiness could lead to a decrease in donations. This suggests that increasing potential donors' sense of impact and resulting happiness, even when part of their donation is allocated to overhead, may mitigate the negative effect of overhead on donations.

In Experiment 1 we explore whether the relationship between overhead and donations is mediated by the perceived impact of one's own donation and the positive emotions associated with giving. Participants ($N=602$) read one of five descriptions of a hypothetical charity in which the overhead level varied: low (5%), moderate (25%), high (55%), plus two control conditions. Participants were then asked: (1) how much they would like to donate to the charity (from \$0 to \$25), (2) "To what extent do you believe your donation will make a positive difference?", and (3) "How happy do you feel about your donation?" (2 and 3 were answered on a 7-pt scale).

As expected, donations decreased as overhead increased. Participants in the 5% overhead condition donated significantly more ($M_5=10.61$) than participants in both the 25% ($M_{25}=8.63$; $p=.04$) and 55% ($M_{55}=7.15$; $p<.01$) overhead conditions. Similar to the donation results, there was a negative effect of increasing overhead level on participants' reported sense of impact and happiness. We evaluated perceived impact and happiness sequentially as mediators and found that they mediate the relationship between overhead level and donation amount (indirect effect = $-.01$, $SE = .0028$; 95% CI $[-0.0151, -0.0039]$) such that the higher the overhead level, the lower the perceived impact and happiness one experiences, which negatively impacts donations.

In an effort to mitigate the effect of overhead, in Experiment 2 we provided potential donors with additional information that highlights the importance of overhead with emphasis on the ways that overhead is meaningful and significant (i.e., impactful). In a 2x2 between-subjects design, participants ($N=601$) were randomly assigned to read a description of a hypothetical charity that had low (5%) or high (55%) overhead and did or did not include the following statement: "Most donors prefer for their donations to be used directly on programming costs. What these individuals do not understand, however, is that in order for a charity to successfully fulfill its mission it must also incur administrative and fundraising costs, making donations spent on overhead also meaningful and significant." Two controls conditions were also used in which the overhead level was not specified. Participants were then asked how much they would like to donate to the charity (from \$0 to \$25).

As in Experiment 1, donations decreased as overhead increased. Participants in the 55% overhead condition donated significantly less ($M_{55}=7.36$) than participants in both the 5% ($M_5=9.90$; $p=.01$) and 5% with impact statement ($M_{5Impact}=9.94$; $p<.01$) conditions. Yet, when the impact statement was included in the 55% overhead condition, the differences were not significant ($M_{55Impact}=8.48$ vs. $M_{5Impact}=9.94$ and $M_{5Impact}=9.94$, ns). This distinction between conditions suggests that reading a statement about the impact of overhead increased donations despite high overhead and provides some preliminary evidence that highlighting the meaning and significance of overhead can help donors overcome overhead aversion.

Additional lab and field studies are currently underway to build on the above findings and identify effective methods for overcoming

donors' overhead aversion and, ultimately, to increase donations in real world contexts.

Voting for Charity: The Benefits for Firms of Direct Consumer Involvement in Charitable Campaigns

EXTENDED ABSTRACT

Recently, a new form of corporate social responsibility has emerged, which invites the customer to select the cause they wish to support through the purchasing of a specific item (Robinson, Irmak & Jayachandran, 2012). While research has evaluated consumer impressions to voting empowerment in corporate social responsibility activities (Robinson, Irmak & Jayachandran, 2012), we evaluate such empowerment in 'pure' donations and the resulting financial decisions of voting and non-voting consumers. Across two field studies at multiple store locations of a large grocery retailer, we give some consumers the opportunity to vote for the cause that the firm will support, while others are merely informed of the firm's charitable actions. Consumers given the opportunity to "vote for charity" upon entering a retailer exhibited increased purchasing and membership renewals during in-store visits.

Study 1 was designed to investigate whether inviting customers to participate in a firm's corporate giving program affects the customer's subsequent purchasing behavior. The study was conducted with the cooperation of a large retailer similar to Costco. This first field experiment was conducted over 10 weekdays at one of this retailer's New England stores. Two research assistants were positioned at the front entrance of the store and intercepted customers as they entered the store. They implemented two experimental conditions. In the "voting" condition, the assistants gave the customers a 1-page description of three local charitable organizations, stating that this store planned to give a total of \$4,500 that month to these charities. Customers were asked to help the retailer decide which charity should receive the largest grant. The charity that received the most customer votes would receive a \$2,500 grant, while the other two charities would receive a \$1,000 grant.

In the second treatment, the "information" condition, the assistants gave the customers the same 1-page description. However, they did not ask them to vote on which charity should receive the grants. The information condition was designed to serve as a control condition. It controls for the possibility that merely providing information about the retailer's charitable giving could influence customer behavior.

The days were divided into two day-parts: mornings (9am – 1pm) and afternoons (2pm – 6pm) and the experimental treatments were rotated between these day parts across the 10 test days. We received transaction data that included a time stamp and we used this time stamp to match the transactions to the treatments. In particular, for the morning day-part we used transactions between 9am (the retailer opened at 9am each morning) and 1:15pm. For the afternoon day-part, we used transactions between 2:30pm and 6:15pm.

Across the 10 days we observed 5,010 baskets in the information condition and 5,048 baskets in the voting condition. In our initial analysis we measured basket size using dollar revenue, with a log transformation to control for outliers. The average log revenue in the voting condition is 4.02, compared to 3.98 in the information condition. The difference between these averages is significant ($p < 0.05$, $t = 1.99$). The use of the log transformation means that the exponent of the difference between the two conditions reveals the % difference in the basket sizes. Giving customers a choice about which charity would receive the next grant increased their average basket sizes by

4.2%. The median basket size is \$248, and so this translates to a \$10.41 increase in the average basket size.

In our next analysis we investigate whether the voting treatment had a stronger impact on purchases of items associated with pro-social behaviors. To identify these items a research assistant visited one of the retailer's stores and identified products with 15 different packaging labels. The findings reveal that items with pro-social labels on their packaging contributed a significantly higher proportion of units in the voting condition (than in the information condition). Allowing customers to vote on the next recipient of a charitable gift increased their purchases of pro-social items. The effect was strongest for the "Charitable or Ecological" and "Organic" pro-social labels.

We conducted a second study to evaluate the impact of voting on membership decisions. This field experiment was conducted over three weekends in four New England stores of the same retailer that participated in Study 1. At the time of the study the retailer was conducting a promotional campaign encouraging new members to visit the store for a 2-month trial membership. When a prospective customer visits the store to enact a trial membership, the customer service representative asks the customer if they would like to upgrade to a full membership. The focus of this study is investigating whether prospective members are more likely to upgrade in the voting condition than in the information condition.

All membership enquiries are processed at a membership service desk at the front of the store. The treatments were implemented by positioning an assistant near this desk. The assistants intercepted customers as they approached the line. They then implemented the same voting and information treatments that were used in the first study. The three charitable organizations were different at each store and were local to each store. The total donation in this study was \$5,000 for each store, distributed as \$3,000 to the charity receiving the most votes, and \$1,000 to each of the other two charities.

In this second study, the treatments were rotated between successive customers. To match the treatments with the outcomes, the customers took their survey and voting forms (for those that voted) to the membership desk. After completing the transaction, the membership service representative then marked the form to indicate why the customer visited and the outcome of the transaction.

The voting condition had a positive impact on the proportion of new members that chose upgraded memberships. In the information condition, 30.6% of the new members chose the regular or rewards membership. In the voting condition, 55.0% converted to the regular or rewards membership. This difference in the conversion rate (55.0% versus 30.6%) is statistically significant $p < 0.01$. Increasing the conversion rate by even a small percentage has the potential to create tremendous economic benefits for this retailer.

Signaling Emotion and Reason in Human Cooperation

EXTENDED ABSTRACT

Consumers are often faced with decisions to cooperate or to act selfishly. While cooperation is essential to social life, it can be threatened by beliefs about whether others will cooperate or pursue their own self-interest. Therefore, it is important to understand why people choose to cooperate and how they infer that others are cooperative. One important factor for both decision-making and signaling cooperation is whether a person relies on emotion or reason when making decisions.

Past theoretical and empirical scholarship provides mixed evidence about whether reason or emotion promotes social good. On one hand, utilitarian philosophy argues that relying on reason pro-

duces the greatest social good (Baron 1993; Bentham 1843/1948; Singer 2009). However, recent empirical evidence suggests the opposite: deliberation leads to lower rates of cooperation in economic games (Rand, Green, and Nowak 2012) and calculative mindsets increase selfishness (Wang, Zhong, and Murnighan 2014).

Emotion has also been characterized as both generous and selfish. Feelings of sympathy and empathy inspire prosocial deeds (Batson 1990; Loewenstein and Small 2007) and yet, it is often argued that feelings represent impure altruism. For example, individuals often feel good as a result of helping others, leading scholars to question whether individuals are motivated by their selfish desire to feel happy (Andreoni 1990).

Recent research on the lay theories behind this association finds that emotion is seen as a positive signal of moral character (Barasch et al., 2014). Individuals who experience emotion towards a cause, or who feel happy as a result of supporting a cause, are seen as more moral than individuals who lack emotion. This is because emotion is perceived to be an untainted signal of individuals' pure intentions to help others.

We build on these findings and explore whether emotion can signal cooperation and, in turn, promote cooperative decisions from others. We contrast emotion- and reason-based decisions and explore four fundamental questions. First, we examine the actual association between decision modes (relying on emotion versus reason) and cooperation (RQ1). Second, we examine lay theories regarding this relationship – whether people have correct or incorrect beliefs about the frequency of cooperation among emotional and rational actors (RQ2). Third, we examine how individuals respond to others who signal emotion and reason in cooperative contexts (RQ3). Fourth, we test whether people will strategically signal their decision mode in these contexts (RQ4). We examine these questions in a series of sequential dyadic prisoners' dilemma (PD) games in which players can send and receive signals about whether emotion or reason guided their decisions.

In **Study 1** ($N = 498$), Player A in the PD made a decision (cooperate or defect), and then reported whether they made their decision using emotion or reason. Player As who made a decision using emotion were more likely to cooperate (64%) than those who made a decision using reason (27%; $\chi^2 = 21.00, p < .01$; RQ1).

Player B subsequently learned whether his partner made his decision using emotion or reason, though Player Bs never learned their partner's actual decision (cooperate or defect). Player Bs who learned that their partner made a PD decision using emotion were more likely to predict that their partner cooperated (62% vs. 25%; $\chi^2 = 28.40, p < .01$; RQ2) and were more likely to respond with cooperation (36% vs. 19%; $\chi^2 = 7.46, p < .01$; RQ3). This suggests that participants use their partner's emotional cue not just in understanding how they make their decision, but also in deciding how they will respond to their partner.

The findings above are robust across different measures of emotion and reason. For example, we found the same pattern of results when we used a continuous measure to depict the degree to which Player A relied on emotion versus reason. We also found that there is no additional effect of decision mode once cooperative behavior is known.

In **Study 2** ($N = 477$), we sought to explore the discrete emotions that players feel and that observers perceive in cooperative contexts. We found that both players and observers associate emotional decision-making with more positive, other-focused emotions (e.g., empathy, sympathy; $F(1,473) = 60.78, p < .01$) and more negative, self-focused emotions (e.g., fear, guilt; $F(1,473) = 23.45, p < .01$) than reason-based decision-making. Nonetheless, observers still be-

lieved that players who made decisions based on emotion were more likely to cooperate than those who made decisions based on reason (64% vs. 24%; $\chi^2 = 35.25, p < .01$; RQ2). As in Study 1, this belief was correct: players who made their decision using emotion were more likely to cooperate (65% vs. 23%; $\chi^2 = 30.41, p < .001$; RQ1).

In our final three studies, we explored whether or not decision-makers strategically signal emotion in cooperative contexts in order to induce their partners to cooperate and thus maximize their own payoffs (RQ4). Across all three studies, we replicated the result that emotional decision-makers are more likely to cooperate. However, we found no evidence that individuals strategically signal emotion to their partners. Individuals were no more likely to report that they made their decision emotionally when they were told their decision mode will be shared with their partner (**Study 3**, $N = 470$; 24% vs. 22% reported emotion as their decision mode; $\chi^2 = .10, p = .75$) or when they could choose whether to share it with their partner (**Study 4**, $N = 186$; 48% vs. 52% reported emotion as their decision mode; $\chi^2 = .06, p = .81$). Additionally, emotional decision-makers did not disproportionately choose to send this information to their partners (**Study 5**, $N = 590$; $B = .32, SE = .48, p = .51$).

Taken together, we demonstrate that emotion *is* and *is perceived to be* a signal of cooperation, but that decision-makers are not strategic about signaling emotion. This research provides basic insight into the nature of human cooperation and ultimately identifies ways that individuals can improve joint decision-making in cooperative contexts.

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Thought You Had It All Figured Out? Look at Children's Consumer Behavior and Think Again

Chair: Tina Lowrey, HEC Paris, France

Paper #1: Offline Friendships Affect Facebook Activity and Teens' Theory of Mind

Elodie Gentina, Université de Lille 2, France

Paper #2: Ownership Shapes Children's Judgments about Material Goods

Ori Friedman, University of Waterloo, Canada
Madison Pesowski, University of Waterloo, Canada

Paper #3: Signaling Versus Accumulating Wealth: For Children, Refraining from Spending Implies Poverty

Heather Kappes, London School of Economics and Political Science, UK

Paper #4: How Do Children Derive Happiness from Past Experiences? Developmental, Experimental, and Longitudinal Evidence

Lan Chaplin, University of Illinois at Chicago, USA
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SESSION OVERVIEW

The goal of this session is to motivate consumer researchers to incorporate more studies with children into some of their work to develop a fuller understanding of the phenomenon they are studying. Why? When most consumer researchers conclude something about "consumers," what they really mean, is "adult consumers" (and not much, if anything, can be said about the 2.4 billion consumers in the world who are under the age of 18 (U.S. Census Bureau 2014).

We need more research with children for a number of reasons: 1) The consumption landscape has changed dramatically in the last decade, with social media penetrating every aspect of children's lives, from how they shop to how they interact with others. 2) Children lack the social-cognitive sophistication, as well as the experience with products, brands, and spending that adults have, which may (or may not) lead them to behave similarly to adults. 3) Studying children would allow researchers to understand how early certain consumer phenomena emerge and any age-related changes in the phenomena.

This session includes four papers, each offering either a novel approach to a research question or surprising findings. In **Paper #1**, Gentina brings old school, forgotten "offline" friendships back into the socialization discussion to better understand the trend of developing "online" friendships. In **Paper #2**, Friedman and Pesowski report results of four experiments with 3-5 year-olds that show that ownership is central in even young children's reasoning about material goods. In **Paper #3**, Kappes shows that surprisingly similar to adults, four year-olds—who lack knowledge of and experience with money (Webley 2005)—perceive spending as a signal of wealth. Finally, in **Paper #4**, Chaplin et al. report results of six studies with 3-17 year-olds and identify an exception to the accumulating body of evidence that "experiences are preferred over material objects."

Altogether, this session will report findings from twelve studies (correlational, experimental, longitudinal) with children ages 3-17. The four papers use a variety of methodological approaches, and present often surprising results (especially when compared to

results based on adults-only research). The topic, overall, should be of interest to those doing research with children, as well as to scholars who study materialism and experiential consumption. Together, the papers contribute to consumer behavior, in that most challenge "common-sense" beliefs about consumption and findings based on adult participants. The papers offer a very cohesive and synergistic view of how children's developmental stages impact their consumption behaviors, but each paper offers novel insights. For all of the papers, data collection is complete, and analysis is ongoing, but preliminary results for each paper already contribute significantly to the field. We expect the session to generate intense discussions (possibly debates) as well as raise at least two questions for future research: 1. When will children's lack of social-cognitive sophistication, and experience with products, brands, and money lead them to behave similarly to (differently from) adults? 2. In general, how can testing children help consumer researchers develop a fuller understanding of consumer phenomena?

Offline Friendships Affect Facebook Activity and Teens' Theory of Mind

EXTENDED ABSTRACT

Facebook has revolutionized day-to-day social interactions (Subrahmanyam and Lin 2007), making it an integral part of adolescents' lives. It is estimated that 92% of adolescent social media users have a Facebook profile and go online daily (Pew 2015). With many adolescents active on Facebook, we investigated how quality versus quantity of offline (non-computer-mediated) friendships might impact the degree to which adolescents are active on Facebook, and how degree of Facebook activity affects adolescents' theory of mind (ToM), the ability to understand others' mental states and predict their behavior (Begeer et al. 2010).

Some researchers suggest that the use of Facebook increases relationship closeness and connectedness with friends (Ellison et al. 2007). Others have found that Facebook deteriorates the quality of social bonds (Hei-Man 2008). We look to offline friendships to shed more light on Facebook friendships. Specifically, we examined how quantity vs. quality of adolescents' offline friendships affects their activity level on Facebook, and how this in turn, affects their interpersonal social skills, namely ToM.

We tested an integrative model with two independent variables – 1) offline friendship quality (measured using self-reports of peer support and loneliness), 2) offline friendship quantity (measured using peer-and-self-reports of adolescents' social integration within a classroom setting). Friendship quality refers to the degree to which relationships are meaningful within a social network (degree centrality) regardless of quantity (number of offline friends). Quantity of friendships refers to the size of participants' offline social network regardless of the quality—the larger the network the more direct connections to others. Our model also included frequency of Facebook activity (making connections, posting selfies, and posting comments). and ToM.

Hypotheses

How do offline friendships affect the frequency with which adolescents use Facebook? The answer is unclear. Having fewer offline friendships may lead adolescents to use Facebook more to fill

a void in their offline social networks. However, offline friendships can be effective in cultivating quality relationships. Keller and Fay (2012) have shown that individuals prefer face-to-face interactions (offline friendships) over Facebook to keep in touch with others. We predicted:

Hypothesis 1 Offline friendship quantity is positively related to the frequency of Facebook activity

Hypothesis 2 Offline friendship quality is negatively related to the frequency of Facebook activity.

How do offline and online friendships influence ToM development? Little is known about the relationship between ToM, exposure to media, and information sharing among adolescents. Nathanson et al. (2013) emphasized that exposure to media such as television is not enough to affect ToM. Instead, for ToM to develop, children must experience an “exchange and negotiation of thoughts and ideas” (Nathanson et al. 2013, p. 1102). Because Facebook provides a place for these conversations and exchanges of content to take place, we predicted:

Hypothesis 3 Frequency of Facebook activity is positively related to adolescents' ToM.

Adolescents with quality relationships may prefer offline friendships over Facebook to communicate with friends (Keller and Fay 2012), and maintain networks of strong and meaningful relationships (regardless of the quantity) that provide them social support and a sense of belonging (Podolny and Baron 1997), resulting in low levels of loneliness (Baumeister and Leary 1995). Thus, we hypothesize:

Hypothesis 4 Online friendship quantity is positively related to the frequency of Facebook activity, which in turn is positively related to ToM.

Hypothesis 5 Offline friendship quality is negatively related to the frequency of Facebook activity, which in turn is positively related to ToM.

Method

The survey was administered in the classroom, a suitable environment to identify adolescents' social positions (Gentina and Bonsu 2013). A questionnaire was distributed to 647 adolescents across 28 classrooms. This sample was then randomly divided into two sub-samples. The first sample ($N_1 = 238$) served to validate the measurement scales. The second sample ($N_2 = 409$) was used to test the proposed model. It encompassed 17 classrooms (public and private schools), and consisted of 419 students: 65 thirteen-fourteen year-olds, 200 fifteen-sixteen year-olds, and 144 seventeen-eighteen year-olds.

To measure offline friendship quantity, we measured adolescent's social integration within the social network using peer and self reports. To measure offline friendship quality, we used Chaplin and John's (2010) peer support scale and Peplau and Cutrona's (1980) revised UCLA Loneliness scale.

Frequency of Facebook activity (making connections, posting comments and posting selfies) was measured using a frequency scale

(1 = never, 5 = always). ToM was measured using the general ToM scale (Dietvorst et al. 2009), a false belief task (Birch and Bloom 2007) and the eye-test (Baron-Cohen et al. 2001).

Results

Confirmatory factor analyses on the first sample ($N_1=238$) showed good fit statistics ($\chi^2 = 216.242$, RMSEA = 0.055, GFI = 0.907, CFI = 0.900, adjusted $c^2 = 1.716$). The composite reliability coefficients were acceptable (Jöreskog $\rho\hat{h} > .704$); convergent and discriminant validity tests were also conducted and results were acceptable.

Structural equation modeling (SEM) based on maximum likelihood estimation was used to estimate the conceptual model ($n_2 = 409$). The fit of the full model was good (RMSEA = .017; $X^2/df = 1.117$; GFI = .985; CFI = .990, and square SRMR = .041).

Results indicated that offline friendship quantity (quality) is positively (negatively) associated with how active adolescents are on Facebook. Additionally, the frequency of Facebook activity mediated the relationship between offline friendship quantity and ToM, as well as the relationship between offline friendship quality and ToM. Findings from this research underscore both the importance of offline friendships and the benefits of online social networks in the development of adolescents' ToM.

Ownership Shapes Children's Judgments about Material Goods

EXTENDED ABSTRACT

Ownership is a major influence on how people think and feel about material goods, and how they use them. For instance, people value and prefer their own goods over non-owned goods (Beggan 1992; Kahneman, Knetsch, and Thaler 1991; Morewedge, Shu, Gilbert, and Wilson 2009); ownership impacts people's memory for objects (e.g., Coventry, Griffiths, and Hamilton 2014; Cunningham, Turk, Macdonald, and Macrae 2008; DeScioli, Rosa, and Gutches 2015); and ownership even influences how people physically handle objects (e.g., Constable, Kritikos, and Bayliss 2011).

An increasingly influential view of ownership draws a distinction between “psychological” and “legal” aspects of ownership (e.g., Pierce, Kostova, and Dirks 2001, 2003; Peck and Shu 2009). For instance, people can feel ownership over material goods that are not actually theirs, and can also feel little or no ownership over goods that do belong to them. That is, feelings of ownership (i.e., “psychological” ownership) are not always aligned with ownership status (i.e., “legal” ownership).

However, there are reasons to think that “legal” aspects of ownership are not strictly legal, and are themselves psychological. One reason to believe this is that people regularly make a variety of judgments about the ownership status of material resources, even though they have no legal training, and even though their judgments do not always align with legal rulings and precedent (e.g., DeScioli and Karpoff 2015; Friedman 2010). In fact, such judgments and effects of ownership status are already evident in toddlers and preschool-aged children. Young children's judgments not only lack familiarity with the law, but their judgments about the ownership of material goods may sometimes be at odds with adult input or intuitions (e.g., Kanngiesser, Gjersoe, and Hood 2010; Neary and Friedman 2014; Ross 1996). For instance, young children often uphold ownership rights in instances where adults' give priority to other principles entitling people to use material goods. As such, young children's sensitivity to the ownership status of material goods suggests that ownership status is itself psychological (rather than legal), and like-

wise that there is more to psychological ownership than feelings of ownership over goods.

Present Experiments

We review four experiments showing that ownership status shapes young children's judgments about particular material goods. We show that ownership affects these judgments even when owned goods are physically identical with other available goods (also see Gelman, Manczak and Noles 2012; Gelman, Manczak, Was, and Noles 2016; Gelman, Noles, and Stilwell 2014), or when they are inferior to other available goods. We also show that ownership affects judgments that are fundamental to children's social functioning: The first two experiments examine children's judgments regarding how people *should* behave, and the second two examine children's predictions about how they *will* behave.

First, we will present two experiments showing that ownership status affects children's judgments about how people should behave in relation to physically identical material goods. For instance, in one study, children were shown vignettes in which a girl and boy had identical balloons. The boy took the girl's balloon, and then one of the balloons happened to pop. When children were asked whether the girl could take the remaining balloon, their answers depended on whose it was. When the boy's balloon popped, and the one belonging to the girl remained, children said she could take it back. However, when the girl's balloon popped, children said the girl should not take the boy's balloon. In other words, they upheld his ownership rights, even though the two balloons were identical, and even though the boy's actions essentially deprived the girl of her property. These findings show that ownership status is a powerful factor in children's reasoning about how people ought to behave, and also that pre-schoolers view owned objects as non-fungible.

The next two experiments show that children, aged three to five years, also use ownership status to predict people's behavior. In these experiments, children were shown vignettes in which a character stood between two objects. Children were then told about the ownership status of the objects, and asked which object the person would use or take. For instance, in one vignette, a girl was shown standing between two wagons, one of which was more attractive than the other. Children were told that the less attractive wagon belonged to the girl, and that the more attractive one belonged to someone else. Children were then either asked to predict which wagon the girl would take home, or to judge which one she liked more. We found that children indicated the wagon belonging to the girl more when predicting which one she would take than when asked about liking, and that this difference increased with age. These findings are noteworthy because they show that ownership influences children's judgments even when consideration of material goods should lead to opposite judgments—we normally expect people to use superior material goods.

Summary

In sum, we show that from early in development, ownership status plays an important role in assessments and predictions of others' behavior. The "legal" aspect of ownership is crucial for basic psychological judgments from early childhood.

Signaling Versus Accumulating Wealth: For Children, Refraining from Spending Implies Poverty

EXTENDED ABSTRACT

Consumer economists (e.g., Lea, Webley, and Young 1992) point out that "savings = income – spending." Holding income

constant, lowering spending increases savings, and thereby builds wealth. In fact, wealth accumulation often relies on refraining from spending (Stanley and Danko 1996). Although individuals who refrain from spending may be wealthier than their counterparts who spend money in similar situations, these individuals may not be perceived that way. Indeed, the vast literature on signaling status via consumption indicates that spending money often succeeds in conveying impressions of wealth. Thus, refraining from spending may be interpreted as a signal of relative poverty rather than wealth. This research examines whether children (who lack knowledge and experience with money), also use spending as signal of perceived wealth.

Even young children (ages 3-10) associate groups of people with different levels of wealth (Olson, Shutts, Kinzler, and Weisman 2012), and are able to tell based on appearance whether someone is poor (Ramsey 1991). Marketers use status-based appeals to attract children, and children are sensitive to status symbols (Schor 2004). However, it is unclear how refraining from spending affects perceived wealth for children, and whether the effects of spending versus refraining on perceived wealth might vary across ages. The present research investigates these questions.

Method

To test how children perceive refraining from spending, participants ages 4-12 ($N = 75$) were presented with a short scenario describing a target child, "Casey," visiting a store with her (his) friends. Casey's gender was matched to the participant's gender.

Design

The scenarios were varied in a between-subjects experimental design such that children read about Casey visiting a candy store or a bookstore, and either buying something or refraining from buying.

Measures

As a manipulation check, participants were asked whether Casey had bought anything at the store; those who answered incorrectly ($N = 21$, 14.6%) were excluded from the analyses below. Thereafter, children were asked to judge Casey's wealth on 7-point scales, with the questions "Do you think Casey has a lot of money?" (reversed) and "How poor do you think Casey is?" These items were combined into an index of perceived wealth. Children answered an open-ended question about why they thought Casey bought/did not buy candy/a book.

Results and Discussion

Wealth

Children who learned that Casey refrained from buying candy or a book judged Casey to be less wealthy ($M = 4.50$) than children who learned that Casey bought something ($M = 3.86$), $F(1, 54) = 5.33$, $p = .025$, $\eta^2_{\text{partial}} = .09$.

In response to the open-ended question about why Casey bought/did not buy candy/a book, more than half of the explanations for why Casey refrained from buying (58%) spontaneously referred to money, whereas none of those for why Casey bought something did so, $\chi^2(1) = 22.73$, $p < .001$. Children who spontaneously referred to money in their explanation for why Casey refrained from buying were older than those who did not refer to money, $t(29) = 2.92$, $p = .007$ (8.39 years versus 6.15 years old).

Moreover, tests of interaction effects between participant age and target behavior (spend versus refrain from spending) on the target's perceived wealth suggested that older children were less likely to take refraining from spending as an indicator of poverty.

Summary

This research finds that children as young as four years-old perceive spending as a signal of wealth. As children age—and acquire more experience with and knowledge about money (Webley 2005)—they may come to understand that refraining from spending is a way to acquire wealth rather than an indicator of less wealth.

How Do Children Derive Happiness from Past Experiences? Developmental, Experimental, and Longitudinal Evidence

EXTENDED ABSTRACT

People evaluate experiential purchases more favorably and are happier after recalling an experiential purchase compared to material purchases (Van Boven 2005; Van Boven and Gilovich 2003). Many experiences are inherently social (Caprariello and Reis 2013), which may make experiences more likely than objects to foster strong social relationships, which are crucial to happiness and well-being (Diener and Seligman 2004; Howell and Hill 2009).

To enjoy past experiences, people must be able to recall them, which relies on memory processes. Enjoyment of past experiences might also rely on an understanding their social significance. To understand experiences' role in terms of social relationships, people can make use of others' feelings and perspectives, which relies on theory of mind. Although memory and theory of mind skills often are taken for granted in adults, children are deficient in these cognitive skills and develop them as they grow older. Memory development helps children recall details of experiences (which otherwise can be difficult given their intangible nature), and theory of mind development helps children make sense of their social world and the actors in it. Both skills should help children enjoy experiences.

If these cognitive capabilities are necessary for the full enjoyment of experiences, then it is likely that children may not derive that much happiness from past experiences, especially at young ages. However, as children age and become more cognitively advanced, they may become able to derive happiness from past experiences, and eventually, should eventually surpass objects in the happiness they give.

Present Research

Across six studies with over 400 children and adolescents ages 3-17, we show that children ages 3-12 derive more happiness from objects than from experiences. As children age, the happiness they derive from experiences increases, to the point that older adolescents derive more happiness from experiences than from objects.

Study 1 (N=242) used a longitudinal design spanning a two-year interval to achieve two aims. The central aim was to test the development of happiness from past experiences. The second aim was to test whether memory improvements boost theory of mind, which in turn boosts retrospective happiness from experiences. To measure happiness with experiences, we used a collage methodology because it is able to capture the variables of interest and was suitable for our participants' wide age range of 3 to 17 years old (Chaplin and John 2005, Chaplin and Lowrey 2010). Children created a collage using images of experiences and objects in order to answer the question, "What makes you happy?" We measured memory (recall and recognition) and theory of mind (false beliefs) using standard tasks.

Study 1 revealed that over the course of 2 years, children's memory improved as well as their theory of mind. Memory scores positively predicted theory of mind scores at both T1 and T2. Not only did theory of mind scores positively predict the proportion of happiness collages that were made up of experiences at both times,

but the effect also significantly increased as children mature. Finally, over the course of 2 years, the proportion of happiness collages that were made up of experiences also increased (see Appendix B).

Study 2 starts off a chain of experiments with 3-5 year-olds to enhance the happiness that experiences can provide. Studies 2 (N=40) and 3 (N=35) used two different memory interventions to assess whether it improved happiness from experiences. If being able to remember an experience is a key component of being able to derive happiness from experiences that have long since passed, then experimentally boosting memory should increase happiness from a past experience. We tested this proposition by experimentally manipulating memory for an experience in 3-5 year old children and measuring their happiness from that experience two weeks later. The experience was an initial interview with the experimenter. Studies 2 and 3 demonstrated that increasing children's memory for an experience increased their retrospective evaluation of the experience. These results replicated that of Study 1's longitudinal findings.

Study 4 (N= 38) moved to testing theory of mind. Study 4 made use of a manipulation aimed at improving understanding of people's inner mental worlds among children ages 3-5. The intervention took place over two weeks, and manipulation checks confirmed that it worked as intended. The children who were randomly assigned to receive a theory of mind intervention (training to understand the mental states of others) were subsequently more skilled at theory of mind tasks than a neutral condition that received numerical training.

Results showed that children in the theory of mind condition reported being happier than children in the neutral condition when recalling the initial study experience. Additionally, from a within-subjects perspective, children in the theory of mind condition were happier at time 2 than they were at time 1, whereas no change in happiness occurred among children in the numerical-boost condition. These results showed that theory of mind is needed to derive happiness from experiences, with this experiment showing its causal role.

Study 5 (N= 68) replicated and extended findings from Studies 1-4 by using an experiment to confirm the mediating role of theory of mind on the relationship between memory and happiness derived from experiences. These results show that being able to remember experiences is a key reason why experiences bring pleasure. However, having a good memory is not sufficient. Children must also develop good theory of mind, and remember the social aspects of experiences, to fully appreciate them.

This study further demonstrated that giving children a salient reminder of an experience can increase the pleasure they derive from that experience. What kind of salient reminders result in the greatest pleasure? Reminders about the social aspects of the experience result in more happiness than reminders of non-social aspects or no salient reminders at all. These results provide causal evidence of the link between memory, theory of mind, and happiness derived from experiences.

Deriving more happiness from experiences than from objects is a developmental process that unfolds overtime. Having good memory and a mature theory of mind set the stage for children to fully appreciate the benefits of experiences.

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When Consumer Multitasking Emerges and How It Reshapes Consumer Behavior

Chair: Christilene du Plessis, Rotterdam School of Management, The Netherlands

Paper #1: Juggling When Low in Control: The Effect of Control on Choice to Multitask

Jerry Han, University of Texas at Austin, USA
Susan Broniarczyk, University of Texas at Austin, USA

Paper #2: Drawing Conclusions While Multitasking: Distracting Background Ads Cue Consumers to Infer Product Interest Through Metacognitive Inferences

Daniel M. Zane, Ohio State University, USA
Robert W. Smith, Ohio State University, USA
Rebecca Walker Reczek, Ohio State University, USA

Paper #3: How Multitasking Influences Consumer Learning of Brand Associations

Christilene du Plessis, Rotterdam School of Management, The Netherlands
Steven Sweldens, Rotterdam School of Management, The Netherlands
Stijn van Osselaer, Cornell University, USA

Paper #4: A Change is as Good as a Rest: Changing Contexts Restores Self-Control

Nicole Mead, University of Melbourne, Australia
Jonathan Levav, Stanford University, USA

SESSION OVERVIEW

Today, consumers multitask more than ever. Technological advances such as mobile devices allow consumers to simultaneously consume multiple media at home or while on the move. For example, while watching TV, US consumers simultaneously use a second device 77% of the time (Google 2012). While multitasking may have substantial implications for consumer behavior and decision-making, research on consumer multitasking is scarce. In this session, we explore the impact of consumer multitasking across a variety of behaviors and contexts by focusing on two questions: (1) what are the drivers of consumer multitasking and (2) what are the consequences of consumer multitasking.

The first paper investigates a unique driver of multitasking and its impact on decision-making and consumer well-being. In three experiments, **Han and Broniarczyk** examine how incidental feelings of low control boost consumers' propensity to multitask. The authors also observe that this multitasking subsequently results in impaired decision-making and lower well-being.

However, multitasking may not always negatively impact consumer judgments. **Zane, Smith and Reczek** find that the impact of distracting background advertisements on product judgments depends on metacognitive inferences about distraction. Across three studies, the authors show that consumers' metacognitive inferences about distraction can lead to increased or decreased interest in products.

The next project investigates how multitasking influences consumers' ability to learn brand associations, and it challenges previous work which has shown that multitasking tends to have a negative impact on consumer learning. In two experiments, **du Plessis, Sweldens and van Osselaer** show that performing tasks simultaneously facilitates predictive learning of brand associations by motivating consumers to allocate more attention to the outcome that is the focus of prediction in the primary learning task.

The increased prevalence of consumer multitasking is due in part to consumers now being able to complete certain tasks without

having to interrupt their daily routines. For example, instead of having to set aside time to go shopping exclusively, consumers can now shop on their mobile devices while completing their daily routines. Thus, consumers often perform a given action across multiple contexts (e.g., initiating product search on a smartphone while out of the house and finalizing the transaction on a laptop once home). The final paper in this session explores the consequences of such context shifts for self-control performance in sequential tasks. In four experiments, **Mead and Levav** find support for the theory that changes in mental and physical contexts reset self-control.

Overall, this session advances our understanding of consumer multitasking by shedding light on the antecedents and consequences of multitasking. The session should appeal to a broad audience of researchers and practitioners because (1) it investigates an emerging phenomenon that has profound implications for the "modern" consumer, (2) speaks to several established literatures in consumer research, including decision-making, power, learning and self-control, and (3) and illustrates how technological advances can reshape fundamental psychological processes and influence consumer well-being.

Juggling When Low in Control: The Effects of Control on Choice to Multitask

EXTENDED ABSTRACT

The development of portable devices has resulted in an environment where consumers are constantly multitasking, which refers to "rapidly switching from one task to another or juggling multiple tasks at the same time" (Ie et al. 2012). Multitasking is related to the distraction and cognitive load literature in that it involves a dispersion of attention or decrease in the amount of cognitive resources available for a task. However, multitasking is distinct in that it is a volitional behavioral mode in which consumers choose to engage in simultaneous task performance even though they have the opportunity to complete tasks sequentially. Despite the widespread nature, there is a lack of investigation into the antecedents and consequences of multitasking in a consumer context. We examine the effect of an important consumer variable, perceived control, on multitasking tendencies. Interestingly, we find that those experiencing low control are more likely to multitask, but that this has deleterious effects as multitasking leads to lower task performance and well-being.

Past work has shown the negative effects of multitasking on attention and subsequent memory recall. For example, chronic multitaskers were more susceptible to interference from irrelevant environmental stimuli and representations in memory (Ophir, Nass, and Wagner 2009). Although such work is shedding light on the effects of multitasking, little work has looked into the triggers of multitasking behavior. Work that has looked into the cause of multitasking has been limited to correlational research methods (e.g. Wang and Tchernev 2012).

Past research has argued that people feeling low control become motivated to restore control (Fiske, Morling, and Stevens 1996). Bardhi, Rohm, and Sultan (2010) report that people believe multitasking provides higher control as it entails increased decision and choice making. Similar to this view, Duff et al. (2014) reported a correlation between high chronic multitasking and feelings of low control. Thus, we predicted that people feeling low control would be more likely to choose to multitask on subsequent tasks, compared to those feeling

high control. Moreover, we expected that such multitasking would lead to a decrease in subsequent task performance and increase in negative affect.

In **study 1**, participants first completed a control manipulation, where they recalled a time when they either had high or low control (Whitson and Galinsky 2008). Then, participants were instructed to complete two tasks: a vocabulary task and a video task. For the vocabulary task, participants were given 4 minutes to memorize a list of German vocabulary words. For the video task, participants watched a 4-minute-long video documentary about twins. Participants were asked whether they wanted to complete the tasks sequentially or simultaneously (i.e. multitask). Participants who selected the sequential option completed each task independently. Participants who selected the multitasking option saw a screen split in half where half of the screen displayed the vocabulary list, whereas the other half displayed the video. Task performance was measured via five vocabulary quizzes and 4 video comprehension questions. As expected, people feeling low incidental control were more likely to multitask on subsequent tasks compared to those feeling high control ($\chi^2(1) = 3.4, p < .06$). Also, as predicted, those who multitasked performed worse in both the German vocabulary test ($F(1, 186) = 15.37, p < .0001$) and the video task ($F(1, 186) = 41.04, p < .0001$).

Study 2 aimed to replicate the effect of control on multitasking while testing the effect of multitasking on consumer decision making. Specifically, we tested the effect of multitasking on people's consideration of irrelevant attributes (Hutchinson and Alba 1991) multiattribute information about stereo speakers was presented to subjects in a training phase. However, only one attribute was diagnostic. Analytic processing (i.e., the ability to isolate the diagnostic attribute in a subsequent test of product knowledge when making purchase decisions. The procedure of study 2 was similar to study 1 except that participants completed a consumer task instead of the vocabulary task. In the consumer task, participants read a description of a friend's product preference and were asked to choose between two products. One of the products had fewer attributes but was more in line with the preference of the friend, whereas the other product had more attributes but was less in line with the friend's preference. We also measured participants' preference for multitasking. The results again showed that people feeling low control were more likely to multitask on subsequent tasks ($\chi^2(1) = 9.51, p < .002$). Also, as in study 1, multitaskers performed worse in the two tasks than those who worked sequentially ($F(1, 100) = 6.06, p < .01$). Moreover, perceived control also had a significant effect on task performance ($F(1, 100) = 5.87, p < .02$), and this effect was mediated through people's preference to multitask (95% CI: [.0014, .1762]; Preacher and Hayes 2004) formal significance tests of indirect effects are rarely conducted. After a brief overview of mediation, we argue the importance of directly testing the significance of indirect effects and provide SPSS and SAS macros that facilitate estimation of the indirect effect with a normal theory approach and a bootstrap approach to obtaining confidence intervals, as well as the traditional approach advocated by Baron and Kenny (1986).

Study 3 sought to further explore the consequences of multitasking on consumer well-being. We also measured people's performance expectations in order to rule out alternative explanations. The procedure was similar to study 2, except that we asked participants how well they expected to perform after they made their choice to multitask or not and measured their stress and negative affect after completing the tasks. As before, participants feeling lower control were more likely to choose to multitask compared to those feeling high control ($\chi^2(1) = 3.76, p < .05$). Also, those who multitasked performed worse on both the product choice task ($F(1, 139) = 9.82,$

$p < .002$) and the video task ($F(1, 139) = 88.62, p < .0001$). More relevant to our goals, we found that those who chose to multitask experienced higher levels of stress ($F(1, 139) = 8.96, p < .01$) and negative affect ($F = 11.69, p < .001$). Mediation analyses also confirmed that feeling low control resulted in higher stress and negative affect, and that these effects were mediated through choice to multitask (Baron and Kenny 1986). Finally, the data also showed that pre-task expected performance was not affected by the control manipulation or the choice to multitask, ruling out an alternative explanation based on biased expectations.

The current research advances our understanding regarding the antecedents of consumer multitasking behavior and documents the detrimental effect of multitasking on subsequent task performance and well-being.

Drawing Conclusions while Multitasking: Distracting Background Ads Cue Consumers to Infer Product Interest through Metacognitive Inferences

EXTENDED ABSTRACT

Consumers multitask more than ever (e.g., 84% of Americans use a second device while watching television; Nielsen 2010). These tendencies toward multitasking often relegate marketing messages to the background while consumers focus on other tasks. This research explores whether consumers draw metacognitive inferences based on how distracting they find a background ad relative to expectations, and what they conclude from this distraction.

Consumers tend to believe that they are able to effectively multitask (Sanbonmatsu et al. 2013). However, consumers are prone to often being distracted away from a focal task by a background stimulus (Finley, Benjamin, and McCarley 2014). Thus, when consumers find their attention moving away from a focal task towards a background stimulus, they experience distraction, which is often unexpected given consumers' beliefs that they can successfully multitask. We theorize that when consumers find themselves more distracted than expected by a background advertisement, they draw on an underlying lay theory that distraction implies interest in the contents of the distracter to make the metacognitive inference that they are interested in the advertised product. We also identify important boundary conditions for this effect, including accessibility and diagnosticity of the lay theory.

In **study 1**, 110 undergraduates participated in a three cell between-subjects experiment. All participants colored a drawing while simultaneously listening to a long-form car advertisement. Participants in the "high perceived distraction" condition first read that students are good at tuning out advertisements while focusing on creative tasks. Participants in this condition should believe any experienced distraction is more than expected and should infer greater interest in the advertised product. Participants in the "low perceived distraction" condition read that students are *not* good at tuning out advertisements while focusing on creative tasks. Distraction in this condition should align with expectations and should not serve as a signal of interest. Additionally, we included a control condition in which we did not manipulate participants' expectations of distraction. Because consumers generally believe they are able to effectively multitask (Sanbonmatsu et al. 2013), any experienced distraction by participants in this condition should also seem unexpected. After coloring and listening to the ad, participants indicated their interest in the advertised brand.

To analyze the between-subject conditions, we created orthogonal contrasts comparing (1) the high perceived distraction and control conditions to the low perceived distraction condition and (2) the

How Multitasking Influences Consumer Learning of Brand Associations

EXTENDED ABSTRACT

This research explores how multitasking influences consumer learning of brand associations. Brand associations are learnt either through predictive (van Osselaer and Alba 2000) or incidental (Anderson and Bower 1973) learning processes. In predictive learning, the degree to which a cue is associated with an outcome depends on how diagnostic the cue is of a change (e.g., increase) in the outcome. For example, imagine a consumer learning about wine who first tries a wine from a particular region and finds it has good quality. Next she tries another wine from the same region which carries the brand of a particular estate, and finds it to be of the same good quality. Whereas the first experience will have led her to associate the region cue with 'good quality,' the same will not occur for the estate cue she encountered in the second learning trial. The reason is that the region cue already perfectly predicted the 'good quality' outcome. This type of 'blocking' effect is a staple finding in predictive learning where cues interact and compete for associative strength with outcomes. Other known examples are 'conditioned inhibition' and 'unblocking' (Kamin 1969).

Such cue interaction effects do not occur in incidental learning. Here, the degree to which a cue is associated with an outcome depends on the frequency with which they co-occur. Predictive and incidental learning can occur simultaneously; consumers engage in predictive learning of outcomes they are trying to predict, but incidental learning of outcomes they are *not* trying to predict (van Osselaer and Janiszewski 2001). Hence, the consumer in the previous example might have acquired an association between the estate cue and 'good quality' via incidental learning instead, but only if she wasn't primarily focused on learning about quality (but rather on, say, the aging potential of the wine).

In this research we investigate how multitasking, operationalized by a cognitively demanding secondary task, influences these learning processes. Theoretically, countervailing predictions can be made. From a resource dependence viewpoint, predictive learning should suffer from cognitive capacity constraints because prediction is effortful (van Osselaer, Janiszewski and Cunha 2004). In contrast, incidental learning has been found to occur when people expend less effort on learning (De Houwer, Hendrickx, and Baeyens 1997).

In contrast, attention management theories allow for the possibility that multitasking could *facilitate* predictive learning. Because additional cognitive load arising from the secondary task increases task difficulty, consumers need to invest more effort into predictive learning. Based on prior research showing that attention narrows and becomes more directed when tasks require more effort (Kahneman 1973) or when motivation increases (Gable and Harmon-Jones 2010), one could predict that consumers will allocate more attention to the outcome that is the focus of prediction when they are multitasking. We test these countervailing accounts in two experiments.

Study 1 ($n=249$) provides an initial test of the hypotheses. Participants were assigned to conditions in a 2(focus: bouquet quality, aging potential) \times 3(cognitive load: low, moderate, high) \times 2(product attribute that uniquely predicts target benefit: attribute 1, attribute 2) mixed design. The first two factors were manipulated between-subjects. Participants were instructed to learn to predict either the bouquet quality or aging potential of wines. Before starting the learning trials, subjects memorized a pattern. Here we manipulated cognitive load using a dot probe task (Bethell-Fox and Shepard 1988). Next, all participants were exposed to six learning trials. The key depen-

high perceived distraction condition to the control condition. Regression revealed a main effect of the first contrast ($F(1,107) = 8.86, p < .01$), such that mean brand interest in the high perceived level of distraction and control conditions ($M = 5.25$) was significantly greater than mean brand interest in the low perceived level of distraction condition ($M = 4.64$). There was no significant main effect of the second contrast ($F(1, 107) = 1.16, ns$); mean brand interest was the same in the high perceived level of distraction condition ($M = 5.11$) and the control condition ($M = 5.37$). Study 1 establishes initial evidence that consumers infer their level of interest in an advertised product from their perceived level of distraction towards a background ad.

In **study 2**, we demonstrate that when the diagnosticity of the "distraction=interest" lay theory is questioned, consumers who are more distracted than expected no longer infer greater interest in the advertised product (Feldman and Lynch 1988; Schwarz et al. 1991). In this study, 207 undergraduates participated in a 2 (Perceived Distraction: high, low) \times 2 (Diagnosticity of Distraction: high, low) between-subjects experiment. They all completed the same tasks as in study 1. Participants' perceived level of distraction was manipulated as in study 1. We also manipulated whether the "distraction=interest" lay theory appears diagnostic. Participants in the "low diagnosticity of distraction" condition read that students are [are not] good at tuning out advertisements, "regardless of whether they are interested in the product being advertised," thus challenging the diagnosticity of the lay theory. Those in the "high diagnosticity of distraction" condition did not read any additional material and hence diagnosticity of the lay theory was not challenged. Once the advertisement ended, participants indicated their interest in the brand. The interaction of these two factors was significant ($F(1, 203) = 3.64, p = .057$). When distraction was diagnostic, participants in the high perceived distraction condition reported significantly greater interest in the brand ($M = 5.35$) than those in the low perceived distraction condition ($M = 4.90$; $F(1, 203) = 3.99, p = .05$). There was no difference in interest across perceived distraction conditions in the conditions where the diagnosticity of the "distraction=interest" lay theory was challenged ($M = 5.01$ vs. 5.17 ; $F(1, 203) = 0.48, ns$).

Study 3 explores whether priming consumers to access a competing lay theory (i.e., that "distraction=annoyance"; Deval et al. 2014; Schwarz 2015) results in opposing metacognitive inferences about their interest in the advertised product. This study used a 2 (Perceived Distraction: high, low) \times 2 (Lay Theory Prime: "distraction= interest," "distraction=annoyance") between-subjects design. Participants first read an article that primed one of the lay theories by arguing that marketers use interesting [annoying] ads to grab attention. They then colored while listening to a cruise ship advertisement. Before coloring, participants' perceived level of distraction was manipulated as in study 1. Afterwards, participants indicated their interest in the brand. A significant interaction emerged ($F(1,217)=6.48, p=.01$). Among participants primed with the "distraction=interest" theory, those in the high perceived distraction condition were more interested in the product ($M=4.64$) than those in the low perceived distraction condition ($M=4.22$; $F(1,217)=2.78, p=.10$). Among participants primed with the "distraction=annoyance" theory, those in the high perceived distraction condition were less interested in the product ($M=4.11$) than those in the low perceived distraction condition ($M=4.61$; $F(1,217)=3.72, p=.05$). These results demonstrate that when an opposing lay theory is accessible when consumers experience distraction, the resulting metacognitive inferences lead to opposite evaluations of the advertised product.

Together, this research extends metacognitive theorizing into the domains of distraction during multitasking and yields useful theoretical and practical implications.

dent variable was the difference in predicted bouquet quality when a wine was made with attribute 1 versus attribute 2.

It was predicted that, because subjects told to focus on bouquet quality will engage in predictive learning of bouquet quality, and predictive learning is characterized by cue-interaction effects, the difference in predicted bouquet quality should be positive (attribute 1 > attribute 2) due to unblocking of attribute 1, and blocking of attribute 2. In contrast, subjects told to focus on aging potential should engage in incidental learning of bouquet quality, as evidenced by a negative bouquet quality rating (attribute 2 > attribute 1). This will occur because attribute 2 was paired twice with a high bouquet quality whereas attribute 1 was paired once with this outcome. In line with the predictions from attention management theory, a significant positive trend was observed among participants told to focus on bouquet quality ($b=.55$, $t=3.77$, $p<.001$). The difference in bouquet quality was higher among those under high ($M=.53$, $SD=.80$) than moderate ($M=.10$, $SD=.71$) and low ($M=-.14$, $SD=.65$) cognitive load. Further, the linear trend was not significant among participants told to focus on predicting aging potential ($b=.32$, $t=.32$, $p=.75$). These results indicate that cognitive load intensified predictive learning, and had no effect on incidental learning.

Because study 1 used unblocking and blocking as cue interaction effects, study 2 ($n=320$) sought to replicate these findings for a different type of cue interaction; conditioned inhibition. Participants were assigned to the same conditions as study 1, except that there were only two load conditions (low vs. high) and that the cue interaction effects characterizing predictive learning were unblocking of attribute 1 and conditioned inhibition of attribute 2.

As in study 1, we found that predictive learning improved under high cognitive load. Indeed, a contrast showed no difference in predicted bouquet quality based on attribute 1 versus attribute 2, among participants under low load ($F(1,83)=2.19$, $p=.14$) who focused on predicting bouquet quality. However, among participants under high load who focused on predicting bouquet quality, the contrast became significant ($F(1,77)=4.62$, $p=.03$).

In addition, cognitive load again did not impact incidental learning. Among participants told to focus on aging potential, attribute 2 was predicted to lead to higher bouquet quality than attribute 1 under low ($F(1,81)=13.46$, $p<.001$) and high load ($F(1,75)=7.63$, $p=.003$).

This research finds that multitasking can facilitate predictive learning without affecting incidental learning of brand associations. Thus, it contributes by showing that attention management, and not resource dependence theories, best describe how learning occurs when consumers are handling multiple cognitive operations simultaneously.

A Change is as Good as a Rest: Changing Contexts Restores Self-Control

EXTENDED ABSTRACT

Due to the increasing sophistication of mobile devices, consumers are increasingly making purchasing decisions while changing contexts. This enables them to initiate product search in one context, and finalize the transaction in another context. Indeed, it has been estimated that 67% of American consumers start shopping on one device but move to another screen to complete the shopping session (Google 2012). The present research examined how context changes influence consumer self-control.

According to the strength model (e.g., Baumeister et al. 1998), self-control works similar to a muscle: after initial exertion, it becomes fatigued and needs to be rested before it can become operable again. Recent theorizing suggests, however, that self-control

failure after initial self-control exertion may stem from an unwillingness rather than inability to continue exerting self-control (Inzlicht and Schmeichel 2012). Building on this, we hypothesized that self-control may be contextually bound. More specifically, in the same context, people may become increasingly reluctant to engage in self-control because they are drawing from the same self-control account. However, a change in context may signal a new self-control account and hence may restore people's willingness to exert self-control. Given that self-control governs impulse buying (Vohs and Faber 2007), a shift in shopping context may have implications for purchasing decisions.

Four experiments tested the context hypothesis by assigning participants to complete a relatively more or less depleting task (task 1) and then randomly assigning them to complete a subsequent self-control task (task 2) in the same or different room. To establish the robustness of the effect, experiments 1-3 tested the basic hypothesis using diverse depletion manipulations and measures. To rule out the possibility that a context change improved self-control because of mere physical movement (which can induce arousal) or disruption, experiment 4 held constant physical movement and disruption while varying whether task 2 was completed in the same context as task 1. Rest replenishes self-control (e.g., Tyler and Burns 2008), so the amount of time that elapsed between the two tasks was held constant across all conditions in all reported experiments.

Study 1 examined performance on the Stroop task (Stroop 1935) as a function of prior self-control exertion (vs. no exertion) and context change (vs. no context change). To manipulate depletion, participants were or were not required to regulate their emotions while reading a neutral, boring passage (Vohs and Schmeichel 2003). For the second task, participants stayed in the same room or moved to a different room down the hall in the same laboratory. The key dependent measure was the time difference between completion of incongruent and congruent trials on the Stroop task. As predicted, an interaction between depletion and context emerged, $F(1,184)=6.033$, $p=.015$, $\eta^2=.032$. Among participants who completed both tasks in the same room, participants in the depletion condition performed worse on the Stroop task ($M=2.72s$, $SD=2.14$) than their no-depletion counterparts ($M=1.71s$, $SD=2.05$; $F(1,184)=6.730$, $p=.010$), conceptually replicating previous ego-depletion effects. More important, depleted participants who switched rooms performed better on the Stroop task ($M=1.72s$, $SD=1.55$) than their non-depleted counterparts who stayed in the same room ($F(1,184)=6.50$, $p=.012$). Additionally, among participants who switched rooms, there was no effect of the depletion manipulation ($F<1$).

Study 2 examined consumption of a tasty but unhealthy snack. Participants randomly assigned to the depletion condition were asked not to think about a white bear during a thought-listing task, whereas participants assigned to the no-depletion condition were allowed to think about anything they liked, including thoughts of a white bear (Wegner et al. 1987). Participants then stayed in the same room or they were moved to a different room for task 2. The dependent measure was grams of potato chips consumed. Conceptually replicating study 1, there was a depletionXcontext interaction, $F(1, 144) = 4.751$, $p = .031$, $\eta^2 = .032$. Among those who completed both tasks in the same room, participants in the depletion condition ate more chips ($M=40.657g$, $SD=23.90$) than participants in the no-depletion condition ($M=31.359g$, $SD=20.46$; $F(1,144)=2.71$, $p=.056$) although that effect was only marginally significant. More important, participants in the depletion condition who changed contexts consumed fewer chips ($M=28.671g$, $SD=14.99$) than their depleted counterparts who did not change rooms, $F(1,144)=6.16$, $p=.014$.

Study 3 examined cheating, which is governed by self-control (Mead et al. 2009). The depletion manipulation concerned writing an essay that required participants to override the impulse to use words that contained common (vs. not common) letters. Participants in the depletion condition wrote an essay without using words that contained the letters 'A' and 'N' whereas those assigned to the no-depletion condition left out words containing the letters 'X' and 'Z' (Schmeichel 2007). The room manipulation was identical to that used in experiments 1 and 2. The measure of self-control was unethical behavior – specifically, the amount of unearned money taken by participants. Conceptually replicating studies 1 and 2, participants in the depletion condition cheated more ($M=.37$, $SD=.69$) than participants in the no-depletion condition ($M=.11$, $SD=.42$), but only when they completed both tasks in the same room, $F(1,116)=5.19$, $p=.025$. As predicted, participants in the depletion condition who switched rooms were less unethical ($M=.06$, $SD=.25$) than their depleted counterparts who stayed in the same room, $F(1,116)=7.18$, $p=.008$.

Study 4 aimed to provide support for the context theory while ruling out the possibility that restoration of self-control in studies 1 to 3 was merely due to disruption or physical movement. To achieve this goal, study 4 included a comparison condition in which participants completed both tasks in the same room but in between the two tasks they were led outside of the room (vs. no change or change). The depletion manipulation was the same as that used in study 3 (essay task) and the dependent measure was performance on the incongruent trials of the Stroop task. Study 4 conceptually replicated the results of studies 1 to 3: changing rooms restored self-control ($p=.047$) However, that restoration was specific to a context change. Mere physical movement/disruption was not sufficient to restore self-control ($p=.227$).

In summary, four experiments suggest that consumers' self-control may be contextually bound. Alternative explanations such as a boost in mood, physical movement, and mere disruption were ruled out and cannot account for obtained effects. The studies have practical implications for how self-control functions in daily life and theoretical implications for the strength model of self-control.

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Engaging the Marketplace in Destigmatization

Chairs: Susan Dunnett, University of Edinburgh Business School, UK
Ann M. Mirabito, Baylor University, USA

Paper #1: More Homely Than Home: Stigma, Liminality and Pilgrimage Consumption

Leighanne Higgins, Lancaster University Management School, UK

Kathy Hamilton, Strathclyde Business School, UK

Paper #2: How Do Brands' Destigmatizing Messages Travel Through Social Media? 'Like a Girl!'

Ann M. Mirabito, Baylor University, USA

Elizabeth Crosby, University of Wisconsin-La Crosse, USA

Kristy McManus, University of Georgia, USA

Paper #3: Delusion or Deception: Examining Racialized Stigma and Colorblind Politics in the Marketplace

Kevin D. Thomas, The University of Texas at Austin, USA

Angelica (Angie) N. Morris, The University of Texas at Austin, USA

Jessica (Jess) Matias, The University of Texas at Austin, USA

Paper #4: Divesting Identities: Counterbalancing and Demythologizing the Stigmatized Identity

Lara Spiteri Cornish, Coventry Business School, UK

James Cronin, Lancaster University Management School, UK

Susan Dunnett, University of Edinburgh Business School, UK

SESSION OVERVIEW

Guiding questions:

1. How do marketers use market-based processes, practices and discourses to facilitate destigmatization?
2. How do stigmatized consumers use marketplace strategies to cope with or attenuate stigma?

The objective of this session is to explore and theorize the power of the marketplace to both stigmatize and destigmatize conditions, consumers and contexts. In his seminal work, Goffman (1963, p. 15) defined stigma as an "attribute that is deeply discrediting," reducing the person who possesses it "from a whole and usual person to a tainted, discounted one." Stigma is a significant social phenomenon, one which leads to vulnerability, marginalization, and exclusion, and reduces opportunity for economic and social advancement.

Extant research on stigma emphasizes the perspective of the stigmatized, with some scholars exploring how social institutions shape stigma within particular cultures. Yet the ways stakeholders within sociocommercial spheres create, perpetuate, resist or attenuate stigma remains largely overlooked (for an exception, see Mirabito et al 2017). In this session, we explore how marketplace stakeholders (consumers, companies, employees, and institutions) contribute to destigmatization through market-based discourses, practices and tactics.

Strong theoretical links draw the papers together –inclusion, exclusion, stereotyping, power and vulnerability run through the work. While the papers cover a range of stigmatized states to illuminate the complex relationship between market agents and stigma, at their core they are united by a sense of social justice. Marketers and the marketplace unquestionably fuel social stigma but interestingly, they may also play a part in destigmatisation processes. Recounting and illuminating these processes has the potential to bring valuable, ameliorative, insight, fostering both conceptual clarity and consumer well-being.

In "More Homely than Home: Stigma, Liminality and Pilgrimage Consumption," Higgins and Hamilton reveal how marketization and detraditionalization have silenced public religious expression,

creating feelings of stigmatization and existential liminality for Catholic consumers in everyday life. They re-conceptualize liminality and find the pilgrimage marketplace to become the *balm* that enables consumers to temporarily shed their stigma and existential liminal state.

In "How Do Brands' Destigmatizing Messages Travel Through Social Media? 'Like a Girl,'" Mirabito, Crosby, and McManus examine the way brands tap social media to destigmatize race, gender, and medical conditions. In particular, they compare the Twitter network of a brand-driven destigmatizing initiative (#LikeAGirl) with a grassroots destigmatizing initiative (#BlackLivesMatter). The #BLM network is dense, with tightly connected groups and strong connections between groups, suggesting an ongoing conversation about the topic. In contrast, the brand-driven initiative yields small clusters engaged in conversation and many unconnected individuals who appropriate the message to further related agendas.

In "Delusion or Deception: Examining Racialized Stigma and Colorblind Politics in the Marketplace" Thomas, Morris and Matias explore marketers' attempts to assuage the racialized stigma of marketplace discrimination by implementing colorblind policies and conclude the experience of racialized stigma does not appear to be lessening. They deconstruct this apparent paradox by investigating how colorblindness is practiced by marketers and experienced by consumers.

Spiteri Cornish, Cronin and Dunnett's "Divesting Identities: Counterbalancing and Demythologizing the Stigmatized Identity" contributes to the theorization of unwanted consumer identities by uncovering the practices and discourses employed by fat consumers to divest stigmatized identities. They outline tactics for divesting identities, such as counterbalancing and demythologizing fatness through consumption narratives. The authors conclude that market-based practices can play a role in destigmatisation but the price for the individual is increased social labor.

More Homely Than Home: Stigma, Liminality and Pilgrimage Consumption

EXTENDED ABSTRACT

The relationship between religion and consumerism remains contentious, yet it is undeniable that the rise of a consumption ideology has coincided with the decline of traditional forms of religion in many westernized countries (Gauthier, Woodland and Martikainen, 2013). Religion is no longer a taken-for-granted institutional pillar in identity projects in consumption-oriented cultures (McAlexander et al. 2014). However, it is poorly understood how these trends of marketization and detraditionalization are associated with religious consumers' experiences of marketplace stigma. This paper aims to provide a deeper understanding of how the sociocultural environmental impacts on the stigma experienced by Catholic consumers and, in doing so, we shed new theoretical light on the relationship between stigma and liminality.

There is little agreement on how religious consumers experience marketplace stigma. Sandikci and Ger (2010) found particular religious orientated consumption choices to be "virtuous" as religious consumers seek the stigma attached with the consumption choice in order to differentiate themselves from others within the predominant societal worldview. Similarly, others view the sacrifice and stigma

felt by religious followers as generally not costs but rather deliberate choices pursued to create “tension with the dominant culture” as a means of creating a “distinctive identity” (Kurtz, 2012, 18; Iannaccone, 1988). Alternatively, other research reveals that consumers may mask their religious identity in an effort to minimize differences with others and avoid potential stigmatization (Weinberger, 2015). This study advances our understanding of what happens when consumers unwantedly experience stigma in light of their association and practice of a specific religion.

The paper is based on a three-year ethnographic study on the consumption of the religious pilgrimage experience to Lourdes in France. The Lourdes pilgrimage was ignited in 1858 by a series of apparitions between fourteen-year-old Bernadette Soubirous and a woman, who was authenticated by the Catholic Church in 1862 as the Mother of Jesus Christ. A consumption experience that continues to grow after 150 years, with over six million pilgrims journeying there annually in search of physical, spiritual and personal renewal. In keeping with standard ethnographic practice, multiple methods of data collection were employed. Fieldwork was based on participant observation, which at times incorporated volunteering with teams. Fieldwork data resulted in over 200 pages of double spaced fieldnotes, approximately 3000 visuals (photographs and videos), and many informal and serendipitous interviews with pilgrims on site at Lourdes, which were audio-recorded when possible. Depth interviews were conducted with twenty-three respondents lasting from thirty minutes to four hours in length enabling the understanding of personal life histories. All interviews were transcribed verbatim, tallying over 1000 double spaced pages of transcription.

Findings reveal that religious conversation and expression is becoming less tolerated and as such is silenced or “backgrounded” (Weinberger, 2015) within respondents’ home environments. Respondents agree that practicing Catholicism results in them being labelled and stereotyped as part of “The God Squad” or as “Crazy Catholics”. We find such existential silencing to be detrimental to Catholic consumers, creating feelings of stigmatization and causing many to feel continuously liminal in everyday life. Turner (1969, p. 103) suggests that submissiveness and silence are characteristics associated with liminal entities. The liminal state has been viewed as a “negative, ambiguous phase” during which liminars suffer a “suspension of their identity” and experience a “vague or blurred” sense of self (Cody and Lawlor, 2011, 211). However, rather than overtly or publically transgressing against normative society, respondents turn to the marketplace. By consuming the Lourdes experience, such religious repression is temporarily freed and consumers are able to temporarily shed their existential liminal state.

The Lourdes pilgrimage consumption experience encapsulates a familiarity that is expressed as being a “home away from home,” that is “comfortable”, “homely”, and “welcoming”. Consequently, many align their pilgrimage consumption experience to being encapsulated within what is colloquially termed the “Lourdes Bubble” with the Lourdes pilgrimage affording them a time and place where they feel “safe”, “secure”, and “protected”, more so than they do at home:

“On the way home everyone is tired, but happy. I can hardly wait to get home, but by this I mean that I can hardly wait to go home to Lourdes next year because that is how I feel about going to Lourdes every year – I am going home!”(Patricia, 93).

Therefore, while emically respondents speak of Lourdes as a home away from home, etically our findings reveal that Lourdes can in fact be more homely than home because of the perceived safety, security and religious freedom that is missing from daily life.

Previous consumer research has found that consumers embrace the stigma associated with their religious fervour (Sandikci and

Ger, 2010). In contrast, we find that the religious setting is not consumed to signify religious virtue but rather to temporarily escape “stigmatic boundaries” and provide a “form of sanctuary and acceptance” (Kozinets, 2001, 72) where consumers are free to express and practice their religiosity. Thus while consumers may suffer a tearing of the self (Jafari and Goulding, 2008) in their everyday lives, the Lourdes marketplace offers a repair; a *balm* that enables consumers to temporarily shed their existential liminal state and experience a temporal cohesive, accepted, holistic sense of self. Van Gennep (1909/ 1960, 46) distinguished between the *physical* return versus *the social* return from rites of passage, a distinction that has yet to be incorporated into consumer research. This study demonstrates that whilst consumption experiences may be *physically* located within a peripheral, liminal landscape, the *social* experience can provide consumers with a holistic sense of self, unachievable in their mundane, everyday lives. The peripheral *physical* location of the Sanctuary of Lourdes, in the Pyrenees region of France, denotes liminality. However, the *social* experiences of Lourdes consumers signals not a “betwixt and between” but rather a stable, holistic state. Thus, through Van Gennep’s distinctions, we advance Schouten’s (1991, 421-422) understanding of “prolonged” and “continued” liminality demonstrating that consumers can be simultaneously *physically* liminal and *socially* whole.

How Do Brands’ Destigmatizing Messages Travel Through Social Media? ‘Like a Girl!’

EXTENDED ABSTRACT

Stigma’s presence in the marketplace has been uncovered in product stigmatization (Ellen and Bone 2008), the experience of stigmatized groups in customer service encounters (Adkins and Ozanne 2005; Crockett, Grier, and Williams 2003), coping through consumption (Ho and O’Donohoe 2014; Nguyen, Chen, and Mukherjee 2014), and the effects of stereotyping on consumer behavior (Campbell and Mohr 2011; Matta and Folkes 2005; Yeh, Jewell, and Hu 2013). Yet little research has explored ways brands destigmatize (for an exception, see Mirabito et al 2016). This is surprising in light of the influence brands can have on individual’s identity formation and values.

Several brands have begun destigmatization initiatives. Dove’s campaign for real beauty seeks to normalize ordinary features, Dorito’s Rainbow promotion sought to normalize sexual orientation, and Always’ Like a Girl campaign aims to destigmatize gender roles. Gender stigmas begin to appear at early ages. Children as young as two categorize clothing, colors, toys, activities, and occupations by gender (Levy, Sadovsky, and Troseth 2000; Liben, Bigler, and Krogh 2001) Metheny’s (1965) studies of gender stereotypes found that sports considered to be female sports were aesthetically pleasing and lacked face-to-face competition or overt aggression, while male sports tended to be more aggressive and competitive, with high levels of bodily contact. According to Riemer and Visio (2003), sports such as gymnastics and aerobics are considered to be feminine, while football and wrestling tend to be viewed as masculine. In in-depth interviews with children ages 8-10, Schmalz and Kerstetter (2006) found most children followed the gender sports stereotypes, but did not have solid answers as to why. Always’ Like a Girl campaign challenges gender stereotypes by exploring the meaning of running “like a girl.”

Social movement organizations (SMOs) also spread destigmatizing messages. Social movements are created as individuals band together for a common cause. Social media, including Twitter conversations, have been embraced by firms and grassroots organizations as a way of recruiting allies and spreading messages. How do

stigma-challenging messages created by brands differ from social change efforts wrought by SMOs? Extant research in social movement formation prior to the advent of social media (cf., Passy and Giugni 2001) concludes that movements are built on dense networks; friends recruit friends. This research explores whether brands' social media networks have a similar shape and structure as those of SMOs.

Methods

Social media networks are created organically as Twitter users share information and viewpoints. Users tweet original messages, reply-to, and mention one another's posts. Popular topics attract the interest of a large number of users who connect in a network structure. Twitter data can be analyzed to uncover the shape of these networks, summarize the content and valence of their discussion, and identify the people playing central roles in extending the messages.

We used NodeXL Pro (Social Media Research Foundation 2016) to download and analyze publicly available Twitter messages incorporating the phrase #LikeAGirl. We captured from the Twitter Search service usernames, hyperlinks and hashtags, and information about each writer's connection to other Twitter users. We created visual maps of the social networks, evaluated network characteristics including group density and clustering and identified central players who transmitted messages to other groups of friends. To gain insight into the ways brand-supported destigmatizing campaigns compare with grassroots destigmatizing campaigns, we compare the structure of the #LikeAGirl network with that of #BlackLivesMatter, a grassroots social movement aimed at destigmatizing race. We downloaded both networks in February 2016; following Smith et al. (2015) practice in comparing different sized campaigns, we analyzed a similar number of messages from each network (approximately 2400).

Preliminary Findings

We observe several differences between the two networks. First, the #BLM network is substantially denser. Density is calculated as the ratio of the total edges to the maximum number of possible edges; the #LAG network is just 60% as dense as the #BLN. The implication is that the #BLN tweeters are conversing with each other, whereas the #LGA tweeters broadcast their message to friends who do not necessarily reply on that topic. Second, and relatedly, the #LAG features relatively more tweets and fewer replies/mentions than #BLM, with 32% of #LAG's activity in tweets to 11% of #BLM. #LAG consists of several small groups, loosely connected, whereas #BLM has more connections between groups. Third, the largest #LAG group, includes just 5% of #LAG users. The group, marked with dark blue disks in the upper left of the map, is anchored by @gridironbeautie, a women's gridiron football enthusiast, who uses #LAG as an endorsement for women's athletics with posts such as "Say Hello to spring football #likeagirl @WFAfootball @IWFL @WWCFL @MWFLfootball @MyLFL @SSFLfootball <https://t.co/tBkPWg7asH>." In contrast, 49% of #BLM tweeters are connected to a news commentator, @blackvoices. An illustrative tweet, "Trayvon Martin was killed on this day four years ago. His death forever changed America. #BlackLivesMatter <https://t.co/8iFqomMLQA>."

More broadly, the #LAG group resembles the Twitter network associated with a brand, breaking news, or big event (Smith et al. 2015). Many users are likely to mention the topic without having connections to one another. Even the brand itself, @Always is connected to just 3% of users. In contrast, #BLM represents a clustered community featuring many hubs, each with a separate crowd of friends. Within #BLM, the hub and spoke nature of the large group anchored by @blackvoices is typical for media outlets or celebrity networks.

Discussion

While brands have added their voices to efforts to eradicate social stigmas, little is known about how brands' social messages are transmitted. Do the brands become central figures in their campaigns, broadcasting their message and build a tight network of adherents to the cause? This exploratory study suggests not. Instead, the #LGA network includes some small clusters of conversationalists; but most #LGA tweeters appear to use the message to further separate agendas. In contrast, #BLM network is dense, with tightly connected groups and with strong connections between groups, suggesting an ongoing conversation about the topic.

Delusion or Deception: Examining Racialized Stigma and Colorblind Politics in the Marketplace

EXTENDED ABSTRACT

Introduction

A peculiar phenomenon is afoot in the marketplace. As marketers make an exerted effort to assuage race-based marketplace discrimination and the racialized stigma that accompanies it by implementing race-neutral/colorblind policies and practices, the experience of racialized stigma does not appear to be lessening for non-white consumers. For instance, enacting nondiscriminatory policies on the basis of race is a customary practice in the marketplace which is typically further supported by federal mandate, yet previous research has demonstrated that the way in which a consumer is racialized bears significantly on the quality of service provided (Ainsworth and Motley, 2000), the assortment of available goods and services (D'Rozario and Williams, 2005), and the pricing of offered products (Talukdar, 2008). In each instance, researchers have found that non-white consumers are adversely impacted, receiving poorer quality service, fewer product options, and higher pricing than consumers from other racial groups. Why does race-based stigmatization continue to exist under the politics of colorblindness, which professes to destigmatize by providing equal treatment and opportunity to all regardless of racial background?

The purpose of this study is to deconstruct this peculiarity by investigating how colorblindness is practiced by marketers and experienced by consumers. We begin with an investigation of race from a socio-historical perspective. This is followed by an exploration of the tenets of colorblindness and the process by which race is reconceptualized through the politics of colorblindness. Utilizing a multifaceted methodological approach that includes a critical discourse analysis of historical and present-day marketing communications and depth interviews with 20 consumers in the U.S., we propose a framework for a colorblind/post-racial aesthetic used by marketers that underpins and potentially exacerbates race-based stigmatizing practices.

Race Historicized

From a socio-historical perspective the concept of race as it is currently experienced can be understood as a configuration of discourse and materiality supported by an historical context (Hall, 1997; Mills, 2014; Smedley, 1998). As a discursive construct race acts as a floating signifier, its meaning shifting with context and ideology (Hall, 1997). Race also serves as a historical construct. Race is a relatively new invention in the history of humanity. Its development coincided with the vast expansion of colonial and imperial projects by European powers. Race served to justify these projects. The construction of race enabled colonial/imperial subjects to be positioned as inferior bodies that required the stewardship of superior beings -- in essence, race was

developed to uphold/secure white supremacy (Smedley, 1998). Lastly, the language (i.e. discourse) of race combined with its historical context create material outcomes closely associated with racial categories (Mills 2014). For instance, with respect to the wealth gap in the United States, the median net worth of white households is 13 times greater than that of black households (Kochhar and Fry, 2014). That is to say, discursive practices combined with systemic and institutionalized policies that have historically favored whites has resulted in the materialization of dire wealth disparities.

Colorblind Politics | Post-racial Society

Many individuals who affirm colorblind politics believe the U.S. is now a post-racial society. The construct of a post-racial society assumes a social environment where racial preference, prejudice, and discrimination are obsolete (Squires, et al., 2010). Impressions of a post-racial America have in part been shaped by the election of Barack Obama as President, increased acceptance of interracial marriage, and shifts in advertising practices (Walker, 2003; Haq, 2010; Squires, et al., 2010). The primary arguments attached to colorblind/post-racial attitudes suggest that a person's racial classification no longer impacts their lived experiences. The politics of colorblindness are heavily rooted in meritocracy, or the belief that the hardest working and most qualified individuals will always succeed, regardless of their race. Equal opportunity, the belief that everyone is afforded the same possibility to achieve success, and personal responsibility -- The belief that people control their fates regardless of social position, and that individual behaviors and choices determine material outcomes (Bonilla-Silva, 2003). Together, these colorblind principles form a post-race ideology-- a set of philosophies individuals use to understand and assign meaning to society. Under post-race ideology the sociohistorical significance of race is obfuscated, and when issues of racial inequality are raised, they are rebuffed as "excuses", or a failure to assume responsibility for individual actions (Bonilla-Silva, 2006). The reconstruction of race in this way reinforces racial stigmas, as adverse material outcome related to race are attributed to an alleged innate substandard ability of these groups—arguments that frequently mirrors historical racial stereotypes (Bonilla-Silva, 2006). In essence, the politics of colorblindness appear to transform race from a dynamic hierarchal system of discursive and institutionalized power into an ahistorical construct that is no longer an outcome of materiality, but rather materiality becomes an outcome of race.

Preliminary Findings

Our preliminary data collection and analysis, which includes a critical discourse analysis of a randomly selected sample of print advertisements from the United States from the present dating back to the early 1900s supports our conceptualization of race, both from a socio-historical and post-race ideological perspective. From a socio-historical perspective the meaning of race in marketing communications has shifted over time. In the early 1900s, marketing communication often utilized race to normalize a hierarchical social system (e.g. Auntie Jemima and Uncle Ben), while during the civil rights movement advertisements explicitly visualized forms of black empowerment. Present-day advertisements often practice racial tokenism, wherein racial diversity and harmony are simulated through the limited and generally tangential inclusion of non-white models into an advertisement dominated by white bodies. Depth interviews with 20 American consumers (10 white; 10 black) are currently being analyzed to more deeply understand how consumers interpret and experience post-race ideology in the marketplace.

Divesting Identities: Counterbalancing and Demythologizing the Stigmatized Identity

EXTENDED ABSTRACT

Within consumer research, much has been written about the development, construction, restoration, and even rejuvenation of identities (Üstüner and Holt, 2007; Schau, Gilly, and Wolfenbarger, 2009; Moiso, Arnould, and Gentry, 2013; Thompson and Üstüner, 2015; Barnhart and Penaloza, 2013), but surprisingly much less attention has been given to the *divestment* of stigmatised identities. The relative absence of work focussing on less desired identity positions, leaves a conceptual vacuum in our understanding of today's reflexive, self-managing and personally edifying subject (Cronin, McCarthy and Delaney, 2015). We argue that outlining the tactics used to manage stigmatised identities could generate important insights for those seeking to improve consumers' quality of life and their existential security in a marketplace that places ever more pressure to reach for "perfection" (Mick et al., 2012).

In his seminal work, Goffman (1963, p.15) defined stigma as an "attribute that is deeply discrediting", reducing the person who possesses it "from a whole and usual person to a tainted, discounted one". We draw on the context of "overweight" women, to theorize how stigmatized consumers counterbalance (Toyoki and Brown, 2014) and demythologise an undesired, imposed identity (Arsel and Thompson, 2011). In order to do so we examine two powerful forces of stigmatisation – the medicalisation of fatness as obesity and the characterisation of fatness in popular culture. Our framing takes both inspiration and departs from that of Scaraboto and Fischer (2013) whose informants reappropriate the label "fat" to legitimise a new cultural identity of "fatshionistas" through which they challenge their exclusion from the fashion marketplace. Scaraboto and Fischer concentrate their analysis on consumer activism and market creation, we are, however, more interested in the cultural and medical discourses which underpin the mundane, everyday negotiations in familial and micro-social interactions.

Medicalisation is an overlooked phenomenon in consumer research but one which has far-reaching implications for consumer wellbeing. We characterise it as a clinical, dispassionate process of modernity in which consumption practices, bodily conditions and mental states that were previously considered to belong to normal human life are defined and treated as medical problems that can be solved through medical and scientific intervention. The medicalisation of fatness as obesity creates its own discourses, understandings and indeed, markets. As obesity is "constructed at the intersection of scientific knowledge and a complex of culturally-based beliefs, values, and ideals" (Gard and Wright, 2005, p.168), the identity trajectories and coping processes of fat consumers is an important context for study.

In order to achieve the research objectives outlined above, 28 in-depth, semi-structured interviews were conducted with "overweight" women (operationalized as UK size 18 and over), from a variety of socio-economic backgrounds. Studies have shown that women experience weight bias, stigmatisation and discrimination more than men, in part because women are more vulnerable to the Western 'thin ideal' and to contemporary fashions relating to beauty and sexual desirability (Puhl & Heuer, 2009; Roehling et al., 2007). This research therefore focuses exclusively on female participants. Interviews focussed on the informant's sense of self, her life world, her life course and her likes and dislikes about herself. Part-to-whole analysis (Thompson, Locander, and Pollio 1989) revealed informants had a hyper-awareness of their "overweight" status, and the negative stereotypes surrounding fatness - both the medicalised "obese" self and the caricatured "lazy", "greedy" person.

Informants thus spoke about feeling that their sovereignty was ‘flanked on two sides’; firstly, through the medical gaze of doctors, marketers and science; and secondly, through the negative stereotypes of popular culture representation. The undesired and imposed medical identity of obese is concretised in a market of scientised, legitimised weight-control products and abstracted in the caricatures of television programs like “*Too Fat to Fly*”. Specifically we unpack the tactical processes by which these consumers manage others’ perceptions of them, how they reconsider and reformulate the meanings of consumption for themselves and ultimately how they fashion identities in contra-distinction to pervasive stereotypes.

Informants’ sought avenues of liberation through discursive tactics. These women warded off stigma through counter-balancing and demythologising discourses, 1.) by being vocal and defensive about their bodies, 2.) by avoiding scenarios that might instigate social judgement e.g. public consumption of unhealthy foods; and 3.) by discursively recasting what it means to be fat e.g. discussing fitness activities. Further, the latter tactic of discursively recasting obese was materialised through the personas and narratives tethered to adjectives like “bubbly”, “larger than life”; “funny”, “warm”, “good listener”. Such identity work has the objective of changing negative perceptions about weight, enabling these women to divest themselves, at least in part, of the stigmatised identities forced upon them (Rice, 2007). We label this cohort the “New Fat” consumers, where fatness becomes a social construct preferable to the medicalised language of the bio-medical model and “medicalized marketplace” (Thompson, 2003).

This study makes several contributions to consumer research. Firstly, we enhance current understandings of the ambivalent infrastructure which makes up consumers’ overall identity projects by illuminating the previously overlooked dimensions of divestment of stigmatised identities. Secondly, the development of alternative descriptors to counter-balance and ultimately replace the biomedical model imposed on them results in new characterisations of ‘fatness’ worthy of further investigation. In particular, our analysis demonstrates how these women manage the toxicities of social denigration in an era of dehumanising medicalisation to authorize and legitimate ostensibly authentic versions of themselves. Drawing from Oyserman’s (2007) identity-based motivation model, it is possible to argue that our interviewees’ positive characterisations of fatness – such as holding the comedic role, being a good listener, or being “bubbly” enable them to disarm stigmatising discourses arising from culture and/or medicalisation. However this destigmatisation is not without its cost as informants describe the “extra” burden of this social labour.

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Bridging Brand and Interpersonal Relationship Research: How and When Is Our Connection to Brands Like Our Connection to People?

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Paper #1: Brand Communication on Social Media: Effects of Non-Persuasive Self-Disclosure on Consumer Perceptions

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Paper #2: Fostering and Leveraging Consumer-Brand Relationships: A Psychological Distance Perspective

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Jeff D. Rotman, Western University, Canada
Matthew Thomson, Western University, Canada
Andrew Perkins, Washington State University, USA

Paper #3: Warm Brands as Relationship Partners: The Dynamics of Social Exclusion, Brands, and Interpersonal Connection

Soyoung Kim, University of Alberta, Canada
Sarah Moore, University of Alberta, Canada
Kyle Murray, University of Alberta, Canada

Paper #4: Seeing Brands Through “Me” Colored Glasses: Effects of Self-Threat and Brand Attachment on Brand Evaluations

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SESSION OVERVIEW

Whether consumers relate to brands similarly to the way they relate to people has been a focus of consumer researchers and managers alike. For example, a substantial body of research has suggested that consumers' responses to brands are cognitively, emotionally, and behaviorally similar to their responses to people (Aggarwal 2004; Dunn and Hoegg 2014; Fournier 1998; Khamitov et al. 2016; Park et al. 2010; Sayin and Gürhan-Canli 2015; Thomson et al. 2005). However, other work has shown that the findings in the interpersonal domain do not frequently apply in the branding context (Whelan and Dawar 2014; Yoon et al. 2006). Similarly, marketing practitioners seem to exhibit a diversity of views – some document a consumer tendency to enliven brands and form emotional relationships with them (Cary 2000), while others doubt the existence of such relationships (Earls 2002). Thus, research that investigates conditions under which consumers' interactions with brands are either similar to or different from their interactions with people would enhance our understanding of the nature of consumers' connections with brands (Alvarez and Fournier 2016; Swaminathan and Dommer 2012). The aim of this session is to examine such consumer-brand connection processes. Specifically, the four papers in this session address the following questions: 1) under what conditions can brand and interpersonal relationships operate in parallel, and 2) how do these brand relationships impact and how are they impacted by interpersonal processes? Session attendees will learn about factors contributing to the similarities and differences between brand and interpersonal relationships and how these factors influence consumers' judgments and behaviors.

The first two papers focus on when and how consumers' interaction with brands are similar to interactions with people. Huang and Dou examine the effect of a brand's self-disclosure (intimate vs. superficial) on brand perceptions as a function of anthropomorphism that activates interpersonal processes in brand relationships.

They show that intimate brand disclosure increases brand closeness under high brand anthropomorphism, but does not increase desire for monetary exchange. Connors, Khamitov, Rotman, Thomson, and Perkins investigate how congruency between a brand's psychological distance to the self and a construal mindset enhances brand evaluations, documenting the results analogous to the findings in the interpersonal domain.

The last two papers examine the social factors that change perceptions and evaluations of brand relationships. Kim, Moore, and Murray show that socially excluded consumers turn to warm brands as relationship partners, and beyond transient consumption, these brand relationships can alleviate the relative deprivation of and the subsequent need for human connections. Lastly, Danienta and White investigate the effect of self-threat coming from social comparisons on the self and the brand relationship, finding that following negative feedback, consumers evaluate a highly self-connected brand more negatively.

Taken together, this session provides multifaceted insights into when and how consumers' responses to brands correspond to interactions between people. Exploring brands through potential extensions and limitations of interpersonal relationship theory can enrich our brand relationship theories. We expect this session to be of interest to researchers in the areas of brands, consumer-brand relationships and interpersonal relationships.

Brand Communication on Social Media: Effects of Non-Persuasive Self-Disclosure on Consumer Perceptions

EXTENDED ABSTRACT

Since relationship closeness promises sales (Sela, Wheeler and Sarial-Abi 2012), increasingly, brands directly communicate with consumers via social media to forge intimate relationships (Neff 2014). They may share information not directly related to products (e.g., inspiring quotes, hobbies, anecdotes). For example, Planters claims that “I like to work out and take leisurely lunches in the park.” (Dahl 2014). While prior research emphasizes persuasive brand communications (e.g., Laran, Dalton, and Andrade 2011), non-persuasive tactics (i.e., self-disclosure) is less understood. In response to Brown (2010)'s call for more theoretical guidelines on social media communication, we explore how non-persuasive self-disclosure influences consumer perceptions.

Self-disclosure refers to the act of revealing personal information to initiate a more intimate relationship with the audiences (Collins and Miller 1994). In brand communication, this tactic may induce a priming effect as consumers behave in a manner implied by self-disclosure (Berger and Fitzsimons 2008). For example, the Walmart brand primes thriftiness in shoppers (Chartrand et al. 2008). Altman and Taylor (1973) state that intimate disclosures (e.g., hopes and fears) generate more intimate feelings than superficial disclosures (e.g., general interest). Further, people who share more intimate information are liked more (Collins and Miller 1994). Therefore, a brand disclosing personal information should be more effective in close relationship building than those acting “formal.”

However, we suggest that brand's self-disclosure may cause a reverse priming effect.

Laran et al. (2011) show that seeing the Walmart slogan “Save Money, Live Better” increases subsequent spending because of the

automatic correction to the persuasive tactics. The contents delivered by a brand may activate persuasive knowledge for correction (Oza, Srivastava, and Koukova 2010) such that consumers may infer the persuasive intent and act in a contrary manner. We propose that brand anthropomorphism can impact consumers' reactance to brand's self-disclosure.

Anthropomorphism, a tendency to attribute humanlike characteristics to nonhuman objects, can delude defensive mechanisms (Epley et al. 2007). People regard anthropomorphized objects more moral (Gray, Gray, and Wegner 2007). Anthropomorphized brands trigger consumers' goals for social interactions and cause behavioral assimilation to the liked brand (Aggarwal and McGill 2012). Thus, people perceive self-disclosure by a highly anthropomorphized brand with less persuasive intents and thus decrease resistance. However, self-disclosure by a lowly anthropomorphized brand may arouse persuasive inferences and trigger reactance. We have tested this prediction in three studies.

In study 1, an apparel brand's followers (N=269) on the Chinese biggest micro-blogging site participated in a 3 self-disclosures (intimate vs. superficial vs. baseline) x anthropomorphism tendency measured design field experiment. This experiment contained three phases. This brand had not been using a self-disclosure tactic previously. So, the most recent eight days persuasive contents were screenshot as the baseline stimuli for phase 1. Then intimate disclosures (personal emotions & secrets) were posted for eight days in phase 2. Five days later, superficial disclosures (weather & food) were posted for eight days in phase 3. Participants completed a survey at the end of each phase and answered questions on their feeling closeness to the brand (Edwards, Lee and Ferle 2009), Inclusion-of-Other-in-the-Self (IOS) (Aron et al. 1992), and the anthropomorphism tendency (AT) (Waytz et al. 2010) based on the snapshots of each disclosure condition. This process involved a between-subject design with every participant taking the survey only once.

Regression analysis revealed significant interactions of intimate*AT ($B = .22$, $t(263) = 3.96$, $p < .001$) and superficial*AT ($B = .13$, $t(263) = 1.88$, $p < .07$) on closeness. The slope was positive in the intimate ($B = .26$, $t(263) = 9.99$, $p < .001$), superficial ($B = .17$, $t(263) = 3.40$, $p < .01$), and insignificant in the baseline condition ($p > .44$). Spotlight analysis (Fitzsimons 2008) indicated higher closeness in intimate than in superficial disclosure ($B = -2.22$, $t(263) = -4.84$, $p < .001$) or baseline ($B = .99$, $t(263) = 6.18$, $p < .001$) at AT(+1SD). No differences were at AT (-1SD). Similar results occurred on IOS, providing an initial support for a priming effect when anthropomorphism was high.

Study 2 measured the actual brand anthropomorphism of a hypothetical watch brand in the lab. 97 undergraduates in Hong Kong joined a 2 disclosures (intimate vs. superficial) x brand anthropomorphism measured study. They read the snapshots of the brand's Twitter either sharing intimate or superficial information. Then they reported feeling closeness, interaction likelihood, and brand anthropomorphism ($\alpha = .91$; Aggarwal and McGill 2007). Regression analysis revealed a main effect of disclosure ($B = .79$, $t(94) = 4.74$, $p < .001$), brand anthropomorphism ($B = .47$, $t(94) = 7.49$, $p < .001$), and their interaction ($B = .26$, $t(93) = 2.11$, $p < .04$). Higher closeness was observed in intimate than superficial condition at brand anthropomorphism (+1SD) ($B = 1.14$, $t(93) = 4.90$, $p < .001$) but the pattern reversed at brand anthropomorphism (-1SD) ($B = .44$, $t(93) = 1.90$, $p < .07$). Same patterns occurred on interaction likelihood. These results replicated study 1 and documented a reverse priming effect when brand anthropomorphism was low.

Study 3 manipulated thinking style evaluating a skin care brand Twitter. 148 American

undergraduates engaged in a 2 thinking (anthropomorphism vs. object) x 2 self-disclosures (intimate vs. superficial) between-subject study. We manipulated thinking style by asking the subjects to evaluate the brand by human personalities vs. object attributes (Chandler and Schwarz 2010). Then we tested the closeness, brand evaluation and willingness to pay. An ANOVA revealed a main effect of the disclosure ($F(1,112) = 7.76$, $p < .01$), the thinking style ($F(1,112) = 32.6$, $p < .001$), and their interaction ($F(1,112) = 9.21$, $p < .01$) on closeness. Closeness was higher in the intimate as compared to superficial disclosure under the anthropomorphic thinking while the reverse was true under the object thinking. Interestingly, while the brand evaluation replicated closeness patterns, WTP showed the opposite results. The results imply that intimate disclosure by anthropomorphized brand may enhance brand evaluation but decrease monetary exchange desires.

This research contributes to an understanding of the non-persuasive marketing communication effects and has important implications for brand's marketing communication in the digital world.

Fostering and Leveraging Consumer-Brand Relationships: A Psychological Distance Perspective

EXTENDED ABSTRACT

A substantial body of research has focused on understanding the various types of relationships that consumers form with brands (Fournier 1998; Miller, Fournier, and Allen 2012). However, less emphasis has been placed on identifying how managers can differentially leverage these brand relationships in order to facilitate more positive outcomes. To address this, the current research examines how the nature of brand relationships influence perceptions of a brand's closeness to the self and, when matched with the appropriate construal level, can result in mindset congruency effects that positively impact consumers' brand evaluations.

Extant research demonstrates that consumers' brand relationships may parallel their interactions with other people (Fournier 1998; Aggarwal 2004). Drawing from the construal level theory of psychological distance (CLT: Trope and Liberman 2010), a key feature of interpersonal relationships is their ability to influence perceptions of the relationship partners' closeness to the self. For example, one's relationship with their sister is more psychologically proximal, whereas one's relationship with a server at a restaurant is more distal. Similarly, extant branding literature shows that consumers can form strong connections between the brand and the self (Escalas and Bettman 2003; 2005), and that individual-level differences exist in the tendency to form such connections (Spratt et al. 2009). Synthesizing these literatures, we posit that brand relationships should impact perceptions of the brand's closeness to the self, shedding light on important opportunities for marketers to better foster brand relationships and better leverage their value.

If brand relationships impact consumers' perceptions of psychological distance, this subjective difference in closeness to the self should be directly related to one's construal level when processing information pertaining to the brand. CLT states that objects that are psychologically distant to the individual are represented by high-level construal, whereas objects that are near to the individual are represented by low-level construal. As such, we posit that the nature of a brand relationship affects consumers' perceptions of the brand's closeness to the self resulting in congruency effects when matched with the appropriate construal level. Specifically, we show that when psychologically close (distant) brands are matched with a low-level (high-level) construal mindset, it results in a mindset congruency effect which facilitates more positive brand evaluations and influ-

ences actual consumer spending. Importantly, we demonstrate that this congruency effect is mediated by increased processing fluency (Lee and Labroo 2004).

Study 1 manipulates brand relationship type (committed, secret affair) and construal level (high, low) to test the mindset congruency effect. Participants first nominated a brand that they felt matched the description of the target relationship type (Miller, Fournier, and Allen 2012). Construal level was manipulated by instructing participants to elaborate on either *how* (low-level) or *why* (high-level) they use the brand. Results support the hypothesized mindset congruency effect. Across three dependent variables (attitudes, trust, and relationship satisfaction) responses were more favorable when participants in the psychologically proximal ‘committed’ relationship condition were in a low-level construal mindset. In contrast, participants in the psychologically distal ‘secret affair’ condition displayed more favorable responses in a high-level construal mindset (p 's < .05).

Study 2 provides a conceptual replication of the mindset congruency effect using a direct manipulation of brand closeness, a subtler concreteness-based manipulation of construal level, and measures of behavioral intentions. The study was conducted under the guise that researchers were interested in testing a new online product quality rating system, *International Standard*, which compiles information from online sources (e.g. consumer reports, online product reviews, etc.) to evaluate the overall quality of a brand. Adapting the Inclusion of Other in Self scale (Aron, Aron, and Smollan 1992) to manipulate brand closeness, participants provided the name of a brand that either had ‘very large’ self-overlap or was ‘separate’ from the self and were then instructed to wait while the system calculated a quality score for their brand. After a delay, the system informed participants that their brand had received a score of 9.2/10. Construal level was manipulated by providing participants with a list of the “top five factors that contributed to the *International Standard* score that the brand received” that varied based on *how* (concrete) or *why* (abstract) the brand received the score that it did. Results again provide evidence to support the pattern of the brand closeness × concreteness interaction across all three brand evaluation variables in addition to purchase intentions and word of mouth (p 's < .05).

Study 3 provides a conceptual replication of the effect and undertakes an empirical examination of the proposed fluency mediator. To manipulate closeness, participants nominated a brand that represented either a ‘committed’ (close) or ‘secret affair’ (distant) brand relationship. Participants’ brands were then used in the same *International Standard* manipulation of concreteness followed by measures of the fluency mediator and dependent variables. Significant and contrasting conditional indirect effects (Model 8; Hayes 2013) support the hypothesized mindset congruency effect being mediated by increased processing fluency across all three dependent variables used in study 1 (95% confidence intervals did not contain zero). Matching the psychological distance associated with a given brand relationship type with the appropriate construal level increases processing fluency leading to more favorable brand evaluations.

Study 4 embeds a concreteness manipulation within a co-branded charity appeal advertisement to demonstrate that the construal mindset congruency effect that arises when closeness is matched with an appropriate construal level carries over to impact the amount of money donated to a charity affiliated with the target brand. Results show that at higher (lower) levels of brand closeness, participants donated more when the charity advertisement appeal used concrete (abstract) language.

This research contributes to the branding literature by demonstrating that consumers view brands more favorably when they receive information that matches the construal level associated with

the psychological closeness of the brand. This mindset congruency effect results in the information being processed more fluently, which facilitates more positive brand evaluations and intentions. Based on these findings, marketers are advised to match the concreteness of their marketing communications with the closeness associated with the types of relationships that the target market experiences with their brand.

Warm Brands as Relationship Partners: The Dynamics of Social Exclusion, Brands, and Interpersonal Connection

EXTENDED ABSTRACT

People have a fundamental need to form positive and lasting relationships (Baumeister and Leary 1995). When people are socially excluded—that is, when they are isolated or excluded by groups or individuals (Williams 2007)—this disrupted social connectedness brings negative downstream consequences such as anxiety and depression (DeWall and Bushman 2011). Thus, excluded individuals engage in coping behaviors to alleviate this adverse state. Recent work has examined consumption as a coping behavior following social exclusion, such as engagement in strategic consumption for the purpose of social inclusion (Mead et al. 2011), conspicuous consumption (Lee and Shrum 2012) or nostalgic product consumption (Loveland, Smeesters, and Mandel 2010). However, little is known about the implications of social exclusion for consumer-brand relationships and for the subsequent dynamics between brands and interpersonal relationships. Thus, this research investigates (1) whether consumption following social exclusion is transitory, that is, fades away once consumption is complete, or it can trigger brand attachment, leading to meaningful consumer-brand relationships and (2) how these brand relationships formed under social exclusion influence the subsequent need for social connections.

Warmth and competence are important dimensions that characterize consumers’ interactions with brands (Aaker, Garbinsky, and Vohs 2012; Kervyn, Fiske, and Malone 2012). Warmth reflects consumers’ perceptions of brands’ intentions as positive or negative; brands perceived as friendly and sincere are seen as warm. Competence concerns brands’ abilities to carry out its intentions; brands that possess a skill set to execute functions successfully are perceived as competent (Bennett and Hill 2012). Existing research has presented competence as a main driver of consumers’ purchase intention (Aaker et al. 2010). However, in the context of social exclusion, we argue that the deprivation of social connection should lead consumers to attend to brands’ warmth, the image of which is akin to social closeness, more than brands’ competence. Such social closeness imbued in warm brands may have a powerful impact on consumers’ psychological attachment to warm brands similarly to the way sharing adversity with those present during a difficult time creates strong attachment to others (Sarnoff and Zimbardo 1961). Thus, we predict that when people are socially excluded, it will trigger emotional attachment to warm brands, thereby leading to continuous brand consumption. In addition, Foa (1993) argues that people deprived of the most needed resource tend to choose the resource similar to the deficient one. Along the line, we predict that in the context of social exclusion, warm brands will function as social resource, which is close to social warmth, creating relative abundance and thereby alleviating the deprivation of and the need for the social connectedness.

Prior to testing our predictions, we created and pre-tested two hypothetical brands: “Sammy (heart) Danny” as a warm brand and “Smith & Dent” as a competent brand. The results showed that the “Sammy (heart) Danny” brand was perceived as a warm but less

competent brand, while “Smith & Dent” as perceived as a competent but less warm brand (all $p < .005$; $N = 42$, $M_{\text{age}} = 31.9$).

In Study 1 we tested the effects of social exclusion on emotional brand attachment and brand short-term and long-term consumption. MTurk participants ($N = 121$, $M_{\text{age}} = 33.7$) completed a writing task in which they were randomly assigned to one of two conditions: (1) social exclusion and (2) no exclusion (Lee and Shrum 2012). Next, participants viewed both two laptop bags presented as either warm or competent (as pre-tested above) and indicated their purchase and repurchase intentions for the brand (1 = not at all, 7 = very much). They also rated the extent to which they felt passionate, connected, and affectionate toward each brand (emotional brand attachment; Thomson et al. 2005). The repeated measure analysis revealed that when people were socially excluded, they were significantly more likely to purchase the warm than the competent brand ($F(1, 118) = 5.23$, $p = .024$; $\eta^2 = 5.31$ vs. $\eta^2 = 4.37$). Socially excluded participants were also marginally more willing to repurchase the warm than the competent brand ($F(1, 118) = 3.05$, $p = .08$; $\eta^2 = 5.39$ vs. $\eta^2 = 4.41$). Bootstrapping analyses (Hayes 2013) showed that emotional brand attachment significantly mediated the effects of social exclusion on warm brand purchase and repurchase intentions (95% CI [0.0228, 1.1314] and 95% CI [0.005, 0.888] respectively).

Study 2 tested how social exclusion interacts with brand types to affect the state of deprivation and the need for social connection. Similar to Study 1, all MTurk participants ($N = 111$, $M_{\text{age}} = 40.35$) were asked to write about their social exclusion experience, and were randomly assigned to view (1) a warm brand, (2) a competent brand, or (3) no brand; in the no brand condition, participants did not see any brand and reported their deprivation of and need for social connection. The regression analysis showed that socially excluded participants were more emotionally attached to the warm brand ($t(72) = 4.54$, $p < .001$) and more likely to purchase ($t(72) = 2.36$, $p < .05$) and repurchase the warm brand ($t = 2.95$, $p < .01$), as compared to the competent brand. Importantly, participants in the warm brand condition were feeling less deprived of social connection ($t(108) = -2.04$, $p < .05$) and indicated a lower need for connection with people (than those in the competent brand condition ($t(108) = -2.04$, $p < .05$), while the differences between the competent and no brand conditions were not significant (all $p > .40$).

In conclusion, our findings contribute to an understanding of the relations between social adversity, brands, and human relationships: Not only do socially excluded consumers turn to warm brands, but, as a result, they feel less deprived of and less in need of human connections. By showing how brands can fill the social roles in thwarted social relationships, we hope that our work will interest researchers in the areas of social adversity, interpersonal and consumer-brand relationships.

Seeing Brands Through “Me” Colored Glasses: Effects of Self-Threat and Brand Attachment on Brand Evaluations

EXTENDED ABSTRACT

It is well documented that consumers use brands to shape and reflect who they are and want to be (e.g., Belk, 1988; Fournier 1998; Escalas and Bettman 2003). An important type of brand attachment can be referred to as a self-brand connection (SBC). A key premise of recent research on SBC is that, if it is possible that the brand concept (i.e., the way consumers think about the brand) can reflect consumers' self-concept, then it is also possible that the brand concept can affect consumers' self-concept. If so, consumers' sense of self-worth may be adversely influenced by exposure to negative brand information. Indeed, research by Cheng, White and Chaplin (2012)

confirms this possibility. Their research demonstrates that consumers with high SBC respond to negative brand information as they do to personal failure – they experience a threat to their positive self view. These findings highlight important, yet unintended *outcomes* of consumer brand attachments.

In this research, we further explore consequences of SBC. Specifically, we examine the notion that if the brand concept can affect the self-concept of high SBC consumers, then the opposite might also be true. Is it possible that consumers' beliefs about themselves influence their beliefs about the brands to which they feel connected? Is it possible that the experience of self-threat, which can make consumers feel worse about themselves, can also make them feel worse about their high SBC brands? We examine these questions in the context of brand evaluations. In three experiments, we demonstrate that self-threat decreases high (vs. low) SBC consumers' brand trust judgments. Moreover, these effects extend to perceptions of brand competence and attractiveness.

Literature and Hypotheses

Self-affirmation theory posits that people are motivated maintain a positive self-concept (Steele 1988). Yet, individuals often experience incidents that threaten this belief. For example, consumers sometimes feel shame about their appearance when they view attractive models (Gulas and McKeage 2000), or feel incompetent when they realize they paid more than others for an identical item (Argo, White, and Dahl 2006). In response to these incidents, individuals are often motivated to reduce self-threat and restore a positive self-view by derogating others (Campbell and Sedikides 1999) or by choosing products that bolster the threatened aspect of the self (Gao, Wheeler, and Shiv 2009).

Consistent with prior research, we argue that, when consumers' self concept is threatened, they experience a “shake” - a temporary decrement - to their self-confidence (Gao et al. 2009). However, we explore an important, yet largely unexplored, consequence of this “shake,” namely a marked decrease in consumers' judgments of their own trustworthiness. Self-trust reflects a positive sense of one's own motivations and values (Govier 1993). Lack of self-trust stems from a decreased confidence in one's ability to meet expectations (Gambetta 2000). We argue that self-threats, particularly those resulting from negative feedback, decrease consumers' self-trust and, therefore, their trust in highly connected brands.

Method and Results

Prior to Studies 1 and 2, SBC perceptions were measures for several brands using the scale developed by Escalas and Bettman (2003). Based on the results of the pretests, we selected exemplars of high and low SBC brands. For the sake of brevity, we only report findings from S2 and S3 below.

In S1, respondents were randomly assigned to either a high (Apple) or low (Blackberry) SBC condition. After reading an article about the correlation between IQ and success, participants completed a Remote Associates Task (RAT) (Mednick et al. 1964) and were randomly assigned to receive either negative performance feedback (i.e., scores in 23rd percentile on the RAT) or no feedback. Next, in an ostensibly unrelated task, respondents rated trusting beliefs about either Apple or Blackberry using measures by Schlosser, White, and Lloyd (2006).

The procedure in S2 is similar to S1 except we used Nike and Reebok as exemplars of high versus low SBC brands, respectively. In addition to trust beliefs, we also measured respondents' ratings of how smart they believe the brand to be. If receiving negative performance feedback adversely affects performance self-esteem

(Shrauger and Rosenberg 1970), respondents should feel less smart following negative feedback and, consistent with our predictions, report lower smartness ratings for high SBC brands.

A two-way ANOVA revealed a significant main effect for SBC ($F(1, 84) = 11.46; p < .001$) that was qualified by an SBC X Feedback interaction ($F(1, 84) = 4.626; p < .05$) for brand smartness ratings. As predicted, whereas feedback had no effect on perceived smartness for those in the low SBC conditions ($M_{\text{control}} = 4.68; M_{\text{negative}} = 4.95; F(1, 84) = ns$), smartness ratings were significantly lower following negative feedback for those in the high SBC conditions ($M_{\text{control}} = 6.19; M_{\text{negative}} = 5.29; F(1, 84) = 19.790; p < .001$). Similarly, planned contrast analyses of a marginally significant SBC X Feedback interaction ($F(1, 84) = 2.960; p < .09$) for trust ratings revealed that, although trust ratings did not depend upon feedback for those in the low SBC condition ($M_{\text{control}} = 4.09; M_{\text{negative}} = 4.36; F(1, 84), ns$), brand trust was significantly lower following negative feedback for high SBC respondents ($M_{\text{control}} = 5.34; M_{\text{negative}} = 4.35; F(1, 84) = 9.143; p < .05$).

In study 3, we measured SBC for the focal brand, Gap. We also manipulated appearance threat (Park and Maner 2009). Finally, in addition to brand trust, we measured brand attractiveness. We regressed attractiveness ratings and trust judgments on SBC, appearance threat, and their interaction. As predicted, for attractiveness ratings, a significant SBC main effect was qualified by a significant SBC X Appearance Threat interaction ($B = -.339; p < .05$). Similarly, trust judgments were significantly affected by SBC as well as the SBC X Appearance Threat interaction ($B = -.306; p < .05$). For both DVs, high (but not low) SBC respondents' ratings were significantly lower following negative appearance feedback.

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Anthropomorphism and Consumer Behaviors: Exploring the New Processes and Implications

Chairs: Feifei Huang, The Chinese University of Hong Kong, Hong Kong, China
Vincent Chi Wong, Lingnan University, Hong Kong, China

Paper #1: I Need My Own Substance! Effects of Anthropomorphic Product Presentations on Brand Choice of Complementary Accessories

He (Michael) Jia, The University of Hong Kong, Hong Kong, China

B. Kyu Kim, University of Southern California, USA

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Paper #2: The Influence of Product Anthropomorphism on Comparative Judgment Strategy

Feifei Huang, The Chinese University of Hong Kong, Hong Kong, China

Vincent Chi Wong, Lingnan University, Hong Kong, China

Echo Wen Wan, The University of Hong Kong, Hong Kong, China

Paper #3: Money Helps When Money Feels: Money Anthropomorphism Increases Charitable Giving

Lili Wang, Zhejiang University, China

Xinyue Zhou, Zhejiang University, China

Sara Kim, The University of Hong Kong, Hong Kong, China

Paper #4: Evaluating Anthropomorphized Products Less Positively: “Shame on Me!”

Ping Dong, University of Toronto, Canada

Pankaj Aggarwal, University of Toronto, Canada

SESSION OVERVIEW

Anthropomorphism refers to the tendency to imbue nonhuman agents with humanlike characteristics, motivations, intentions, or emotions (Epley, Waytz, and Cacioppo 2007). As a common phenomenon in consumption environments, anthropomorphism has drawn wide attentions from both social psychology and consumer researchers (Aggarwal and McGill 2012). Previous consumer research has largely focused on how imbuing products with *general* humanlike features affects liking of products (e.g., Aggarwal and McGill 2007). However, relatively fewer studies have attempted to identify the *specific* humanlike features that drive the effects. The four papers in this session identify important cognitive and emotional processes associated with such specific humanlike features, and explore new implications for consumer behaviors.

In particular, the first two papers in the session focus on consumers' perceptions of anthropomorphized products. The paper by Jia et al. explores the effect of “bodily consideration” activated by anthropomorphic product presentations on preferences for complementary accessories. Huang, Wong and Wan's research suggests that consumers tend to treat an anthropomorphized product as an integrated entity, and explores the implications for comparative judgment strategies. The remaining two papers link anthropomorphism research with feelings or emotions. The paper by Wang, Zhou, and Kim introduces the role of perceived warmth of anthropomorphized money in a charitable giving context. Dong and Aggarwal demonstrate shame as a novel emotional antecedent on consumers' evaluation of anthropomorphized products.

The first paper shows in four studies that anthropomorphic presentations of a base product (e.g., making a *Canon* printer “talk” in a video advertisement) increase consumers' choice share of complementary accessories from the same brand that provides the base product (e.g., *Canon* ink cartridges) over accessories from a different brand (e.g., *Staples* ink cartridges). This effect occurs because anthropomorphism activates a “bodily consideration” and consumers are biologically averse to foreign body-related substances.

In the second paper, five experiments show that anthropomorphism of product alternatives increases the chance that consumers use an absolute judgment strategy (vs. dimension-by-dimension strategy) in comparative judgment. This effect is mediated by consumers' perception of each anthropomorphized alternative as an integrated entity (vs. a bundle of attributes).

The third paper explores what happens when people think of money as a human. This research systematically examines in six studies the effect of money anthropomorphism on charitable giving, and finds that money anthropomorphism leads people to consider money to be warmer and thus makes people more inclined to donate.

Finally in the fourth paper, four studies demonstrate that experiencing shame (vs. fear, sadness, or neutral emotion) decreases consumers' preference for anthropomorphized products. The effect is driven by a heightened desire to avoid social contact, and is stronger for consumers with interdependent (vs. independent) self-construal and for products consumed in private (vs. public).

Taken together, these papers present new insights and directions in anthropomorphism research. Given the growing impact of anthropomorphism in consumer research and its marketing implications, we expect this session to generate high interest among ACR attendees and spark future research, as well as engage the audience to discuss the interpretation of many consequences of anthropomorphism. (498 words)

I Need My Own Substance! Effects of Anthropomorphic Product Presentations on Brand Choice of Complementary Accessories

EXTENDED ABSTRACT

Many firms across various industries adopt a “razor-and-blade” business model, in which these firms attract consumers by offering a base product (e.g., a razor) at a low price and then earn their real profit from consumers' repeated purchases of complementary accessories (e.g., replaceable blades) for the base product (Teece 2010). Oftentimes, this business model faces threats from competing generic brands that offer cheaper alternative accessories to consumers.

In this research, we examine whether marketers can subtly vary the way they present a base product to change consumers' subjective perception of the product, as a solution for protecting their market share in the accessory market. Specifically, we focus on anthropomorphic product presentations, that is, making a base product look, move, or talk as a human being in ads, product appearances, or consumer-product interfaces (Aggarwal and McGill 2007; Kim and McGill 2011).

We propose that anthropomorphic presentations of a base product (e.g., a *Canon* printer) will increase consumers' choice share of

complementary accessories provided by the same brand that offers the base product (e.g., *Canon* ink cartridges) over accessories from a different brand (e.g., *Staples* ink cartridges). This is because there is a “whole-part” relationship between a base product and its complementary accessories, so that anthropomorphic presentations of the base product will activate a “bodily consideration” — consumers are biologically averse to foreign body-related substances (Tybur, Lieberman, and Griskevicius 2009), and they also project such an aversion onto accessories from a different brand, which represent “foreign body substances” to the anthropomorphized base product.

In Study 1, we assigned 156 undergraduates to two conditions. In the anthropomorphic condition, participants watched a video in which a Canon printer appeared to introduce itself from a first-person perspective (it also moved its “lips” when “talking”); in the non-anthropomorphic condition, the same Canon printer was introduced from a third-person perspective (see Puzakova, Kwak, and Rocereto 2013 for similar manipulations). Then, participants made a choice between a Canon ink cartridge and a low-cost alternative provided by Staples. We found that participants were more likely to choose the Canon ink cartridge for the Canon printer in the anthropomorphic condition (50.0%) than in the non-anthropomorphic condition (34.2%; $Wald = 3.94, p < .05$).

In Study 2, we presented a Samsung laptop computer to participants with a video manipulation similar to that used in Study 1. After participants ($N = 201$) watched the video, they were instructed to imagine that they had just purchased the Samsung laptop computer, and to further choose between a Samsung hard drive and a Toshiba hard drive for their Samsung laptop computer. Then, participants rated the perceived compatibility between the Samsung laptop computer and the Toshiba hard drive (“be compatible with/work well with,” $\alpha = .97$). Replicating the results of Study 1, we found that participants were more likely to choose the Samsung hard drive for their Samsung laptop computer in the anthropomorphic condition than in the non-anthropomorphic condition (79.0% vs. 62.4%; $Wald = 6.55, p < .01$). Furthermore, anthropomorphic product presentation decreased the perceived compatibility between the Samsung laptop computer and the Toshiba hard drive (5.01 vs. 5.62; $F(1, 199) = 7.29, p < .01$), and such a decrease in the perceived compatibility mediated the effect of anthropomorphic product presentation on brand choice (95%CI: .15, .89).

In Study 3, we again used the Samsung laptop videos to manipulate anthropomorphism and added a second between-subjects factor to the experimental design. A half of participants made a decision on hard drives for their Samsung laptop computer as those did in Study 2, and the other half made a decision on what tablet computer (Samsung vs. Toshiba) to buy together with their Samsung laptop computer. There was an interaction between anthropomorphic presentation and decision target ($N = 201$; $b = -1.12, z = -1.88, p = .06$). In the hard drive condition, we replicated our results, such that the anthropomorphic presentation of the Samsung laptop computer increased the choice share of the Samsung hard drive over the Toshiba hard drive (74.5% vs. 54.7%; $b = .83, z = 1.95, p = .05$). In contrast, this effect disappeared when the decision target was tablet computer ($b = -.29, z = -.70, p > .48$). These results demonstrated that anthropomorphic product presentations only influence consumers’ brand choice of accessories for the base product, but not their brand choice of other products that can work independently of the base product. Such findings are consistent with the “bodily consideration” account — a “whole-part” relationship does not exist between a laptop computer and a tablet computer, and thus a “bodily consideration” should not be activated, consequently inhibiting consumers’ projection of their own aversion to foreign body-related substances onto this context.

In Study 4, we manipulated product anthropomorphism using print ads. In the anthropomorphic condition, a Philips electric toothbrush was described from a first-person perspective, while the same electric toothbrush was presented from a third-person perspective in the non-anthropomorphic condition. After imagining having decided to buy the Philips electric toothbrush, participants ($N = 102$) chose between a Philips replacement brush head and a low-cost alternative provided by Up & Up (a store brand owned by Target) for their Philips electric toothbrush. Replicating the previous results, we found that participants were more likely to choose the Philips replacement brush head for their Philips electric toothbrush in the anthropomorphic condition (52.8%) than in the non-anthropomorphic condition (30.6%; $Wald = 5.05, p < .03$). In addition, at the end of the survey, we measured participants’ chronic aversion to foreign body-related substances (e.g., “having a blood transfusion”) with a four-item scale ($\alpha = .81$). We found that the effect of anthropomorphic presentation on brand choice of accessories increased with participants’ chronic aversion to foreign body-related substances ($b = .55, z = 2.05, p < .04$), further supporting the “bodily consideration” account.

In sum, our research contributes to the literature on product anthropomorphism by demonstrating that anthropomorphism can activate a “bodily consideration” in the context of accessory decision. The findings also enrich our understanding of consumers’ brand choice of complementary goods. (1000 words)

The Influence of Product Anthropomorphism on Comparative Judgment Strategy

EXTENDED ABSTRACT

Previous research has shown that anthropomorphism can influence evaluation of a product when considered in *isolation* or in comparison with *non-humanized* product (e.g., Aggarwal and McGill 2007; Chandler and Schwarz 2010; Kim and McGill 2011). However, little is known about the influence of anthropomorphism on comparisons among several anthropomorphized alternatives presented simultaneously. Intuitively, the effect of anthropomorphism may be cancelled out in such a context, if the effect of anthropomorphism is considered for each product alternative individually. The present research, however, suggests that anthropomorphism influences the comparative strategy to process the product information, and eventually affects consumers’ preference.

Consumers who have to make a decision between different choice alternatives may compute a preference in at least two ways. On one hand, they may perform a *dimension-by-dimension comparison* and choose the alternative that is superior with the greatest number of dimensions (Shafir, Simonson, and Tversky 1993). Alternatively, consumers may first estimate the overall attractiveness of each alternative by integrating the values along the dimensions and then choose the alternative with the greatest overall attractiveness (*absolute judgment process*; Parducci 1965). The final decision can be quite different, depending on which strategy is adopted (Park and Kim 2005). That is, the alternative scoring higher on overall attractiveness may be inferior along more dimensions than the other alternative(s).

When product alternatives are presented in a humanized manner, consumers tend to treat each alternative as an organic whole with a soul rather than a loose combination of instrumental attributes—similar to the way we treat people (McGill 1998). Just like each person is distinctive, each humanized product as an integrated entity is perceived as structurally distinct from other humanized products, and should not be broken down to pieces and compared by individual dimensions mechanically (Chandler and Schwarz 2010; Fiske and

Neuberg 1990). We propose that when confronting a consideration set in which all alternatives are anthropomorphized (vs. non-anthropomorphized), consumers are more likely to perceive each alternative as an integrated entity and thus, increase their chance to use an absolute judgment strategy.

Experiment 1 tested the effect using a choice task with a one-factor, two-level design (anthropomorphism vs. non-anthropomorphism). Specifically, each participant was presented with two laptops to choose. One laptop (i.e., absolute-dominant laptop) was designed to be preferred if participants use an absolute judgment comparative strategy (i.e., with an overall higher performance), while the other laptop (i.e., dimension-dominant laptop) was designed to be preferred if a dimension-by-dimension strategy is used (i.e., with a greater number of superior dimensions). Anthropomorphism was manipulated by describing the laptops in a human-like tone and by asking participants to concentrate on thinking of each laptop as a person. As expected, anthropomorphism increased participants' choice of and preference for absolute-dominant alternative.

Experiment 2 tested the underlying mechanism using a moderation-of-process design. We expected that the effect of anthropomorphism on comparative judgment strategy should not hold when participants are led to believe that even human attributes are autonomous and can be detached from each other. The experiment had a 2 (belief of human attributes: autonomous vs. integral) \times 2 (anthropomorphism of products: anthropomorphism vs. non-anthropomorphism). Participants first read a paragraph containing arguments that human attributes are either "autonomous and contribute individually" or "integral and embedded to each other" (general trait manipulation approach; Chiu, Hong, and Dweck 1997). Then, similar to experiment 1, participants were presented with a pair of either anthropomorphized or non-anthropomorphized smart phones for evaluation. When participants were led to believe that human attributes are integral, the results replicated those in experiment 1. However, the effect diminished when they were led to believe that even human attributes can be detached and evaluated individually.

To provide direct process evidence of the judgment strategies elicited by anthropomorphism, process-tracing software MouseLab was used in experiment 3. Participants were asked to evaluate two alternatives of restaurants, both described in either a human-like tone or a non-human-like tone. Information of the restaurants was presented on the computer screen in the form of a 2 (alternative) \times 3 (attribute) matrix. The information in the matrix was hidden behind masked boxes, and the participants had to open one box at a time by moving a mouse-controlled cursor to the box. MouseLab recorded which boxes the participants opened, and in what sequences. The amount of alternative-based cursor movements relative to attribute-based movements was calculated in a way suggested by Payne, Bettman and Johnson (1988), and this value was significantly higher in anthropomorphism condition than in non-anthropomorphism condition.

Experiment 4 tested the effect using eye-tracking technique with real information of products. Participants were presented with two alternative digital cameras to choose—described either in a human-like manner or not. Participants' eyeballs movements were recorded by an eye-tracking machine and analyzed using the method similar to the MouseLab study. The results replicated those from experiment 3.

Experiment 5 further tested the effect in a real choice context. Participants were told that they can get a bag of corn snack for free, and were asked to make a choice between two corn snack alternatives based on the package pictures and descriptions, which were displayed in a way similar to online shopping. Anthropomorphism of

snack alternatives was manipulated using human-like or non-human-like packages. Consistent with expectation, participants were more likely to choose the absolute-dominant snack in the anthropomorphism condition than in the non-anthropomorphism condition. Importantly, participants' perception of each product as an integrated entity or a bundle of attributes was directly measured, and was found to mediate the effect of anthropomorphism on the choice they made.

To summarize, in five experiments involving comparative judgments of products in various categories, we show that anthropomorphism leads to perceptions of each product alternative as an integrated entity (vs. a bundle of attributes), and thus increases consumers' chance to use an absolute judgment strategy. While previous anthropomorphism literature rarely compares multiple anthropomorphized products presented simultaneously—a context that is pervasive in everyday consumption—this research fills this gap. Additionally, this research contributes to comparative judgment literature by identifying anthropomorphism as a new antecedent of judgment strategy. (1000 words)

Money Helps When Money Feels: Money Anthropomorphism Increases Charitable Giving

EXTENDED ABSTRACT

Throughout history, philosophers and psychologists have considered money as a negative force that weakens social bonds and reduces people's tendency to help others (Marx 1844, 1964; Vohs, Mead, and Goode 2006, 2008). However, is it possible that thoughts of money can actually promote helping and charitable giving to others? What happens when people think of money as a person? Will money anthropomorphism increase charitable giving? In the present research, we propose that money anthropomorphism, imbuing money with humanlike characteristics, leads people to consider money to be warmer and in turn makes people more inclined to donate. Across seven studies including one pilot study, we tested our hypothesis.

In the pilot study, we examined consumers' dispositional tendency to anthropomorphize money and its correlation with their donation intention. We also measured a general tendency to anthropomorphize any entities to show our effect is specific to money anthropomorphism. A correlation analysis revealed that a consumers' dispositional tendency to anthropomorphize money was positively correlated with their donation intention, whereas the general tendency to anthropomorphize any entities was not. The findings provided preliminary evidence to support our argument that money anthropomorphism can enhance charitable giving. In the main studies, we manipulated money anthropomorphism to examine the casual effect of money anthropomorphism on charity donations.

In Study 1, we used a previously validated anthropomorphism manipulation (Aggarwal and McGill 2007), and show participants in the anthropomorphism condition displayed a higher donation intention ($M = 4.42$, $SD = 1.98$) than those in the object condition ($M = 3.69$, $SD = 2.03$).

Study 2 replicated findings in Study 1 by using a different method to manipulate money anthropomorphism (adapted from Chandler and Schwarz 2010). In the anthropomorphism condition, participants thought of money with personality traits, whereas in the object condition, participants thought about money in terms of its physical features. Consistent with Study 1, money anthropomorphism significantly increased participants' donation intention. In addition, we also tested the underlying mechanism of the effect of money anthropomorphism on charitable giving. A mediation analysis showed that the effect of money anthropomorphism on donation intention was mediated by the enhanced warmth perception of money (Indirect effect: b

= .17, SE = .12, 95% CI [.01, .53]). However, we did not find strong evidence to suggest that the enhanced competence perception mediated the effect (Indirect effect: $B = .15$, SE = .12, 95% CI [-.01, .50]).

Study 3 further examined the underlying process of the money anthropomorphism effect by examining a boundary condition. Our logic was that if perceived warmth, not perceived competence, mediated the money anthropomorphism effect on charity donation, the effect should be attenuated if participants were explicitly guided to think of money as a competent, agentic person (agentic human condition). We predicted we would replicate the findings in the previous studies when participants were asked to think of money as a warm, empathetic person (communal human condition). Supporting our prediction, results showed that participants in the communal human condition ($M = 4.50$, $SD = 1.94$) had a higher donation intention than those in the object condition ($M = 3.84$, $SD = 2.12$, $F(2, 259) = 4.90$, $p = .02$) and those in the agentic human condition ($M = 3.73$, $SD = 1.86$, $F(2, 259) = 6.66$, $p = .01$). There was no significant difference between the agentic human and object conditions ($F(2, 259) = .13$, $p = .72$). A mediation analysis further confirmed that perceived warmth, not perceived competence, served as the mediator for the money anthropomorphism effect.

Study 4 focused on ruling out an alternative explanation that charitable donations might have benefited from a humanization itself rather than money anthropomorphism per se (humanization halo effect). That is, anthropomorphizing anything might enhance charitable giving. However, our results showed that the effect was specific to money anthropomorphism ($M_{anthropomorphism} = 4.33$, $SD_{anthropomorphism} = 1.67$, $M_{control} = 3.40$, $SD_{control} = 1.86$, $F(1, 363) = 9.68$, $p = .002$). We did not observe the same effect when participants were asked to anthropomorphize the charity, any object they can easily anthropomorphize, or any familiar product they can think of (all $ps > .17$). These findings suggest that anthropomorphism itself is not sufficient to induce a heightened intention to donate. Although the charity organization is also involved in the charitable process, charity anthropomorphism did not lead to an increase in donation amount compared with money anthropomorphism.

Study 5 examined whether money anthropomorphism would lead participants to donate real money. Results showed that money anthropomorphism increased not only the probability of donation ($P_{Human} = 72.09\%$, $P_{Object} = 46.80\%$, $\chi^2 = 5.93$, $p = .02$) but also the amount of donation ($M_{Human} = 2.98$, $SD = 3.52$; $M_{Object} = 1.36$, $SD = 2.52$, $t(75) = 2.49$, $p = .02$).

In Study 6, we used a different method to manipulate money anthropomorphism that can enhance the external validity and provide meaningful managerial implications. For example, in the anthropomorphism condition participants were asked to contribute one "George Washington," whereas those in the control condition were asked to donate \$1 dollar. Moreover, we ruled out an alternative explanation that the effect might have been driven by the reduced pain of parting with money.

Our research provides new insight into the potential positive effects of the cue of money on consumer behavior. The findings also contribute to the emergent theorization about underlying psychological mechanisms for the effect of anthropomorphism on consumer behavior. (893 words)

Evaluating Anthropomorphized Products Less Positively: "Shame on Me!"

EXTENDED ABSTRACT

Shame is an aversive affective reaction that occurs following the failure to meet internalized social standards (Tangney 1999; Tra-

cy and Robins 2004). Hence, shame has been characterized as both a "self-conscious" (Tangney 1999) and a "social" emotion (Fischer and Tangney 1995), and has been linked with low self-worth (Tracy, Robins, and Tangney 2007), dysfunctional interpersonal behaviors (Tangney, Stuewig, and Mashek 2007), and a motivation for escape or concealment (Tangney et al. 2007). These findings suggest that shame-laden individuals tend to cope by avoiding public exposure.

Although the strategies that people use to cope with feelings of shame in social relationships are well documented, the impact of these feelings on non-social, consumption behavior has not received much attention. Building on the premise that shame-laden individuals have a strong desire to avoid public exposure, the current research explores the possibility that shame may lead to lowered evaluation of anthropomorphized products. Prior research suggests that when people anthropomorphize a product, they imbue it with humanlike characteristics, motivations, intentions, or emotions (Aggarwal and McGill 2007; Epley, Waytz, and Cacioppo 2007). As a result, people may interact with anthropomorphized products in a way similar to their interactions with other persons. Consequently, even the mere presence of anthropomorphized products might create a psychological feeling of being in a public environment and being under the watchful eyes of others, regardless of actual anonymity (Bateson, Nettle, and Roberts 2006). Thus, we expect that shame-laden consumers would evaluate the anthropomorphized (vs. non-anthropomorphized) products less favorably, and that this effect will be driven by a general desire to avoid social contact with others.

Moreover, we argue that the effect of incidental shame on reduced evaluation of anthropomorphized products will be (a) stronger for consumers with interdependent (vs. independent) construal, as they are generally more susceptible to others' evaluations (Oyserman and Lee 2008); and (b) weaker for products consumed publicly (vs. privately), as we do not expect the presence of an anthropomorphized product to exert any additional effect on consumers' desire to avoid social contact above and beyond what they already experience in a public consumption context.

Further, the effect will be specific to shame and would not generalize to other negatively valenced emotions such as fear or sadness, which are characterized by different cognitive appraisals and social motivations. While shame elicits a greater desire to avoid social interaction with others (Tracy and Robins 2004), people tend to cope with fear and sadness through greater affiliation with others. For instance, Dunn and Hoegg (2014) showed that fearful consumers tend to seek affiliation with an available brand when the opportunity to build affiliations with others is not immediately available. Similarly, sadness may evoke the motivation to seek help and accompaniment from others driven by a sense of loss and helplessness (Gary and Lerner 2013). Thus, to get further evidence for the process by which shame reduces consumers' evaluation of anthropomorphized products and to rule out a generalized negative valence of the emotion as an alternative explanation, we compared the effect of shame with fear and sadness. Four experiments were conducted to test the proposed hypotheses.

Experiment 1 employed a 3 (emotion: shame vs. fear vs. neutral) \times 2 (product type: anthropomorphized vs. non-anthropomorphized) between-subjects design. Participants first recalled a past experience that gave rise to feelings of shame, fear or neutral emotion (a typical day experience). Afterwards, participants proceeded to an ostensibly unrelated task, in which they provided evaluations of either an anthropomorphized or non-anthropomorphized smoothie-maker Puzakova et al. 2013). As expected, participants who recalled a shameful (vs. fearful or neutral) experience provided less favorable evaluation of an anthropomorphized smoothie-maker, but not

a non-anthropomorphized smoothie-maker. Moreover, as expected, fear (vs. neutral emotion) increased consumers' evaluation of the anthropomorphized product.

Experiment 2 replicated the results of Experiment 1 and further tested the underlying mechanism of the effect. We followed the same procedure as in Experiment 1 except that we used sadness (rather than fear) as the comparison negative emotion and a different product category (i.e., digital camera). The results mirrored those of Experiment 1. A moderated mediation analysis revealed that participants' desire to avoid social contact with others mediated the emotion \times product type interaction effect on evaluation.

Experiment 3 tested the moderating role of self-construal through a 2 (emotion: shame vs. neutral) \times 2 (self-construal: independent vs. interdependent) \times 2 (product type: anthropomorphized vs. non-anthropomorphized) between-subjects design. Participants were randomly assigned to an independent or interdependent self-construal condition (Schlosser 2015), and then one of two emotion induction conditions (shame vs. neutral) using the same recall task. As predicted, the negative effect of shame on evaluation of anthropomorphized products occurred for participants primed with interdependent self-construal, but not independent self-construal.

Experiment 4 further tested the moderating role of private (vs. public) consumption context using a 2 (emotion: shame vs. neutral) \times 2 (product type: anthropomorphized vs. non-anthropomorphized product) \times 2 (consumption context: public vs. private) between-subjects design. After recalling either a shameful or neutral event, participants were asked to imagine that they had just bought a tablet and would like to buy a case for it. To manipulate consumption context, participants were instructed that the tablet was mainly used at home (private context) or at school (public context). Then participants provided evaluations of a tablet case that was either anthropomorphized or not. As further support for our underlying mechanism, we found that when the product was used publicly (i.e., when social contact was already high), the negative effect of shame on anthropomorphized product disappeared, in keeping with our hypothesis. However, when the product was used privately, the social presence of anthropomorphized product resulted in a less favorable evaluation.

Taken together, this research documents a novel emotional antecedent – incidental shame – on consumer's evaluation of anthropomorphized products. Although anthropomorphizing a products have been shown to lead to positive outcomes (Chandler and Schwarz 2010; Delbaere et al. 2011), our research suggests that marketers may need to re-consider the effectiveness of this strategy if their products elicit feelings of shame (e.g., counterfeit products). (996 words)

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Self-Control in Consumption: Novel Antecedents and Consequences

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Paper #1: Effect of Anger and Anxiety on Choice in Self-Control Dilemmas

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Suresh Ramanathan, Texas A&M University, USA

Paper #2: Bringing Ulysses to Scale: A Tale of Persistence, Spillovers and Customer Loyalty

Daniel Mochon, Tulane University, USA
Janet Schwartz, Tulane University, USA
Dan Ariely, Duke University, USA

Paper #3: Waste Aversion for Virtue versus Vice

Jeehye Christine Kim, INSEAD, France
Jongmin Kim, Singapore Management University, Singapore

Paper #4: Pleasure, Guilt and Regret in Consumption: Revisiting the Vice-Virtue Categorization in Theories of Self-Control

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SESSION OVERVIEW

Most theories of self-control in consumption characterize self-control as an effortful process requiring cognitive resources or willpower (e.g., Baumeister et al. 1998; Shiv and Fedorikhin 1999, Bazerman et al. 1998, Hoch and Loewenstein 1991). According to these theories, consumers in general want to exert self-control but often lack the necessary resources to do so, as epitomized in the Biblical saying “The spirit is willing but the flesh is weak.” The proposed session explores factors beyond the traditional three factors lack of cognitive resources, willpower, and volition, in affecting the antecedents and consequences of exerting self-control.

The first paper by Koley, Warren, and Ramanathan looks at how experienced emotions influence consumers’ propensity to exert self-control. The authors argue that anxiety activates the goal to seek security (Raghunathan, Pham, and Corfman 2006). As a consequence, experiencing anxiety facilitates exertion of self-control when doing so promotes a security goal. Anger, in contrast, activates a goal to seek dominance (Peterson and Harmon-Jones 2012), and facilitates self-control when doing so promotes that goal.

The second paper by Mochon, Schwartz, and Ariely investigates the strategies that people use to constrain unhealthy consumption. In a longitudinal field experiment, grocery shoppers voluntarily committed to a 6-month contract that led to increase in the share of virtues and decreases in the share of vices. This strategy emerged over time, and persisted for 6-months after the intervention ended. Furthermore, there were no signs of negative spillovers on exercising or customer loyalty as a result of giving up (some) vices.

In the third paper by Kim and Kim, the consequences of exerting or not exerting self-control on wasting is explored. Specifically, the authors argue that “like the consumption of vices” the wasting of vices introduces guilt. For virtues, however, only the wasting but not their consumption engenders guilt. As a consequence, people are more likely to waste leftover vices than leftover virtues.

Finally, the fourth (theoretical) paper by Vosgerau, Scopelliti, and Huh argues that the prevalent conceptualization of vices as hedonic and virtues as utilitarian implies an unrealistic prediction, namely that all hedonic consumption must be thwarted by feel-

ings of guilt and regret. The authors propose to recognize excessive consumption “rather than hedonics” as the defining characteristic of vices, and that self-control should be measured as amount consumed, not as choice share of vices.

Together, the four papers extend the popular theorizing of self-control as a lack of cognitive resources or willpower. The findings presented suggest that emotions and self-image consistency can drive self-control. Furthermore, not exerting self-control can lead to wasting. Lastly, the very definition and measure of self-control as choice share of vices may have to be revised. The papers encourage session attendees to critically examine current theories of self-control, and to explore the implications for public policy aimed at helping consumers to exert self-control.

Effect of Anger and Anxiety on Choice in Self-Control Dilemmas

EXTENDED ABSTRACT

Research suggests that negative emotions generally harm self-control. For example, distressed consumers eat more junk food (Gark, Wansink, & Inman 2007), and save less money (Cryder, Lerner, Gross, & Dahl 2008). In contrast, we show that negative emotions can either facilitate or impair self-control depending on the match between the goals activated by the emotion and the benefits associated with the virtuous and gratifying options in the choice set.

A self-control dilemma involves a choice between virtuous options that facilitate long-term goals (e.g., saving money) and gratifying options that facilitates immediate desires (e.g., buying something fun; Tice & Baumeister, 1997). Importantly, these virtuous and gratifying options can be chosen for different benefits (i.e., to attain different goals). For example, consumers may choose to save money in order to accumulate wealth and power (a dominance goal), or to achieve a secure retirement (a security goal). Similarly, gratifying by buying an unnecessary pair of sunglasses, may achieve different immediate benefits, such as eye protection (a security goal) or signaling one’s status (a dominance goal).

Furthermore, just as self-control options are associated with different goals, negative emotions too activate different goals. Negative emotions, which occur in response to threats or obstacles in the environment, activate goals that enable individuals to cope with the threat or the obstacle (Lench, Flore, and Bench 2011). For example, anxiety signals a risk of facing punishing consequences in the future, and therefore activates the goal to seek security (Raghunathan, Pham, and Corfman 2006). In contrast, anger signals that something or someone is obstructing the active pursuit of a reward, and thus activates the goal to seek dominance (Peterson and Harmon-Jones 2012).

These goals activated by emotions in-turn increase choice for options that are consistent with the activated goal (van Osselaer & Janiszewski, 2012), even in unrelated contexts (Lerner & Keltner, 2000). Thus, the effect of any negative emotion on self-control should depend on the match between the goal activated by the emotion and the goals linked to the gratifying and virtuous options in the choice set. Specifically, we predict that anger would impair self-control when the virtuous-option moves the consumer towards a security goal rather than a dominance goal (e.g., saving for a rainy day rather than saving for status). Conversely, anxiety would impair self-control when the virtuous-option facilitates a dominance rather

than a security goal (e.g., saving for status rather than saving for a rainy day).

We test these predictions across four experiments. In study 1 we looked at the effect of anger and anxiety on self-control while manipulating the benefit associated with either the virtuous-option or the gratifying-option in the choice set. The study used a 3 (emotion: anxiety, anger, control) x 2 (benefit provided by: gratifying-option, virtuous-option) x 2 (benefit: dominance, security) between-subject design. Participants ($N=352$) first viewed a pre-tested video that induced anger, anxiety, or no emotion (control). As part of an ostensibly separate study, they were subsequently asked to choose between a relatively virtuous gift-card to a supermarket and a more gratifying gift-card for a pair of Ray-Ban sunglasses. The effect of the emotion manipulation on self-control depended on which gift-card was associated with an additional benefit as well as whether that benefit promised dominance or security (three-way interaction: $p < .01$). Angry (anxious) participants were more (less) likely to gratify when the sunglasses were described as “having a reputation as the most prestigious brand” than when they were described as “having a reputation for offering the best protection from damaging UV-rays” ($ps < .10$). Conversely, angry (anxious) participants were less (more) likely to gratify when the virtuous-option was described as “making individuals appear more confident and powerful” than when it was described as “making individuals more secure” ($ps < .10$).

Study 2 replicated study 1 using a different choice task and emotion manipulation. The study used a 3 (emotion: anxiety, anger, control) x 3 (benefit: dominance, security, neutral) between-subject design. Participants wrote about events that make them feel angry, anxious, or that occurred recently (control condition). As an ostensibly separate study, they next chose between looking at entertaining cartoons (gratifying-option) and reading an article to prepare for job-interviews (virtuous option). Again, the effect of the emotion manipulation depended on whether the virtuous job-interview article was associated with dominance benefits (e.g., it will help you find a prestigious job) or security benefits (e.g., it will help you find a secure job; interaction: $p < .01$). As predicted, angry (anxious) participants were more likely to choose the job-interview article over the entertaining article when the article was associated with dominance (security) rather than security (dominance) benefits ($ps < .05$).

Studies 3a and 3b use the causal chain approach (Spencer, Zanna, & Fang, 2005) to provide process evidence. Study 3a used a lexical decision task (Fishbach, Friedman, and Kruglanski 2003) to demonstrate that anger activates the goal of dominance, whereas anxiety activates the goal of security. After completing the emotion manipulation described in study 2, participants judged whether a series of letter-strings were words or non-words as quickly as they could. Consistent with our prediction, angry participants were quicker at identifying words related to dominance (e.g., authority, prestige) than security (e.g., protect, insurance), whereas anxious participants were quicker at identifying words related to security than dominance (interaction: $p < .05$).

Study 3b used a goal priming procedure to examine the second step in the causal chain: that individuals with an active dominance (security) goal would exert greater self-control when virtuous behavior benefits a consistent rather than inconsistent goal. Participants unscrambled words to create valid sentences (Bargh and Chartrand 2000). Depending on the goal prime condition, some of the words were either related to dominance (e.g., prestige, authority) or security (e.g., protect, insurance). Participants were subsequently presented with the same choice as in study 2. As predicted, participants primed with a dominance (security) goal were more likely to choose the job-interview article over the entertaining article when the article

was associated with dominance (security) rather than security (dominance) benefits (interaction: $p < .05$).

Bringing Ulysses to Scale: A Tale of Persistence, Spillovers and Customer Loyalty

EXTENDED ABSTRACT

Financial incentive programs are an increasingly attractive way to improve health. While research from the behavioral sciences shows that many such interventions effectively improve a specific health behavior while in place, less is known about the underlying strategies people use to achieve their goals and their extended effects on behavior. These effects are essential to understand when bringing behavioral science insights to scale. If an intervention has positive effects on a targeted behavior, but leads to negative consequences once the program ends, or shows negative spillover effects in other domains, it may not be sustainable.

We address this question by examining the behavioral strategies and extended effects of a penalty-based behavioral health intervention: a voluntary 6-month commitment contract that significantly improved the health of grocery purchases (Schwartz et al. 2014). Member households, who were already receiving a 25% discount on healthy (virtuous) food grocery purchases, put their discount on the line by precommitting to a 5-percentage-point increase above their household healthy food baseline. Those who met the goal kept their discount; those who did not forfeited it. Participants were free to choose any strategy to meet this goal. For example, they could increase the purchase of virtuous items like fruit and vegetables, decrease the purchase of vice items or some combination of both. The results showed that over time, households were best able to meet their goal and maintain their goal with a strategy that balanced virtue and vice.

Since this precommitment field experiment was run within a comprehensive health rewards program, we could examine the commitment device's strategic impact beyond the specific time period and targeted behavior (nutrition). Specifically, we examined the penalty effect's persistence once it was removed, whether it led to negative spillover effects while in place (i.e., healthier nutrition = less exercise) and, finally, the impact of the penalty on customer loyalty and engagement.

Persistence: Consistent with the persistence prediction, the committed group continued to make healthier grocery purchases during each of the 6-months in the post-intervention period ($\beta = 2.84$, $SE = .95$, $p < .01$). Persistence was strongest for the most loyal customers, as well as those who had the biggest discount on the line, thus demonstrating that penalty-based incentives can be catalysts to promoting long-term healthy change.

Spillovers: We see no evidence of negative spillover effects, especially as households had to give up some vices in order to meet their goal. Committed households exercised slightly more (though not significantly) than control households ($\beta = .07$, $SE = .05$, $n.s.$). Interestingly, there was a significant positive effect on exercise when examining participants who had put the most money on the line during the commitment period, ($\beta = .23$, $SE = .07$, $p < .01$). Our results reinforce the value of incentives as a tool for improving health, by suggesting that they do not lead to negative consequences in other domains, and may even lead to positive spillovers for some.

Loyalty effects: While penalty-only commitment contracts may improve targeted health behaviors, this may come at the cost of customer loyalty—a trade-off many firms are unwilling to make. We test the effect of the intervention on customer loyalty by examining involvement with the health rewards program during the year after the

commitment contract ended. Committed households showed a positive (though non-significant) change in loyalty status (our measure of involvement) during the year after the intervention ended ($\beta=.07$, $SE=.12, n.s.$). This is an important finding, because most committed households forfeited their discount at least once, which could have resulted in backlash. Consistent with this finding, the results of a follow-up survey further suggested that committed households did not blame the firm for failures. Indeed, 68% assigned more blame to themselves than to the firm for failing (only 15% assigned more blame to the firm). This suggests that consumers took responsibility for their own actions, and consequently for their own failures, which mitigated any negative feelings towards the firm.

Taken together, these results highlight the potential for insights from the behavioral sciences to be implemented on a large scale basis, and that some concerns over negative spillovers and consumer backlash may be overstated.

Waste Aversion for Virtue versus Vice

EXTENDED ABSTRACT

Consumers are averse to wasting, and like to maximize the use of what they pay for (Arkes 1996; Bolton and Alba 2012). Yet, waste of goods still abounds. Nearly one-third of food produced for human consumption is wasted globally, which amounts to the economic loss of \$750 billion per year (FAO 2015). The question of why people waste, despite their inclination to be averse to wasting, is an important problem which has not been explored much (Porpino 2016). In this research, we answer this question of why consumers waste by exploring how they respond to wasting of virtues and vices differently in the context of food waste.

We propose that consumers relax their tendency to be averse to wasting when consuming makes them feel as guilty as does wasting. When does that happen? Past research has shown that there is a difference in how much guilt is elicited when consuming virtues versus vices. The distinction between virtues and vices is characterized by the intertemporal conflict consumers face in choosing between tempting immediate pleasures (e.g., tasty but unhealthy food) and long-term future benefits (e.g., less tasty but healthy food). In general, choosing virtues is viewed as normatively good (Rook 1987), whereas choosing vices induces guilt (Lascu 1991; Ramanathan and Williams 2007).

Importantly, the guilt induced by consuming a vice pulls one's consumption decision in the direction towards wasting the vice. We propose that relative strength of waste-guilt compared to consumption-guilt determines one's decision to waste or not. Specifically, we predict that for virtues, consumers would feel guilty when wasting as compared to consuming, and thus, they would be more likely to save food from being wasted (i.e., demonstrating the expected pattern of waste aversion). On the other hand, we predict that for vices, consumers would not feel guiltier when wasting as compared to consuming, and thus, they would be less likely to save food from being wasted (i.e., no pattern of waste aversion). Across three studies, we test this hypothesis and demonstrate that one of the reasons why people waste may be because consuming feels as guilty as wasting.

A pilot study ($N=87$) we conducted confirmed our argument related to guilt; for virtues, consuming felt less guilty than wasting ($F(1,83)=4.60, p=.03$) whereas for vices, consuming felt as guilty as wasting.

In the first study, participants ($N=119$) were randomly assigned to one of the two conditions (virtue vs. vice), and asked to imagine that they were at a chocolate-tasting event. They read a description of a chocolate that either framed the chocolate as healthy (virtue)

or tasty (vice; Mishra and Mishra 2011). Participants were told that they are last people at the event and the organizer of the event asked them to take some left-over chocolates with them, otherwise, left-overs will be thrown away and wasted. Participants indicated how guilty they would feel if they leave chocolates (therefore wasted) and how likely they are to take some chocolates with them (to prevent from being wasted) on a 7-point scale. As predicted, wasting virtue-framed chocolates ($M=5.93$) felt guiltier than wasting vice-framed chocolates ($M=5.28$; $F(1,117)=4.77, p=.031$), and participants were more likely to save virtue-framed chocolate ($M=6.35$) than vice-framed chocolates ($M=5.95$; $F(1,117)=4.16, p=.044$) from being wasted. A bootstrap analysis revealed a significant mediation by guilt ($CI_{lower-bound}=.04, CI_{upper-bound}=.40$).

In study 2, we included a control condition wherein the food is not wasted in order to demonstrate that waste aversion is observed for virtues, but not for vices. The study was a 2 x 2 (waste: waste vs. waste-not x framing: virtue vs. vice) between-subjects design and the same chocolate-tasting scenario from the first study was used. Importantly, participants ($N=277$) were told that left-over chocolates would be either thrown away and wasted (waste condition) or given away to other people at the event (waste-not condition). Participants were asked to indicate how likely they are to take some chocolates with them on a 7-point scale. Consistent with our predictions, for virtue-framed chocolates, participants were more likely to take some chocolates with them when they were to be wasted ($M=6.28$) than not ($M=5.53$; $F(1,273)=8.39, p=.004$), showing the expected pattern of waste aversion. However, there was no difference in how likely participants were to take some vice-framed chocolates when chocolates were to be wasted versus not ($p>.97$).

In study 3, we replicate our findings from study 2 by employing a real measure of waste aversion. Participants ($N=198$) were randomly assigned to one of the four conditions (waste: waste vs. waste-not x framing: virtue vs. vice), and read a description of lemon drops that were framed as either vitamin-c supplements (virtue) or candies (vice). A cup holding 80 lemon drops was placed in front of participants. To be consistent with the cover story of evaluating lemon drops, participants answered two questions on color and shape of the lemon drops. Afterward, an experimenter came in and told them that they were last people for the study, and they can take some lemon drops with them if they want to, otherwise lemon drops will be thrown away and wasted (waste condition) or given away to other people in the lab (waste-not condition). Then the experimenter left the room to get an exit sign-up sheet to give some time for participants to take lemon drops. The number of lemon drops taken served as our main dependent variable. Consistent with the results from study 2, participants took more virtue-framed lemon drops when they were to be wasted ($M=5.53$) than not ($M=1.17$; $F(1,194)=7.36, p=.007$). However, participants did not take more vice-framed lemon drops when they were to be wasted versus not ($p>.2$).

Across three studies, we demonstrate that consumers show waste aversion for virtues but not for vices because wasting virtues makes them feel guiltier than consuming them, a pattern that does not hold for vices.

Pleasure, Guilt and Regret in Consumption: Revisiting the Vice-Virtue Categorization in Theories of Self-Control

EXTENDED ABSTRACT

Self-control problems are often characterized as intertemporally inconsistent preferences (Ainslie 1975; Loewenstein and Prelec 1992), where a consumer prefers the immediate consumption

of a good to its consumption in the future, but as time passes by she regrets having consumed the good in the past. Based on intertemporally inconsistent preferences, Wertenbroch (1998) introduced a formal definition of vice and virtues: A product X is a vice relative to product Y, and Y is a virtue relative to X, if X is preferred now rather than later, and Y is preferred later rather than now.

We argue that Wertenbroch's (1998) definition³in combination with the corollary that vices are hedonic and virtues are utilitarian⁴has led to the development of theories of self-control that postulate that enjoyment derived from consumption is always accompanied by feelings of guilt and regret. We show this by reviewing the self-control literature, and propose a change to the definition of vice-consumption that recognizes excessive consumption³rather than hedonics⁴as its defining characteristic.

Wertenbroch's definition was highly influential, the vice-virtue distinction has been adopted in the literature on self-control in social psychology and consumer behavior (a comprehensive review of self-control papers published in JEP:G, JPSP, Psych Science, OBHDP, JCR, JM, JMR, Marketing Science, and Marketing Letters from 1995 to 2016 shows that over 70% use the vice-virtue distinction). In the typical self-control experiment (e.g., Baumeister et al. 1998; Shiv and Fedorikhin 1999), participants are given a choice between a vice (e.g., a piece of chocolate cake) and a virtue food (e.g., a fruit salad). Choice shares serve as the dependent variable, where higher shares of the vice are interpreted as a relative lack of self-control. In fewer instances (e.g., Coelho do Vale et al. 2008; Campbell and Mohr 2011), self-control is measured by the absolute amount of vices chosen or consumed.

Khan, Dhar and Wertenbroch (2005, p. 20) postulated: "...by Wertenbroch's (1998) formal definition, hedonic goods could be characterized as vices and utilitarian goods as virtues in a direct comparison with each other." (cf. also Alba and Williams 2013; Milkman et al. 2008, 2010; O'Curry and Strahilevitz 2001; Read et al. 1999). According to this corollary, vice products are tempting, elicit more affective responses, and provide for more experiential consumption, fun, pleasure, and excitement than virtue products do. Virtues, in contrast, are primarily instrumental and mainly purchased and consumed on the basis of their functional aspects, that is they promote health and³in case of durables⁴efficiency. The idea that self-control conflicts can be characterized as choosing between hedonic and utilitarian consumption opportunities is also present in other theories of self-control, such as the conflict of want versus should selves (Bazerman et al. 1998), desire versus willpower (Hoch and Loewenstein 1991), heart versus mind (Shiv and Fedorikhin 1999), and enjoyment versus control (Stroebe et al. 2012).

If vices = hedonic and virtues = utilitarian, pleasure derived from hedonic consumption must be accompanied by feelings of regret because³by definition⁴vices are preferred now rather than later, and virtues are preferred later rather than now. Consequently, the consumption of vices will necessarily be regretted at a later stage (Baumeister 2002; Read et al. 1999) and induce feelings of guilt (Kivetz and Simonson 2002). Enjoyment from immediate consumption will be tainted by feelings of guilt and anticipated regret, and post-consumption enjoyment (e.g., memories) will be thwarted by experienced regret. The more enjoyment is derived from hedonic consumption, the more guilt and regret will be anticipated and experienced. So, according to current theories of self-control, the self-disciplined consumer lives a healthy life devoid of enjoyment.

Clearly, this is an incorrect depiction of hedonic consumption. Many people seem to enjoy consuming products without being plagued by feelings of guilt and regret. The consumption of any product, whether hedonic or utilitarian, may be harmless in modera-

tion. In excess, however, consumption becomes problematic and perilous. Pizza for example³typically considered a vice⁴is per se not bad for one's health. Millions of Italians eat it several times a week, and they belong to the slimmest people in Europe. Even for addictive and strictly toxic substances such as cigarettes, consumption amount linearly determines health damages (Bjartveit and Tverdal 2005), so a cigarette a day is much less damaging than a pack a day. Likewise the consumption of so-called virtues can be harmful when consumed in excess. Fruitarianism, for example, a diet consisting exclusively of eating fruits, is dangerous and may cause nutritional deficiencies in protein, calcium, vitamins D and B. The deficiency of some of these nutrients can cause severe and irreversible damage, especially to the brain and nervous system (<https://en.wikipedia.org/wiki/Fruitarianism>). Our argument also holds for vices and virtues other than foods. Spending time with friends and family can be a virtue unless done in excess. Working is a virtue unless done in excess. Praying, running, eating, sleeping, having sex,... , any activity is harmless or even beneficial in moderation but perilous in excess.

Realizing that excessive consumption³not hedonics⁴is the defining characteristic of vices leads to a number of straightforward but fundamental implications. First, the definition of vices needs to include consumption amount as its defining characteristic. Second, tests of self-control theories should use consumption amount³rather than choice share of vices⁴as dependent variable. Third, moral licensing effects (justifying future consumption of vices by past consumption of virtues) rely to a large extent on the binary classification of virtue- versus vice-consumption. When consumption amount³a continuous variable⁴is the defining characteristic, however, moral licensing is much harder to accomplish as it is difficult to define the cutoff of consumption amount at which licensing is psychologically feasible. Finally, the most important implication concerns consumer welfare. Consumers can enjoy hedonic consumption without being plagued by feelings of guilt and regret as long as they consume with moderation. Indulgence is not a matter of too much enjoyment but of too much consumption. Consequently, consumers can exert self-control without depriving themselves of enjoyment derived from consumption (cf., Cornil and Chandon 2015).

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Money Orients People Away From Small-Group Sociality And Toward Large-Group Sociality: Evidence From Big Data, Experiments, And Field Studies

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Paper #1: The Prosocial Glow of Cash: How Payment Method Affects Customers' Perceptions of Helpfulness

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Grant Donnelly, Harvard Business School, USA

Remi Trudel, Boston University, USA

Paper #2: Can The Way Individuals Are Rewarded Affect Motivation and Engagement?

Avni Shah, University of Toronto, Canada

Amber Holden, University of Toronto, Canada

Paper #3: Social Class And Social Worlds: Income Affects The Frequency And Nature of Social Contact

Kathleen D. Vohs, University of Minnesota, USA

Emily Bianchi, Emory University, USA

Paper #4: To Profit or Not to Profit? Consumer Support For The Social Venture Question

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SESSION OVERVIEW

Money is the most influential tool for enabling mutually-beneficial interactions with outgroup members and strangers. Money thus connects people to others outside their small, intimate sphere, making it conducive to a style of sociality best for dealings in the large group (Baumeister and Sommer 1997). Large-group sociality differs qualitatively from behaviors that suit relationships with intimate others and kin (Baumeister and Sommer 1997), suggesting that money should be helpful for outcomes pertaining to large-group endeavors, such as being an employee or consumer, and harmful for outcomes that have features of small-group relating. The four talks in this session show both patterns.

Being a consumer is a primary form of large-group sociality. Ksendzova, Donnelly, and Trudel tested how the salience of money influences consumers' prosocial glow in exchange transactions. Field and experimental studies revealed that cash payments (versus credit and debit cards, which are less symbolic of money) increase customers' perception of having helped the businesses and employees.

Being an employee is another key role in large-group relating. Shah and Holden used incentive-compatible experiments to show that rewards that make money more salient (e.g., cash instead of direct deposits) foster greater motivation to persist in a task. Speaking to the large-group theory, getting paid in cash (vs. direct deposits) builds organizational connection and trust.

Two papers demonstrate the harms that money can bring to small-group sociality. Vohs and Bianchi used two large nationally representative samples (N=116,000) to study how people spend their non-working time. They found that the more people earn, the less time they spend with family and neighbors. Furthermore, as income rises, the limited time people do devote to socializing is spent with friends. Insofar as family and neighbors are prime sources of small-group relationships, whereas friends connect people to the wider social network, this paper shows both that money orients people to larger spheres as well as creates small sphere divisions.

Given that companies are representations of large-group collectives, how do consumers react when firms act in a manner befitting small-group sociality? Lee, Bolton, and Winterich measured the support consumers give organizations that are for-profit versus non-profit and that aim to benefit society. Prosociality is a feature of small groups, whereas profit-making benefits the large group. This conflict leads people to be averse to supporting — through donation or product purchase — prosocially-oriented for-profit organizations.

Studies ranging from large-scale surveys to field investigations involving customers and donors suggest that money is a vehicle for participating in nominal relationships and group endeavors (e.g., businesses), and thus brings people beyond the close, intimate sphere of relating. Money connects people in a manner that enables larger groups, such as societies and cultures, to flourish — but is incongruent and thus disruptive to interactions among close, intimate ties.

The Prosocial Glow of Cash: How Payment Method Affects Customers' Perceptions of Helpfulness

EXTENDED ABSTRACT

Over the last decade, many have researched the motivational and interpersonal consequences of having money on the mind. When money becomes a salient topic for people in words, images, or actual currency (compared to neutral concepts and stimuli), it has potential to fray social ties by decreasing generosity, cooperation, and social interaction (see Vohs 2015 for review). Money primes an “exchange mindset,” including a focus on costs (e.g., Chatterjee and Rose 2012). Social ties become unnecessary baggage — a barrier in the pursuit of personal reward. Yet, the exchange of money between people is an ever-present component of their daily lives, from infrequent large purchases to daily morning coffees, that is done for mutual benefit. Consequently, it is important to better understand the psychology of money and, specifically, how it affects people's social experiences in an exchange setting.

The salience of money depends, in part, on how people pay. Cash most clearly embodies the general construct of money, compared to the less-symbolic payment types (Prelec and Lowenstein 1998). Not surprisingly, cash possesses a social dark side. For example, participants who counted \$1 bills (compared to days on a paper calendar) were more likely to cheat in a task by lying to the researcher (Gino and Mogilner 2014). However, an emerging line of research points to the bright side of cash, which best signals costs people endure when they pay. The psychological “pain of paying” with cash (compared to less symbolic methods) brings a gain of greater post-purchase satisfaction (Shah, Eisenkraft, Bettman and Chartrand, 2016). Building on these findings, we examine the role of money salience in how buyers feel about their exchange with the sellers. If cash (compared to debit or credit cards, for example) best represents costs to the self, can it also pleasantly remind people of the contributions they make to others?

In Study 1, we investigated people's perceived helpfulness to the seller based on salience of money in the payment (cash or card) and characteristics of the seller (small or large business). We surveyed customers (N = 222), exiting either a small or multinational-chain coffee store. Customers reported their payment method and its perceived helpfulness to the business. Neither store encouraged cash

payments or required a minimum purchase amount for electronic payments. We observed a main effect of cash payments on perceived helpfulness (with and without controlling for total amount spent). Moreover, post-hoc tests revealed that consumers judged cash to be more helpful than cards at the small business, rather than the large business.

In Study 2, we aimed to a) control for people's self-selection into buying at small versus large businesses, b) conceptually replicate Study 1, and c) extend our understanding of why customers judge cash payments as helpful. We randomly assigned Amazon Mechanical Turk participants ($N = 404$) to answer questions regarding a hypothetical purchase of an umbrella in a 2 (cash vs. credit card) \times 2 (small vs. large business) between-subjects design. We replicated our results from the field study in that cash payments were perceived as more helpful than card payments, especially to small businesses. Moreover, regardless of business size, people who imagined paying with cash (compared to credit cards) imagined lesser overhead costs to the business, a more direct exchange between themselves and the business, greater closeness to the business, and stronger empathizing with its employees. In a moderated dual-mediation model, we found that people felt helpful paying cash because they recognized that cash helps businesses avoid overhead costs (e.g., "to benefit from my entire payment"). Further, in the case of small businesses, empathizing with employees (e.g., "think of the business as a group of people") also explained the relationship between cash payments and perceived helpfulness.

Then, in Study 3 ($N = 608$ mTurk participants), we examined whether empathizing with relatable employees of a large business can elicit stronger perceptions of helpfulness from paying with cash. We compared judgments of helpfulness between payment method, business size, and three variations of additional business descriptions: control (none), a description prompting consideration of employees (i.e., a description of employees who believe their identity is intertwined with the business identity), and a description prompting a more specific consideration of relatable employees (i.e., a description of employees being similar to the participant). Only in the "relatable employees" condition there was no difference in consumers' perceived helpfulness of cash between small and large businesses. In a post-test, another group of mTurk participants read one of three business descriptions, paired with mention of either small or large business size ($N=50$ per cell). In response, they selected one out of seven circles, one circle representing "self" and the other "employees," with varying degrees of overlap (per Aaron, Aaron, and Smollan, 1992). As expected, judges evaluating the relatable-employees scenario indicated a greater self-employees overlap than judges evaluating the consideration-of-employees or control scenarios, regardless of whether the business in question was small or large. Thus, large-business customers can also feel helpful when paying with cash, rather than by card, to the extent they can empathize with the employees.

Examining the downstream consequences of perceived helpfulness, we then surveyed customers of a food truck plaza ($N = 460$) about their purchases in Study 4. Each customer was asked to recall how much they had paid, payment method, perceived helpfulness to the business, and purchase satisfaction. People who paid with cash judged their payment to be more helpful than people who paid with debit or credit cards, and they were also happier with their purchase. Perceived helpfulness mediated the relationship between payment type and purchase satisfaction.

These findings illustrate a bright side for the psychology of money in the context of large-group sociality. Money is meant to maximize mutual benefit in exchanges of resources, and methods of

payment that make money salient have potential to further enhance the value of such exchanges for both buyers and recipients. Consequently, businesses may benefit from encouraging cash payments while serving happier and more connected customers.

Can The Way Individuals Are Rewarded Affect Motivation And Engagement?

EXTENDED ABSTRACT

The individuals at the head of Houston-based oil company Hilcorp decided to give out \$100,000 bonuses to each of the company's 1,381 employees for the 2015 holiday season after reaching their goal to double the size of their company within a five-year period. One reporter commented, "with the way Hilcorp treats their employees, it might be worth sticking around for a few more years." (Grainger 2015). The reporter taps into an important topic in consumer behavior. Bonuses, as incentives or anticipated rewards, are important drivers of motivation and engagement with the organization (Gagné and Deci 2005). And while the Hilcorp example is on the extreme end, it is quite common for rewards to be given out, whether for the accomplishment of individual goals or milestones. However, not all bonuses are distributed in the same form within organizations; bonus types can range from cash (as at Hilcorp) to check to gift cards to direct deposit. Thus, a natural question emerges: can these different forms have differential effects on an individual's behavior, influencing their motivation and connection to their organization? Finally, what happens when individuals anticipate this bonus but fall just short? Do different forms of a bonus payment affect subsequent motivation, engagement, and connection with the organization after the bonus has been lost?

Recent research has demonstrated systemic psychological and behavioral biases in the way individuals evaluate the value of money based on the payment form (e.g., Raghurir and Srivastava 2008; So-man 2001). More salient forms of money (i.e., paying with cash vs. a debit or credit card; paying with a debit card vs. direct deposit) influence the amount of pain individuals feel when paying with the money. Paying with a less painful form of money increases the propensity to evaluate products more favorably and to feel more psychologically connected to the product, brand or organization (Chatterjee and Rose, 2011; Shah et al. 2016). However, most research on the influence of payment form on behavior and relationships has focused on when individuals *pay* money. Yet, there are so many instances where individuals *receive* money. We propose and find that individuals feel more connected to the organization and are more motivated, increasing their persistence on a task, when the bonus payment form is more salient (i.e., cash or gift card versus direct deposit). However, this effect reverses when individuals finish just short (i.e., second place), subsequently feeling less connected and decreasing motivation in comparison to those who were told that they lost a less salient bonus.

In study 1 ($N=200$), we investigated whether the form of the \$50 incentive (gift card or direct deposit) influenced perceived motivation and organizational commitment. Individuals reported feeling significantly more, organizational connection, organizational trust, rewarded for their efforts, and more motivated to work harder in a task when the reward was a more tangible and salient reward (i.e., gift card). While we establish initial support for our hypothesis, what happens when individual *do not* win the bonus? Do more salient forms of payment continue to keep motivation and organizational connection high or is there a backlash effect? In study 2 ($N=204$) we attempted to get a better sense whether payment form could affect subsequent motivation and connection post-loss. We once again

varied the form of the incentive (\$100 cash, \$100 direct deposit) and asked individuals questions regarding their perceived motivation and organizational connection. After finishing this questionnaire, individuals were informed that they finished second in the task and would not be receiving the bonus. We asked how motivated they would be in a future task and their organizational connection. We replicated the results in Study 1: cash participants had significantly higher organizational commitment, trust, and motivation prior to finding out whether they won the bonus or not. However, after finding out they finished second, cash participants now reported feeling more disappointed and feeling less connected to their organization than direct deposit participants.

In study 3, we sought to measure actual behavior and engagement, as well as look at the mechanism behind these effects. We invited participants to the lab (N=164) for a two-period task. In the first period, participants that they would be engaging in a copyediting task and that they would be scored on how well they performed in the task. If they finish within the top 5% they would win either a \$150 cash prize (a more salient form of money) or a less salient form—\$150 directly debited to their student card (which is accepted everywhere on campus and on many locations commonly frequented off campus). Individuals who were told that they would be winning \$150 cash if they finished in the top 5% spent more time on the copyediting task, caught more errors, reported putting in more effort, and reported greater feelings of organizational connection and trust than those who were told that they would be winning \$150 directly deposited into their account. These results were mediated by anticipatory reward, whereby cash bonus participants felt more anticipatory reward driving motivation, and organizational commitment. Following the first period, we manipulated whether participants lost the task by finishing in the top 6% (i.e., just missing the prize) or merely being told that they lost the task generally. We gave them a subsequent copyediting task, where they would get a \$150 cash (or \$150 direct deposit) bonus for finishing in the top 5%. Similar to study 2, individuals who just missed the cash bonus in the first round were now significantly less motivated, spent less time on the subsequent copyediting task, and reported feeling less organizational commitment than those who lost the direct deposit bonus. However, this was not the case when individuals were told they lost the prize more generally.

These studies identify an important new aspect of consumer behavior—different forms of payment can influence feelings of reward and subsequently influence motivation and organizational connection. This work has important implications for consumer behavior, motivation, and organizational relationships in understanding how to foster a better workplace.

Social Class And Social Worlds: Income Affects The Frequency And Nature of Social Contact

EXTENDED ABSTRACT

Does access to money predict social behavior? Past work has shown that money fosters self-reliance and reduces interest in others, both in form of short-term exposure to cash (Vohs, Mead, and Goode 2006) and stable states of wealth (Kraus and Keltner, 2009). Logistically, money allows people to meet their needs with lesser reliance on others for help (see Kraus, Piff, and Keltner 2011; Vohs and Baumeister 2011). Psychologically, this work suggests, presence of money puts people into an agentic mindset, one in which people are motivated to pursue their own goals with their own means (Mogilner 2010). These findings suggest that greater wealth should decrease reliance on those likely to help based on geographical affiliation or

communal ties. In contrast, the goal-oriented motivation of money may lead people to more deliberately craft their social networks. Building on these implications, we examined whether income predicts the frequency and type of social interactions.

In Study 1, we used a nationally representative sample of American adults (N = 29, 399) who had filled out twenty three annual surveys about their lives as part of the General Social Survey (GSS; Smith, Hout, and Marsden 2012). These participants reported on how frequently they had spent social evenings with relatives, people from their neighborhoods, or friends outside of their neighborhoods in the previous year. Moreover, participants reported income (which was adjusted for inflation) and hours worked per week, among other demographic variables.

Beyond effects of age, marital status, or time spent working, people with higher household incomes (compared to those with lower incomes) reported spending fewer evenings per year socializing with others. Particularly, they reported spending less time with relatives and neighbors; however, higher incomes predicted more frequent socializing with friends outside one's neighborhood. Predicted values indicated that people with higher incomes (+1 SD) spent 5.8 fewer evenings with family and 10.3 fewer evenings with neighbors each year, compared to people in households with lower incomes (-1SD). Conversely, people with highest incomes spent an additional 6.5 evenings a year with friends compared to people with the lowest incomes

Next, we addressed the potentially meaningful roles of living with relatives out of economic necessity and having moved away from one's home state (a life event more common for people with wealthier backgrounds). To do so, we tested the relationship between income and social time in sub-samples of a) people living alone and b) those who had moved away from their home states, respectively, and observed similar patterns: income negatively predicted total time spent with others and, more specifically, greater income predicted less time spent with family and neighbors but more time with friends. This pattern of time use suggests that people with great wealth more voluntarily configure their social worlds.

In Study 2, we sought to examine the influence of people's income on how and with whom they spend their time in a different nationally representative sample (N = 86,627) and with different metrics used to gauge social activity. As part of the American Time Use Survey (ATUS; 2002 – 2011), participants were asked to reconstruct the previous day by estimating minutes spent on each activity. Social activities included spending time with immediate and extended family members, friends, and by oneself (outside of work). Moreover, participants reported demographic and other relevant information, such as time spent at work and childcare.

People with high (+1 SD), compared to low (-1 SD), household incomes spent an additional 10 minutes alone, 22 minutes with friends, and 26 fewer minutes with family each day. Controlling for marital status, age, time spent working, and childcare activities, we again observed that people's incomes positively predicted leisure time spent alone and with friends and negatively predicted time spent with close and extended relatives.

This research sheds light on how wealth shapes people's social relationships and helps qualify previous findings that generally depict money as a social barrier. People with higher incomes reported spending fewer evenings socializing (Study 1) and a smaller fraction of their day in the company of others (Study 2). Moreover, income predicted how people allocated their social time. People with higher incomes spent less time socializing with family and neighbors and more time socializing with friends. Further, the results speak to a broader trend of Americans being more disengaged from community

life than in the past (Putnam 2000), despite the ever-improving quality of economic life that allows greater flexibility in their leisure time. These patterns imply that money, more specifically, may act as a barrier in social relationships that also serve an instrumental function.

To Profit or Not to Profit? Consumer Support For the Social Venture Question

EXTENDED ABSTRACT

Social ventures—organizations serving an explicit social purpose through transactions in the marketplace—can achieve their social missions through either nonprofit or for-profit orientation (i.e., for-profit social ventures, hereafter FPSVs). Although social ventures have traditionally been nonprofits, increasing number of social entrepreneurs today choose a for-profit status to gain flexibility in generating revenues and greater operational efficiency (Dees and Anderson 2003; Easterly and Mieasing 2007). Is a for-profit status really more beneficial to the social ventures? To help address the social entrepreneur's quandary of 'to profit or not to profit', we investigate consumer reactions to social ventures that vary as a function of profit orientation.

This research proposes consumer support will be lower for FPSVs (vs. nonprofits) due to inferences of greed arising from the FPSV's profit orientation (Aaker et al. 2010; Gregoire, et al. 2010), which in turn reduce consumers' anticipated warm glow (i.e., emotional utility consumers get from being benevolent; Andreoni 1990). In addition to exploring this focal proposition, we subsequently identify theoretically and pragmatically relevant boundary conditions that alter the perceptions of greed and warm glow, and in turn, support for social ventures.

Study 1A-1C tested our fundamental proposition by exploring participants' actual monetary donations, financial and material donation intentions, and product purchase intentions toward a target organization described as either FPSV or nonprofits. Study 1A found that participants donated less money and reported lower intentions to donate both in-kind goods and money when the organization was described as a FPSV (vs. nonprofits). This aversion to FPSV (vs. nonprofits) was robust for consumer support in the form of product purchase (Study 1B), regardless of the quality of the product (Study 1C). The effect of profit orientation on consumer support occurred due to higher greed perceptions associated with the FPSV, which deterred anticipated warm glow (greed perceptions and warm glow were found as serial mediators in these and all subsequent studies).

Study 2-4 examined boundary conditions that may turn on/off the greed perceptions. Specifically, Study 2 explored the interplay of profits, operational efficiency, and revenue source. We expected that if a FPSV discloses minimal level of profits, it would reduce perceptions of greed associated with profit. Also, given that consumers exhibit 'overhead aversion' (Gneezy et al. 2014), justifying profits through greater operational efficiency would reduce greed perceptions. Importantly, the mitigating role of an efficiency justification for the effect of profit would occur, especially when the FPSV's primary revenue source is from product sales rather than donations. A significant three-way interaction of profits, operational efficiency and revenue source on consumer support for FPSV (vs. nonprofit) indicated that when the revenue source of FPSV was product sales, the negative effect of profit was significant in the absence of the justification but profit had no effect in the presence of the justification. When donation was the revenue source, profit undermined support for the FPSV regardless of whether a justification was provided or not.

Study 2 found increased support for FPSVs (vs. nonprofits) based on minimal profits or operational efficiency when revenue source was product sales but only to the point of indifference between FPSVs and nonprofits. Building on this finding, Study 3 sought to find how to overcome this aversion more effectively. We expected that a superior level of cause support in addition to minimal profits would lead consumers to prefer FPSVs over nonprofits. Additionally, we expected individuals' communal orientation (Clark et al. 1987) would moderate this effect: communal individuals would be more sensitive to organizational greed and cause support information. An interaction of cause support level and communal orientation indicated that consumers tended to support the nonprofit when cause support was unknown or equal for FPSV with minimal profits but switched to supporting the FPSV with minimal profits (vs. nonprofit) when cause support was higher for it. This effect was stronger for those with communal orientation.

Recognizing only about 24-31% of participants in Studies 1A-1C were aware of FPSVs prior to the studies, Study 4 explores whether disclosure of the organization's profit orientation is critical for consumer aversion to FPSVs (vs. nonprofits) to arise. To enhance practical and public policy implications, Study 4 examined reactions of *actual donors* to a social venture (FPSV vs. nonprofit) as a function of disclosure of the organization's profit orientation and consumers' communal orientation. We expected communal individuals would be more sensitive to disclosure of profit orientation given their sensitivity to greed. Participants were recruited based on prior donation experience (to Goodwill or USAgain) and were either informed of the organization's profit orientation (i.e., describing its nonprofit/for-profit status) or not. As expected, a three-way interaction of organization type, disclosure of profit orientation, and communal orientation emerged on repeat donation intentions. In the disclosure condition, participants were less likely to re-donate to FPSV (vs. nonprofit), with this effect stronger for those with higher communal orientation. In the no-disclosure condition, participants were equally likely to re-donate to both organizations and communal orientation uniformly predicted donations to both organizations. These findings suggest actual donors to FPSVs are largely unaware of the organization's profit orientation and, when so informed, their support declines.

Together, these studies demonstrate a strong aversion among consumers to FPSVs versus nonprofits due to higher greed perceptions and lower anticipated warm glow. This aversion is attenuated by minimizing profits or by justifying profits through operational efficiency and generating revenues through product sales. However, to be preferred to a nonprofit, a FPSV should provide superior cause support *and* take only minimal profits. Importantly, actual supporters of for-profit social ventures indicate reduced support when the organization's profit orientation is disclosed. Consumers with higher communal orientation are especially sensitive to disclosure of profit orientation, as well as the level of organization's cause support. By addressing new and important questions regarding the role of profit orientation in social ventures, we broaden the literature on consumer support for social causes, advance literature on organizational greed and warm glow, and provide important insights for social ventures and public policy.

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Healthy or Unhealthy? Large or Small? How Context and Language Shape Consumption Preferences

Chair: Anna Paley, New York University, USA

Paper #1: Better for Both the Waistline and the Bottom Line: A Field Study on the Sales Impact of Featuring Healthy Foods, Unhealthy Foods, or a Mix of Both

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Matt Harding, Duke University, USA
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Paper #2: Mental Accounting for Food in Exceptional Contexts

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Paper #3: Outsourcing Responsibility for Indulgences

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Paper #4: You Call This Healthy? Refining “Healthy Food” Claims and Their Impact on Choice and Healthiness Associations

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SESSION OVERVIEW

Although extant research has made great strides in illuminating how consumer food choices are shaped by environmental and contextual factors, many questions remain ripe for exploration. This session explores two broad questions regarding consumer beliefs, preferences, and choices regarding healthy vs. unhealthy foods and portion sizes: (1) How does context affect the preferences and choices consumers make around healthy eating and portion size? (2) What are the implications and downstream consequences of perceiving healthy vs. unhealthy foods? With a multi-methods approach, this session explores the questions above from four complementary perspectives.

First, Liu, Dallas, Harding & Fitzsimons explore the implications of increasing the visual salience of various items in shopping displays. The authors detail an extensive field study at twelve convenience stores. Their results speak to the key managerial decision of which types of foods to feature (i.e. healthy vs. unhealthy vs. mix of both). For example, the authors show that featuring healthy foods increases sales of healthy foods; however, featuring both healthy and unhealthy foods leads only to an increase in sales of unhealthy foods.

While visual salience is unquestionably important, the following two papers explore other ways in which the context surrounding food consumption affects preferences.

Sussman, Alter & Paley directly examine the situation in which foods are consumed. When the same foods are eaten in more exceptional scenarios (e.g. a snack consumed in an airplane rather than in a car), consumers underestimate the caloric impact of their meal. In turn, this leads to preferences for larger portion sizes and an increase in actual consumption.

Next, Hagen, Krishna & McFerran suggest another contextual influence that guides preferences around consumption experiences: whether consumers wish to serve themselves or be served by others. When faced with unhealthy foods, consumers prefer to absolve themselves from responsibility for indulgent decisions. Correspondingly,

for unhealthy (but not healthy) foods, consumers display a marked preference for being served by others rather than serving themselves.

Lastly, Andre, Chandon & Haws provide a nuanced view of various types of health-related messaging. The authors identify two key dimensions characterizing health-related claims — positivity (vs. negativity) and naturalness (vs. scientific-alteration). Importantly, these dimensions have implications on perceptions and preferences regarding the healthiness, taste, satiation, and quality of the foods. These perceptions differ between French and American consumers.

In sum, addressing the first question raised earlier, this session provides three novel contextual factors shaping decisions around healthy vs. unhealthy foods and portion sizes: (1) the types of foods featured in displays (Liu et al.), (2) perceptions of consumption experiences as ordinary versus exceptional (Sussman et al.) and (3) preferences for being served by others vs. serving oneself (Hagen et al.). Regarding the consequences of perceiving healthy and unhealthy foods, this session identifies and explores important nuances surrounding health claims (Andre et al.), and details the consequences of perceiving healthy versus unhealthy foods on sales (Liu et al.) and serving-style preferences (Hagen et al.). Overall, this session offers key insights into real-world issues and carries implications for both managers and consumers.

Better for Both the Waistline and the Bottom Line: A Field Study on the Sales Impact of Featuring Healthy Foods, Unhealthy Foods, or a Mix of Both

EXTENDED ABSTRACT

Many stores offer both unhealthy foods and healthy (“better-for-you”) foods (Gebauer and Laska 2011). Yet although healthy options are increasingly available, consumers often do not select them. One of the most common reasons is lack of salience (Chandon and Wansink 2002). Thus, policy makers have called for featuring healthy foods as a way to increase healthy food sales (Cohen and Babey 2012). Indeed, considerable research suggests that featured products are more likely to be chosen (e.g., Just and Wansink 2009).

However, we know little about the real-world impact of featuring either healthy or unhealthy foods on sales of the non-featured food type and thus on overall sales. We also know little about the impact of jointly featuring both food types. From a managerial perspective, both questions are important because they have implications for whether it is a more effective sales strategy to feature healthy foods, unhealthy foods, or a combination of both. Additionally, there are theoretical reasons why we might expect featuring one food type (healthy or unhealthy) to have a particular impact on sales of the non-featured food type and why we might expect a certain impact of jointly featuring both food types. For instance, the concept of licensing suggests that featuring healthy foods might increase both healthy and unhealthy food sales if consumers choose healthy foods and then feel licensed to indulge (Khan and Dhar 2006). As another example, the concept of vicarious goal fulfillment, whereby exposure to a healthy food can vicariously fulfill health goals (Wilcox et al. 2009), suggests that featuring both healthy and unhealthy foods will primarily lead to an increase in unhealthy sales.

Importantly, however, these various theoretical concepts have been identified through laboratory studies, primarily of hypothetical

choices, and few field tests exist. Given that some research suggests similarities in findings between hypothetical-choice lab studies and field tests (Shah et al. 2014), whereas other research suggests dissimilarities (Kiszko et al. 2014; Mochon et al. 2016), field tests are important when the findings have implications for real-world managerial decisions. Such field tests may also indicate which theoretical forces are strong enough to overcome the noisiness of the field.

Accordingly, we conducted a field study in twelve convenience stores over eight weeks, using an efficient Latin-Square research design enabling comparison of the impact of three treatment conditions (vs. a control) while controlling for differences between stores and time periods. Specifically, we identified 18 target products (9 unhealthy, 9 healthy) and compared the sales impact of featuring unhealthy foods, healthy foods, or a mix of both (vs. a control display not featuring any target products identified for this study) on sales of the 18 target products. The convenience stores provided basket-level sales data.

First, we found that featuring either only healthy foods or only unhealthy foods successfully increased sales of the featured foods. Second, we found that relative to the control condition, featuring only healthy foods did not decrease sales of unhealthy foods. In contrast, featuring only unhealthy foods resulted in a decrease in sales of healthy foods. In other words, featuring healthy (vs. unhealthy) foods had different effects on sales of the non-featured food type. Third, we found that featuring a mix of both healthy and unhealthy foods only significantly increased sales of unhealthy foods. The first finding is consistent with research showing that increasing the salience of products increases their sales (e.g., Just and Wansink 2009). The second and third findings offer unique contributions by representing field tests of effects predicted by various theoretical accounts from lab research. The second finding does not follow straightforwardly from any single theoretical account identified in prior research, showing that lab findings and field tests do not always converge cleanly. The third finding could be consistent with a vicarious goal fulfillment account whereby the presence of the healthy foods addresses a health goal for some consumers (Wilcox et al. 2009).

Interesting results were also found at the basket-level, shedding light on potential explanations for the sales results. The basket-level data for when only unhealthy foods were featured mirrored the sales data—unhealthy items per basket increased (vs. control), and healthy items per basket decreased. However, the basket-level data for when only healthy foods were featured and when a combination was featured did not mirror the sales data. Specifically, when healthy foods were featured alone, healthy items per basket increased (consistent with the sales results), while unhealthy items per basket decreased (differing from the sales results, which showed total unit sales of unhealthy items were not affected). We conjecture that this difference between unhealthy items per basket and unit sales of unhealthy items might have occurred because the healthy display may violate expectations for a convenience store (Gebauer and Laska 2011) and thus draw attention (Bettman 1979; Helgeson and Beatty 1987), leading some to make an unplanned healthy purchase; further, people who entered the store planning to buy an unhealthy item likely still purchased it (i.e., increasing the number of baskets purchasing any test items but not affecting sales of the unhealthy items). Similarly, when both healthy and unhealthy foods were featured, unhealthy items per basket increased (consistent with the sales results), whereas healthy items per basket decreased (differing from the sales results, which showed that total unit sales of healthy items were not affected). Again, we conjecture that this difference between healthy items per basket and unit sales of healthy items occurred because the healthy items drew people's attention to the display, increasing the number

of baskets purchasing a test item. Yet although some customers purchased healthy test products, most consumers still purchased the unhealthy test products, perhaps because of vicarious goal fulfillment processes (Wilcox et al. 2009). Thus, total unit sales of healthy foods directionally increased in this condition, but the number of such products per basket significantly decreased.

In sum, these findings mitigate potential concerns about featuring healthy foods. Rather, featuring healthy foods alone may be better from both firm and consumer welfare standpoints than either featuring unhealthy foods alone or featuring both food types.

Mental Accounting for Food in Exceptional Contexts

EXTENDED ABSTRACT

What seems like a bigger setback to one's diet: A small bag of peanuts consumed on a typical car ride or that same bag of peanuts consumed on a flight across the ocean? While the food is the same, the consumption context differs. This research suggests that the difference in context has broad consequences: the extent to which a consumption occasion is considered more ordinary or more exceptional guides eating behavior. Specifically, we demonstrate that people do not appropriately account for calories consumed during exceptional circumstances. This occurs in part because people have greater difficulty tracking these foods, and are less likely to recall eating them. In turn, this leads to a preference for larger portions and an increase in consumption.

Prior research has examined the distinction between ordinary and exceptional items in a financial context. Sussman and Alter (2012) demonstrate that people underestimate spending on exceptional purchases and overspend on such items. This occurs because of errors in budgeting. In the domain of charity donations, more exceptional framing of causes can increase donations (Sussman, Sharma, & Alter, 2015).

Across five lab studies, we investigate whether a similar distinction between ordinary and exceptional contexts influences choices we make for our diets. Examining both real and hypothetical consumption, we explore mental accounting processes around tracking caloric consumption. We provide evidence that people have greater difficulty tracking and recalling their consumption when foods are considered more exceptional.

In study 1, we prompted participants to consider a target food (chocolate) as more ordinary or more exceptional through a broad vs. narrow categorization task. Some participants were asked to list prior instances of junk food consumption, making chocolate seem more ordinary. Other participants were asked to list prior instances of chocolate consumption, making chocolate seem more exceptional. Then, participants had the opportunity to eat chocolate or other healthy snacks. We find that participants who view chocolate as more exceptional consume more of the target food (chocolate); however, they do not consume more of the control foods ($F_{in}(1, 144) = 6.21, p = .014$).

To better understand this behavior, in studies 2a and 2b, we showed participants a list of 10 foods consumed in exceptional contexts and 10 similar foods consumed in ordinary contexts (20 items per subject, counterbalanced between subjects). Participants indicated the extent to which each food was a setback to their diet. Participants considered the foods consumed in exceptional contexts to be less of a setback to their diets when compared to the same foods consumed in ordinary contexts (study 2a; $t(152) = 2.71, p = .008$). Further, participants believed that those same foods required less exercise to work off when consumed in exceptional (vs. ordinary) contexts (study 2b; $t(149) = 2.42, p = .017$).

In study 3, we explored a consequence of these beliefs. With the same list of foods used in studies 2a and 2b, we demonstrate a preference for larger portion sizes when a particular food is consumed in an exceptional (vs. ordinary) context ($t(247) = 4.27, p < .001$). The relative difference in preferred portion size between exceptional and ordinary contexts was mediated by the difference in the perceived setback to one's diet between foods consumed in each of the two settings ($b = .33, t(246) = 8.26, p < .001$; Judd, Kenny, and McClelland, 2001).

In study 4, we apply a mental accounting framework to investigate how the calorie tracking process may vary as a function of perceived exceptionality. After seeing a list of 30 exceptional and ordinary items, participants were asked to recall the items shown. Participants had worse recall for exceptional items, suggesting errors in booking ($t(64) = 3.94, p < .001$). Participants were also asked to categorize recalled foods in seven categories (breakfast, morning snack, lunch, afternoon snack, dinner, evening snack, and other). For exceptional (vs. ordinary) items, participants were more likely to place them in the miscellaneous category, suggesting errors in posting ($t(58) = 2.27, p = .027$). This study points to the notion that people may be less likely to take note of exceptional consumption instances and less likely to post them to meaningful budget categories.

In five studies, we show a preference for higher levels of consumption (studies 1 and 3) when an identical food is considered exceptional rather than ordinary. We provide evidence that this discrepancy stems from errors in both booking and posting: episodes of exceptional consumption are less likely to be either remembered or meaningfully noted. People may fail to record the full value of their caloric intake when foods are consumed during exceptional circumstances (study 2a 2b, and 4), leading to higher levels of consumption.

Individual overindulgences can accumulate with little awareness. The conceptual distinction between caloric consumption in exceptional versus ordinary contexts is important for understanding biases that prevent people from leading healthier lives.

Outsourcing Responsibility for Indulgences

EXTENDED ABSTRACT

For many consumers, food consumption contexts are riddled with conflict. On the one hand, unhealthy food options are enticing—consumers perceive them as tastier (Raghunathan, Naylor, and Hoyer 2006) and more satisfying (Finkelstein and Fishbach 2010), and overall they elicit strong positive affective reactions (Shiv and Fedorikhin 1999). On the other hand, unhealthy eating is generally considered a “vice” (Chernev and Gal 2010; Thomas, Desai, and Seenivasan 2011), the consumption of which leaves many consumers feeling guilty (Ramanathan and Williams 2007; Wansink and Chandon 2006). Some research has found that consumers attempt to resolve this uncomfortable conflict with the help of motivated reasoning strategies so that they can “have their cake and eat it, too.” For instance, they may fabricate licenses for their indulgence by minimizing their remembered prior consumption (May and Irmak 2014) or exaggerating foregone consumption (Effron, Monin, and Miller 2013). In this paper, we predict and find that a different path to remorse-free indulgence that consumers take is having someone else serve them.

Recent work suggests that consumers become more likely to make unhealthy choices when they are served by someone else, because being served allows them to reject responsibility and thus feel less bad for their unhealthy eating (Hagen, Krishna, and McFerran 2015). Based on these findings we hypothesize that consumers may strategically and proactively outsource responsibility for unhealthy eating. Specifically, we propose that consumers have a lay theory that being served by someone else will allow them to absolve them-

selves of (some) responsibility. If that is indeed the case, they should (i) strategically choose being served (versus serving themselves) for unhealthy (but not healthy) foods, and (ii) this preference for being served (versus serving themselves) should be driven by a motivation to reject responsibility. Two field studies and one controlled laboratory experiment support this idea.

Studies 1A and 1B tested consumers' preference for being served (versus serving themselves) unhealthy and healthy foods in field settings. Both studies featured contexts where who serves (self or other) is chosen by the consumer, that is, both serving oneself and taking a pre-served portion are available side by side.

In study 1A, we provided beverages in different groups of an undergraduate extra-curricular program. Students were told they could feel free to take a cup or pour themselves one if they wanted. In all classrooms, we provided the beverage containers and empty 8oz cups as well as half-filled 8oz cups. Thus people could either serve themselves the drink or take a pre-served cup. We manipulated the beverages' healthiness (healthy almond milk/blueberry juice versus unhealthy chocolate milk/pumpkin eggnog; pre-tested to be seen as differentially healthy but equally well-liked) and measured the respective proportions of students that chose the pre-served cups versus the empty cups to serve themselves.

Healthiness and server choice had a significant relationship, $\chi^2(1, N=88)=30.34, p < .01$. Specifically, for the unhealthy beverages, people who elected to have a drink were disproportionately more likely to choose the pre-served cups (50 out of 52) than to serve themselves (2 out of 52; $\chi^2(1, N=52)=44.31, p < .01$). For the healthy beverages, however, people were equally likely to take the pre-served drink (16 out of 36) as they were to serve themselves (20 out of 36, $\chi^2(1, N=36)=44, p > .5$).

Study 1B replicated the pattern from study 1A using snack foods in international student orientations. Together, the two field studies showed that, as predicted, for unhealthy (but not for healthy) foods consumers prefer being served instead of serving themselves. This is consistent with the hypothesis that consumers seek to avoid serving themselves in the case of unhealthy food, because they strategically seek to push off responsibility for unhealthy food. Yet, these data are aggregate, and process can only be inferred. Study 2 examined the hypothesized process directly in the laboratory and tested whether consumers' stronger preference for being served by someone else (versus serving themselves) when the food is unhealthy (versus healthy), is due to a greater motivation to reject responsibility for unhealthy (versus healthy) food.

In study 2, participants imagined a dinner reception where dessert was offered. We manipulated the dessert's healthiness (healthy fruit versus unhealthy cake) and measured participants' preference regarding who should serve the food as well as their motivation to reject responsibility. Serving preference was measured on a slider scale ranging from “*I prefer serving myself*” (0) to “*I prefer another person serving me*” (100). Motivation to reject responsibility was measured via agreement with “*For chocolate cake [fruit salad], I would probably look for ‘excuses’ allowing me to eat this food*” and “*For chocolate cake [fruit salad] it's nice if I can ascribe ‘responsibility’ for having it to other circumstances,*” measured on a slider scale from “*Strongly disagree*” (0) to “*Strongly agree*” (100). These two items were combined into an index for “motivation to reject responsibility” ($\alpha=.63$).

People's preference for being served by someone else was higher for the unhealthy dessert than for the healthy dessert, $F(1, 118)=11.80, p < .01$. They were also more motivated to reject responsibility for the unhealthy dessert than for the healthy food, $F(1, 118)=11.03, p < .01$. Finally, motivation to reject responsibility medi-

ated the effects of food's healthiness (healthy versus unhealthy) on the preference for who should serve it (95% CI= -10.15 – -.21).

These results align with our motivated reasoning account: People's preference for being served (versus serving themselves) is enhanced for unhealthy food compared to healthy food, and the driving process behind this effect is the motivation to reject responsibility for consumption. Interestingly, we found that this process seems to occur even when people themselves chose to have a certain food.

These findings suggest that when offering indulgent foods (e.g., frozen desserts) providing full service may more easily attract consumers than requiring self-service. Studies directly testing this managerial implication are underway.

You Call This Healthy? Refining "Healthy Food" Claims and Their Impact on Choice and Healthiness Associations

EXTENDED ABSTRACT

Although it is well-known that consumers are poor at understanding food claims (see Mariotti et al. 2010; Nocella and Kennedy 2012 for a recent review), it may come as a surprise that practitioners, food researchers, and consumers still have limited conceptual tools to navigate the diversity and complexity of the plethora of food claims present in the marketplace. Indeed, although past research has investigated people's responses to specific food claims (e.g., "low fat"), we do not know whether these reactions 1) can be generalized to other claims, 2) differ based on health goals, or 3) vary across different cultures (Rozin et al. 1999).

In this research, we first identified two dimensions of high theoretical and practical relevance in the context of food evaluations. First, positivity (focusing on the positive or negative aspects of the food), has been shown to lead to different responses in the context of food benefits (Malaviya and Brendl 2014), and this distinction between positive and negative nutrients is commonly used by business practitioners (e.g. "Smart Choice" or "NuVal" labeling systems). The second dimension, naturalness, reflects the natural or scientific derivation of the food claim. Indeed, concerns for the naturalness of food are widespread (Rozin et al. 2012), and marketers often highlight the natural qualities of their food products or extol the scientific benefits of their production process.

Next, we identified a set of 37 common and familiar food claims using an Amazon MTurk sample (N=432). These 37 claims were then used in Study 1, in which 401 MTurk participants each evaluated 8 food claims randomly chosen from the 37. The assessments included measures of naturalness, positivity, as well as inferences about the healthiness, taste and satiating power of the food, as well as demographic information.

Results revealed that consumers' perceptions of food claims are appropriately described by a four cluster solution, corresponding to a 2 (nature vs. science based) x 2 (positive vs. negative focus) perceptual space. We propose labels for the four types of claims we identify from this framework as follows: "Removing" claims (which are science-based and negative-focused, e.g., "gluten free"), "Adding" claims (science-based and positive-focused, e.g., "added vitamins"), "Not Removing" claims (nature-based and positive-focused, e.g., "organic"), and "Not Adding" claims (nature-based and negative-focused, e.g., "no artificial flavor"). Further analysis revealed that each type of claim was associated with different taste, health, and satiation expectations. For example, positive-focus claims were seen as healthier than negative-focus ($M=5.49$ vs. $M=5.05$, $F(1,33)=19.67$, $p<.001$), and similar differences were observed for the predicted satiation from the food ($M=4.35$ vs. $M=3.70$, $F(1,33)=22.32$, $p<.001$). The differences were even stronger for predicted taste: "Not Remov-

ing" claims were seen as tastier than both "Not Adding" and "Adding", which were in turn seen as tastier than "Removing".

In study 2, we examined how our framework can predict choice. We focused on two specific products, corn flakes cereals and milk, and tested the impact of the four types of claims identified in study 1 across different eating goals. A U.S. marketing research firm provided us with a panel of 600 participants, who were primed with one of three goals, two of which were health-related (losing weight goal vs. being healthier goal), and a "taste good" control condition. Consumers were then asked to pick one cereal among a set of five different realistic cereal boxes, four of them bearing a health claim for each of the four types (e.g., "no artificial flavors" for negative-natural claims and "low in sugar" for negative-scientific claims) and the fifth being a control option bearing no claim. Analysis revealed that preferences for food claim types shifted across goals. For example, consumers primed with a weight loss goal favored science-based claims, while those primed with a healthy eating goal chose nature-based claims. This pattern was particularly true for negative, but not positive claims. Similar findings emerged based on subsequent choice of milk to accompany the cereals, using different exemplar claims from our health-claim framework.

In study 3, we sought to conceptually replicate the results obtained in study 2, but also investigate similarity and differences between cultures in responses to the health claims. To do so, we collected samples from both U.S. MTurkers as well as a demographically matched sample of French participants (Total N=1367). We selected 16 food claims from our previous list of 37 (4 from each cluster), and each participant was randomly assigned to view four food claims. For each claim, the participants were asked to imagine a cereal box bearing the claim, and to evaluate the predicted benefit of consuming the product in terms of health, taste, satiation, quality, and dieting. For overall evaluation of the cereal, the French preferred those with the nature-based claims over those with the science-based claims, whereas the Americans liked both nature and science-based claims equally. Health claims focusing on positive elements led to better inferences in general (about healthiness, taste, and quality) than health claims focusing on negative elements across both cultures. However, while Americans viewed science-based claims as healthier than nature-based claims, the opposite was true amongst the French participants. Science-based and negative "Removing" claims were perceived to be better for dieting in both countries. Finally, nature-based claims were linked to better taste and food quality than science-based claims across cultures.

In conclusion, our results provide both food researchers and marketers with a better understanding of the way consumers perceive healthy food claims based on the underlying dimensions of positivity and naturalness, and the extent that food claims impact choice based on various health goals, and the different expectations in terms of taste, healthiness, and other characteristics. Further, our cross cultural study documented both some similarities, but also striking differences in how health claims were perceived by American and French participants, suggesting that the cultural context is critical in determining which type of claims most effectively communicate a product's healthiness.

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Biases in Consumer Financial Decision Making

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Paper #1: Better Understood Companies Seem Like Safer Investments

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Paper #2: Debt Aversion: Anomalous in Theory, Advantageous in Practice

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Paper #3: Judgments Based on Stocks and Flows: Different Presentations of the Same Data Can Lead to Opposing Inferences

Stephen Spiller, University of California Los Angeles, USA
Nicholas Reinholdt, University of Colorado, USA
Sam Maglio, University of Toronto, Canada

Paper #4: Leaving Money on the Kitchen Table: Exploring Sluggish Mortgage Refinancing Using Administrative Data, Surveys, and Field Experiments

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SESSION OVERVIEW

The financial decisions consumers make are increasingly complex and important for their financial welfare. For instance, consumers now decide whether to finance a purchase on any of several credit cards that vary along interest rates, reward structures, grace periods, and potential fees. Consumers decide which investments fit their risk tolerance, despite widespread misunderstanding of how financial risk works (Reinhold, Fernbach, and de Langhe 2016). Consumers also make decisions about mortgage refinancing not only in light of the complexities of the loans, but also in light of predatory lending practices (Bond, Musto, and Yilmaz 2009). Financial decisions like these present challenges to decision-makers; they usually involve a time component, trading off current desires for future necessities, and reasoning about complex, nonlinear relations (e.g., compounding: McKenzie and Liersch 2011; stock-flow problems: Cronin, Gonzalez, and Serman 2009). To deal with such complexity, consumers mentally simplify the decisions. The papers in this session describe several ways consumers simplify, and show cases where the result is beneficial or detrimental to consumer welfare.

First, Long, Fernbach and de Langhe find having a high understanding of what a company does leads people to perceive the company's stock as being less risky. They also find understanding is unrelated to the true risk of a stock, indicating the bias leads to consumers making investments that do not match their risk preferences. Second, Walters and colleagues investigate a novel individual difference – debt aversion. They find debt aversion is associated with several biases, such as negative discount rates for losses. However, in real-world decisions debt aversion can lead to an especially positive outcome – better credit scores. Third, Spiller, Reinhold, and Maglio find consumers tend to form opinions based on the direction of a trend regardless of whether the same information is presented as a stock (e.g. asset price over time) or a flow (e.g. rate of return over

time). For instance, if an asset's price is increasing at a diminishing rate, when presented as a stock the direction is positive, and people tend to think the price will keep increasing. When presented as a flow, the direction is negative, and people tend to think the rate of change will continue, and the stock's price will soon decrease. Finally, Johnson, Meier, and Toubia find consumers overwhelmingly do not accept beneficial mortgage refinance offers. Consumers' high suspicions about financial institutions' motives lead to decreased offer acceptance.

These papers seek to answer not only how consumers simplify the complex decisions they face, but also how these heuristics affect the quality of decisions. The session will be a great opportunity for students interested in the burgeoning field of consumer financial decision-making to get a good sense of the topics and methods researchers are tackling. The papers present a variety of methodologies from laboratory experiments to secondary-data analysis to field experiments, and they deal with a range of substantively important topics like debt accumulation, investing, and mortgage refinancing. They also cover a broad theoretical range from basic psychological processes to actual consumer behavior in the marketplace.

Better Understood Companies Seem Like Safer Investments

EXTENDED ABSTRACT

Investment experts often advise people to invest in companies that they understand. This can be a beneficial strategy, because a consumer may have local knowledge other investors do not have, allowing the consumer to make a better valuation of the company (Hayek 1945). However, this rationale means that understanding is merely a starting point – the first step in determining a company's value. Unfortunately, consumers often misinterpret the experts' advice, thinking companies they understand are safer to invest in.

Prior research has found that sense of understanding influences preference formation (Hadar and Sood 2014; Fernbach, Sloman, St. Louis, and Schube 2013; Hadar, Sood, and Fox 2013). Our research shows that a person's sense of understanding influences preferences by impacting risk perceptions. When people feel they understand what a company does, investing in that company feels safer. While sense of understanding may be a valid indicator of risk in some domains, it is not in the financial domain. Thus relying on sense of understanding to guide investment decisions leads to suboptimal choices.

Study 1a

We presented 248 participants with ten company descriptions, sampled randomly from the S&P 500. Each participant read the company's profile from Yahoo! Finance, and rated how risky investing in the company was, how well they understood what the company does, and how familiar they were with the company. Participants completed the epistemic and aleatory risk scale (Ears; Fox, Tannenbaum, and Ulkumen 2016). Ears measures the degree to which a person believes an event's outcome is knowable in advance, given enough information (epistemic) versus completely random (aleatory). Finally, we computed each stock's capital asset pricing model (CAPM) beta statistic, which is an objective measure of a stock's risk.

As predicted, companies rated as higher in understanding received lower risk ratings ($r = -0.31, p < .001$). However, understand-

ing did not correlate with objective risk ($r = -0.06, p > .23$). Regression analyses indicate that the relationship between understanding and risk is robust ($\beta = -0.12, t(475) = -2.74, p < .007$) after controlling for differences in familiarity, objective risk, or aleatory/epistemic risk judgments.

Study 1b

We presented 335 participants with four company profiles, sampled randomly from the S&P 500. Instead of rating risk on a seven-point scale, participants completed a distribution builder task in which they constructed a histogram by assigning 100 balls to 11 bins that represent possible rates of return for the stock. From the participant's distribution, we calculate several statistics including the mean rate of return and standard deviation. Participants also rated other covariates as in 1a and we calculated objective risk statistics.

We used the standard deviation as a proxy for perceived risk due to its long history of representing risk in mean-variance models of investing (Markowitz 1952). Again, we found that higher understanding is related to lower risk perceptions ($r = -0.19, p < .001$) and that this relationship remains significant when controlling for other measured variables ($\beta = -0.23, t(446) = -4.26, p < .001$). We also analyzed participants' mean expectations for stock returns. Participants estimated higher average returns for higher understanding companies ($r = 0.16, p < .001$), and the result remained significant when controlling for the other variables ($\beta = 0.26, t(446) = -2.99, p < .003$). The effects of understanding on perceived standard deviation and mean of the outcome distribution is consistent with previous research connecting risk perception both to uncertainty and to the likelihood of bad outcomes (Slovic 1987).

Study 2

Studies 1a and 1b established across a broad range of companies that people perceive less risk in companies that they understand better. In study 2, we manipulate understanding by providing participants with structured versus unstructured information about companies. In the structured condition, participants examined a table containing divisions of the company in one column and what that division produces or sells in the second column. In the unstructured condition, participants received the same information, except the table was split in two, such that participants could not directly match a division with what it produced or sold. Pretests indicated that the structured condition had higher ratings of understanding for companies that were rated as easy to understand in studies 1a and 1b, but had the opposite effect for companies rated as hard to understand in studies 1a and 1b ($f(1, 198) = 16.42, p < .001$). In the main study, we measured ratings of risk on the same 7-point scale as study 1a, and found that for companies that were rated as easier to understand in studies 1a and 1b, structure caused lower risk ratings ($t(199) = -3.67, p < .001$). For companies that were rated as harder to understand in studies 1a and 1b, structure caused higher risk ratings ($t(199) = 3.13, p < .001$).

Study 3

In study 3, we investigate how sense of understanding impacts portfolio composition. Participants were asked to allocate \$10,000 to stocks to create a portfolio for a hypothetical client. Participants were randomly assigned either a client described as having a high risk-tolerance or a low risk-tolerance. Participants were shown three company profiles rated as easy to understand in previous studies and three rated as difficult to understand. If sense of understanding is negatively correlated to risk in people's minds, participants in the low risk-tolerance condition should allocate more money to well-un-

derstood companies and participants in the high risk-tolerance condition should allocate more money to poorly understood companies. In line with these predictions, participants allocated a higher percentage of money to high understanding companies in the low risk-tolerance condition than high risk-tolerance condition ($m_l = 61\%, m_h = 44\%, t(149) = 6.36, p < .001$).

Across several studies we show that risk perceptions are driven by consumers' sense of understanding about what a company does. However, sense of understanding is unrelated to the true riskiness of a stock. Reliance on sense of understanding as a cue for risk can thus lead people to select investments whose true level of risk mismatches their risk preference.

Debt Aversion: Anomalous in Theory, Advantageous in Practice

EXTENDED ABSTRACT

Casual observation suggests that people display varying attitudes towards debt. However, the traditional view of time preference is that people are prone to taking on debt, paying a premium to make payments later rather than sooner. In this paper we assert that debt seeking may not be as universal as standard discounting models assume. Even if people take on debt in practice due to liquidity constraints, they may treat debt as inherently unappealing. For instance, many people who pay off their balances in full each month prefer to make purchases by debit rather than credit card, even though using a credit card under these conditions is tantamount to an interest free loan (Zinman 2009).

In this paper we introduce a novel scale to measure general attitudes towards debt: the debt attitude scale (DAS), a 4-item measure of aversion to debt that we show can predict three anomalous intertemporal preferences in the lab: individuals higher in debt aversion are more likely to exhibit negative discount rates for losses, greater patience for losses compared to gains (the gain-loss asymmetry), and greater patience for borrowing compared to saving (the borrowing-saving asymmetry). Despite the fact that debt aversion predicts anomalous patterns of preference in the lab, in a field study we find that individuals who report higher levels of debt aversion actually have better credit scores.

The first anomaly, negative discount rates for losses, is the observation that many people prefer incurring a loss sooner rather than later and therefore require a premium to postpone making payments (Scholten et al. 2016; Yates and Watts 1975) so that measured discount rates are sometimes negative (Hardisty, Appelt, and Weber 2013). This finding, which contradicts standard economic analysis, might also be interpreted as an expression of debt aversion. Thus, we predict that explicit ratings of aversion to debt on our rating scale will be associated with a higher frequency of negative discount rates for losses in a generic intertemporal choice task.

The second anomaly, the gain-loss asymmetry (Loewenstein and Prelec, 1992), is the finding that people tend to be more patient when making decisions concerning future losses than future gains. For example, a person who is indifferent between gaining \$100 today and gaining \$120 one year from today will generally prefer losing \$100 today to losing \$120 one year from today. Our interpretation is that delayed losses or payments tend to be construed as debts, since they are obligations to pay money in the future, and that people who are debt averse will prefer to incur the loss as soon as possible. Thus, we predict that people who express more debt averse attitudes on the DAS will exhibit greater patience in a generic intertemporal choice task when assessing losses relative to gains (i.e., show greater gain-loss asymmetry in discounting).

A third, related anomaly, which we call the borrowing-saving asymmetry, is the observation that people's discount rates are typically lower for borrowing than saving (Prelec and Loewenstein 1998; Meissner 2015). We predict that because people with more debt averse attitudes discount future losses less than gains, they will generally have lower discount rates for borrowing (i.e., gaining money today in exchange for losing money in the future) than saving (i.e., losing money today in exchange for gaining money in the future).

Although debt aversion may be associated with "anomalous" behavior, in that it violates standard economic accounts of intertemporal discounting, it may nevertheless provide some advantage or protection to people making every day financial decisions. It is well known that people tend to be impatient, and seek to favor immediate over deferred gratification, which is often funded by unsustainable debt (e.g., running up credit card balances). An instinctive aversion to debt may serve as a restraint on such behavior and thus moderate any tendency to over-borrow.

In study 1 we find that debt aversion is associated with negative discounting for losses. Participants ($n = 520$) first completed the debt attitude scale (DAS). Participants then completed a titration of discount rates for losses using a standard discount-delay task and a measure of loss aversion. We find that the majority of participants expressed debt aversion (i.e., responses above the midpoint of the scale). Participants reporting greater debt aversion on the DAS were more likely to express negative discount rates for losses, even after controlling for other factors such as loss aversion ($p < .001$).

In study 2 we extended this result to show that debt aversion is associated with greater asymmetry in gain-loss discounting. Participants ($n = 168$) completed the DAS and a titration of discount rates for both losses and gains. Participants higher in debt aversion tended to express lower discount rates for losses-vs-gains whereas participants low in debt aversion showed no difference across elicitations (interaction $p < .05$).

In study 3 we find that debt aversion is associated with greater asymmetries in discount rate for borrowing versus saving. Participants ($n = 313$) completed the DAS, a borrowing schedule titration, and a saving schedule titration. Once again, participants reporting greater debt aversion on the DAS tended to be more patient for borrowing (trading off an immediate gain against a larger looming loss), but not for saving (trading off an immediate loss for a larger looming gain), interaction $p < .05$.

Although debt aversion is associated with anomalous behaviors in the laboratory, we expected that it might confer some advantage in practice. In study 4 participants ($n = 152$) completed the DAS, other individual difference measures, and gave consent to obtain their credit scores. We find that higher scores on the DAS are related to better credit scores, after controlling for demographic variables ($p < .01$). Further, we find the DAS is a stronger predictor of credit scores than previously proposed attitude scales.

In sum, we develop a new, easy to administer attitudinal measure of debt aversion. We find debt aversion to be common. Further, debt aversion appears to serve as a useful heuristic for better financial decision making in the field, but leads to anomalous behavior in the lab.

Judgments Based on Stocks and Flows: Different Presentations of the Same Data Can Lead to Opposing Inferences

EXTENDED ABSTRACT

Prudent financial decision-making requires understanding how quantities change over time and how they might change in the future. Good investors should understand macroeconomic trends such as sales and job growth when deciding whether to enter a market. Families should understand their financial assets and liabilities before committing to expenditures or debt. Quantities that change over time can be presented in different ways. Here, we focus on two ways to present the same information: as a stock (e.g., wealth over time) or as a flow (e.g., income less expenditures over time). Although each format presents the same information, even well-educated adults have substantial difficulty translating between stocks and flows (Cronin, Gonzalez, and Sterman 2009; Sweeney and Sterman 2000; Sterman 2010). We find that presentation format (stock vs. flow) influences the judgments consumer make.

When making judgments, people heavily weight information that is made the most salient (Kahneman 2015; Slovic 1972; Tversky and Kahneman 1981; in graphical displays: Cleveland and McGill 1984; Lurie and Mason 2007). As a result, trends that are explicit influence judgments more than trends that must be deduced. Consider a \$1,000 bank account balance that increases to \$1,700, to \$2,100 and finally to \$2,200 with an implied flow of +\$700, +\$400, +\$100. One might judge the balance based on the stock trend (increasing) or the flow trend (decreasing). One common mistake is to conflate the two, inferring that stocks and flows track each other's patterns (Sweeney and Sterman 2000). Our results indicate that presentation format – and the apparent trend that varies by format – shapes consumer judgments.

Study 1

100 participants were randomly assigned to view us employment data (2007-2013) as either a stock (number of private-sector jobs per month) or flow (number of private-sector jobs gained or lost per month). The most rapid job loss occurred around January 2009 when Barack Obama was inaugurated. The rate of job loss accelerated in the previous year and slowed (but did not reverse) in the year following his inauguration. Although they show the same data, the apparent stock trend during Obama's first year was negative and the apparent flow trend was positive.

When asked "in your view, what effect did Barack Obama have on the American economy during his first year in office?" (1 = "made it much worse," 7 = "made it much better"), flow participants reported that Obama had a positive effect ($m = 4.84$, $sd = 1.36$), whereas stock participants reported that Obama had a negative effect ($m = 3.32$, $sd = 1.61$; $t(98) = 5.10$, $p < .001$); each of these values significantly differed from the midpoint (4 = "made no difference," $ps < .01$). We do not claim whether one depiction better represents the economy, but rather that they lead to very different judgments.

Study 2

402 participants were randomly assigned to make forecasts from each of 9 stock graphs or 9 flow graphs. These nine graphs came from a 3 (stock trend: negative, zero, positive) x 3 (flow trend: negative, zero, positive) design; domains and magnitudes were randomized across patterns. Consider the sequence (32, 41, 47, 50, 50) with the associated flow (+9, +6, +3, +0). This sequence has a positive stock trend (32 to 50) and a negative flow trend (+9 to +0). Par-

ticipants saw four years of monthly data and the ending quantity and made a forecast of what the quantity would be one year later.

Across the 9 patterns, the modal response reflected a linear extrapolation from the ending trend. In 5 cases, this trend had the same sign for stocks and flows, with the dominant response receiving 79% to 100% of responses. In the other 4 cases, forecasts followed the observed ending trend, which varied for stocks and flows. For example, for a positive stock / negative flow trend, the modal forecast in the stock condition was no change (41%) and the modal forecast in the flow condition was negative (94%). In each of these 4 cases, the distribution of signed changes varied by condition ($p < .001$).

Study 3

Are these differences due to an inability to comprehend the graphs? We selected the four cases with different ending trends from study 2, but calibrated the trends differently (e.g., the positive stock / negative flow trends were patterned (20, 32, 41, 47, 50) and (+12, +9, +6, +3), respectively). 605 participants were assigned to one of six conditions in a 3 (graph: stock, flow, stock+flow) x 2 (order: forecast then describe; describe then forecast) design. Participants in the stock+flow condition saw both graphs; their responses fell between the stock and flow participants and we do not discuss them further. The forecast task was like the study 2 task. The describe task asked participants to read and compute quantities from the graph rather than make a forecast of the future.

Aggregate results replicated study 2. Among the observations on which participants described the graphs correctly (42%; cf. Cronin et al. 2009), the differences persisted when flows trended upwards or downwards. For example, for a positive stock / negative flow trend, the modal forecast in the stock condition was positive (97%) but the modal forecast in the flow condition was negative (41%; $p < .001$).

Study 4

Study 4 tested whether the effect persists when data are displayed as a table. 401 participants were randomly assigned to one condition in a 2 (data: stock, flow) x 2 (display: graph, table) design. Each described and then made a forecast based on a positive stock / negative flow. Results replicated study 3. Even among participants faced with a table, the effect persisted among the 81% who read the table correctly. The modal forecast in the stock condition was positive (87%) but the modal forecast in the flow condition was negative (50%; $p < .001$).

The decision to present data as stocks or flows, despite being formally equivalent, is not a neutral choice. Stark differences in judgment valence result from such differences, even among those who demonstrate a priori that they can accurately describe such graphs.

Leaving Money on the Kitchen Table: Exploring Sluggish Mortgage Refinancing using Administrative Data, Surveys, and Field Experiments

EXTENDED ABSTRACT

Refinancing is one of the most important financial decisions of households. Getting this decision wrong can be very costly for homeowners. Previous research does suggest that borrowers do not optimally refinance (see, e.g., Stanton 1995; Campbell 2006; Agarwal et al. 2012). The many borrowers who do not refinance when they should or do so sluggishly (referred in industry circles as “Woodheads”) potentially leave a lot of money on the table. Keys et al. (2014) estimate based on loan-level data that the median present-discounted cost of failing to refinance is about \$11,500. In

this paper, we take advantage of the home affordable refinance program (HARP), a setting that has multiple features that allow us to address these issues. First, we have detailed information about the offers sent to about 800,000 borrowers and then observe whether they refinanced through this program. Second, all those offers have no upfront costs – all prepayment penalties and appraisal costs are waived and provide substantial savings, suggesting that refinancing should be frequent. We ask 1) how much money do borrowers leave on the table by not accepting the refinance offers, and 2) whether heterogeneity in borrower’s preferences, attitudes, and/or financial sophistication can explain part of the refinance patterns. Finally, HARP refinancing is very lucrative for same-servicer refinancing as these loans are sold at a premium (see, p. 35 in Fuster et al. 2013). This allows the offerer to conduct several different (behaviorally informed) interventions to attempt to increase refinancing rates. Thus HARP provides us with a relatively unique setting in which many empirical problems are minimized.

The results show that only 16.23 % of the borrowers applied to the first refinance offer sent by the bank. While we observe refinance offers, we do not have information about other offers from competitors. However, we do know whether borrowers paid off their mortgage – which can be either through another refinance offer from our fi, by refinancing with a competitor or paying off the loan in full. Overall, 60.16% did not refinance. This is stunningly high given the fact that there are no monetary costs and that the pre-approved offers are attractive: on average, the interest rate drops by 1.8 percentage points (median: 1.75). Such a rate decrease would lead to a monthly savings of \$204 on average (median: \$122). If non-applicants had picked up the offer from the fi, they would have saved several thousand dollars over the life time of the mortgage. Our results show that many households leave substantial amounts of money on the table by not applying to the refinance offer. However, this does not mean that borrowers do not pay any attention to the offer because, on average, borrower react to the attractiveness of the offer in an expected way: the more attractive the offer (the greater decrease in interest rate) the more likely borrowers are to refinance. However, application rates increase only up to a certain point after which the application probability almost returns to the baseline level. Because borrowers react to the attractiveness of the offer, it appears that they at least looked at it.

We next investigated potential reasons for not refinancing by conducting a large-scale survey with a subset of borrowers. We match the answers to the survey to the administrative data. The responses suggest that part of the problem of sluggish refinancing is suspicion by borrowers of the motives of financial institutions. Apparently, refinance offers under the HARP program seem too good to be true for many borrowers. Households expect there to be hidden fees and cumbersome processes that are not compensated by the attractiveness of the offer. The evidence from the survey matched to the administrative data suggests that higher suspicion about the motives of financial institutions is robustly associated with lower application rates. In addition, we find that typical time preference parameters such as present bias and discount rates are significantly related to the refinancing decision. Present bias and discount rates (following Laibson (1997)) predict how sensitive borrowers are to the attractiveness of the offer (i.e., the interest rate decrease). At the same time, other psychological factors, like numerical ability, conscientiousness, and others seem less important in determining refinancing decisions.

Our resulting set of field experiments demonstrates that barriers to refinancing are extremely difficult to overcome. For example, the literature suggests that financial incentives may nudge present-biased individuals into applying (see, e.g. Charness and Gneezy 2009;

Gneezy et al., 2011). Based on this logic, in one field experiment the fi offered an immediate benefit, i.e. gift cards of up to \$100, for applying. In another field experiment, the bank relied on a third-party (in our case, Fannie Mae and Freddy Mac) to increase the credibility of the program. Finally, in a third field experiment the bank committed to paying \$500 to the borrower if the process took more than 30 days. However, when borrowers are suspicious, they are likely to discount such interventions. If anything, these interventions might backfire, and borrowers become even more suspicious. Evidence from three large-scale field experiments (with more than 100,000 borrowers per experiment) indicates that these interventions have no effect on application rates. Offering gift cards, for example, has—if anything—a slight negative effect on application rates. In other words, interventions that try to tackle psychological barriers like present-biased preferences may not be effective when customers are suspicious.

This result sheds light on the question of how sustainable it is to exploit consumers' decision-making biases. If the suspicion of our borrowers was really shaped by the past behavior of the financial industry, then the resulting loss of trust has delayed costs in that it restricts the fis ability to sell its products. As such exploiting behavioral bias in the short-run, might then have long-term costs in terms of increased suspicion. Indeed, the importance of trust (and the lack thereof) in guiding customer behavior has been well documented in marketing (Berry 1996; tax et al. 1998; Garbarino and Johnson 1999; Sirdeshmukh et al. 2002; Harris and Goode 2004), but neglected in finance.

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The Heart and/or the Mind 2.0: How Affective Inputs Can Improve Our Understanding of Cognitive Processing

Chairs: Hristina Nikolova, Boston College, USA

Cait Lambertson, University of Pittsburgh, USA

Paper #1: (Emotional) Reference Point Formation

Milica Mormann, University of Miami, USA

Luke Nowlan, University of Miami, USA

Joseph Johnson, University of Miami, USA

Paper #2: The Bright Side of Dread: Anticipation Asymmetries Explain Why Losses Are Discounted Less Than Gains

David J. Hardisty, University of British Columbia, Canada

Shane Frederick, Yale University, USA

Elke U. Weber, Columbia University, USA

Paper #3: Do You Know How Much You'll Hate the Fruit Salad? Affective Forecasting Ability and Self-Regulatory Success

Hristina Nikolova, Boston College, USA

Cait Lambertson, University of Pittsburgh, USA

Paper #4: Is It More Rational to Say "No"?: How Choosing Versus Rejecting Alternatives Affects Information Processing

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SESSION OVERVIEW

To say that affect and cognition both shape decision-making is in no way new. However, most of the research to date has studied the affective and cognitive drivers of judgment and decision-making in isolation from each other. In this special session, we present four papers that consider the interplay of affect and cognition and collectively answer the following questions:

How do incidental, anticipated, and actual emotions shape the building blocks of cognitive activities (e.g., reference point formation, information processing, and intertemporal discounting)?

Does recognizing these emotional influences allow us to better explain or change effects observed when decision-making is viewed from a purely cognitive perspective?

Though sharing a fairly tight focus on the above-two questions, the papers in the session approach affect differently enough to offer a range of perspectives. While some examine the influence of incidental affect on otherwise cognitively-driven decisions (Mormann, Nowlan, and Johnson), others focus on integral affect (Hardisty, Frederick, and Weber; Nikolova and Lambertson; Sokolova and Krishna).

The session starts with a paper by Mormann, Nowlan, and Johnson who examine how *incidental emotions* affect reference point formation in stocks evaluation decisions using eye-tracking. The authors suggest that incidental emotions determine how investors allocate attention to different pieces of financial information when evaluating a stock (initial, current, high, low prices), which, in turn, impacts their reference point for the stock.

The session continues with illuminating our understanding of the interplay between cognition and *integral affect*. Hardisty, Frederick, and Weber demonstrate that asymmetries in anticipatory affect explain why losses are discounted less than gains (the "sign effect"). Results show that waiting for gains is a mixed emotional experience (pleasurable due to savoring and painful due to impatience), whereas waiting for losses is a unidimensional painful experience. These differences in anticipatory affect mediate the "sign effect" in discounting.

Nikolova and Lambertson examine the role of anticipatory integral affect in self-regulation. The authors demonstrate that individual differences in affective forecasting accuracy predict indulgence/restraint in emotion-driven domains (food and time management) better than does trait self-control. Further, they find that mispredictions of hedonic (but not self-conscious) affect, drive indulgence, and suggest simple debiasing strategies.

Finally, Sokolova and Krishna take a broader perspective and examine how task type (choice, rejection) alters the impact of the affective, heuristic-based System 1 and deliberative System 2 on decision-making. Using robust judgment and decision-making phenomena (e.g., framing effects), the authors show that task type shifts decision-making from the affective, heuristic-based System-1 processing (in choice) to the deliberative System-2 processing (in rejection).

In sum, the papers in this session (comprising 19 studies and one eye-tracking experiment) advance our theoretical understanding of the affective and cognitive influences on judgment and decision-making from four intriguing perspectives in a variety of disciplines (marketing, psychology, economics, and finance), using different methodologies (lab studies, eye-tracking experiment, and quantitative modeling), and considering a variety of important decisions. We expect the session to be of great interest to a broad audience of researchers working in the areas of judgment and decision-making, affect, cognition, and self-regulation.

(Emotional) Reference Point Formation

EXTENDED ABSTRACT

Reference points influence investor behavior because financial outcomes are coded as gains or losses relative to the reference point. The behavioral finance literature mentions multiple reference points, such as the purchase price or historic highs. However, it is not clear exactly how reference points are formed or "how multiple reference points compete and combine" (Kahneman 1992), and whether transient emotional states influence the combination of multiple reference points.

Here, we use eye-tracking to examine how people form their reference points. In addition, we investigate how incidental emotions affect reference point formation. Recent work has shown that emotions influence financial decisions at the market level (e.g., Edmans, Garcia, and Norli 2007) as well as the individual level (e.g. Lee and Andrade 2011). This area of research emphasizes the underlying role of social inferences in explaining the effect of emotions on decision making. Here, we focus on another mechanism through which emotions should drive decision making; namely, perception and attention.

We suggest that incidental emotions guide investors' attention when evaluating financial assets, which, as a result, influences their subjective valuation, or reference point, for those assets. Relative to negative emotions, positive emotions have been shown to increase the breadth of attentional processes and guide attention to peripheral stimuli in basic visual tasks (Fredrickson 2001; Wadlinger and Isaacowitz 2006). Building on this research, we designed an experiment in which participants observe stock charts conveying temporally local information (i.e. the current price) and peripheral information (i.e.

historic highs, lows, and the purchase price). We explore whether the relationship between emotion and attentional breadth can predict: a) which prices investors look at, and b) their subsequent valuations of each stock they observe.

The experiment consisted of two tasks. First, incidental emotion was induced by showing either a joyful, fearful, or emotionally neutral control video. Second, after watching the video, twenty-two subjects viewed stock charts and were asked to determine their “neutral selling price”, i.e., reference point, for each stock across multiple trials (Baucells, Weber, and Welfens 2011). Eye-tracking was used to examine the amount of time people fixated on, i.e., considered, the initial, current, high, and low trading prices on the stock chart as they formed their reference points.

Our eye-tracking data shows that, as individuals form their reference points, the initial and current price receive the most attention, followed by highs, while lows receive very little attention. We find that incidental emotions significantly influence formation of the reference point ($F(2, 232) = 7.13, p < .01$): joyful investors form the highest reference points, followed by neutral investors, and finally fearful investors.

Our eye-tracking data reveals that incidental emotions influence how investors allocate their attention to stock charts: attention to the current price is greatest among those in the fear condition ($F(2, 241) = 10.77, p < .01$), while attention to the initial and high prices is greatest among those in the joy condition ($F(2, 241) = 10.16, p < .01$; $F(2, 231) = 8.59, p < .01$, respectively).

Finally, we develop a quantitative model of the underlying process and show that emotions affect how investors allocate their attention and that, in turn, attention affects reference point formation. The model demonstrates that for a given stock graph, attention to the low price decreases the reference point while attention to the high price increases the reference point. For stocks in which the current price was relatively high (i.e., when the stock trend is up), we find that attention to the current price increases the reference point, but we find the reverse when the current price was relatively low (i.e., when the stock trend is down). Follow-up analyses demonstrate that looking times at the current price region mediate the negative effect of fear on reference point when the stock trend is down (indirect effect = $-.046$; 95% CI: $-.108$ to $-.004$), and suppress the negative effect of fear when the stock trend is up (indirect effect = $.035$; 95% CI: $.002$ to $.110$). These findings implicate attention as one of the processes through which incidental emotions influence the reference point.

This research makes important contributions to the decision making literature by highlighting a key situational factor that influences reference point formation; namely, incidental emotions. Further, we build on findings in the attention and perception literature by demonstrating that the effects of emotion on attentional scope translate to relatively complex information search and judgment contexts. These findings carry implications for household financial decision-making and can help us better understand various market level phenomena, such as the disposition effect.

The Bright Side of Dread: Anticipation Asymmetries Explain Why Losses Are Discounted Less Than Gains

EXTENDED ABSTRACT

The desire to have good things immediately is much stronger than the desire to postpone negative outcomes (Thaler 1981; Hardisty and Weber 2009). Though this “sign effect” is a robust result, the reasons for it are not well understood. We hypothesize that the desire to postpone losses is weaker than the desire to accelerate gains because aversive anticipation of bad things is stronger than the pleasur-

able anticipation of good ones, even after controlling for loss aversion. Anticipation utility predicts lower discount rates for losses, but has little effect on gains, producing the sign effect. This anticipation asymmetry happens because waiting for a gain is a mixed emotional experience that is both pleasurable and painful, whereas waiting for a loss is a more unidimensional painful experience.

Loewenstein (1987) famously found that people were willing to pay more for a kiss from a movie star in three days than for an immediate kiss, and inferred that the increased value of the delayed kiss was driven by savoring. However, we ran several replication studies (Pilot Studies 1-3) and were not able to replicate this finding. This suggests that savoring may be less robust than previously thought. In contrast, several papers have documented the importance of dread in intertemporal choice. For example, Berns and colleagues (2006) assessed dread for electric shocks using both self-report and fMRI of brain activation during the period preceding them. People who reported greater “anticipatory anxiety” exhibited more activity in posterior elements of the cortical pain matrix, and had a stronger preference for immediate shocks. Such results demonstrate the efficacy of self-report measures of dread. The relative strength of anticipation for positive versus negative events, however, has rarely been examined, and is our focus.

In Study 1 ($n = 193$), participants chose between \$49 today OR \$60 in 89 days. These amounts referenced gains or losses depending on the condition to which respondents had been randomly assigned. Participants were then told to “Imagine expecting to receive [pay] \$60 in 89 days.” and were asked “How psychologically pleasurable or displeasurable would the anticipation be? In other words, how would you feel while waiting for it?” They responded on a 201 point bipolar scale ranging from -100 “strongly dislike the feeling of waiting” on the left to +100 “strongly like the feeling of waiting” on the right, with 0 labeled “neutral.” Participants then answered 26 other choices between smaller smaller sooner and larger later rewards [penalties] (all from Kirby, Petry, and Bickel 1999) and some demographic questions.

Participants’ desire for immediate gains was stronger than their desire to postpone losses, replicating the sign effect. SS rewards were preferred 57% of the time in the gain conditions compared to just 26% preference for LL losses, $t(191) = 10.7, p < .001$. This implies annualized discount rates of 332% for gains and 34% for losses.

Anticipating a future loss was rated as -36 ($SD = 46$), whereas anticipating a future gain was rated as -5 ($SD = 55$), $t(191) = 5.6, p < .001, d = 0.8$, supporting our hypothesis. Moreover, these expected anticipatory emotions mediated the sign effect, $p < .001$. The valence of the event in question affects judgments of the associated anticipatory emotions, which in turn predicts time preferences.

In Study 1b ($n = 100$), we show this same pattern of results in a consumer choice setting with a choice between two air conditioning units. One option had a cheaper upfront cost but was energy inefficient, wasting money in the long run. We framed the future energy usage of both models as gains or losses, between subjects. In the positive frame, 59% of participants chose the “impatient” model, compared with 29% in the negative frame, $t(92) = 3.0, p < .01$. Furthermore, this result was mediated by asymmetries in anticipation ratings, replicating Study 1a.

In Study 2 ($n = 169$), we demonstrate the robustness of this anticipation asymmetry across twenty different events (10 gain and 10 loss), including classics from the literature such as the electric shock and kiss from a movie star. We also demonstrate the asymmetry across different time horizons, from 3 days to 5 years.

In Studies 1 and 2, we made no attempt to equate the *subjective* magnitude of positive and negative events. Thus, our suggestion

that that dread is stronger than savoring may simply reflect the fact that the set of negative events were more psychologically significant than the set of positive events (i.e., loss aversion). We addressed this in Study 3 ($n=106$) by presenting each participant with pairs of positive and a negative event and dynamically adjusting the magnitudes until each participant was indifferent between accepting or rejecting the pair, indicating that the positive and negative event had been subjectively equated. Notably, the median participant was indifferent between a \$25 loss and a \$49 gain for the financial items, replicating the 2:1 ratio typically found for loss aversion (Kahneman and Tversky 1979). Participants then gave their time preferences and anticipation ratings for these tailor matched events. The results replicated previous studies, including the sign effect in choices, the asymmetry in anticipation, and the ability of anticipation to predict choices.

If not loss aversion, then what drives this asymmetry in the anticipation? In Study 4 ($n=69$), we demonstrate that anticipation of gains is a mixed emotional experience, while thinking about losses is a relatively unidimensional experience. Participants rated both the positive *and* negative anticipation of each event on separate questions. We found that when thinking about receiving a future gain, people look forward to the event and experience some pleasure while imagining it (“savoring”), but also feel some deprivation that they don’t have it yet (“impatience”), and this makes the anticipation somewhat aversive as well. Overall, then, anticipation of gains is neutral or weakly positive. In contrast, when thinking about paying \$60 in the future, people dislike thinking about the future loss (“dread”), but derive little positive enjoyment from the fact that they don’t have to pay yet (“enjoying the moment”). The net result is strong disutility when anticipating future losses.

Do You Know How Much You’ll Hate the Fruit Salad? Affective Forecasting Ability and Self-Regulatory Success

EXTENDED ABSTRACT

Readers of the self-control literature could infer that self-control represents a battle of the mind and the heart, with the mind prompting restraint and the heart prompting indulgence (Shiv and Fedorikhin 1999). When trait self-control operates, cognitive processes effortfully exert control over impulsive tendencies (Muraven and Baumeister 2000). Then, when cognition is impeded, emotions drive consumption, generally leading to greater indulgence (Shiv and Fedorikhin 1999).

In the present paper, we argue that cognition and emotion cannot be so neatly divided with regard to their impact on self-control. Rather, we suggest that individuals’ *affective forecasting ability* (AFA) – a cognitive skill that determines the accuracy of one’s predictions about the emotional outcomes of an experience – explains self-regulatory behavior above and beyond trait self-control. This insight is important for two reasons. First, consumers’ affective forecasting accuracy is a skill, not a limited resource such as trait self-control (Muraven and Baumeister 2000). Thus, affective forecasting errors can explain self-control failures even in cases where depletion is unlikely. Second, as it is a cognitive skill, affective forecasting can be improved through simple debiasing interventions, thereby improving restraint without attempting to alter a stable internal trait.

To substantiate these arguments, we first developed a six-item affective forecasting accuracy measure (AFA, sample item: “I usually know how my decisions will make me feel in the future;” $\alpha = .94$). The scale was validated in Study 1A using a standard predictor-experiencer paradigm: Seahawks/Patriots fans who scored higher on the AFA had lower forecasting errors in predicting how they would feel after their team lost/won the 2015 Super Bowl ($b = -.21, t(117)$

$= -3.04, p = .003$). The scale also showed acceptable levels of test-retest reliability ($ICC = .71$) and theoretically appropriate levels of convergent and discriminant validity (Studies 1B and 1C).

Studies 2A and 2B both establish nomological validity of the AFA scale and distinguish it from the trait self-control scale (Tangney et al. 2004). A pretest revealed that consumers’ self-control decisions are more affect-driven in the food and time management domains and more cognitive-driven in the money domain. As such, we anticipated that AFA will have a stronger predictive power in the former two domains, while trait self-control will be a more powerful predictor of financial self-control decisions. In line with these predictions, Study 2A ($n = 161$; 45% male) revealed that trait self-control predicted the amount of money allocated to indulgences in a money budgeting task ($b = -2.89, p = .003$), but AFA was not a significant predictor ($p = .17$). In contrast, AFA predicted the time allocated to having fun in a time budgeting task ($b = -2.48, p = .04$) and the amount of calories and fat in a food selection task ($b = -27.50, p = .05$ and $b = -3.10, p = .005$). Conversely, trait self-control did not emerge as a significant predictor of self-control decisions in the time management and food domains (p ’s $> .40$).

Study 2B ($n = 52$, 51% male) replicated the food domain findings using a real self-control decision (i.e., a choice between an apple and a cupcake). Results showed that the higher participants’ AFA was, the less likely they were to select the indulgent snack ($b = -.81, p = .03$). Importantly, even after controlling for trait self-control ($b = -.20, p = .70$), AFA still predicted participants’ snack choice ($b = -.72, p = .07$).

Study 3 examines the types of mispredictions that undermine the self-control of low AFA individuals. Participants ($n = 72$, 35% male) first completed the AFA scale. After a filler task, participants were asked to imagine a self-control scenario in which they had to decide between going to a birthday party (vice) and studying for an exam (virtue; Hung and Mukhopadhyay 2012). Participants then forecast the self-conscious (guilt/pride) and hedonic emotions (pleasure/ deprivation) they would experience if they make each decision. Finally, participants indicated their decision (1=“definitely study” and 7=“definitely go to the party.”)

The higher participants’ AFA was, the less likely they were to go to the party ($b = -.44, p < .001$). Furthermore, as AFA rose, individuals forecasted lower levels of negative hedonic emotions (deprivation) from studying for the exam ($b = -.26, p = .06$). AFA was also a marginally significant predictor of positive self-conscious emotions (pride) associated with the virtuous decision ($b = .18, p = .08$). However, AFA did not predict forecasted negative self-conscious emotions (guilt) or positive hedonic emotions (pleasure) associated with the vice decision (p ’s $> .12$). Most importantly, mediation analysis revealed that *only* the predicted negative hedonic emotions associated with the virtuous decision mediated the relationship between participants’ AFA and their preference to attend the party (95% CI: $-.12, -.009$).

Using this insight, Study 4 tests an intervention designed to improve the accuracy of forecasting negative hedonic emotions associated with virtue consumption. We use surrogation, or using other people’s affective reactions, as a debiasing strategy (Gilbert et al. 2009). Study 4 ($n = 255$; 58% male) used a 2 cell (control/debiasing intervention) between-subjects design with AFA as a second continuously measured factor. Participants were notified that they would participate in a tasting test and asked to choose between a milk chocolate (vice) and a dark chocolate (virtue). Before making their choice, participants in the debiasing condition were given product reviews from prior participants which included information about the level of negative hedonic emotions (e.g., deprivation, missing

out) experienced from consuming the virtuous product; respondents in the control condition read neutral reviews that lacked any affective information. Results revealed a significant interaction of participants' AFA and intervention condition ($b = -.49, p = .05$). Low AFA participants ($-1SD$) who received the debiasing reviews were more likely to select the dark chocolate than those who received the control reviews ($b = .86, p = .01$). However, for high AFA participants ($+1SD$), there was no significant difference between the debiasing and control reviews conditions ($p = .79$). These results were unchanged when we controlled for participants' trait self-control ($p = .95$).

In sum, the current research suggests that affective forecasting accuracy is an important component of successful self-regulation, such that a better ability to correctly predict one's emotional reactions facilitates restraint in affectively-laden self-control domains. In highlighting this path to restraint, we offer a new hope for individuals who want to avoid indulgence or firms who want to prompt consumers toward restraint – simple interventions that reduce consumers' need to rely on their own, possibly faulty affective forecasting abilities can reduce impulsive decisions and prompt greater long-term well-being.

Is It More Rational to Say “No”? : How Choosing Versus Rejecting Alternatives Affects Information Processing

EXTENDED ABSTRACT

Consumers make their decisions in different ways. In some situations, they choose alternatives from a set of available options to form their consideration sets; however, in other situations, they reject (filter out) the less-attractive alternatives from a list of available options. While the two decision strategies (choosing vs. rejecting) should normatively lead to the same outcomes, research in consumer psychology and behavioral economics has shown that oftentimes they produce different decisions (e.g., Laran and Wilcox 2011; Shafir 1993). In this paper we add to the previous line of work on choice versus rejection by showing that these decision strategies can affect consumer evaluations by *shifting the decision-making from the automatic and heuristic-based System-1 processing (in choice), to the deliberative System-2 processing (in rejection)*.

To develop this prediction we build on research in consumer behavior and cognitive psychology. Rejection is a potential source of “action,” or commission errors: making the wrong rejection decision implies elimination of the best option. In contrast, choice is a source of “inaction,” or omission errors: making the wrong choice decision implies *not* selecting the right alternative. Because individuals hold themselves more responsible for the negative consequences of commissions, than for those of omissions (Ritov and Baron 1992), they should be more motivated to reduce their potential regret and to deliberate on their decisions in rejection as opposed to choice.

Further, studies looking at the differences between negation and acceptance, two decisions that mirror rejection and choice, suggest that rejection may be less automatic and more deliberative than choice. “Nay-sayers,” who tend to reply “no” to “yes/no” questions and to disagree with Likert-scale items, are more reflective than people who demonstrate an overall agreement tendency (Couch and Keniston 1960). Finally, several studies imply that rejection draws upon cognitive resources and, thus, involves System-2 processing more than does choice (Krishnamurthy and Anish 2008; Laran and Wilcox 2011). For example, Krishnamurthy and Anish found that resource depletion affected decisions in rejection, but not in choice. In sum, prior research indicates that rejection decisions are less automatic, more deliberative, and rely to a greater extent on cognitive

resources, all of which imply greater involvement of System-2 processing in rejection tasks.

We tested our prediction across seven studies. To demonstrate that rejection relies more on the deliberative System-2 processing than does choice, in the first three studies we utilized the robust finding that the gains versus losses frames affect choice under System-1 processing, but not under System-2 processing (e.g. De Martino et al. 2006; Simon et al. 2004). In Study 1A, we used the Asian disease problem, wherein people had to consider two programs of combating an unusual disease (Tversky and Kahneman 1981): a riskless program A, and a risky program B. Driven by System-1 processing, people change their preferences across different problem frames: they favor the riskless option in the domain of gains and avoid this option in the domain of losses. Greater involvement of deliberative System-2 processing has been shown to mitigate the effects of problem framing and to produce more consistent preferences across gains and losses frames (De Martino et al. 2006). In line with our predictions regarding greater involvement of System-2 processing in rejection, decision-makers expressed more consistent preferences across the gains and the losses frames when they had to indicate “which plan <they would> reject” ($\Pi_{\text{gains}} = 48\%$ vs. $\Pi_{\text{losses}} = 43\%$, $p = .66$), than when they had to indicate “which plan <they would> choose” ($\Pi_{\text{gains}} = 76\%$ vs. $\Pi_{\text{losses}} = 42\%$, $p = .001$). Study 1B and an incentive-compatible Study 1C replicated the moderating effect of task type on framing effects: when asked about monetary gains (vs. losses) people exhibited more consistent preferences in a rejection task (1B: $\Pi_{\text{gains}} = 54\%$ vs. $\Pi_{\text{losses}} = 38\%$, $p = .12$; 1C: $\Pi_{\text{gains}} = 41\%$ vs. $\Pi_{\text{losses}} = 50\%$, $p = .43$), compared to a choice task (1B: $\Pi_{\text{gains}} = 96\%$ vs. $\Pi_{\text{losses}} = 29\%$, $p = .001$; 1C: $\Pi_{\text{gains}} = 79\%$ vs. $\Pi_{\text{losses}} = 42\%$, $p = .001$).

Study 2 demonstrated the effect of task type on information processing in the context of online reviews. Participants had to remove hotels from (save them to) their list after looking at their aggregate numerical ratings (i.e. aggregate information) and at two of their randomly selected reviews (i.e. anecdotal evidence). People have been shown to discount aggregate information in the face of anecdotal evidence under System-1 processing, but not under System-2 processing (Alter et al. 2007; Kahneman and Tversky 1973). We expected that participants would put more weight on aggregate information in System-2 laden rejection, than in System-1 laden choice. Indeed, rejection reduced the share of hotels with bad ratings and good individual reviews ($\Pi_{\text{rejection}} = 28\%$ vs. $\Pi_{\text{choice}} = 39\%$, $p = .028$), and increased the share of hotels with good aggregate ratings but bad individual reviews in participants' consideration sets ($\Pi_{\text{rejection}} = 31\%$ vs. $\Pi_{\text{choice}} = 22\%$, $p = .098$). Next, Study 3 showed that under rejection instructions people were less likely to opt for the objectively more expensive but seemingly cheap cell phone plan favored under System-1 processing ($\Pi_{\text{rejection}} = 51\%$ vs. $\Pi_{\text{choice}} = 70\%$, $p = .045$).

Study 4 examined the impact of cognitive depletion hindering System-2 processing on rejection and choice decisions regarding monetary gains (we earlier observed that rejection reduces the System-1 driven preference for riskless gains). We replicated the effect of task type on the preference for the sure gain in the control condition ($\Pi_{\text{rejection}} = 54\%$ vs. $\Pi_{\text{choice}} = 81\%$, $p = .009$). However, when participants were cognitively depleted, the share of the riskless option in the rejection task increased ($p = .04$), and the task-type effect was eliminated ($\Pi_{\text{rejection}} = 75\%$ vs. $\Pi_{\text{choice}} = 83\%$, $p = .36$). Study 5 examined the effect of feeling-based processing – consistent with System-1 – on choice versus rejection decisions regarding monetary gains. We replicated the effect of task type in the control condition ($\Pi_{\text{rejection}} = 52\%$ vs. $\Pi_{\text{choice}} = 95\%$, $p < .001$). However, when the instructions induced a feeling-based evaluation, the share of the riskless option in the rejection task increased ($p = .02$), and the difference

between the rejection and choice tasks was reduced ($\Pi_{\text{rejection}} = 73\%$ vs. $\Pi_{\text{choice}} = 89\%$, $p = .027$).

This research shows that choosing versus rejecting alternatives determines how the information about the attributes is processed. In addition, this research introduces task type as a novel moderator of the framing effects, documented both in behavioral economics and consumer psychology.

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Empty Wallets and Sparse Portfolios: Causes and Consequences of Poor Financial Decisions

Chair: Joshua I. Morris, Stanford University, USA

Paper #1: When Your Hands Are Tied: The Effect of Expense Ownership on Financial Decisions

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Paper #2: Understanding the Expense Prediction Bias

Chuck Howard, University of British Columbia, Canada
David Hardisty, University of British Columbia, Canada
Abigail Sussman, University of Chicago, USA
Melissa Knoll, Consumer Financial Protection Bureau, USA

Paper #3: Discretionary Debt Decisions: Consumer Willingness to Borrow for Experiences and Material Goods

Stephanie M. Tully, University of Southern California, USA
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Paper #4: Do People Understand the Benefit of Diversification?

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SESSION OVERVIEW

Making financial decisions is a fundamental aspect of being a consumer. However, the typical consumer lacks basic financial literacy (Fernandes, Lynch, and Netemeyer 2014) and borrows and spends significantly more than they should. As the private sector shifts away from pension plans (Novy-Marx and Rauh 2011), the onus on the consumer to better manage their finances is paramount. While much of past research has focused on identifying ways in which consumers engage in financial behavior and how these behaviors can be improved (Thaler & Sunstein 2009), we contribute to the dialogue by exploring the dark side of financial behaviors—the causes and consequences of poor financial decisions.

Specifically, in this session we explore false beliefs and biases that cause poor financial decision making, and examine their downstream consequences in four major domains of financial behaviors: spending, planning and forecasting, borrowing, and investing.

First, Morris and Huang examine the impact of feeling ownership over the decision to spend. They find that low perceived ownership over the incurrance of an expense can lead to less pain of payment and consequently a higher likelihood of over spending—especially among consumers who tend to be less financially responsible and thus more likely to use the lack of ownership as justification for spending. In the second paper, Howard, Hardisty, Sussman, and Knoll examine the expense prediction bias and find that over a broad American sample, consumers predict lower expenses for the future than they recall for the past. Through five studies, they find that this effect is due to perceiving past expenses as more unusual than future expenses, and that it is predictive of high interest payday loan usage. In the third paper, Tully and Sharma identify a key variable that determines a consumer's willingness to borrow—whether the target item is an experience or a material good. They argue through seven studies that despite being more ephemeral, consumers have a higher willingness to borrow for experiences because of a heightened importance of purchase timing. Finally, in the last paper, Reinholtz, Fernbach, and de Langhe show that individuals—both high and low in financial literacy—do not understand diversification and falsely believe that it increases the expected return and volatility of a portfolio.

Consequently, these biases lead investors to construct risky portfolios that mismatch their risk preferences.

Together, the four papers in this session enhance our understanding of how and why poor financial decisions occur. The studies incorporate paradigms and methods that extend from histogram building tools, large-scale archival data, to multiple experiments involving actual financial decisions with real implications. Collectively, these papers draw from a wide spectrum of literature including agency, categorization, time, and risk perceptions, and provide insight into poor financial behaviors such as spending, inadequate planning and forecasting, borrowing, and improper investing. We believe that this session will attract a broad audience, and facilitate interesting discussions and collaborations that can generate valuable insights for researchers, marketers, and policy makers who aim to help consumers make better financial decisions.

When Your Hands Are Tied: The Effect of Expense Ownership on Financial Decisions

EXTENDED ABSTRACT

Consumers experience varying degrees of ownership over the incurrance of an expense. For example, the decision to purchase a new iPhone to replace an old one with a shattered screen could be perceived as highly dictated by a consumer's own will (e.g., the phone seems functional but the consumer decides to incur the expense anyways), or as relatively low in decision ownership (e.g., the phone does not seem to be fully functioning and thus the situation mostly dictates the incurrance of the expense). While in either case the consumer makes the ultimate decision to incur the expense of a new iPhone, we posit that different levels of perceived ownership will affect the consumer's spending experience and the specific choice for the expense (e.g. whether they choose a pricier new model or a cheaper old model).

The act of choosing is closely linked to perceptions of personal causality (deCharms, 1968), and such causal attributions have been shown to affect emotional responses to an outcome (Botti et al., 2009). Although consumers prefer making choices for themselves (Langer 1975; Langer & Rodin 1976), when facing a set of unattractive options, choosing could lead to lower satisfaction (Botti & Iyengar, 2004). Similarly, in the domain of financial decisions, while choosing to incur an expense can be greatly enjoyable because of the hedonic or functional utility one receives from the purchase itself (Csikszentmihalyi, 2000), such decisions can also be perceived as aversive due to the pain of payment one experiences from spending money (Prelec & Loewenstein, 1998; Knutson et al., 2007). While previous research has focused on the consequences of having autonomy in making a choice among various options, we explore the impact of perceived expense ownership—the extent to which a choice agent feels that the incurrance of the expense is dictated mostly by their own will or the situation—on the spending experience and the ultimate spending decision.

Specifically, we hypothesize that when consumers decide to incur an expense, a lower perceived level of expense ownership makes the expense easier to justify in their minds, leading to less pain of payment. This lower pain of payment has important consequences on financial decisions, such as increasing consumers' willingness to select a more expensive option for fulfilling that expense.

Understanding the Expense Prediction Bias

EXTENDED ABSTRACT

We conducted four studies to capture the impact of expense ownership on financial decisions as well as its underlying processes. In Study 1, 150 participants read two versions of a scenario where their old TV was having mechanical issues and they had decided to purchase a new TV. In the high ownership scenario, their old TV was having mild issues; in the low ownership scenario, their old TV was having the same mild issues in addition to more severe issues. Significantly more participants anticipated feeling less pain of payment (85%) and a higher likelihood of choosing a more expensive new TV (83%) in the low ownership scenario. Additionally, given that they were to buy a new TV, significantly more participants would prefer to be in the low ownership scenario (65%) even though in this scenario their old TV would be less usable and have lower resale value.

In Study 2, iPhone owners were led to imagine incurring the expense of a new iPhone because the screen of their current phone was shattered; however, the old phone was either still highly functional (high expense ownership) or had lost major functionality (low expense ownership). Participants then chose a specific new iPhone to purchase (varying in price and model), rated their anticipated pain of payment, and judged how easy it was to justify purchasing a new phone. We found a significant two-step mediation from expense ownership → ease of justifying purchasing a new phone → pain of payment → phone choice (95% CI: [.13, 9.09]). When participants experienced lower ownership in incurring the expense (i.e., they felt that the expense was mostly dictated by the situation), it was easier to justify the expense and they anticipated less pain of payment. Consequently, they chose more expensive phone options for fulfilling the expense.

Study 3 used the same design as in Study 2, and we varied whether participants imagined themselves or a friend as the decision agent in the scenario. While we replicated the two-step mediation when the decision agent was the self (95% CI: [.65, 14.05]), the effect was not significant when the decision agent was a friend. The results suggest that low expense ownership is effective in alleviating pain of payment only when it is self-serving.

In Study 4, participants earned real money from an initial filler task that included a scale of financial responsibility and were then presented with the opportunity to either pay to rent a short film or perform a boring task at no cost. Participants who stated their preference for renting a short film were then led to believe that they had either chosen the short film task (high expense ownership) or were assigned to it randomly based on a number they selected earlier (low expense ownership). Participants then chose between three short films that varied in price (\$0.25-\$0.75) and quality. We found a significant interaction of ownership condition and financial responsibility on film choice ($b = -1.27$, $t = -2.96$, $p = .003$), where participants who were low in financial responsibility (1 SD below the mean) chose a significantly more expensive movie when they were in the low ownership condition (vs. the high ownership condition), $b = 1.45$, $t = 2.44$, $p = .015$. Conversely, participants who were high in financial responsibility (1 SD above the mean) showed the opposite effect, $b = -1.10$, $t = -1.93$, $p = .054$. While financially irresponsible consumers took advantage of low expense ownership to alleviate the pain of payment in order to spend more, financially responsible consumers seemed to have experienced reactance and spent less. Additional work to further explore the moderating role of financial responsibility is currently underway.

Previous research on expense misprediction has shown that people predict lower expenses for the future than they recall for the past (e.g., Peetz & Buehler 2009, 2013), a phenomenon we've labeled *expense prediction bias* (EPB). Gaining a deeper understanding of this bias is important because of the high frequency with which people make spending predictions (Peetz et al., 2016), and because expense misprediction may have serious real world financial consequences, especially for low-income consumers. With these considerations serving as motivation, the present research makes several notable contributions. First, we hypothesize that EPB occurs because people tend to think of their past expenses as somewhat unusual, and yet predict that future expenses will be more ordinary. In support of this theory we find evidence that *perceived unusualness* of future expenses acts as a moderator capable of reversing the bias. Furthermore, we provide novel evidence that EPB is associated with serious financial consequences, highlighting the importance of identifying an effective intervention. We also provide evidence that: (A) there is no corresponding income bias, (B) EPB gets stronger (rather than weaker) with careful prompting and thought by participants, (C) EPB is associated with underestimating the *number* of unique future expenses but not the *amount* of each one, and (D) EPB is *not* associated with numeracy, consideration of future consequences, propensity to plan, risk preferences, temporal discounting choices, income, or education. (These null results are not discussed in detail below due to space constraints). Finally, we augment research in this area—generally conducted with small samples of undergraduates—by replicating the bias across 5 studies conducted with 2,762 adult Americans from diverse economic backgrounds.

In Study 1, participants recalled and predicted the dollar amount of their required, optional, and unexpected expenses for the past and next week in counterbalanced order (no order effect was observed), and we calculated an EPB score by subtracting aggregate predicted from aggregate recalled expenses. Consistent with prior research on expense misprediction, participants under-predicted future expenses relative to past expenses, leading to a mean EPB score of \$63.58 (different from 0, $p = .03$), or 13.0% of recalled expenses. In Study 1 participants were also asked to recall and predict their income. Consistent with prior research on expense vs. income-neglect (Berman et al., 2015), a corresponding income prediction bias was not observed. This null result was replicated in Studies 2-4 and is not discussed further.

Study 2 extended the EPB measure utilized in Study 1 by employing a time 1/time 2 design. This allowed us to examine a conceptually similar pattern, but calculate an alternative bias measure by subtracting time 1 predicted expenses from time 2 recalled expenses. The mean EPB score was \$60.61 (different from 0, $p = .05$), replicating the bias in a time 1/time 2 design.

In Study 3 participants were asked to recall and predict regular and irregular expenses. They were subsequently provided with a list of common expenses to consider (e.g., rent, car repairs, home improvements), and given the option to revise their initial estimates. Initially, participants recalled \$480 worth of expenses, and predicted \$381 (Mean difference=\$99, $p < .001$). After completing the detailed expense prompts, participants recalled \$584 worth of expenses, and predicted \$419 (Mean difference=\$165, $p < .01$). Thus, the detailed expense prompts actually led to *higher* EPB scores, because participants revised their recalled expenses upward to a significantly greater extent than their predicted expenses ($p = .01$). Study 3 also asked participants to report their experience with payday loans, allowing

us to compare EPB between payday loan users and non-users. The mean difference in initial EPB between payday loan users and non-users was \$74 ($p=.07$), and this difference grew to \$233 ($p=.01$) after participants were given the opportunity to revise their estimates. This result provides suggestive evidence of a link between EPB and high interest debt burdens.

Study 4 replicated the bias once again and also included an expense listing task that asked participants to estimate the dollar amount of unique expenses that they had during the last week and believed they would not have during the next week, as well as for unique expenses that they anticipated having next week but did not have during the last week. These measures showed that participants underestimated the *number* but not the *amount* of unique future expenses vs. unique past expenses (Mean difference for number= 0.66 , $p<.001$; Mean difference for amount= $\$19.48$, $p=.34$), and that underestimating the number of unique future expenses is correlated with EPB ($r=.15$, $p<.01$).

Study 5 sought to reverse the bias. Building off of our results from Study 4, as well as work by Sussman & Alter (2012) showing that individuals underpredict total exceptional (but not ordinary) expenses, we manipulated *perceived unusualness* of future expenses by randomly assigning participants to either a control condition that asked participants to recall and predict their expenses, a “different” condition that asked participants to list three reasons why their expenses for the next week might be different from any other week (before they predicted their expenses for next week), or a “similar” condition that mirrored the design of the different condition. As predicted, the bias was replicated in the control condition ($M=\$37.31$), reversed in the different condition ($M=-\$75.33$), and not meaningfully affected in the similar condition ($M=\$20.41$), $F(2, 446)=14.01$, $p<.001$.

The present research makes several important contributions to the literature on expense misprediction. Most notably we show that EPB is prevalent in large samples of adult Americans, that EPB is associated with payday loan use, and that EPB can be reversed by manipulating perceived unusualness of future expenses. In sum, these results advanced our theoretical understanding of EPB by integrating cognitive accounts of expense misprediction, and they have the potential to meaningfully impact policy that can tangibly improve consumer financial well-being. The present research also suggests several exciting directions for future research. Examples include investigating whether or not underestimating the number of unique future expenses (vs. the amount of each expense) mediates the bias, and establishing a causal link between EPB and downstream consequences such as payday loan use.

Discretionary Debt Decisions: Consumer Willingness to Borrow for Experiences and Material Goods

EXTENDED ABSTRACT

Previous research suggests that people prefer borrowing for longer-lasting purchases because they continue receiving benefits from the purchase while they pay for it (e.g., Hirst et. al 1994). One fundamental categorization of purchases that is inherently tied to longevity is that of experiences and material goods (Van Boven and Gilovich 2003). Since experiences are ephemeral, the previous research suggests that people should prefer borrowing for material goods (vs. experiences). In contrast, the current work argues that, on average, people are more willing to borrow for experiences despite their greater ephemerality.

People typically consider borrowing when current funds cannot be used. Given the implicit tradeoff between borrowing and fore-

going a purchase in the present, we suggest that the importance of purchase timing is a stronger driver of willingness to borrow (WTB) than physical longevity. Further, we propose that purchase timing importance is generally greater for experiences than for material goods. In contrast to material goods which are typically used repeatedly over time, experiences exist for a finite time period. As such, experiences may be more likely to be conceptualized as a function of the time-specific properties when the experience is expected to occur. Thus, delaying an experience may seem like a more fundamental change to the purchase. Consequently, we suggest that WTB is greater for experiences (vs. material goods). An analysis of archival data and seven lab studies provide support for our hypotheses.

Using archival expenditure data from The Bureau of Labor Statistics, we calculated relative spending on discretionary experiences as a function of total spending (Tully et al. 2015). As predicted, greater spending on discretionary experiences predicted higher credit card balances ($\beta=0.03$, $t(30240)=5.35$, $p<.001$), as well as more financing interest paid in the last month ($\beta=0.03$, $t(30240)=4.68$, $p<.001$).

Study 1 demonstrated the basic effect in a lab setting. Participants considered either a material good or an experience they intended to purchase and indicated their WTB for the purchase. WTB was significantly greater for experiences, $F(1, 335)=5.80$, $p=.017$, and was mediated by differences in purchase timing importance (95% CI: .17, .63).

Study 2 orthogonally manipulated purchase type and physical longevity to rule out the possibility that short-lived purchases incite a sense of urgency. Participants imagined visiting a local art store that was offering either art classes or a high-end painting kit and were further told that the purchase was expected to last them either 4 weeks or 12 weeks. WTB was greater for the experience, $F(1, 297)=6.33$, $p=.012$, and was unaffected by physical longevity, $F<1$.

Studies 3 and 4 provide greater evidence of mechanism by examining boundary conditions. In Study 3, participants imagined being on vacation and wanting to buy either an experience (a city tour) or a material good (a painting from a local artist). However, we varied the purchase timing importance of the material good by varying whether the good was available for purchase online after the vacation was over. As predicted, WTB was greater for the experience when the material good was available online, $F(1, 208)=17.24$, $p<.001$. However, there was no difference in WTB for the experience and the material good that was only available during the vacation, $F(1, 208) < 1$, NS.

Study 4 examined attenuation by reductions in purchase timing importance for experiences. To do so, we examined the strength of the link between an experience and a specific period of time. In Study 4a, participants wrote about either an experience or material good they intended to purchase and indicated whether they had chosen a date (to have the experience or acquire the material good). When a date had been chosen (and the experience could be conceptualized as a function of time-specific features), purchase timing importance was greater for experiences, $F(1, 135)=21.36$, $p<.001$. However, without having chosen a date, purchase timing importance was no different for experiences and material goods, $F<1$. Building from this, Study 4B asked participants to consider buying an experience (day at local theme park) or a material good (smartwatch). They were either told that a date had been planned or that they were considering one date in addition to others. WTB was greater for the experience when the date was set, $F(1, 329)=10.47$, $p<.001$, but otherwise did not differ, $F<1$.

To reconcile our results with previous research, Study 5a varied whether the context was an acquisition decision (whether to borrow or to forego the purchase in the present) or a source-of-funding

decision (whether to use cash or borrowed funds to make the purchase). Since timing is unaffected in source-of-funding decisions, we expected that in these contexts, people would prefer to borrow for longer-lasting purchases in line with previous research. Thus, some participants imagined one purchase (either a stereo or music festival tickets) that would need to be financed, whereas other people imagined making both purchases, where *one* would need to be financed and the other could be acquired with cash. As expected, WTB was greater for experiences when the decision was framed as an acquisition decision, $F(1, 503)=7.35, p=.007$. However, WTB was greater for the material good when framed as a source-of-funding decision, $t(244)=12.07, p<.001$.

We have suggested that the reversal found in Study 5a was due to the relevance of purchase timing importance. However, two alternative possibilities are that when material goods and experiences can be directly compared (1) physical longevity becomes more evaluable (e.g., Hsee 1996) or (2) people feel like they *ought* to borrow for the material good (Bazerman et al. 1998). To isolate our proposed explanation, Study 5b was identical to Study 5a but for the addition of two new conditions in which we provided participants with a reference purchase to contrast the focal purchase against. Again, WTB was greater for the material good when framed as a source-of-funding decision, $t(238)=10.60, p<.001$). However, regardless of whether a reference purchase was provided, WTB was greater for the experience when framed as an acquisition decision (no reference: $F(1, 975)=3.26, p=.071$; with reference: $F(1, 975)=15.85, p<.001$).

Do People Understand the Benefit of Diversification?

EXTENDED ABSTRACT

Diversification—investing in many imperfectly correlated assets—reduces exposure to risk without sacrificing expected returns. Some assets in a diversified portfolio will perform better than expected and others will perform worse, but the value of the portfolio will be less volatile as these unpredictable deviations will tend to offset. Despite this benefit, many people are undiversified (Campbell, 2006; Goetzmann & Kumar, 2008). For example, a typical individual investor holds a portfolio with only four stocks (Barber & Odean, 2001).

While several explanations have been proposed to account for improper diversification, we explore a more fundamental question: Do investors understand the benefit provided by diversification?

Understanding how diversification affects portfolio performance requires understanding the distributional properties of a sum of random variables. This may be easy for statisticians, but most people have poor statistical intuitions (Lipkus, Samsa, & Rimer, 2001). Moreover, people may lack the financial literacy required to apply this knowledge correctly (Lusardi & Mitchell, 2007).

We demonstrate two pervasive errors in people's beliefs about diversification. First, many people believe that diversification increases, rather than decreases, the volatility of a portfolio. This error is particularly common among people low in financial literacy, and appears to result from a judgment of representativeness: Because diversification involves investing in many unpredictable assets (vs. only a few), it feels like it should increase the aggregate unpredictability of the portfolio. This is analogous to conflating the properties of an outcome distribution with the properties of the generating mechanism (Kahneman & Tversky, 1972, 1973).

Second, many people incorrectly believe that diversification increases the mean performance of a portfolio. This error is most common among those high in financial literacy and seems to result from a misunderstanding of financial advice: People may know that

diversification is a good investment strategy but associate this with an increase in the mean, rather than a decrease in volatility. This is consistent with previous work suggesting the central tendency of a distribution is more salient than the degree of dispersion (Obrecht, Chapman, & Gelman, 2007).

In Studies 1A–1F, we had people make forecasts for diversified and undiversified portfolios using a graphical, histogram building tool (Goldstein & Rothschild, 2014). In effect, this tool yields a subjective probability distribution of each participant's beliefs about the future value of each stock portfolio. We found that many people, but especially those low in financial literacy, expected greater variance in possible stock prices (i.e., more risk/volatility) from the diversified portfolio. Further, most people, but especially those high in financial literacy, expected a greater mean stock price (i.e., better returns) from the diversified portfolio. These biases are inconsistent with inferences about portfolio construction, as they occurred even when stocks in the portfolios were “randomly selected” or explicitly known.

In Studies 2A and 2B we explored possible downstream consequences of these biases using a portfolio construction task. We found people tended to create portfolios that mismatched the risk preferences of investors in ways consistent with the false beliefs documented in Studies 1A–1F. Specifically, those low in financial literacy tended to give a less diversified portfolio to an older, risk-averse investor than they gave to a younger, risk-seeking investor.

Finally, in Study 3 we explored possible explanations for these biases by manipulating what people thought about before forecasting the performance of a portfolio. Participants who first thought about how the individual stocks in the portfolio might perform expected greater unpredictability from the portfolio, while those who instead thought about the value of diversification expected greater returns from the portfolio.

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Contemporary Perspectives on Consumption and Belonging

Chair: Robert Alfonso Arias, University of Illinois at Urbana-Champaign, USA

Paper #1: Toward a Conceptual Understanding of Belonging in Consumer Research

Robert Alfonso Arias, University of Illinois at Urbana-Champaign, USA

Paper #2: Products as Pals: Engaging With Anthropomorphic Products Mitigates Effects of Social Exclusion

James A. Mourey, DePaul University, USA
Jenny G. Olson, University of Kansas, USA
Carolyn Yoon, University of Michigan, USA

Paper #3: The Perfect Lunchbox: Social Class Identity and Everyday Mothering

Benedetta Cappellini, Royal Holloway, University of London, UK
Vicki Harman, Royal Holloway, University of London, UK

Paper #4: The Joneses Don't Live Here: Conspicuous Consumption in a New Urban Neighborhood

Meredith Thomas, University of Wisconsin - Madison, USA
Thomas O'Guinn, University of Wisconsin - Madison, USA

SESSION OVERVIEW

Much of our identity is rooted in how we belong to different social entities such as our families, ethnicities, nationalities, political and religious affiliations, and professional classes. All of these contribute to who we are and what we do. In his seminal work on human motivation, Maslow (1943) positions belongingness needs immediately after physiological and safety needs. Baumeister and Leary (1995) compile a preponderance of evidence to support a construct they identify as the "need to belong" (NTB), one they argue is universal. Empirical evidence affirms the NTB as one of the most fundamental human needs, suggesting it developed to increase chances of survival (Baumeister and Leary 1995; Buss 1990).

Disciplines such as sociology, social psychology, anthropology, and education express interest in how people develop their desires to belong (Yuval-Davis 2006; Hurtado and Carter 1997; Baumeister and Leary 1995). Yet despite the centrality of social connections and consumption to daily life, links between belonging and consumption receive little empirical attention in consumer behavior (Mead et al. 2011). Moreover, most consumer research in belonging examines how consumers react to belongingness threats (e.g., social exclusion). This research stream primarily develops from the state-based construct of the Need to Belong (NTB) (Baumeister and Leary 1995), which they define as a "need to form and maintain at least a minimum quantity of interpersonal relationships, [and] is innately... human" (p. 499). Though this theoretical framework offers clear value, there are facets of belongingness in consumer behavior that remain unexplained and require alternative theoretical perspectives. For example, the NTB definition (1) does not account for cases outside of the interpersonal context such as belonging to larger imagined communities (e.g., nations, religions, political parties) or physical environments, (2) is not conducive to studying the processual nature of building a sense of belonging, and (3) is not helpful when to examining consumers' conscious efforts to belong within various entities.

This special session places the study of belonging front and center, investigating the complex relationships among belonging, exclusion, identity, and consumption from diverse approaches. James Mourey, Jennifer Olson, and Carolyn Yoon study how adverse effects from belongingness threats may be mitigated via interactions with

anthropomorphized products. Robert Arias examines how belonging is studied across disciplines, leverages empirical data, and develops a theoretical construct to better understand how individuals *proactively* consume to pursue processual belongingness goals. Meredith Thomas and Dr. Thomas O'Guinn investigates how physical design and urban planning strategies impact feelings of belonging within a community. Drs. Benedetta Cappellini and Vicki Harman examine how middle-class British mothers display their social class belonging through the everyday mundane practice of making lunchboxes for their children. Collectively, we provide a multifaceted approach to how belonging research may be advanced in the consumption domain. In addition to including a more traditional approach to consumer belonging (i.e., by examining social exclusion), we promote an alternative perspective that acknowledges consumers' conscious efforts to pursue belonging. This session is likely to appeal to scholars interested in identity, brand/consumption communities, experiential consumption, among other domains.

Toward a Conceptual Understanding of Belonging in Consumer Research

EXTENDED ABSTRACT

Much of our identity is rooted in how we belong to different memberships. In fact, a preponderance of evidence suggests belongingness is an innate human need (Baumeister and Leary 1995). The notion that humans possess an inherent need to belong is not new by any means, however (Maslow 1943).

Belonging, however, remains to be fully explored and utilized in consumer research, despite social connections and consumption being central facets of daily life (Mead et al. 2011). Though research streams such as those relating to identity and brand communities employ forms of the term "belonging," in fact these constructs are often peripheral and remain unexamined or even undefined (Muniz and O'Guinn 2001; McAlexander et al. 2002). The minimal consumer research relevant to belonging mostly examines how consumers react to belongingness threats to the state-based construct, the Need to Belong (NTB) (Baumeister and Leary 1995).

Consequently, the objective of the current presentation is to critically evaluate the current status of the belonging construct(s) in consumer behavior research, illuminate valuable research opportunities, and leverage extant research and empirical data to develop a consumer-conducive definition of the "sense of belonging" construct. Through this strategic review, I contribute to our conceptual understanding of belonging by uncovering a novel approach to investigate consumption/belonging linkages. Given the nature of the contribution, this analysis may be classified as a theoretical advancement via identification (MacInnis 2011), revealing dimensions of the consumption/belonging research domain that are previously unexamined.

To understand the current status of belonging in consumption research, one must be familiar with the theoretical construct of NTB (Baumeister and Leary 1995). Baumeister and Leary (1995) were the first to compile evidence to empirically demonstrate that NTB exists. They define the NTB as a "need to form and maintain at least a minimum quantity of interpersonal relationships, [and] is innately prepared among human beings" (p. 499). To manipulate NTB, researchers employ a variety of manipulations such as instructing confederates not to talk to a participant in a group setting (Snoek 1962)

and providing false feedback, informing the subject his or her test results revealed a future with fading social relationships (Twenge et al. 2001).

The few studies in consumer research that integrate belonging in its research design often adopt Baumeister and Leary's (1995) theoretical framework, using social exclusion as an implicit proxy for a temporarily-heightened NTB. For example, recent findings demonstrate that after social exclusion, consumers are more likely to express an increased desire for specific consumer goods valorized by aspirational social groups (Dommer et al. 2013), to sacrifice "personal and financial well-being for the sake of social well-being" (Mead et al. 2011, p. 902), and to desire nostalgic products (Loveland et al. 2010).

Though the NTB construct (Baumeister and Leary 1995) effectively allows consumer researchers to study aspects of belonging, it possesses limitations. Importantly, I allocate my focus on the *sense of belonging* construct, one considered to be processual and fluid (Yuval-Davis 2006). Importantly, I do not use the term "feelings" of belonging (Easterbrook and Vignoles 2013) because our empirical findings and extant research reveal the SB involves more than emotions for consumers (Hagerty et al. 1992). Though it has been inconsistently defined (Mahar et al. 2014), core commonalities exist among the "sense of belonging" definitions. I integrate key elements from various conceptualizations in an effort to delineate the construct and develop its conduciveness for consumer research. I employ the term "sense of belonging" to refer to the subjective, context-mediated experience that derives from a personal relationship with an external referent, evolving in response to the degree to which individuals (1) believe the relationship to be reciprocal, (2) feel accepted, (3) perceive their traits and values are shared or complement the referent, (4) believe the relationships to be secure and temporally stable (Hagerty et al. 1992; Levett-Jones et al. 2009; Mahar et al. 2014). In addition to utilizing extant literature, I show evidence for each of the definition's four components using empirical data.

Unlike the NTB construct, this definition of "sense of belonging" acknowledges belongingness experiences beyond the interpersonal context such as belonging to collective identities, imagined communities, or even physical spaces. Because the definition is inclusive, it may act as a springboard to allow researchers to investigate belonging/consumption links beyond reactions to belongingness threats, such as how individuals *proactively* consume to pursue a sense of belonging. Though, prior research contends that the sense of belonging as a theoretical construct has not been well studied and is inconsistently defined, I delineate the construct to facilitate future explicit study of belonging (Meeuwisse et al. 2010). Overall, this close examination of the belonging literature across domains demonstrates that belonging can (and should be) investigated beyond social exclusion.

Products as Pals: Engaging With Anthropomorphic Products Mitigates Effects of Social Exclusion

EXTENDED ABSTRACT

From Apple's Siri to Amazon's Alexa, iRobot's Roomba to Google's self-driving vehicle, there is no question that anthropomorphized consumer products exist in an increasing number of industries. As products feature more characteristics typically associated with "being alive," whether through design, interaction, intelligence, responsiveness, and/or personality, an important question to consider is how these "living" products might influence basic human needs for affiliation. As such, the present research explores whether anthropomorphized products can mitigate well-established effects of social exclusion (i.e., threats to affiliation) and, if so, whether bound-

ary conditions exist with respect to an anthropomorphized product's ability to fulfill needs typically fulfilled via social interaction.

Prior research indicates that anthropomorphism affects moral care and concern for non-human targets, such as the environment or animals, and even trust placed in non-human technological agents like autonomous vehicles (e.g., Waytz, Cacioppo, and Epley 2010). Linking exclusion and anthropomorphism, prior research also shows that people who feel more chronically disconnected from others attribute anthropomorphized qualities to a variety of objects and entities (e.g., religious agents, pets, imaginary creatures) more than those who are more connected (Epley et al. 2008). This suggests anthropomorphized products could potentially affect measures of social connectedness in ways that have, to date, remain untested. Waytz and Epley (2012) find that the more socially connected one is (to real people), the more s/he dehumanizes others, suggesting that once social connections are fulfilled, one may have a *weaker* need for social reassurance from others. The present work extends into a nonhuman, consumer product domain to examine whether interacting with an anthropomorphized product could also result in a mitigated need for social assurance from human others. We test this hypothesis in a series of six experiments that feature a broad range of consumer products varying in their anthropomorphism.

Experiment 1A builds upon prior research (Maner et al. 2007) demonstrating that socially excluded individuals satisfy their desire to reconnect by rating neutral faces as being "more sociable." Participants were randomly assigned to either a social exclusion condition in which they wrote about a time they were socially excluded (Epley et al. 2008) or a control essay condition in which they wrote about their prior day. Following the essay manipulation, participants completed a trivia game and were asked to use either Siri (anthropomorphized aid) or Google (non-anthropomorphized aid) for assistance. They then rated a series of neutral faces on personality factors per Maner et al. (2007). The results reveal that introducing an anthropomorphized product dampens the tendency among socially excluded consumers to view others as more sociable.

One limitation of this initial experiment is that it is unclear how interacting with Google and Siri compares to genuine interpersonal interaction, as there was no human interaction condition. Experiment 1B explores this idea by randomly assigning socially excluded and control essay participants to work with an anthropomorphized calculator, a non-anthropomorphized calculator, or a human partner to solve math problems. Prior research reveals dampened mood effects following exclusion (e.g., Baumeister et al. 2005; Twenge et al. 2001), which can be improved via human interaction. Our results not only replicate this prior research, but demonstrates that engaging with an anthropomorphized calculator has mood restorative effects comparable to those of engaging with a real human being.

Experiments 2A and 2B explore the extent to which individuals compensate for social exclusion. Following the essay manipulation, participants were asked to consider questions regarding their cellular phone (placed in their hand as part of the study). The control group's questions were worded neutrally (e.g., "What is the design of your phone like?") whereas the experimental group's questions had the same meaning but were phrased in an anthropomorphized way (e.g., "What is the body of your phone like?"). The results reveal that socially excluded participants estimate that they have more Facebook friends (experiment 2A) and will send more text messages in the upcoming month (experiment 2B) compared to control essay participants, unless they engage with an anthropomorphized phone.

Experiment 3 tested our prediction with respect to previous findings, suggesting socially excluded individuals engage in prosocial behavior as a means of reestablishing social bonds (Lee and Shrum

2012). Participants completed the essay task and phone tasks from the previous two experiments, but also completed the Need for Social Assurance scale (Lee and Robbins 1995) and indicated their willingness to complete additional surveys without compensation, a measure of prosocial behavior (Mortensen and Cialdini 2009). As predicted, socially excluded participants in the anthropomorphized vs. non-anthropomorphized phone condition report a lower need for social assurance, which, in turn, reduces their willingness to engage in prosocial behavior, suggesting their need to forge bonds had been satisfied.

If anthropomorphized products subtly fulfill needs for social assurance, then drawing explicit attention to the fact that an anthropomorphized product is *not*, in fact, actually alive should eliminate the effects. Our final experiment tests this prediction. Following the essay condition manipulation, participants were randomly assigned to view one of three Roomba vacuums: Roomba turned to look like a face (anthropomorphized), Roomba turned 90-degrees (control), or a Roomba turned to look like a face with an explicit reminder that it was "...just a machine, not a real person." As predicted, socially excluded individuals reported a significantly higher need for social assurance in both the control Roomba condition *and* the misattribution condition, but not in the anthropomorphized condition, supporting the misattribution story.

Taken together, our results indicate that engaging with anthropomorphized consumer products can mitigate well-established effects of social exclusion. As more consumer products blur the line between product and person, be it avatars, smart cars, or responsive technology, and people feel increasingly less connected to "real" others, understanding anthropomorphized products and how they affect consumer psychology and behavior is more critical than ever before. We hope the current research inspires future studies further exploring how consumer products and people fulfill innate social needs, sometimes at the expense of one another.

The Perfect Lunchbox: Social Class Identity and Everyday Mothering

EXTENDED ABSTRACT

This paper contributes to this special session on belonging by investigating how middle-class British mothers display their social class belonging through the everyday mundane practice of making lunchboxes for their children. As an example of home food being eaten in the school setting without parents being present, lunchboxes present an interesting case for understanding how consumers display their social identities.

Social identity theories highlight how individual identity is framed by membership to social categories including social class, gender and family roles. These categories provide individuals with a set of norms and tools enabling consumers to define their own selves (Schouten 1991). Consumption plays a key part in displaying individual belonging to certain categories, as mothers, for example, use objects to materialize their sense of fitting into a particular way of mothering and their disregard of other forms of mothering (Thomsen and Sorensen, 2006). The marketing literature has highlighted how identities are not static as individuals move between different memberships during their lives (Ulver and Ostberg, 2014) and thus individual identity can contain contradictions. Consumption can provide a solution of such contradictions but can also aggravate anxieties and insecurities (Shankar et al. 2009). For example, the current way of doing middle class mothering, also defined as intensive mothering (Hays 1996), is characterized by intensified consumption practices prioritizing children's desires. This intensified consumption causes identity uncertainties and anxieties in mothers (Voice Group 2010).

From the aforementioned literature, we understand consumers are the ones who move from one sense of belonging to another. Without denying the importance of seeing consumers' sense of belonging as an ongoing process, this study takes a slightly different perspective, showing it is not only consumers' identities that are on the move. Rather, norms and conventions change over time and thus they are also mobile and fluid. Historical research on mothering, for example, shows us that what were considered good mothering practices in the past are now perceived as unconceivable way of parenting (Lee et al. 2014). This is indeed the case of feeding children, an aspect of mothering which is subject to rapid changes in norms and conventions (Schor and Ford 2007). Given that norms on how to feed children are subject to such changes, how do mothers maintain the narrative of the self as a 'good mother'? How are mothers' consumer strategies, as revealed through the example of the lunchbox, influenced by their social class identity?

We answer these questions by looking at the everyday experience of 30 middle class and working class British mothers making lunchboxes for their children. Semi-structured interviews and focus group discussions were used to understand the individual and collective identity of being a mother, and the everyday practices associated with such a sense of belonging. Findings from our thematic analysis reveal that middle-class mothers tend to possess a clear set of ideas and ideals of what constitutes good mothering. Their ideals replicated the aforementioned intensive mothering (Hays, 1996), understood by participants as an intensified and financially demanding labor aimed at prioritizing the children's desires ahead of their own. If mothers were able to describe these classed ideals of good mothering and their aspiration to belong to such a category, identifying the set of practical rules and conventions was indeed more challenging.

The impossibility of listing the set of norms and conventions of doing good mothering through feeding the children was attributed to the rapid changes in the marketplace. For example, mothers highlight the rapidity in which food and indeed brands can be classified as "good" or "bad." Given that bad food is often framed as mass-produced items associated with working class mothering, participants carefully avoid consuming food that could lead to display a 'wrong' identity. Also, they describe the constant introduction of new items, products and rules in the marketplace, making the work of feeding the children 'properly' a very challenging one. Government initiatives, celebrity chefs, supermarkets and also schools and other parents are listed as actors constantly redefining conventions and rules around the practices of feeding the children. Giving these perceived continuous changes, mothers feel anxious as they need to constantly display an up-to-date good mothering, showing they are aware of the new marketplace conventions of feeding children. As one mother eloquently says "I need to check if I am not losing the plot." In order to not to lose the plot, mothers activate a set of consumer strategies including learning about new products (e.g. thermos flasks for keeping food hot) and brands via celebrities and experts, but also activating mechanisms of surveilling other mothers.

To conclude, this research shows how the marketplace is one of the main forces modifying norms and conventions in relation to certain social categories, such as what it is to be a 'good mother' and how to display a middle class disposition in relation to children's food. If the previous marketing literature highlights how consumers might have identities on the move, this study shows how social categories can also change over time. This study has shown how the category of 'good mother' is fluid but with a clear social class positioning. Given such a fluidity, good mothering is a never fully-achieved target, and as such, women's sense of belonging to this category is surrounded by a sense of uncertainty and anxiety. An intensified but

highly discerning type of consumption requiring the constant learning of the market's new options and distinguishing oneself from the 'wrong type' of consumers is seen by middle class mothers as a way of coping with the constant changes in the market.

The Joneses Don't Live Here: Conspicuous Consumption in a New Urban Neighborhood

EXTENDED ABSTRACT

The demise of traditional community has been the subject of social science research for well over a century (Marx 1848; Tonnies 1887; Durkheim 1893; Veblen 1899; Simmel 1900; Weber 1922). Sociologists have often pointed to the rise in consumer culture as a main driver in the breakdown of relationship-focused society. Certainly, with the rise of the automobile, suburbanization, television, dual career households, and the Internet, people interact less in person (Putnam 2000). But, in this study, we have found that the desire for that connection is very much alive.

In consumer literature, scholars have passed over traditional, face-to-face community in favor of studying community centered around brands and past-times (Muniz and Schau 2005; Cova and Cova 2001; Muniz and O'Guinn 2001), and more imagined (Anderson 1991) or technologically mediated forms of community (Jayanti and Singh 2010; Kozinets, De Valck, Wojnicki, and Wilner, 2010; Cayla and Eckhardt 2008; Mathwick, Wiertz and de Ruyter 2008; Thompson and Coskuner-Balli 2007).

This research investigates a neighborhood planning strategy that is built, marketed and sold with the promise that by living there, one can experience belonging in a traditional community. This trend is called New Urbanism and is spreading quickly in popularity across the United States and around the world (Katz 1994; Dreier, Mollenkopf & Swanstrom 2004). It takes very old concepts of urban planning, and builds them into new neighborhoods, which are thought to facilitate social interaction, trust, sharing, and a communal spirit (Zukin 2009). In this study, by community, we mean "a (physical) place, shared ideals, social network, collective framework, neighborly interaction, including "structural, cultural and sentimental supports and an altruistic outreach of affection and empathy (Keller 2003)."

This work explores how traditional community exists in contemporary consumer culture. We also ask, "How does the market try to (re)create community through a residential product?" We explore the role of consumption in these neighborhoods, and its role in creating a sense of belonging to a traditional community.

To date, the first author has conducted 28 semi-structured depth interviews with 37 residents of a New Urban neighborhood. Additionally, we have used extensive field notes, photographs, and secondary data sources to understand how traditional community exists.

The site of our study, Pleasant Valley, USA, features New Urban residential design, with modest homes on small plots of land, ample shared space, but relatively minimal personal property. In Pleasant Valley, belonging to a traditional community constitutes the brand platform and consumer promise. It is also a place where a way of life, is marketed, sold and in turn, consumed. In this study, we ask whether this neighborhood product delivers on its promise, and if so, how.

A second line of questioning focuses on an issue that has been studied since Veblen's 1899 work on the Leisure Class. Conspicuous consumption is thought to be a way of expressing one's self through possessions, in place of personal interaction. We ask whether the role of conspicuous consumption is different in this place where personal interactions are the focus and goal.

The adage "keeping up with the Joneses" is widely recognized to be a suburban phenomenon in which neighbors express themselves and especially their economic worth by trying to consume the biggest and best on their neighborhood block. The New Urban ideal promotes a carefully controlled, common aesthetic in which neighbors are encouraged to contribute to the overall image of the neighborhood, both behaviorally and materially (Zukin 2009). Therefore, our research explores the ways in which residents in New Urban neighborhoods use consumption to signal individual meaning and how that establishes the parameters for in-group belonging, reinforcing the communal focus.

Our results show that a desire for community is the most popular reason for purchasing a home in Pleasant Valley. However, the most powerful ways informants recount a sense of belonging in the community involve adhering to the proper consumption script. One common topic is the "anti-consumerist" community ethic, and the importance of deliberately and visibly living beneath one's means. The culture of the community is perceived as more socially and environmentally conscious, less materialistic.

Instead of common portrayals of conspicuous consumption in which extravagant consumption replaces social connection (Veblen 1899), in this case consumption is driven by the desire to convey an ideology, politic or philosophy of moral responsibility.

Informants expressed a sense of obligation to make moderate, controlled decisions about consumption, and expect others to do the same. This results in the accumulation of field-dependent cultural capital within the neighborhood (Bourdieu 1986).

Using underconsumption to express one's belief in the neighborhood ideology seems to solidify community in Pleasant Valley. However, there was one common theme among informants that was seen to cause a breakdown in community. Residents who presented ostentatious displays of wealth are thought to weaken community by disregarding the community culture of underconsumption. Informants who described this often made character judgments about those offending residents, even though they had never met. After discussing the "infidels" or "outsiders," informants described themselves to be more like the majority of residents in the neighborhood who also consume responsibly. This represents an ideological conflict, one that has been central in American culture: libertarian free market versus communitarian (Putnam 2000), and social expression as taste.

To conclude, in much of the social science literature, community has been placed at odds with consumer culture. However, in this case it is through consumption activity that residents feel a sense of common ground and belonging to the neighborhood and its members. Also, they practice a form of conspicuous consumption that is not intended to be used for comparison purposes, but rather to be less remarkable, and to signal an understanding of the shared moral responsibility. This is in contrast to popular theories on conspicuous consumption. Also, this research offers new findings related to Bourdieu's theories of capital by presenting a case in which the visible results of high levels of economic capital diminish cultural and social capital. We also hope to provide insights into New Urbanism's effectiveness in recapturing a traditional sense of community.

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Understanding and Mitigating the Impact of Informational and Intentional Asymmetries in the Consumer Setting

Chair: Michael O'Donnell, University of California Berkeley, USA

Paper #1: The Potential Benefits and Pitfalls of Poking Fun at Yourself: Self-Deprecating Humor as Impression Management

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

Paper #2: Backhanded Compliments: Implicit Social Comparison Undermines Flattery

Ovul Sezer, Harvard Business School, USA
Alison Wood Brooks, Harvard Business School, USA
Michael Norton, Harvard Business School, USA

Paper #3: Endorsing Help For Others That You Oppose For Yourself: Mind Perception Guides Support for Paternalism

Juliana Schroeder, University of California Berkeley, USA
Adam Waytz, Northwestern University, USA
Nicholas Epley, University of Chicago, USA

Paper #4: Encouraging Consumers to Consider Others' Perspectives Helps Them Optimize Decisions about Scarce Resources

Elanor Williams, University of California San Diego, USA
On Amir, University of California San Diego, USA
Alicia Lieberman, University of California San Diego, USA

SESSION OVERVIEW

Markets are replete with social interactions. Many of these interactions require impression management, either for the purposes of ingratiating service providers to clients, managers to employees, or consumers with one another. Some interactions regulate markets, and require a coordination of needs between the regulators and the regulated, and still others require coordination among consumers to achieve maximum utility. Given the differing goals and perspectives of consumers in the marketplace, there arises the possibility for asymmetry in how an action is intended and how it is perceived and reacted to. The papers in this session each take a critical look at actor-observer asymmetries in the consumer setting, and provide a cautionary tale for those who would attempt to influence others, as well as a strategy for overcoming these asymmetries and maximizing benefit for all parties.

The first two papers together demonstrate failures of two distinct impression management strategies. O'Donnell, Jung, and Critcher show that, although humor is a widely used tactic to engender liking, the use of self-deprecating humor has unintended negative consequences for the self-deprecator. Indeed, the reliable message is that self-deprecation is taken seriously, and is understood to be a diagnostic statement of one's belief about one's own ability, as well as a negative signal of self-esteem. Likewise, Sezer, Wood Brooks, and Norton investigate a similar failure of impression management through the use of backhanded compliments. Although flatterers who use backhanded compliments intend to simultaneously garner liking while also maintaining status distance, their compliments are viewed as insulting and draw social penalties from the ostensibly flattered. Importantly, those who use backhanded compliments as a means of being both liked and respected are often rewarded with neither.

The third paper demonstrates the complex interplay between would-be-regulators and the regulated in the marketplace. Schroeder, Waytz, and Epley show that regulators prefer to impose paternalistic

policies on others (e.g., banning fatty foods) they themselves prefer to be less actively regulated. These asymmetries arise because the regulators underestimate the self-control and mental capacity of those being regulated. However, hinting at a possible reconciliation between each of the asymmetries detailed so far, when the regulators are reminded of their own shortcomings, their preferences for paternalistic policies increases.

Finally, the fourth paper shows how the costs of informational and motivational asymmetries can be mitigated. Williams, Amir, and Lieberman demonstrate that by reminding consumers to consider the choices of others, cooperation increases and positive outcomes are maximized. By focusing on the behavior of others, consumers coordinate over scarce resources and arrive at better outcomes. Indeed, the conclusions of this paper suggest that the breakdown between the intentions of actors and the reception of their actions detailed in each of the papers could be mitigated by inducing the actors to consider more carefully how others will act and respond.

Taken together, attendees at our session will leave with a strong understanding of how informational asymmetries can have unintended consequences in the marketplace, but also learn how to avoid undesirable outcomes and maximize benefit in marketplace interactions.

The Potential Benefits and Pitfalls of Poking Fun at Yourself: Self-Deprecating Humor as Impression Management

EXTENDED ABSTRACT

Imagine a meeting between a contractor and a client. Just as the meeting is wrapping up and negotiations are finalized, the contractor makes a self-effacing remark, "Fortunately, every project I've ever done has been on time and under budget, if you double the estimates!" Even if the contractor is obviously joking, she has likely already formed a negative impression in the mind of the client. Impression management is the process by which people or organizations attempt to influence how others view them (Leary & Kowalski, 2012), and is under-studied in marketing. Grove & Fisk (2013) point out that impression management can be of great importance to firms and particularly service providers, where the individual is the firm.

Humor is a common tactic for impression management, as it reduces social distance (Ziv, 1984). However, there is no single definition of humor, and we propose that one type of humor, self-deprecation, can be especially fraught as a means of managing impressions. Self-deprecating humor is a favorite of standup comedians, but the limited literature on self-deprecation suggests that it is primarily a component of negative self-esteem (Owens, 1993). While self-deprecators might believe they are signaling confidence, Kruger et al. (2005) found that communicators often misperceive how observers will understand their meaning. Thus, within the context of self-deprecating humor, we investigate its impact as a signal for self-esteem, as well as its use as a buffer against others' development of negative perceptions of the self.

In Study 1, we investigate how observers perceive self-deprecation. Four hundred thirty-eight participants took part in a study with a 2X2X2 design. We varied the attractiveness of the self-deprecator, using normed pictures from the Chicago Face database and we var-

ied intelligence by providing cues about the speaker's intelligence (a surgeon/trash collector-in-training). Finally, we varied whether the speaker made a self-deprecating remark about his intelligence or attractiveness, with the following joke: "I'm so [ugly/stupid], a monkey looked at me and decided it's proof that evolution sometimes works in reverse!" We find that participants consistently take self-deprecators' remarks at face value: observers think that the target believes himself to be less intelligent when joking about his intellect and he believes himself to be less attractive when joking about his appearance. While the self-deprecating joke is framed as a light-hearted remark among a group of friends, self-deprecating humor is seen as reflecting poor self-esteem, regardless of the target's actual intelligence or attractiveness. This is likely not what a self-deprecator intends to achieve by making a self-deprecating remark.

In Study 1, the target always makes a self-deprecating remark. This approach allowed us to keep constant the effect of self-deprecation, while investigating its effects across multiple domains. Study 2 builds on Study 1 by varying whether or not the target self-deprecates, allowing us to test for the effect of self-deprecating humor itself. Five hundred fifty-two participants took part in a study with 2X2X2 design in which we varied whether the participant learns about either the target's attractiveness or intelligence, whether the target is either high or low status on that dimension, and whether the target either does or does not self-deprecate on that dimension. Once again, we find a main effect of self-deprecation, such that self-deprecating targets are universally regarded as having lower self-esteem. Moreover, self-deprecators are seen as viewing themselves as less positively on the dimension about which they self-deprecate. Study 2 provides converging evidence that self-deprecators may be inadvertently conveying negative views about themselves when they make self-deprecating remarks.

Study 3 investigates the impact of self-deprecating humor on a novel dimension. Seven hundred fifty-seven participants took part in a study with a 2X2X2 design in which they read about somebody taking an art class at a local community center. We varied the target's status (high or low ability), whether or not there was an image of his art, and whether or not he made a self-deprecating joke about his art ("I think my art is pretty bad, but I actually already have a buyer lined up...the local zoo want to line their birdcage with it!"). We again find that self-deprecation is taken at face value, such that when the target self-deprecates, he is assumed to have lower self-esteem and view himself as a worse artist. However, here we find evidence that self-deprecation can be effective in managing impressions, as evidenced by a self-deprecation by status interaction. When the target is a bad artist, self-deprecation is associated with higher self-esteem ratings, but this effect is reversed when the target is a good artist. Study 3 suggests that self-deprecation might be effective for certain domains.

Study 4 integrates the findings of Studies 1-3 to provide more insight into the circumstances under which self-deprecation can be useful and when it is not. Seven hundred sixty participants took part in a study with a 2X2X2 design. We varied the dimension (artistic ability or intelligence), the target's status on the dimension, and whether or not the target self-deprecates ("Intelligence/Artistic ability may grow over time, but in my case, you can't grow something from nothing!"). We again find that self-deprecators are seen as having lower self-esteem than those who do not self-deprecate. However, we do find a significant three-way interaction, such that for artistic ability, self-deprecation blunts the impact to self-esteem of being a bad artist, but for intelligence, self-deprecation is always associated with reduced ratings of self-esteem.

The results of four studies show that self-deprecation is taken at face value – self-deprecators transmit an unintended message in addition to the their intended humor. Indeed, even when self-deprecation mitigates the impact of being a bad artist on one's self-esteem, observers think the target believes he is a bad artist. However, self-deprecation about one's intelligence or appearance is always negative. Continuing work is underway to investigate whether the centrality of the dimension to a person's self-esteem can explain the differing results for artistic ability and intelligence or appearance. Regardless, the results suggest caution for professionals— the self-deprecating contractor should know that her joking putdowns are taken at face value.

Backhanded Compliments: Implicit Social Comparison Undermines Flattery

EXTENDED ABSTRACT

Consider how you would feel at the end of a meeting – after you'd given a lengthy presentation – if a colleague turned to you and said: "Your ideas were good." Now, consider your emotional reaction if your colleague tacked on just a few more words: "Your ideas were good... for an intern." We explore the psychology of such backhanded compliments. Given their ubiquity in the workplace (*You speak well... for a woman*) in everyday life (*Those clothes make you look thin*), and in academia (*This seems pretty rigorous for a social psychologist*) we suspected that actors may believe that backhanded compliments are effective – but that targets might feel otherwise.

Giving compliments—communicating positive things about another person—is an important part of social and organizational life (Gordon, 1996, Zivnuska, Kacmar, Witt, Carlson, & Bratton, 2004). Several streams of research suggest that using flattery in social and professional interactions leads to positive outcomes, from likeability to evaluations of job performance to career success (Bolino, Varela, Bande, & Turnley, 2006; Wayne & Liden, 1995). Because flattery is egocentrically validating, people view those who compliment them in a favorable light (Gordon, 1996; Jones, Stires, Shaver, & Harris, 1968).

At the same time, however, flattery may come with costs. In particular, flattering someone may imply that the flatterer is of lower status than the recipient – as with the phrase, "sucking up to the boss." We suggest that one means by which flatterers seek to gain positive evaluations yet maintain their status is by deploying backhanded compliments: e.g. "You are smarter than I thought." Backhanded compliments are a distinct, common, yet understudied type of praise. We examine whether flatterers believe that backhanded compliments are effective strategy for gaining liking and status – and also assess whether recipients actually grant that liking and status to flatterers.

Drawing from research on social comparison, we suggest that people perceive backhanded compliments as less flattering than straightforward compliments. An extensive body of research has shown that social comparison has affective and cognitive consequences (Buunk & Gibbons 2007; Dunn, Ruedy, & Schweitzer, 2011). In particular, while downward comparisons enhance one's self-image, upward social comparisons are aversive (Achee, Tesser, & Pilkington, 1994), and evoke feelings of threat, envy, and anger (Cohen-Charash & Mueller, 2007). We suggest that targets perceive backhanded compliments as offensive because they induce an implicit social comparison between the target and another standard, reducing feelings of positive affect compared to straightforward compliments.

Building on psychology and management literatures on impression-management, we suggest that individuals use backhanded compliments to signal their status while simultaneously expressing praise for the target. The desire to gain and signal status is a fundamental and powerful driver of human behavior in social and organizational life (Argyle, 1994; Berger, Rosenholtz, & Zelditch, 1980). Individuals are motivated to acquire and signal status by attaining respect and admiration from others (Berger, Cohen, & Zelditch, 1972; Magee & Galinsky, 2008), because people with high status receive countless material and social rewards (Berger et al., 1980; Fennis, 2008). Based on the need to signal status, we suggest that people use backhanded compliments to signal their status while eliciting liking. Although people choose to give backhanded compliments when motivated to make a favorable impression by conveying status, we suggest that it backfires. We hypothesize that individuals who offer backhanded compliments will be perceived to have lower status than those who give straightforward compliments.

We tested our account in four studies. In Study 1, we participants to recall a backhanded compliment or compliment they had received and rated the extent to which they felt they were being compared to another person or a group on a 7-point scale. As expected, ratings of implicit social comparison was higher for backhanded compliments than straightforward compliments, $t(154) = 7.71, p < .001$.

In Study 2 we assessed recipients' evaluations of backhanded compliments compared to straightforward compliments. Participants were randomly assigned to one of the seven conditions to receive different types of compliments and backhanded compliments: "Your ideas were good." (compliment) or "Your ideas were good for a [your gender]." (backhanded compliment). Participants' ratings of offensiveness ($F(6, 708) = 62.10, p < .001, \eta^2 = .35$), and experience of positive emotions ($F(6, 708) = 49.38, p < .001, \eta^2 = .30$) varied across conditions. Participants perceived backhanded compliments as more offensive – and experienced lower positive emotions when receiving them – compared to compliments.

In Study 3, we asked participants to choose which of two self-presentation strategies – giving a compliment or giving a backhanded compliment – would best elicit liking, convey status, or achieve both goals. In both conditions in which status was a goal, participants favored the backhanded compliment ($\chi^2(2, N = 300) = 71.64, p < .001$), reflecting their belief that backhanded compliments would signal status.

In Study 4, we tested the efficacy of giving straightforward compliments, backhanded compliments, and straightforward insults in garnering status. As predicted, an ANOVA revealed a significant effect on perceived status, conditions $F(2, 233) = 124.61, p < .001, \eta^2 = .52$. Most importantly, ratings of perceived status were lower in the backhanded compliment condition than in the compliment condition, $t(153) = -8.57, p < .001, d = 1.37$.

Finally in Study 5, we tested whether perceived self-presentational concern mediates the relationship between backhanded compliments and perceived lower status. As in Study 4, participants who received a backhanded compliment perceived their coworker to have lower status than those received a compliment, $t(247) = 14.68, p < .001$, because targets who offer backhanded compliments are perceived to be more concerned about self-presentation.

By investigating backhanded compliments, we contribute to the impression management literature by identifying and examining a distinct self-presentation strategy that people use to signal status. Second, our work contributes to management and organizational behavior research by investigating boundary conditions of flattery. Finally, we extend research on status by highlighting the often-neglected conflict between signaling status and eliciting liking: would-

be flatterers believe that backhanded compliments will garner them both liking and status, whereas the recipients of their efforts grant them neither.

Endorsing Help For Others That You Oppose For Yourself: Mind Perception Guides Support for Paternalism

EXTENDED ABSTRACT

As members of a highly interdependent species, people not only try to improve their own well-being, they also try to improve others' well-being. People can choose to help themselves and others in more or less paternalistic ways. For example, providing or banning specific goods is more paternalistic because it restricts the recipient's choice compared to giving cash or information. We propose that support for paternalistic aid depends in part on people's subtle inferences about the mental capacities—self-control and rationality—of those being helped.

Our proposal provides an explanation for why paternalistic aid is popular when giving to others but unpopular among those they are targeted to help (e.g., Conly, 2013; Hill, 2006; Mill, 1869). People tend to believe that others have weaker mental capacities than the self, at least in part because they experience their own minds directly but observe others' minds indirectly (Epley & Waytz, 2010; Haslam et al., 2005; Pronin, 2009; Waytz, Schroeder, & Epley, 2014). We propose that this difference in how people judge their own versus others' minds accounts for self-other differences in support for paternalism. Although other factors may also influence support for paternalism (e.g., ideology, need for autonomy; Costa & Kahn, 2013; Jung, Mellers, & Baron, 2015; Tannenbaum & Ditto, 2015), these do not predict a self-other difference in support for paternalism.

We tested our hypothesis in Experiment 1 by asking participants to choose the most effective policies either for themselves or for an "average citizen." Participants made five sets of choices (avoiding unhealthy foods, avoiding credit card debt, not misusing a gun, saving for retirement, and avoiding mortgage debt) each with two options: a more or less paternalistic policy. For example, participants could either select a policy that banned unhealthy foods (more paternalistic) or provided information on calorie counts (less paternalistic). They also reported how capable they (and the average citizen) were of achieving each goal. As expected, participants were more likely to select paternalistic policies for the average citizen than for themselves, and this was fully mediated by perceived capacity to exert self-control.

Experiments 2-4 next tested how beliefs about the mental capacities of others in need affected paternalistic aid. In Experiment 2, the greater mental capacity that participants believed recipients of charity aid had, the more likely they were to donate their own earnings to a less paternalistic charity (GiveDirectly, which gives direct cash donations to recipients) compared to a more paternalistic charity (Red Cross) or no charity. In Experiments 3 and 4 we manipulated mental capacity beliefs about different groups of people (e.g., Kenyans), and again measured subsequent donations to more or less paternalistic charities. Donors who read information framed to make recipients seem less (vs. more) mentally capable were more likely to donate to the more paternalistic charity. Although beliefs about recipients' mental capacities predicted to which charity they gave, only beliefs about recipients' magnitude of need predicted how much they gave.

Finally, we tested whether making people aware of their own mental shortcomings will increase support for paternalistic approaches to help themselves (Experiment 5). We asked participants

to evaluate the effectiveness of four policies for reducing obesity either just before or just after a major cultural temptation for overeating: Thanksgiving dinner. Two of these policies were relatively paternalistic, and two were relatively agentic. Consistent with our hypothesis, participants thought that paternalistic approaches to obesity are more effective just after their Thanksgiving dinner than just before it, because they recognized more weakness in their own self-control after (vs. before) Thanksgiving.

Across five experiments examining beliefs about one's own and others' mental capacities, participants consistently preferred to provide paternalistic aid to those who seemed to have less mental capacity: other people (Experiments 1-2), those described as having diminished mental capacities (Experiments 2-4), or oneself after experiencing a moment of mental weakness (Experiment 5). Our findings have important theoretical and practical implications.

Theoretically, these results highlight how subtle inferences about others' mental capacities can affect social life. In particular, our research suggests that the subtle tendency to dehumanize others (Haslam & Loughnan, 2014)—to think of their mental capacities as relatively diminished compared to one's own (Pronin, 2009; Waytz et al., 2014)—matters because it can affect how people attempt to help each other. Thinking of others as being somewhat mentally incapable, perhaps more like children than like adults, can lead people to treat others as relatively childlike as well, preferring a more paternalistic approach to helping others rather than a more agentic approach that enables others to help themselves.

Practically, these results are important for policy makers, charitable organizations, and any others who are trying to improve people's lives through different sources of aid. Decisions about how to help others *should* be guided by empirical evidence about the actual effectiveness of particular interventions. Our experiments, however, demonstrate that these decisions in the absence of evidence may actually be guided by a less useful source: potentially mistaken inferences about the minds of those being helped. Those who design policy, offer aid, or try to help those in need would be wise to remember that good intentions may be guided by mistaken assumptions about the very people whose lives they are trying to improve.

Encouraging Consumers to Consider Others' Perspectives Helps Them Optimize Decisions about Scarce Resources

EXTENDED ABSTRACT

Consumers often converge on scarce resources, like money, time, space, and attention. If consumers better anticipated the behavior of others and slightly shifted their choices to coordinate with them, it would improve general welfare. Sometimes people can coordinate by basing choices on the same focal point (e.g., Camerer 2003), or by making choices sequentially rather than simultaneously (Rapoport 1997) or with one-sided communication (Cooper et al. 1989). But these approaches are not always possible. We address a particular understudied class of coordination problems, in which decision-makers must anticipate others' actions while being unable to communicate with them, and avoid rather than match their behavior. We suspect that these coordination problems are challenging because people typically underweight or even fail to consider other people's behavior, even though accounting for that behavior is inherently part of the coordination task. Across five studies we show that encouraging decision-makers to consider what others are likely to do can ameliorate these coordination problems by shifting consumers' choices.

In an initial field experiment, individuals entered a lottery to participate in a study with a monetary incentive. Timeslots were lim-

ited; participants could enter the lottery for only one timeslot and one person was drawn per slot. Participants receiving a reminder to consider why others might select particular timeslots chose less popular timeslots, increasing their competitive advantage, and were thus more likely to be invited to participate (47.0%) than control participants who received no reminder (28.6%; $\beta = .18$, $t = 2.81$, $p = .006$). In study 2 we demonstrate this effect in a different domain. Participants imagined participating in a costume contest in which the goal was to stand out from the crowd and were given six potential costumes from which to choose, including two trendy costumes, two classic costumes, and two unusual costumes. Participants who were reminded to consider what others might wear to the contest were more likely to choose one of the unusual costumes (39.3%) than participants in the control condition who received no such reminder (25.7%; $\chi^2(1, N = 298) = 6.33$, $p = .01$, $\phi = .15$).

Studies 3 and 4 suggest that these shifted choices do stem from an increased likelihood of considering others' probable behavior. In study 3, participants imagined a trip to the bank on a busy day and chose when to go between four 15-minute timeslots: at the beginning of the workday, during lunch, in the midafternoon, or at the end of the workday. Participants were asked to choose a time that was most likely to allow them to complete the errand on time, and provided a reason for their choice. After they provided their reason, they self-rated how focused that reason was on their own time constraints and on other people's behavior. Participants receiving a perspective-taking reminder were more likely to choose the less-busy midafternoon timeslot (55.8%) than control participants (30.8%; $\chi^2(1, N = 419) = 26.60$, $p < .001$, $\phi = .25$). Perspective-taking participants also indicated that they were more focused on other people's behavior ($M = 6.17$, $SD = 1.38$) than control participants ($M = 5.39$, $SD = 1.96$; $t(370.82) = -4.68$, $p < .001$, $d = .47$) and that they were less focused on their own constraints ($M = 4.66$, $SD = 1.96$) than control participants ($M = 5.34$, $SD = 1.72$; $t(405.47) = 3.73$, $p < .001$, $d = .37$). Study 4 demonstrates that people who are naturally inclined to consider others' perspectives are more likely to optimize their social media use to get a large audience with less competition for users' attention. Participants indicated how likely they would be to post on Twitter at seven different times (12:00am, 4:30am, 9:00am, 2:22pm, 5:00pm, 7:00pm, and 1:30am). They then completed versions of the Fantasy and Perspective-Taking subscales of the Interpersonal Reactivity Index (Davis 1981). Participants who scored higher on the perspective taking scale demonstrated increased variance in their posting times ($\beta = .03$, $t(266) = 2.88$, $p = .004$), suggesting that they are more responsive to when people are likely to be on Twitter and are therefore more discerning when they post.

Finally, in study 5, we demonstrate a boundary condition as well as provide further support for the idea that reminders facilitate coordination because people do not naturally consider others' actions enough, by showing an exception for situations where those actions are inherently obvious. Specifically, when participants are asked to plan an outing to the beach that would avoid crowds during a busy holiday 3-day weekend, they were equally likely to go to the beach on the Friday of that weekend whether they were reminded to consider others (7.8%) or not (6.7%; $\chi^2(1, N = 207) = .08$, $p = .77$, $\phi = .02$). However, participants deciding when to go to the beach on a weekend where they had a personal 3-day weekend were more likely to choose Friday for the beach day when they were asked to consider when other people would go to the beach (35.3%) than when they did not receive the perspective taking reminder (19.8%; $\chi^2(1, N = 203) = 6.10$, $p = .01$, $\phi = .17$). The interaction between conditions is significant ($\chi^2(1, N = 410) = 23.14$, $p < .001$, $\phi = .24$).

Employing both laboratory and consequential field situations, we demonstrate that consumers underutilize their ability to perspective-take, even though perspective-taking is intrinsically part of coordinating with other people. Encouragement to consider what others will do and why enhances coordination and improves outcomes. This insight offers potential solutions to consumers, marketers, and policy makers who aim to improve customer experience, satisfaction, and welfare.

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Contemporary Issues in Healthier Food Choice

Chairs: Martin Reimann, University of Arizona, USA
Ossama Elshiewy, University of Goettingen, Germany

Paper #1: The Mental Budgeting of Calories: How Nutrition Information Influences Food Consumption Day by Day, Not Meal by Meal

Ga-Eun (Grace) Oh, Hong Kong University of Science and Technology, China
Young Eun Huh, Hong Kong University of Science and Technology, China
Anirban Mukhopadhyay, Hong Kong University of Science and Technology, China

Paper #2: Healthy-Shopping Dynamics: The Relative Healthiness of Food Purchases Throughout Shopping Trips

Martine van der Heide, University of Groningen, Netherlands
Koert van Ittersum, University of Groningen, Netherlands
Jenny van Doorn, University of Groningen, Netherlands

Paper #3: ‘Low Fat’ but High in Sugar: Consumer Response to Misleading Nutrition Claims

Ossama Elshiewy, University of Goettingen, Germany
Steffen Jahn, University of Goettingen, Germany
Tim Doering, University of Goettingen, Germany
Yasemin Boztug, University of Goettingen, Germany

Paper #4: Can Children Still Be Happy If 160 Calories Are Cut Out of the Happy Meal? Reinforcing Effects of Toys on Portion Choices

Martin Reimann, University of Arizona, USA
Kristen Lane, University of Arizona, USA

SESSION OVERVIEW

Health problems caused by excessive food intake are increasing. Millions of people across the world are suffering from being overweight or obese (Ng et al. 2014; WHO 2014). Overwhelming food choice environments like supermarkets and fast-food restaurants increase the relevance for research about how consumers make healthier food choices and, more importantly, how consumers can be motivated to do so (Chandon and Wansink 2012). The purpose of this session is to report and discuss new insights from different perspectives on healthier food choices and to expand the body of knowledge: first, the various findings from the four papers contribute to consumer research by showing new behavioral mechanisms and dynamics, but also potential implementation strategies, which are relevant for healthier food choices. Hence, consumer researchers will gain insights into how to achieve win-win situations for both consumers and food suppliers. The four papers apply different methodologies to answer novel research questions and will, therefore, provide a promising foundation for a vivid discussion. The papers are summarized as follows:

In Paper #1, Oh, Huh, and Mukhopadhyay present a field experiment, manipulating availability of nutrition information, and reveal that consumers set day-level mental budgets for calories. They found that consumers who set budgets adjust dinnertime consumption in response to information about past calorific consumption. The authors demonstrate that such mental calorie budgets interact with calorie information provision and can influence subsequent decisions. Hence, their results provide evidence about transmitting effects of calorie information, and emphasize the importance of considering these insights when evaluating nutrition disclosure effectiveness.

In Paper #2, van der Heide, van Ittersum, and van Doorn report how the healthiness of a series of sequential purchases evolves throughout a shopping trip. Their research combines results from an online study and a lab experiment and, their findings show healthy-shopping dynamics: overweight consumers purchase healthier options in the first half of the shopping trip, while making unhealthier choices during the second half. Normal weight consumers did not show any choice patterns during the shopping trip. These results highlight how focusing on single purchases and end-of-trip baskets can fail to capture individual differences regarding healthy-shopping decisions.

In Paper #3, Elshiewy, Jahn, Doering, and Boztug combine results from supermarket purchase and experimental survey data to investigate how consumers respond to voluntary front-of-pack nutrition labels. Experimental results reveal an overall increase in brand trust, while product attitude increases (decreases) for healthy (unhealthy) products. Interestingly, results show that nutrition labels only affect sales and purchase intention for products with potentially misleading nutrition claims (i.e., ‘low fat’ products with high sugar content).

In Paper #4, Reimann and Lane show how healthier food choices can be motivated in fast-food restaurants. Their findings reveal that including an inexpensive non-food item (toy) with a smaller-sized meal incentivizes children to choose the smaller-sized “Happy Meal” instead of the regular-sized version without non-food item. This effect even holds among children with overweight and obesity. Their findings matter for both food marketers and public policy makers, who aim to stimulate healthier food choices.

The Mental Budgeting of Calories: How Nutrition Information Influences Food Consumption Day by Day, Not Meal by Meal

EXTENDED ABSTRACT

Does the presence of calorie information influence food consumption? Over the last decade or so, calorie labels have been mandated across several jurisdictions worldwide, in the hope that they will help curb the obesity epidemic. However, the emerging evidence reveals that these measures have had a disconcertingly weak effect, if at all (Downs et al. 2013). We suggest that these observed null effects may, in part, be attributable to the paradigm that has been used. Almost all research on nutrition labeling has studied how the provision of nutrition information about a given food item affects consumers’ choices of that specific item. However, given that most consumers make multiple food decisions a day (Cutler, Glaeser, and Shapiro 2003) and decisions may not be independent of preceding decisions (Khare and Inman 2009), examining the effect of nutrition information within a narrowly defined choice context may not adequately capture how consumers use such information.

We propose instead that, consistent with public health messaging, consumers have day-level calorie consumption limits (i.e., mental budgets of calorie consumption), which affect their food decisions more broadly. Much research has shown that consumers use mental accounts to keep track of financial expenses (e.g., Thaler 1985, 1999; Heath and Soll 1996; Cheema and Soman 2006). They set budgets for a certain period of time (e.g., weekly food and entertainment budgets) and regularly monitor the balance to avoid overspending (Read,

Loewenstein, and Rabin 1999). We propose that, like these monetary budgets, consumers have a budget for calorie consumption, which is set daily. Since the calorie content of any single food item is usually much lower than a daily budget, the provision of calorie information will not have a major influence on one-off decisions unless the information reveals an unusually high calorie count. However, this information may well have an observable effect across consumption situations at a day level. If so, a consumer's decision regarding dinner may well be influenced by the nutrition information processed at lunch.

Who is likely to have a mental budget for calories? Restrained eaters (Herman and Polivy 1980) care about and pay attention to food-relevant information. Therefore, restrained (vs. unrestrained) eaters should (a) be more likely to have such mental budgets, which (b) are generally smaller. Consequently, we predict that the effect of calorie information disclosure should be apparent at a day level, for consumers who are restrained eaters.

Study 1 tested for the existence of mental calorie budgets. 3,150 respondents participated from Australia, Hong Kong, India, South Africa, UK, and USA (minimum 500 respondents from each country). Participants were asked to indicate the acceptable calorie range for them to eat for a normal day by typing the minimum and the maximum calories, in an open response format with an option to indicate if they did not normally watch the number of calories they ate. 47% of respondents reported having daily consumption budgets. Broken down by country, the US reported the highest proportion, 63%, followed by UK, 59%, Hong Kong, 48%, India, 40%, Australia, 40%, and South Africa, 32%. On average, consistent with public health messaging, daily calorie budgets ranged from 1,425 calories to 2,683 calories.

Study 2 tested whether the size of the mental budget varies depending on dietary restraint. MTurkers ($N=200$) first indicated their acceptable range of daily calorie consumption with an option to express that they did not have limits on food consumption. Then, we measured dietary restraint (Herman and Polivy 1980). As predicted, more restrained eaters were more likely to have daily budgets ($p < .001$), and have smaller budgets ($p < .05$).

Based on the evidence of existence of daily calorie budgets especially for restrained eaters, Study 3 tested how these budgets interact with the provision of calorie information at a day level. Calorie information provided for meals on the same day (e.g., breakfast and lunch) enables restrained eaters to track how much of their budget has been used and how much budget is left for dinner. Therefore, when calorie information is provided for the prior intake, restrained eaters should "balance" the remaining budget at dinner (i.e., eat less [more] when the remaining budget is tight [ample]). Study 3 was a field experiment that tested these predictions.

Participants ($N=190$ undergraduate students) recorded their food diaries for an entire day. In the late afternoon, half the participants received accurate and itemized feedback about how many calories they had consumed till then. The other half, control, got no feedback. As predicted, there was an interaction such that restrained eaters who had consumed relatively high calories prior to feedback (one SD above the mean of average pre-feedback calorie intake) decreased calorie consumption at dinner (vs. control; $p = .06$). Conversely, restrained eaters who had consumed relatively less calories (one SD below the mean of average pre-feedback calorie intake) during the day subsequently increased their dinnertime calorie consumption (vs. control; $p < .01$). Providing feedback did not influence the dinnertime consumption for unrestrained eaters (ns).

In summary, we provide evidence for daily mental budgets for calorie consumption. The likelihood of having calorie budgets and

the sizes of the budgets vary depending on dietary restraint. We demonstrate that such mental calorie budgets interact with calorie information provision to influence subsequent decisions. Hence, the null effects of calorie information provision observed in past research may be due to the fact that researchers have been looking with too narrow a lens.

Healthy-Shopping Dynamics: The Relative Healthiness of Food Purchases Throughout Shopping Trips

EXTENDED ABSTRACT

Globally, nearly 30% of the world population is now considered overweight or obese (Ng et al. 2014). This obesity epidemic is largely driven by the overconsumption of unhealthy (i.e., energy-dense and nutrient-poor) foods (Asfaw 2011). Surprisingly, while supermarkets account for more than 50% of public food expenditures (Glanz, Bader, and Iyer 2012), we know little about the "healthiness" of people's shopping baskets. Research to date typically focuses on healthiness of single purchases or end-of-trip baskets, investigating for instance the impact of health labels and "fat taxes" (Khan, Misra, and Singh 2016; Wansink and Chandon 2006). However, a growing body of research suggests that the grocery purchase process is more than a series of independent decisions—it is dynamic and evolves in response to earlier purchase decisions (Gilbride, Inman, and Stillew 2015).

Taking these dynamics into account is highly relevant, since the positive immediate effects of health interventions might in fact backfire due to dynamic responses. For instance, while price reductions effectively stimulate healthy food purchases, they may increase the total number of calories purchased in the end-of-trip shopping basket (Waterlander et al. 2012). Therefore, the goal of this research is to examine healthy-shopping dynamics throughout major shopping trips. Do shoppers consistently purchase relatively (un)healthy foods, or do they interchangeably purchase relatively unhealthy and healthy foods?

Existing theories offer support for both accounts: a dynamic interchange of healthy and unhealthy purchases (Khan and Dhar 2006) and the consistent purchase of (un)healthy foods (Williams and DeSteno 2008). These varying dynamics seem to originate from an interplay of licensing effects, "what-the-hell" effects and feelings of pride and/or guilt. First, a healthy food choice may license the purchase of a self-indulgent, unhealthy product (Hui, Bradlow, and Fader 2009; Khan and Dhar 2006). Second, when consumers purchase an unhealthy product, their failure to adhere to health goals may cause a "what-the-hell" response, leading to further unhealthy purchases (Cochran and Tesser 1996). Third, consumers may experience pride after a healthy food purchase (Mukhopadhyay and Johar 2007), facilitating further pursuit of (health) goals (Williams and DeSteno 2008). Fourth, consumers may experience guilt after purchasing an unhealthy product, which may motivate healthier future choices (Chen and Sengupta 2014).

Concluding, existing literature suggests multiple dynamic forces that affect (un)healthy food purchases. Moreover, these dynamics could differ across weight categories. Among others, overweight consumers differ from their normal-weight counterparts in terms of the guilt they experience regarding their eating behavior (Wansink and Chandon 2006). We empirically investigate these notions in two initial studies.

In Study 1, we first conducted an online study on healthy-shopping dynamics involving 160 MTurk participants ($M_{\text{age}} = 31.6$; 46% female). Participants made 11 within-category product choices (e.g., diet coke within the coke category). We assessed the relative healthi-

ness of these choices in terms of calories—the number of calories relative to the average number of calories of all presented options. Each product decision involved four options (presented with a picture, price and caloric information) and a no-purchase option. Furthermore, participants were randomly assigned to different real-time caloric feedback conditions (no feedback vs. % GDP feedback vs. total calories feedback).

After classifying participants as normal-weight ($BMI < 25$) or overweight ($BMI \geq 25$), we conducted a repeated measures analysis with polynomial contrast analysis on relative healthiness. The within-subjects effect of relative healthiness was highly significant ($F(10, 1540) = 6.80; p < .01$), supporting the existence of healthy-shopping dynamics. The between-subjects effects of participants' weight ($F(1, 154) = 1.69; p = .20$) and feedback condition ($F(2, 154) = 0.37; p = .69$) were not significant. However, contrast analysis suggests a significant cubic interaction between relative healthiness and weight ($F(1, 154) = 13.65; p < .01$), indicating that healthiness dynamics differ between normal-weight and overweight shoppers. Among overweight participants, cubic contrasts are significant ($F(1, 69) = 43.57; p < .01$). They purchase relative healthy options in the first half of the shopping trip, while making relatively unhealthy choices during the second half of the trip. Among normal-weight participants, cubic contrasts were also significant ($F(1, 85) = 5.25; p = .02$), although less pronounced. No significant contrasts or interactions were found for the caloric feedback conditions ($p > .10$).

This study supports the presence of healthy-shopping dynamics, particularly among overweight shoppers. To address some of the study's limitations, Study 2 was conducted.

We next conducted Study 2 as a lab study involving 320 undergraduates ($M_{age} = 20.7$; 49% female). Participants made 25 (virtual) product choices in randomized order. Product decisions involved three product options (without a no-choice option). Furthermore, to stimulate realistic choices, one of the participants could win a \$75 prize package containing the selected products and cash. No caloric feedback was provided in this study. The rest of the design and procedure were identical to Study 1.

Repeated measures analysis again yielded a significant within-subjects effect for relative healthiness ($F(24,7632) = 1.51; p = .05$). Again, the between-subjects effect of participants' weight was not significant ($F(1,318) = 1.43; p = .23$). Contrast analysis suggests a significant quadratic interaction between relative healthiness and weight, further indicating that dynamics differ across weight categories ($F(1, 318) = 3.92; p = .05$). A marginally significant quadratic evolution was found for overweight participants ($F(1, 33) = 3.63; p = .07$)—they select more low-calorie options (i.e., healthier options) at the start and the end of the shopping trip than half-way through the trip. For normal-weight participants, quadratic, cubic and linear contrasts remained insignificant ($p > .10$).

This study further supports the existence of healthy-shopping dynamics throughout a major shopping trip and confirms differences across weight categories. Since normal-weight and overweight shoppers did not differ in terms of overall relative healthiness, these results highlight how the currently prevalent focus on single purchases and end-of-trip baskets would fail to capture important individual differences regarding healthy-shopping decisions. Planned follow-up studies will also consider other individual differences and test potential underlying processes.

'Low Fat' but High in Sugar: Consumer Response to Misleading Nutrition Claims

EXTENDED ABSTRACT

Package-based claims and labels have become popular tools to influence consumers' perceived healthiness of food products (Andrews et al. 2014, Chandon 2013). In particular, marketers make use of nutrition claims (e.g., 'low fat') and voluntary nutrition labels (e.g., GDA) posted on the front of the package to emphasize the nutritional advantage of their products (Elshiewy, Jahn, and Boztug 2016; Newman, Howlett, and Burton 2014). Nutrition claims increase the perceived healthiness of food (Andrews, Netemeyer, and Burton 1998; Belei et al. 2012; Geyskens et al. 2007; Wansink and Chandon 2006) and can have a positive impact on sales in supermarkets (Balasubramanian and Cole 2002; Levy et al. 1985; Teisl, Bockstael, and Levy 2001). The downside of these findings is that misleading nutrition claims can be responsible for overeating and obesity (Belei et al. 2012; Wansink and Chandon 2006). The so-called health-halo effect implies a simultaneous overestimation of the food's healthiness and an underestimation of its energy content, which can result in increased consumption (Chandon and Wansink 2007). For nutrition claims such as 'low fat,' consumers may overgeneralize the information from the claim and rate the product as being healthy on other nutrients not mentioned in the claim (Andrews, Netemeyer, and Burton 1998; Roe, Levy, and Derby 1999). The perceived healthiness will be biased if the food product features, for example, a 'low fat' claim but is high in sugar content. Such biased perception is not unlikely as food manufacturers sometimes increase the amount of sugar to compensate for the fat reduction in order to keep the food's tastiness (Brennan and Tudorica 2008).

Our research seeks to explore how consumers react to food products featuring a nutrition claim after the introduction of a front-of-pack (FOP) nutrition label. We do not expect a generally healthier choice behavior, but contend that it depends on the combination of claim content with the amount of other nutrients disclosed on the FOP nutrition label. We argue that FOP nutrition labels alter the perception of food products only when expectations are disconfirmed (Burton et al. 2015, Burton, Howlett, and Tangari 2009). If consumers overestimated the healthiness of a product before nutrition label introduction due to a nutrition claim, we predict aversion behaviors toward this product. That is, nutrition label introduction should lead to decreased consumption of food that claims to be, for example, 'low fat' but is high in sugar.

We combine results from supermarket purchase data and an experimental survey to investigate how consumers respond to such potentially misleading nutrition claims. Our purchase data analysis uses supermarket scanner data for 24 yogurt products covering a two-year period, one year before and one year after a voluntary FOP nutrition label introduction. The label displays the amount of calories (in kcal) as well as sugar, fat, saturated fat and salt (in g) per serving together with the percentage of recommended daily amount. After label introduction, sales volume did not decrease for unhealthier products in general. Sales volume did decrease, however, for yogurts with low fat content (and the corresponding 'low fat' claim), but only when they also contained high amounts of sugar.

To investigate the underlying mechanism, we conducted an experimental survey as a follow-up analysis. We used a 2 ('low fat' claim absence vs. presence) x 2 (low vs. high sugar content) design with repeated-measures (before and after nutrition content disclosure). Four different yogurts were constructed as stimuli, two of which fulfilled FDA requirements to feature a 'low fat' claim (less than 3 g fat per 100 g). We averaged the fat and sugar content of

yogurts typically available at supermarkets to create four distinct conditions: a 'low fat' claim/low sugar natural yogurt (.6 g fat/5.8 g sugar), a no claim/low sugar Greek yogurt (10.8 g fat/ 6.7 g sugar), no claim/high sugar fruit yogurt (4.5 g fat/13.8 g sugar) and a 'low fat' claim/high sugar fruit yogurt (1.5 g fat/13.8 g sugar).

For our online experiment we recruited 405 respondents using MTurk. First, participants answered questions about their dietary concerns and nutrition proficiency, and were then randomly assigned to one of the four conditions. They were presented an image of a fictitiously branded yogurt product; in two of the conditions the product featured a 'low fat' claim. Importantly, other information about the nutrition content was not revealed. Respondents were asked about their product attitude, brand trust, and purchase intention. Following these evaluations, participants were presented the same yogurt again, but this time with additional FOP nutrition information (calories, sugar, fat, saturated fat and salt per 100 g and the percentage of recommended daily amount). As before, we asked about product attitude, brand trust, and purchase intention.

Results from ANOVA and mediated moderation analysis provide strong support for the proposed mechanism. Product attitude and purchase intention increased for a low-sugar yogurt featuring a 'low fat' claim after FOP nutrition label provision. Interestingly, product attitude for yogurts without the claim decreased significantly, while the purchase intention was not affected by the FOP nutrition information. In line with our prediction and the results from the purchase data analysis, purchase intention significantly decreased for the 'low fat'/high sugar yogurt after FOP nutrition label exposure. Product attitude worsened as well. We used dietary concerns and nutrition proficiency as control variables in our models. Taken together, results suggest that FOP nutrition labels can correct for biased healthiness perceptions, but do not promote healthier choices per se. With respect to misleading nutrition claims, comprehensive nutrition information appears to mitigate the health halo and reduce choice. Importantly, label introduction had a positive effect on brand trust across all four conditions. It appears that voluntary FOP nutrition disclosure still works as a brand-perception improving food marketing strategy.

In summary, our research reveals aversion behavior towards food products with potentially misleading nutrition claims. The combination of results from supermarket purchase data and an experimental survey greatly enhances external and internal validity of our findings. Our results, therefore, contribute to the growing literature in healthier food choice, with relevance to consumer research, food marketing and public policy.

Can Children Still be Happy If 160 Calories Are Cut Out of The Happy Meal? Reinforcing Effects of Toys on Portion Choices

EXTENDED ABSTRACT

As childhood overweight and obesity have risen, researchers have started investigating food marketing tactics that may have contributed to the pandemic. For example, toy premiums in children's meals (e.g., McDonald's Happy Meals) effectively motivate children to visit fast food restaurants (Bernhardt et al. 2013). At the same time, children's meal bundles have undergone scrutiny for high energy density (Powell, Harris, and Fox 2013; O'Donnell et al. 2008). Relatedly, two recent systematic reviews found character endorsers (e.g., McDonald's Ronald McDonald) considerably increase children's liking and preference (Smits et al. 2015; Kraak and Story 2015) for energy-dense foods (Kraak and Story 2015). These tactics' popularity among food marketers and meal bundle's link to over-

weight and obesity have generated suspicions that toy premiums have incentivized over-consumption, even encouraging legal action (Otten et al. 2014). The effects of food marketing tactics on children are especially worrisome because they likely establish and reinforce long-lasting food choice patterns (Connell, Brucks, and Nielsen 2014).

In the present research, we asked whether toy giveaways (henceforth referred to as toy premiums) could be used to incentivize children to choose a smaller-sized meal. Specifically, we tested whether including a toy with a smaller-sized (420 calories), but not with a regular-sized (580 calories), Happy Meal would predict smaller-sized meal choice. On first sight, cutting 160 calories out of a meal may not be an effective strategy, considering smaller-sized food portions are less attention-grabbing (Fisher and Birch 1999) and less desirable (Jansen, Mulken, and Jansen 2007) than larger-sized ones and are, therefore, often rejected by children (Wansink and Hanks 2014).

We argue that toys can be used as effective substitutes for food. One might expect that substitutes need to satisfy common physiological needs (e.g. both water and juice satisfy thirst) (Green and Freed 1993). Yet, we build on extant research in arguing that even highly different stimuli such as food and toys share a common physiological basis, hence allowing their behavioral substitution. Humans have learned to associate solid and liquid foods with appetitive and survival values, which makes food a vegetative reward (Schultz 2006; Rollins et al. 2014). Because children can be reinforced for the receipt of toys (Bijou and Sturges 1959), toys can represent artificial rewards. Hence, we argue that the reinforcing prowess of the toy can counterbalance the lower reinforcement value of a smaller-sized (compared to a regular-sized) meal. The translation of both food and toy into a common reinforcement value should facilitate choice substitution of food with toy. Indirect evidence for the notion of a common physiological basis of vegetative and artificial rewards comes, for example, from a recent adult study that observed automatic responses (e.g., salivation) for attractive material goods (Gal 2012) similar to those expected for delicious food. Following this novel notion of choice substitution, we argue that toys can be used as positive reinforcers, strengthening children's choice behavior for the smaller-sized meal.

At present, there is no experimental evidence evaluating the potential reinforcing value of toys in smaller-sized Happy Meal choice. The goal of the present work was to test the effectiveness of toys in lowering food portion choice and consumption. The research was conducted in the field with actual Happy Meals, across time (i.e., across two repeated trials) and in regard to BMI. Recent research showed that food cues are more attention-grabbing in individuals with obesity (Castellanos et al. 2009; Davids et al. 2010) and that overweight individuals are more susceptible to larger portion sizes (Burger, Fisher, and Johnson 2011), implying BMI could moderate or even nullify the effect of toy on smaller-sized meal choice. Conversely, other research reports overeating in response to larger portion sizes to occur regardless of BMI (Livingstone and Pourshahidi 2014). We attempt to reconcile these findings by determining if BMI will moderate children's portion choice.

In the present research, inclusion of a toy with a smaller-sized meal, but not with the regular-sized version, predicted smaller-sized meal choice ($B = 2.84$, $SE = .77$, $z = 3.67$, $p < .001$, 95% CI [1.33; 4.36]), suggesting that children can be incentivized to choose less food when such is paired with a toy. BMI neither moderated nor nullified the effect of toy on smaller-sized meal choice ($p = .125$), suggesting that children with overweight and obesity can also be in-

centrized to choose less. Further, neither age, sex, nor hunger level affected choice.

In conclusion, the findings from this study suggest fast-food restaurant chains should include toys to motivate children to choose less food. Children offered a smaller meal with a toy (vs. regular meal without one) are more likely to choose the smaller meal compared to children that are offered a regular meal with a toy (vs. a smaller meal without one).

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What's in a Label? How Food Labels Shape Perceptions and Consumption

Chairs: Johannes Boegershausen, University of British Columbia, Canada
Ga-Eun (Grace) Oh, Hong Kong University of Science and Technology, China

Paper #1: Does Salience of the Sound of Food Increase or Decrease Consumption? Nailya Ordabayeva, Boston College, USA

Raji Srinivasan, The University of Texas at Austin, USA

Paper #2: The Local Halo: Local Foods are Perceived as Both Healthy and Tasty

Steven K. Dallas, New York University, USA

Peggy J. Liu, University of Pittsburgh, USA

Gavan J. Fitzsimons, Duke University, USA

Paper #3: Judge Me for What I Eat: Consumers Choose Low-Calorie Labeled Food to Signal Competence

Ga-Eun (Grace) Oh, Hong Kong University of Science and Technology, China

Young Eun Huh, Hong Kong University of Science and Technology, China

Paper #4: No Fries for You! Waiters Externally Impose Self-Control to Restaurant Customers Depending on Their Weight and Gender

Johannes Boegershausen, University of British Columbia, Canada

Yann Cornil, University of British Columbia, Canada

Ray Charles "Chuck" Howard, University of British Columbia, Canada

SESSION OVERVIEW

Food labeling is a powerful marketing tool to create associations between food products and desirable attributes (Chandon and Wansink 2011). Prior research has demonstrated that labeling influences perceptions such as taste and healthiness, which in turn affect food choice, sensory experiences, and enjoyment (Levin and Gaeth 1988; Belei et al. 2012; Shah et al. 2014). In this session we offer novel sensory and social perspectives on how food labeling influences consumption decisions for the self and others. Specifically, we have compiled four exciting papers examining how food labels change consumers' expectation for sensory experiences (Ordabayeva and Srinivasan), enhance hedonic pleasure (Dallas, Liu, and Fitzsimons), and influence consumption decisions in the social sphere for the self (Oh and Huh) and for others (Boegershausen, Cornil, and Howard).

The first paper by Ordabayeva and Srinivasan examines the influence of sound salience in labels on consumption experiences. When labels make the sound of food salient (vs. not salient), consumers' expectations are drawn to experience of sound, which increases consumption enjoyment as well as consumption, even for healthy foods. However, this positive effect is reversed when competing sounds are present or when consumption monitoring is activated by the food or the social environment.

In the second paper, Dallas, Liu, and Fitzsimons demonstrate the existence of a "local halo" effect: Labeling foods as "local" leads consumers to perceive foods as healthier and tastier simultaneously, thus overcoming the "healthy = not tasty" lay belief. This local halo effect even holds for low-fat foods that are conventionally perceived as less tasty than their regular counterparts, boosting choice of low-fat foods.

The third paper by Oh and Huh further extends the role of food labels to interpersonal contexts based on the impression manage-

ment literature. Lab experiments and a field experiment show that when consumers are motivated to convey their competence to others, consumers are more likely to choose low-calorie labeled (vs. non-labeled) food. Further, this is due to the belief that choosing low-calorie foods reflects one's competence.

Finally, Boegershausen, Cornil, and Howard examine how the recommendations by waiters in restaurants are influenced by food labels, and by the external characteristics of patrons. In line with stereotyping theory, they demonstrate that participants assuming the role of a waiter are more likely to discourage female (vs. male) customers from choosing unhealthy but tasty food when customers are heavy (but not thin). This pattern of paternalistic recommendations (imposed self-control) is a novel form of subtle, insidious discrimination against heavy female consumers.

Collectively, the four papers (all in advanced stages) shed novel insights on the role of food labeling. Taken together, the papers address the following questions: (i) which food labels can moderate or even reverse well-established labeling effects and (ii) how do labels affect choices in more interpersonal settings. A full appreciation of the far-reaching effects of food labels can enrich our theories about food consumption. This session is of interest to a diverse audience as it appeals to researchers interested in food consumption, labeling, expectancy effects, sensory perception, and social influence.

Does Salience of the Sound of Food Increase or Decrease Consumption?

EXTENDED ABSTRACT

The sound that a food makes when it is eaten is central in our experiences of food (Vickers 1981), and it is an attribute that marketers often highlight to boost the appeal of products (Mermelstein 2013). Yet, the marketing literature has overlooked the effect of the sound salience of food on consumption experiences. Existing marketing studies on audition have reported the effects of sounds invoked by brand names (e.g., "Frosh" vs. "Frish" ice-cream) and of ambient sounds in the environment on perceptions of food products (Lowrey and Shrum 2007; Milliman 1986). In the meantime, the use of sound in labels, advertising slogans, and packaging is pervasive. In our analysis of new snack foods introduced in the US in 2013-14 (data provided by Innova Marketing Insights), we found that 70% of new snacks made the sound of food salient. It is therefore important to understand how the salience of the sound of food, controlling for the food's actual sound, influences consumption experiences, and to delineate conditions in which sound salience increases or decreases consumption. This is the focus of our research.

We build on studies in food science that correlated the food's actual loudness with expectations of the food's sound and freshness (Vickers 1983; Zampini and Spence 2004). We integrate these findings with marketing insights about the effects of expectations created by food labels on product experiences (Levin and Gaeth 1988; McCabe and Nowlis 2003). We posit that making the sound of food salient will enhance consumers' expectations of the food's sound. In turn, when consumers' heightened expectations of the food's sound are confirmed, the salience of the food's sound will increase food enjoyment and consumption. However, when expectations of the food's sound are disconfirmed (when auditory attention is diverted to a competing sound) or when the salience of the sound of food

triggers consumption metering (when consumption monitoring is active), the salience of the sound of food will reduce consumption. We test our predictions in five studies.

First, we ran a pre-test to verify our proposition that the salience of the sound of food enhances sound expectations. Participants saw an advertisement of chocolate candies with a crunchy exterior and a creamy interior. The ad slogan of the candies manipulated the salience of the candies' sound by describing the candies as "delicious and crunchy" in the sound-salient condition or "delicious and creamy" in the sound non-salient condition, while keeping the actual candies and their actual sound constant across conditions. Participants indicated that they expected the sound of the candies to be more pronounced (loud, audible, salient, attention-grabbing) when the ad made the sound salient vs. non-salient.

Study 1 tested the effect of sound salience on consumption enjoyment and purchase intentions. Participants sampled three chocolate candies from the pre-test, and they saw the same ads of the candies (describing candies as "delicious and crunchy" in the sound-salient condition vs. "delicious and creamy" in the sound non-salient condition). After sampling the candies, participants rated their enjoyment of the candies (enjoyment, taste, and deliciousness) and their intentions to purchase the candies. The results revealed higher purchase intentions when the sound of the candies was salient (vs. non-salient), and this effect was mediated by consumption enjoyment.

Study 2 tested the role auditory attention in moderating the effect of sound salience. Participants watched a movie clip while snacking on potato chips. The ad slogan of the chips made their sound salient ("crunchy and tasty") or non-salient ("tasty"). We also manipulated auditory attention by using an auditory instruction, and we measured actual consumption. In the control condition, we provided no auditory instruction and expected to replicate the positive effect of sound salience on consumption. In the competing sound condition, we instructed participants to pay attention to a competing sound (the movie) and expected to reverse the effect of chips' sound salience due to disconfirmed expectations of the chips' sound. The results supported our predictions.

Studies 3 and 4 tested the role of consumption monitoring in moderating the effect of sound salience. In Study 3, participants watched a movie clip while snacking on potato chips. The ad of the chips made their sound salient ("crunchy and tasty") or non-salient ("tasty"), as in Study 2. Furthermore, the chips were served in a transparent pack that activated consumption monitoring (Deng and Srinivasan 2013) or an opaque pack that did not. The results revealed that sound salience increased consumption from an opaque pack that did not activate consumption monitoring, but decreased consumption from a transparent pack that activated consumption monitoring. Consumption enjoyment mediated this interactive effect of sound salience with consumption monitoring. Study 4 replicated the moderating effect of consumption monitoring with an alternate description of the chips' sound ("loud") and a contextual manipulation of consumption monitoring (public consumption setting: consumption monitoring active vs. private setting: consumption monitoring not active).

Study 5 tested whether the sound salience of healthy foods can increase healthy food consumption among adults in a weight-loss program. Participants read a book excerpt while sampling carrots. The carrots were described as having been chosen for the study because of their sound (sound-salient condition) vs. popularity (sound non-salient condition). Participants indicated the quantity of carrots that they desired to eat and completed the behavioral activation scale (Carver and White 1994) that captured their inherent tendency to seek enjoyable sensory experiences. The results indicated that sound salience increased desired consumption among individuals with a

high tendency to seek enjoyable sensory experiences, which reinforced the importance of sensory enjoyment in driving the effect of sound salience.

In sum, our findings demonstrate that the mere salience of the sound of food, controlling for the food's actual sound, can significantly impact consumption experiences and decisions. However, this effect may be positive or negative, depending on the attention that consumers are able to pay to the sound of food and the degree of consumption monitoring that is triggered by the food or the environment. The findings shed light on the benefits as well as the potential costs of sensory labels.

The Local Halo: Local Foods are Perceived as Both Healthy and Tasty

EXTENDED ABSTRACT

Consumers often have multiple goals when making food choices (Finkelstein and Fishbach 2010; Liu et al. 2015). For example, consumers generally want their food to be both tasty and healthy. However, addressing both of these goals simultaneously can be difficult because many consumers believe that there is an inverse relationship between tastiness and healthiness (Liu et al. 2015; Raghunathan, Naylor, and Hoyer 2006). Indeed, consumers believe that healthy foods are generally less tasty than unhealthy foods (Liu et al. 2015) and that the same food will taste worse when it is labeled as healthy rather than unhealthy (Raghunathan et al. 2006). Because of this perceived conflict between a health goal and a taste goal, consumers often feel that they must pick one goal to pursue with a given food choice. Problematic from a health perspective, many consumers prioritize taste goals over health goals (Glanz et al. 1998; Stewart, Blisard, and Jolliffe 2006), such that consumers' health goals affect their food choices only if they are convinced that their taste goals will also be addressed. This combination of consumers' belief that healthy foods are not tasty, and the priority that they place on taste over health, may contribute towards excess weight gain, with negative health consequences (Flegal et al. 2010). Thus, it is critical to find a way to overcome consumers' unhealthy = tasty (and healthy = not tasty) intuitions. The current research proposes that labeling a food with a "local" label can overcome these intuitions, such that local foods are perceived to be both tasty and healthy.

Recently, there has been a movement within the United States to "buy local" products (Lyon 2014). In fact, between 2008 and 2012, local and regional food sales increased from \$4.8 billion to \$6.1 billion (Wright 2015). Indeed, local products—particularly foods—are increasingly seen positively (Klavinski 2013). We suggest that this positivity creates a "local halo," such that local foods are perceived to be both tasty and healthy. Halo effects occur when "an initial favorable impression promotes subsequent favorable evaluations on unrelated dimensions" (Schuldt, Muller, and Schwarz 2012, p. 581) and were originally examined in person-perception contexts (Asch 1946; Kelley 1950). In terms of past research on "halo" effects in the food context, consumers have been shown to generalize the associations they have with a particular label (i.e., a restaurant name or the organic or fair trade label) to the product's healthiness. For example, Chandon and Wansink (2007) found that people believe restaurants that are positioned as healthy serve lower calorie foods than restaurants that are not positioned as healthy even when that is not the case. Relatedly, Schuldt and Schwarz (2010) identified an "organic halo," such that consumers infer that organic foods are lower in calories than non-organic foods, and Schuldt, Muller, and Schwarz (2012) identified a similar halo for "fair trade" products. However, whereas this past research has identified a label's halo effect on a single at-

tribute of healthiness, we instead test whether a local label's halo extends beyond a single attribute of healthiness to include tastiness. Examining whether the local halo can increase both healthiness and tastiness perceptions is particularly interesting because these two attributes are typically viewed as being inversely related (Liu et al. 2015; Raghunathan et al. 2006). In sum, we predict that the positivity that consumers feel towards local foods will lead them to infer that such foods are "positive" on both taste and health (i.e., are both tasty and healthy), overcoming the healthy = not tasty intuition.

Three studies tested these hypotheses. Study 1 randomly assigned participants to consider either a yogurt parfait labeled as made with ingredients from local farms, a yogurt parfait labeled as made with ingredients from distant farms, or a yogurt parfait with no label. Participants were then asked how healthy and tasty they thought the parfaits would be. Participants who rated the parfait with the local label believed it would be significantly healthier than the control parfait ($p = .029$) and directionally healthier than the distant label parfait ($p = .149$), and significantly tastier than the control parfait ($p = .015$) and the distant label parfait as well ($p = .005$).

Study 2 tested whether the local halo can overcome the healthy = not tasty intuition. All participants were presented with cheddar cheese crackers. Based on random assignment, participants were either told that the crackers were low-fat, made with local ingredients, both low-fat and made with local ingredients, or were not provided any additional information. Participants were then asked how healthy and tasty they thought the crackers would be. There was a significant effect of condition on both healthiness ($p < .001$) and tastiness ($p < .001$). Participants rated the local crackers directionally tastier than the control crackers ($p = .135$) and significantly healthier than the control crackers ($p < .001$). In addition, participants rated the crackers that were both low-fat and made with local ingredients as significantly tastier ($p < .001$) and healthier ($p < .001$) than the crackers that were just low-fat.

Study 3 tested the effect of the local label on choice. Participants were randomly assigned to make a choice between either regular cheddar cheese crackers and low-fat cheddar cheese crackers or between regular cheddar cheese crackers and low-fat cheddar cheese crackers made with local ingredients. There was a significant effect of condition on choice ($\chi^2(1) = 29.31, p < .001$), such that participants were significantly more likely to select the regular crackers when the other alternative was low-fat crackers (81.36%) as opposed to when the alternative was low-fat crackers made with local ingredients (47.37%). Accordingly, adding the local label eliminated the preference for regular crackers over low-fat crackers.

In sum, the present research demonstrates a local halo. Local products are perceived as healthier and tastier than their non-local counterparts, and are even able to overcome the healthy = not tasty intuition. Additional studies are currently in progress, testing the impact of the local label on actual taste perceptions and on consumer choices in a field setting.

Judge Me for What I Eat: Consumers Choose Low-Calorie Labeled Food to Signal Competence

EXTENDED ABSTRACT

Consumption decisions reflect not only one's preference but also one's identity to others (Belk 1988). Knowing this signaling power of possessions and brands, consumers strategically make purchase decisions to convey a desirable impression to others (Schlenker et al. 1996). As many of social interactions involve food and eating, it is also important to understand how consumers use food decisions for impression management (Herman, Roth, and Polivy

2003). The current research examines how food labels are used as a means to convey a desired image to others. We suggest that consumers strategically choose low-calorie labeled food when they are motivated to impress others.

Despite popularity of research on food labels, a potential signaling power of food labels has been largely overlooked (see Chandon 2013 for a review). Exceptionally, it has been found that some food labels discourage consumers' choice in public when labels connote undesirable implications to decision maker such that men are less likely to choose femininity-laden food (e.g., ladies cut steak) in public versus private (White and Dahl 2006). As with possessions and brands, consumers may use positive and/or negative associations with food in decisions to signal a desired image to others.

Because low-calorie food is perceived as less tasty but healthy (Raghunathan et al. 2006), choosing low-calorie food would require self-control. Hence, choosing low-calorie food would be associated with chooser's endurance and pursuit of virtue in sacrificing pleasure. Such restraint and self-control is related to capabilities to achieve goals (Barrick and Mount 1991). Therefore, when consumers are motivated to convey their high self-control and competence to others such as in job interview, they will be more likely to choose a low-calorie labeled option (vs. when the same option is not labeled).

Studies 1A and 1B examined whether consumers are more likely to choose low-calorie labeled foods when they are motivated to convey a desirable image to others, but not when the decision is made in private. Study 1A employed a 2 (visibility of choice: not vs. visible to other) x 2 (label to target options: no label vs. low-calorie labeled) between-subjects design. Participants imagined they were consultants and had a meeting with an important client. During the break time, they went out to have a snack and chose from five pastry options. Low-calorie labels were attached to two target options only in the label condition. Half of participants made a choice with the client, while the other half made a choice alone. As we predicted, low-calorie label increased choice of target options in public condition (choiceno_label = 11.7%; choicelow-calorie_labeled = 30.5%; $p = .01$) but not in private condition ($p > .6$). In study 1B, we replicated the findings in a different context (i.e., job interview) with different set of stimuli (i.e., beverage). Low-calorie labels increased choice of target beverages when participants made a choice with the interviewer (choiceno_label = 25.6%; choicelow-calorie_labeled = 44.8%; $p < .05$), but not in private ($p > .3$).

In study 2, participants made an actual chocolate choice that would be consequential. Participants in the public condition made a choice that would be evaluated by other student in the same lab whereas participants in the private condition made a choice that would be kept confidential. Consistent with studies 1A and 1B, choice of labeled options was increased in the public condition (choiceno_label = 35.8%; choicelow-calorie_labeled = 50.9%; $p < .05$), not in private ($p > .7$).

Study 3 examined consumers' belief that choosing low-calorie foods would reflect one's competence. Undergraduate participants saw a beverage choice of other student and evaluated how competent they think the student would be for their group projects. As predicted, participants judged the student as more competent when her choice was (vs. not) labeled with low-calorie ($p = .01$).

Study 4 investigated the boundary condition. Although choosing low-calorie labeled option is helpful to convey competence to others, it may not signal all other positive traits. Impression formation literature has suggested that competence and sociability are two fundamental dimensions for social judgments (Cuddy et al. 2008) but they are not positively related (Judd et al. 2005). Thus, consumers would not necessarily choose a low-calorie labeled option when

they are motivated to signal their sociability. The study employed a 2 (social goal: competent vs. sociable) x 2 (label: control vs. low-calorie) between-subjects design. Participants in the competence condition imagined that as a consultant they went out for a snack with an important client as in Study 1A. Participants in the sociability goal condition imagined that they as a party planner went out with an important client and it was important to be seen as a social person. The low-calorie label increased choice share of the target pastry (choiceno_label = 15.7%; choicelow-calorie_label = 28.9%; $p < .01$) but no difference was found in the sociability goal condition ($p > .9$). The findings suggest that the low-calorie labels are not used to deliver all positive impression, but specifically related to competence personality.

Study 5 was a field study to test how low-calorie labels are used for the impression management. The study was conducted during actual interviews for recruiting research assistants. The job description specified that the research assistants should be conscientious, well-organized, and highly motivated. At the end of each individual interview, an interviewer offered a cookie as a small gift for coming for the interview. Interviewees chose between two different brands of cookies, one of which had a 'low-calorie' label next to the brand name in the half of interviews. Replicating the findings from previous studies, we found that when the cookie was labeled (vs. not labeled) as low-calorie, job candidates were more likely to choose the target cookie (choiceno_label = 29.4%; choicelow-calorie_label = 64.7%; $p < .05$).

In summary, the current research examined how low-calorie labels are used for impression management. Across six studies, we found that consumers strategically choose low-calorie labeled food when they are motivated to impress others. We provide evidence suggesting that this is due to the belief that choosing low-calorie foods reflects one's competence.

No Fries for You! Waiters Externally Impose Self-Control to Restaurant Customers Depending on Their Weight and Gender

EXTENDED ABSTRACT

Overweight people now constitute the majority of the US population (Ogden et al. 2014), still they are stigmatized and suffer from discrimination in their access to health care, in the workplace, but also in shopping environments where they receive mediocre service (e.g., Carr and Friedman 2005; King et al. 2006; Rudolph et al. 2009; Vanhove and Gordon 2014). In addition, weight discrimination tends to be associated with gender discrimination; it is less socially acceptable for women than for men to be overweight (Judge and Cable 2011; Owen and Laurel-Seller 2000; Ricciardelli and McCabe 2001). Weight discrimination often relies on the belief that heavy people lack self-control especially in relation to food (Crandall, Nierman, and Hebl 2009), and this stereotype is also associated with women (Else-Quest et al. 2012).

Our research further investigates the interaction between weight and gender in shaping discrimination, in consumer contexts that are associated with eating self-control – restaurants. Discrimination is defined as any form of specific treatment based on an individual's presumed traits. We examine a novel, subtle form of discrimination: the content of recommendations provided by waiters to restaurant patrons. Because of information asymmetries (e.g., better knowledge of menu items), waiters can influence the decisions of customers by selectively adapting how they present the menu to customers. For instance, waiters may vary the amount of information about dishes or offer explicit recommendations for certain items. Recommending

dishes lower in calories – and lower in taste – to specific patrons can be interpreted as paternalistic “advice” designed to externally impose self-control, i.e., a form of prejudicial treatment (Dana and Cain 2015). We predict that waiters' dish recommendations can vary as a function of patrons' weight and gender, such that waiters recommend healthier options to heavy females, but not to heavy men.

In order to test how customer size and gender influence waiters' recommendations we developed a paradigm, which mimics customer-waiter interactions. Participants are asked to endorse the role of waiters and are shown a restaurant menu featuring three courses (two dishes per course). All dishes are designed and pretested such that one dish per course is healthier but less tasty than the other dish. Participants are given a 'cheat sheet' with additional information about the dishes, not available to patrons, such as ingredients or preparation style. Next, participants are randomly assigned to one of four pictures displaying a hypothetical customer varying in gender (male/female) and size (thin/heavy). We carefully pretested these images to ensure that perceptions of weight status, attractiveness, and healthiness varied only across weight status but not across gender. To test how customer gender and size interact to shape waiters' recommendations we used two different dependent measures in study 1 and 2.

In study 1 ($n = 201$; MTurk), participants selected the dish information that they wished to present to customers in a drag-and-drop task. Participants could select only 50% of the total available information. Our cover story was that there was limited time to pitch the menu, therefore participants had to select the most relevant information about the dishes. A 2 (gender) x 2 (size) ANOVA on the percentage of tasty-unhealthy pieces information produced only a significant gender x size interaction ($p = .004$). Gender did not significantly impact the dish recommendations when patrons were thin ($M_{\text{thin female}} = 54\%$, $M_{\text{thin male}} = 50\%$, n.s.), but had a significant influence when patrons were heavy: waiter-participants were less likely to mention tasty-unhealthy options to heavy female than to heavy male customers ($(M_{\text{heavy female}} = 47\%$, $M_{\text{heavy male}} = 53\%$, $p = .019$).

Study 2 relied on a more implicit measurement of dish recommendations. Participants in study 2 ($n = 230$; undergraduate students) were told to endorse the role of waiters at the university restaurant, and were asked to present the menu (the same as in Study 1) to the customer they saw on the screen. Their pitch was recorded on video. They were free to present any information, but had a limited time to do so. Subsequently, two independent coders, who were blind to the conditions, watched and evaluated the videos in order to create an index of the content of waiters' recommendations ($-3 =$ only healthy options recommended, $0 =$ neutral, $3 =$ only unhealthy options recommended), which served as a dependent measure. Inter-rater reliability was high (Krippendorff's $\alpha = .81$) and disputes were resolved via a third coder and discussions. A 2 (gender) x 2 (size) ANOVA on the overall recommendation index produced a significant effect of customer gender ($p = .001$) and a marginally significant interaction between gender and size ($p = .078$). Consistent with study 1, gender had no significant impact on dish recommendations when patrons were thin ($(M_{\text{thin female}} = -.36$, $M_{\text{thin male}} = -.02$, n.s.), but had a significant influence when patrons were heavy: waiter-participants were less likely to recommend unhealthy options to heavy female than to heavy male patrons ($(M_{\text{heavy female}} = -.58$, $M_{\text{heavy male}} = .51$, $p < .001$).

Our work uncovers a novel, insidious form of weight-gender discrimination involving paternalistic advice and externally imposed self-control. Two studies show that waiters use weight cues differently depending on whether the customer is male or female. Unlike heavy male customers, heavy female customers are particularly likely to receive paternalistic recommendations prioritizing health concerns over pleasure.

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The Surprising Effects of Affect

Chair: Nancy M. Puccinelli, Oxford University, UK

Paper #1: Two Roads to Affect Effects

Nancy M. Puccinelli, Oxford University, UK
Dhruv Grewal, Babson College, USA
Scott Motyka, Claremont Colleges, USA
Susan A. Andrzejewski, California State University Channel Islands, USA
Tamar Avnet, Yeshiva University, USA

Paper #2: Apocalypse Now: The Effect of Fear and Time Orientation on Choice Deferral

Andrew Edward White, Arizona State University, USA
Andrea C. Morales, Arizona State University, USA
Patti Williams, Wharton, University of Pennsylvania, USA
Nicole Coleman, University of Pittsburgh, USA

Paper #3: The Different Effects of Benign versus Malicious Envy on Self-Control

Yunhui Huang, Hong Kong University of Science and Technology, China
Jaideep Sengupta, Hong Kong University of Science and Technology, China

Paper #4: The Need to Feel Better

Charlene Y. Chen, Nanyang Business School, Singapore
Michel T. Pham, Columbia Business School, USA

SESSION OVERVIEW

It is well accepted that affect and emotion are among the principal drivers of consumer behavior. Within the body of work that examines these effects, more insight is needed on the impact of affect. Our symposium addresses this need by bringing authors from three continents together to articulate the gap in knowledge around affect and fill this gap with an enriched understanding of fear, envy and affect regulation.

In the first paper, Puccinelli and colleagues present a comprehensive qualitative and quantitative review of the effects of affect, focusing on when affect leads to affect congruent effects and when affect leads to affect incongruent effects. White and colleagues examine fear and find that fear increases choice and reduces deferral. Next, Huang and Sengupta show that benign envy improves self-control compared to malicious envy, because of heightened self-awareness in the former. Finally, Chen and Pham advance a new need to feel better construct with four distinct dimensions and demonstrate its predictive validity with respect to affect regulation.

Together these papers emphasize the important contribution of affect research to our understanding of consumer behavior. Collectively, they underscore the role of relevance in affective experience (Puccinelli et al.). The importance of fear to a situation leads to immediate as opposed to deferred action (White et al.). The relevance of self-awareness on the effects of envy (Huang and Sengupta). And the role of individual differences in the need to feel better (Chen and Pham).

This session includes qualitative and quantitative review and experimental methodologies to examine the impact of affect. The session also considers the influence of affect from several perspectives: Congruence and incongruence (Puccinelli et al.), choice deferral (White et al.), self-control (Huang and Sengupta) and affect regulation (Chen and Pham). As such it is likely to engage audiences both within and beyond the domain of affect and emotion. Each of the pieces of research included represent completed papers con-

sisting of several studies and extensive analyses. Importantly, the session represents a unique opportunity to consider the effects of affect in concert to draw important generalizations about affective phenomena.

As a group all of these papers examine when affect leads to positive and negative effects, exploring in particular how these effects are shaped by attribution and goals.

Two Roads to Affect Effects

EXTENDED ABSTRACT

Imagine a customer walking into a bank. He finds the branch is playing his favorite song and offering free cookies both of which put him in a good mood. However, when a salesperson approaches offering to help him open an account, he is even more critical of the bank's offerings. His goal to assess the account options accurately and not to be influenced by his good mood makes him more critical of the options. This scenario highlights the complex and consequential nature of consumer affect. Given the ubiquity of affect (i.e., mood and emotion) and its tremendous impact on customer behavior, it is critical to understand when positive affect will be advantageous and when it could be detrimental to a favorable consumer response.

The substantial role that affective feelings play in people's judgments and decisions has been the focus of behavioral and marketing research for the past few decades (Bechara et al. 1997; Epstein 1994; Novak and Hoffman 2009; Pham 1998; Pham et al. 2001; Schwarz and Clore 1996). During that period, it has examined the effects of different feelings states and responses (e.g., positive vs. negative moods, pleasant vs. unpleasant feelings) on a variety of judgment related variables (Edell and Burke 1987; Gardner 1985; Kahn and Isen 1993; Luce 1998; Morales and Fitzsimons 2007; Winterich and Haws 2011), it has examined the conditions that promote a greater influence of feelings on judgement (Greifeneder, Bless, and Pham 2011), such as accessibility, diagnosticity (Feldman and Lynch 1988), representativeness and relevancy (Gorn, Goldberg, and Basu 1993; Kim, Park, and Schwarz 2010; Raghunathan, Pham, and Corfman 2006; Siemer and Reizenzein 1998), and it has examined the influence of feelings under different processing abilities, such as distraction (Albarracin and Kumkale 2003; Albarracin and Wyer 2001), time pressure (Pham et al. 2001; Siemer and Reizenzein 1998), or cognitive load (Shiv and Fedorikhin 1999).

Affect And Consumer Response

Given the ubiquity of affect (i.e., mood and emotion) and its tremendous impact on customer behavior (Averill 1983), it is critical to understand when positive affect will be advantageous and when it could be detrimental to a favorable consumer response. Research on the affect-congruence effect suggests that consumers in a positive affective state should evaluate offerings more positively and those in a negative affective state should evaluate offerings more negatively (Forgas 1995; Pham 2009). Several mechanisms have been identified as underlying this effect. At an unconscious level, it is suggested that a priming effect leads affect to bring more affect-related content to mind (Forgas 1995), for example, feelings have been found to be more influential when people are instructed to pay attention to them, which presumably increases their relative accessibility compared to other inputs (Siemer and Reizenzein 1998; White and McFarland 2009). In this case, the influence of feelings is done relatively auto-

matically and without much deliberation, or filtering. As such, consumers just transfer their affective reactions to whatever object is in front of them, similar to the classic halo effect. At a more conscious level, however, it is the perceived diagnosticity of the feelings that is the basis for judgment. The affect-as-information (AAI) effect suggests that individuals use affect as an informative cue and base their favorability or unfavorability of an option on how it makes them feel at the time of judgment (Pham et al. 2001, Schwarz and Clore 1983). However, if consumers find their feelings to not be representative of the target or irrelevant to the judgment at hand (such as in the case of upbeat music in a bank), they might overcorrect for their reactions that in turn will result in a less favorable attitude toward the product – affect incongruence.

Regardless of this vast amount of research on affective feelings, the direct effect of positive or negative affect on consumer behavior is still unclear. Some research suggests that the valence of the feelings will lead to the same valence of the response, hence, positive affect leads to a favorable consumer response, while negative affect leads to an unfavorable response, an effect also known as the affect congruence effect (Brown, Homer, and Inman 1998; Forgas 1995; Greifeneder et al. 2011; Pham 1998; Schwarz and Clore 1983, 1988). Other research, on the other hand, finds that this effect can disappear or even be reversed, also known as the affect incongruence effect (Cavanaugh, Bettman, and Luce 2015; Erber, Wegner, and Theriault 1996; Goldsmith, Cho, and Dhar 2012; Labroo and Mukhopadhyay 2009; Lasaleta, Sedikides, and Vohs 2014; Puccinelli 2006; Puccinelli, Wilcox, and Grewal 2015; Salerno, Laran, and Janiszewski 2014). Hence, hypothetically, a clothing store can play upbeat or somber music, a bank could give away cookies or not, and an advertiser could feature smiling or serious models, without fully being aware of the impact these affective features might have on consumers' attitude and purchase behavior. In other words, how does affect (Griskevicius et al. 2009; Morales, Wu, and Fitzsimons 2012; Pham 1998; Pham, Lee, and Stephen 2012) influence consumers' evaluation and behavior? When can managers expect positive affect to lead to favorable consumer evaluation and behavior? When might this effect be attenuated?

Present Research

Managers launch ad campaigns and develop retail strategies designed to make consumers feel good, where the hope or lay belief is that feeling good will carry over to the brand, products, and store, and lead consumers to evaluate the brand more favorably, buy more product and remain in the store longer. However, in reality, that is not always the case. Our research identifies situations where managers can utilize positive effects of feel-good strategies and situations where there are pitfalls that can lead such a strategy to backfire. In our research, then, there are two possible types of effect: affect congruence and affect incongruence. This paper will qualitatively and quantitatively review the research on affect to identify the principal factors driving affect congruence versus affect incongruence effects.

In addition to the contribution of this paper to the role of affect theory directly, the impact of affect in practical terms is quite substantial since understanding the role of affect has very real implications for managers. Managers can significantly increase the favorability of consumer evaluations toward their brand and purchase intentions toward their products by using informed elicitation of positive affect. The papers that follow will offer a more nuanced understanding of how the specific emotions of fear (White et al.) and envy (Huang and Sengupta) impact behavior.

Apocalypse Now: The Effect of Fear and Time Orientation on Choice Deferral

EXTENDED ABSTRACT

Although researchers have examined how a range of psychological processes can influence consumer choice among sets of alternatives, less is known about the factors that shape choice deferral. Because the decision to choose or defer underlies every consumer decision, the psychology of choice deferral is integral to understanding consumer behavior. In the current investigation, we consider the role of incidental fear in deferral. In doing so, we focus on the functional relationship between fear, time orientation, and situational vigilance. Following on the previous paper (Puccinelli et al.) the current paper exemplifies the counterintuitive notion that a negative affective state (i.e., fear) increases favorable behavior (i.e., choice).

Past research has highlighted the usefulness of considering the functionality of specific emotions—in particular, how emotions help people navigate recurring sets of threats and opportunities (e.g., Griskevicius, Shiota, and Nowlis 2010). As part of a broader self-protection system (Daly and Wilson 2005), fear may uniquely affect choice deferral. Once activated, this system increases vigilance to the current environment, enhances present-focus, and fosters perceptions that the future is risky (Angie, et al. 2011; Davis et al. 2011). When it comes to choice, increasing focus on the present is likely to reduce deferral—a person facing a threat may not be around long enough to choose in the future. Supporting this, people are less likely to defer choice when facing time pressure (Dhar and Nowlis 1999). More generally, because fear enhances vigilance and attention to details of the current situation, people experiencing fear may increasingly value non-threatening aspects of their environment. Thus, fear may lead people to value products that they encounter in their present environment more—regardless of whether they choose them or not.

In five experiments, we examine the impact of fear on choice deferral. In study 1, participants were randomly assigned to read a story designed to elicit fear, disgust, or no emotion. Afterwards, participants made a series of decisions in which they could select among several products in a choice set or “wait to get more information.” Participants made eight such decisions among choice sets that represented a variety of products. In line with the functional perspective, participants in the fear condition were significantly less likely to defer choice than participants in the other conditions ($ps < .03$).

Much previous research has distinguished emotions based upon their underlying appraisal tendencies (Smith and Ellsworth 1985). In study 2 we compared fear to a range of other emotions selected to represent variation along several appraisal dimensions (disgust, sadness, hope, and pride). Participants were exposed to pictures designed to elicit one of these emotions. Then, they completed the same dependent measure from study 1. Participants in the fear condition were less likely to defer choice than participants in any of the other emotion conditions ($p = .002$); none of the other emotion conditions were significantly different from one another ($ps > .3$). Together, studies 1 and 2 support our initial contention that fear reduces choice deferral, and that this tendency is unique to fear, exclusive from other emotions with similar appraisal tendencies.

In study 3, we tested whether the relationship between fear and deferral is mediated by an increased focus on the present. Participants were randomly assigned to view a series of pictures that either elicited fear or no emotion. Next, they completed the dependent variable from the previous studies and a measure of time orientation that assessed present- versus future-focus (Strathman et al. 1994). Participants in the fear condition deferred less than those in the con-

tol condition ($p < .05$) and also became more present-focused ($p < .01$). Importantly, the increased present-focus mediated the relationship between the fear manipulation and deferral (95% CI: .0045, .0343).

In addition to reducing deferral, the functional perspective also would predict that people concerned with fear may value products that they encounter in their present environment more, regardless of whether they choose them. In study 4, we tested this prediction. Rather than giving participants the option to “wait to get more information,” participants in study 4 could opt to defer choice by selecting “none” of the products. If fear is increasing participants’ valuation of products, people primed with fear should elect to choose a product—even when they don’t have to make a choice because they perceive options in the present choice set more favorably than any unknown or future options. Participants were randomly assigned to read one of the three stories from study 1 and completed the modified dependent variable. As predicted, participants in the fear condition were less likely to defer choice than participants in the other conditions ($ps < .05$).

Study 5 used the same independent and dependent variables from study 4. However, after deciding whether to select a product or defer choice, participants also rated how much they liked each product. As in previous studies, participants in the fear condition were less likely to defer ($ps < .05$). Moreover, relative to the other conditions and consistent with the proposed underlying process, participants in the fear condition also rated all of the products that they were presented with more favorably ($ps < .03$)—even those that they did not choose.

Taken together, these findings highlight the role of incidental fear in choice deferral. Specifically, we documented that: (1) fear increases choice and reduces deferral, (2) the link between fear and choice is mediated by (a) negative perceptions of unknown products and (b) positive evaluations of known products, and (4) other discrete emotions do not similarly affect the tendency to defer choice. This work stands in contrast to past research (Luce 1998), which suggested that general negativity could increase deferral. In so doing, we highlight the unique aspects of fear that prompt action in the current situation, compared to a more general view of negative emotions. These results show how a fleeting situational factor, such as briefly activating the emotion of fear, can help marketers increase the likelihood that consumers make a choice and thereby “close the sale.”

The next paper (Huang and Sengupta) will build on this investigation by examining how different types of envy shape self-control.

The Different Effects of Benign versus Malicious Envy on Self-Control

EXTENDED ABSTRACT

Although it is an emotion that is both ubiquitous to consumer settings and a prime motivator of purchase behavior (van de Ven, Zeelenberg, and Pieters 2011; Crusius and Mussweiler 2012), envy – the negative feeling induced by wanting something that another person has (Smith and Kim 2007) – has been surprisingly understudied in our field. Of late, however, consumer scholars have sought to understand this emotion, with one focus being on the distinction between benign envy (which occurs when the envied possession/achievement is deemed to be deserved, e.g., a job promotion based on hard work) and malicious envy (which occurs when the envied possession/achievement is deemed to be undeserved, e.g., a job promotion based on being the boss’s relative; van de Ven, Zeelenberg, and Pieters 2009; Chan and Sengupta 2013). Expanding on the pre-

vious paper (White et al.) the current paper explores how the underlying attribution process for envy shapes its effects on self-control.

This paper extends current understanding on the distinction between benign and malicious envy by examining their impact on consumer decision-making. We propose that benign envy, as compared to malicious envy, heightens people’s self-awareness and therefore benefits subsequent self-control. Benign envy is characterized by greater causal attribution to the self and a motivation to improve oneself, both of which induce a focus on the self and its role in creating and changing the current situation – hallmarks of self-awareness (Duval and Wicklund 1972). In contrast, malicious envy is characterized by a motivation to undermine the envied target, which focuses attention outward on the target and the unfair situation. Further, past work finds that heightened self-awareness promotes a correspondence between people’s behaviors and normative standards (Gibbons 1990; Wicklund and Duval 1972). Assuming that self-control represents a normative ideal for most people, we argue that benign envy (vs. malicious envy) enhances self-control. We tested this and related hypotheses in a series of studies.

Experiment 1a tested our basic premise by having student participants read a neutral scenario, or one that either elicited benign or malicious envy by describing a fellow student in a course as having received an A+ either deservedly or undeservedly. Self-control was then measured by observing their preference between chocolate cake and fruit salad; a preference for the latter indicates greater self-control (Shiv and Fedorikhin 1999). As predicted, envy type influenced self-control ($F(2, 99) = 3.20, p = .045$), such that participants in the benign envy condition reported greater relative preference for the salad (vs. cake; $M = 5.52$) than those in the malicious envy ($M = 4.18; t(99) = 2.07, p = .041$) and control conditions ($M = 4.03; t(99) = 2.13, p = .023$); higher numbers indicate salad preference.

Experiment 1b used a similar procedure but also included a standard measure of self-awareness (Govern and Marsch 2001). Benign envy produced both greater self-awareness ($M = 4.76$) and greater preference for the salad ($M = 6.57$) than malicious envy (Self-awareness: $M = 4.25; F(1, 59) = 4.22, p = .044$; Preference: $M = 5.13; F(1, 59) = 4.26, p = .044$). Importantly, the effect of envy type on self-control was mediated by self-awareness (95% CI: .03 -1.08). Although overall mood was more positive for benign (vs. malicious) envy, controlling for mood did not affect self-control results in any of our studies.

Experiment 2 further examined the role of self-awareness in driving the effect of envy on self-control. We manipulated both envy type (via a job promotion scenario similar to the opening vignette) and self-awareness (via a priming task). If the self-control improvement for benign (vs. malicious) envy is based on improved self-awareness, priming the latter should increase self-control for those experiencing malicious envy, but not for benignly envious people, who are already experiencing high self-awareness. Envy type and self-awareness indeed exerted an interactive effect on self-control ($F(1, 118) = 4.57, p = .035$). Further, preference for salad under malicious envy was greater when self-awareness was primed ($M_{prime} = 5.31, M_{no-prime} = 3.88; t(118) = 1.95, p = .05$). No such effect was obtained in the benign envy condition ($M_{prime} = 4.63, M_{no-prime} = 5.45; t(118) = 1.08, p = .28$). That priming actually seemed to (non-significantly) decrease self-control in this condition might be a manifestation of a contrast effect (Herr, Sherman and Fazio 1983).

Not only does the self-awareness distinction between benign and malicious envy enable a prediction of immediate choice, it also contains implications for sequential decisions (e.g., Mukhopadhyay, Sengupta and Ramanathan 2008). Our final study first presented benignly vs. maliciously envious participants with a scenario

in which they and a friend jointly ordered either an indulgent dessert or a healthy one. We then presented them with the cake-salad choice. We predicted that benignly envious participants would exhibit choice consistency (greater likelihood of choosing salad in the second choice when the first scenario indicated a preference for the healthy dessert than the indulgent one). The rationale was that benign envy increases private self-awareness; it should therefore increase the likelihood that participants attribute the first choice to themselves (vs. the friend; Duval and Wicklund 1972). Further, self-aware participants are likely to infer their own preferences from the choice they just made (Bem 1972); consequently, the next choice is likely to be consistent with the earlier one (Mukhopadhyay et al. 2008). No particular prediction about choice consistency was made for malicious envy. As predicted, the thought of having chosen a healthy (vs. indulgent) dessert earlier led to greater relative preference for salad (vs. cake; $M = 4.45$ vs. $M = 3.13$; $t(142) = 1.94$, $p = .054$) in the benign envy case. In the malicious envy condition, relative preference was not influenced by prior choice ($M_{\text{healthy}} = 3.46$, $M_{\text{indulgent}} = 4.11$; $t(142) = .89$, $p = .37$; 2-way interaction $F(1, 142) = 3.91$, $p = .050$).

Collectively, these results, and others from parallel studies in our lab not described here, contribute to both the envy literature (highlighting hitherto-unexamined effects of feeling benignly versus maliciously envious) and also the self-awareness literature by identifying a new antecedent of increased self-awareness, benign envy. More broadly, this research provides insights into consumer decision-making by showing how envy – a widely-prevalent consumer emotion – can influence decisions in seemingly-unrelated contexts.

The paper that follows moves on from the previous ones in the session by considering individual differences in the goals elicited by an affective state.

The Need to Feel Better

EXTENDED ABSTRACT

In modern societies, consumption in one form or another is often regarded as a major affect-regulatory device (Luomala and Laaksonen, 1999). In advertising campaigns, products and services are often marketed as ways to make consumers “feel better” if they are in a bad mood (e.g., flowers, spas, movies, alcohol, etc.). This phenomenon is widely based on the popular lay-belief that negative mood is unpleasant, and therefore people necessarily strive to repair their negative mood. The previous papers illustrate how a negative affective state does not always lead to affect regulation. Moreover, one can think of instances where people dwell on their negative mood and do nothing to improve it (Andrade and Cohen 2007). For instance, people may seek out melancholic music when they feel sad, or choose to remain miserable when something frustrates them. Our research proposes that people vary considerably in the degree to which they need to feel better when they experience negative feelings. Specifically, it advances current understanding of why certain individuals choose to remain in their negative mood, or even bring on unpleasant emotions, rather than to improve their mood. To this end, we have developed a construct called the “Need to Feel Better” (NFB) which encompasses four distinct facets: 1) behavioral tendency to repair bad moods, 2) aversion to negative feelings, 3) pleasure derived from negative feelings, and 4) tendency to reflect on negative feelings.

Differentiating individuals on their NFB allows us to predict when people are likely to engage in mood repair. Hence, we have developed a scale that includes 16 items which tap into the four different facets of NFB. The scale possesses good internal consistency

($\alpha = .85$), test-retest reliability at two weeks ($r = .68$), and construct validity. Our data shows that females tend to have higher NFB than males ($M_{\text{female}} = 4.52$ vs. $M_{\text{male}} = 4.29$; $t(518) = 4.17$, $p < .001$), and that NFB is positively associated with age ($r = .09$, $p < .05$). NFB is also correlated with the Big Five personality traits (John, Donahue, & Kentle, 1991): it is positively correlated with extraversion ($r = .21$, $p < .01$), agreeableness ($r = .31$, $p < .001$), and conscientiousness ($r = .22$, $p < .01$) but negatively correlated with neuroticism ($r = -.17$, $p < .05$). Furthermore, NFB is associated with more frequent engagement in common mood repair activities such as leisure shopping ($r = .24$, $p < .005$) and exercise ($r = .19$, $p < .05$). Finally, people with NFB report greater life satisfaction ($r = .19$, $p < .05$) and happiness ($r = .26$, $p < .005$).

We conducted three experiments to test the predictive validity of the NFB construct. The first two experiments tested whether high-NFB individuals would be more likely than low-NFB individuals to regulate their affect by choosing positive stimuli when they experience negative (vs. neutral) affect. Both experiments comprised two-parts that were separated by a week. In part 1, participants filled out the NFB scale. In part 2, participants in the negative-affect condition watched a sad video whereas those in the neutral-affect condition watched a documentary on computers. After watching the video, participants answered some questions about the video and their mood. Following that, they were told that they would be evaluating different media items (e.g., recorded music, newspaper articles) and that due to time constraints they could choose which items to review. In Experiment 1, student participants made a choice between two neutral pieces of music (a distractor question), followed by a choice between a happy (“Laughs and Swings”) and a sad (“A Rainy Day”) song (key dependent variable; Cohen and Andrade 2004). High-NFB participants were more likely to choose the happy song when they experienced negative (vs. neutral) affect ($\beta = -.69$, Wald = 4.95, $p = .026$); this difference was non-significant among low-NFB participants ($\beta = .21$, Wald = .65, $p = .419$). In Experiment 2, Mechanical Turk participants were presented with six different pair-wise choices of news article headlines: three were distractor choices, and the other three included a positive and a negative option. The key dependent variable was the number of positive options participants chose among these three choices. High-NFB participants chose more positive options to repair their negative affect ($\beta = -.35$, $t(156) = -3.28$, $p = .001$); this difference was non-significant among low-NFB participants ($\beta = .02$, $t(156) = .14$, $p = .885$).

To provide further evidence for the predictive validity of our construct, we investigated whether high-NFB (vs. low-NFB) individuals would display more favorable attitudes towards products with mood-lifting benefits independent of their existing affect. We measured Mechanical Turk participants’ NFB scores in part 1. After a week, in part 2, we showed them an advertisement for a vitamin C health supplement that either highlighted its mood-lifting benefits or not. After viewing the ad, participants were asked to indicate their interest in buying the product. Results showed that high-NFB participants indicated greater interest when the mood-lifting appeal was present versus absent ($\beta = .55$, $t(146) = 2.86$, $p = .005$), but the same difference was non-significant among low-NFB participants ($\beta = .11$, $t(146) = .55$, $p = .582$). These results suggest that NFB predicts how attracted people are towards mood-lifting appeals in marketing.

Our research proposes a new construct called the “Need to Feel Better,” and provides evidence of individual differences on this motivational construct. It challenges the assumption that people have a universal tendency to want to feel better, and that people necessarily engage in affect-regulation when they feel bad. It enhances our understanding of why certain individuals choose not to regulate their

negative affect and also allows us to decipher when people would behave in a mood-congruent versus mood-incongruent way (Cohen and Andrade 2004). Our research has implications for the marketing of “feel-good” products (e.g., aromatherapy and vacation packages) and the use of mood repair appeals (e.g., Volkswagen’s “Get Happy” campaign). Marketing strategies that incorporate such appeals should be targeted at consumer segments that tend to have higher NFB. Finally, our research also has implications for consumer satisfaction with product consumption, and more broadly, consumer welfare. Finally this paper offers a conclusion to the session as it moves beyond the impact of affect to the ways in which goals may or may not shape the influence of affect on behavior.

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Never Out of Touch: New Insights from the World of Haptic Engagement

Chairs: Rhonda Hadi, University of Oxford, UK

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Paper #1: Grip not to Slip: How Haptic Roughness Leads to Psychological Ownership

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Joann Peck, University of Wisconsin - Madison, USA
Robin Tanner, University of Wisconsin - Madison, USA
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Paper #2: Good Vibrations: Consumer Responses to Technologically-Mediated Social Touch

Rhonda Hadi, University of Oxford, UK
Ana Valenzuela, Baruch College, CUNY, USA and ESADE Business School, Spain

Paper #3: Multisensory Integration of Touch and Vision During Product Evaluation and Choice

Mathias Streicher, Innsbruck University, Austria
Zachary Estes, Bocconi University, Italy

Paper #4: It Feels Softer Than It Looked: Contrast-Priming Effects of Touch-Screen Users in Multi-Channel Shopping

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Amitav Chakravarti, London School of Economics & Political Science, UK
Rami Zwick, University of California Riverside, USA

SESSION OVERVIEW

Research has demonstrated the fundamental role haptics play in shaping consumer outcomes (Holbrook 1983, Peck and Childers 2003). For example, studies have documented the influence of “mere touch” on product evaluations (Peck and Shu 2009) and the effect of haptic sensations on taste perceptions (Krishna and Morrin 2008). As a consequence, tactile considerations are becoming increasingly important in product design (Vanhemert 2015). However, haptic sensations vary in their characteristics and can be delivered through various different mediums. This suggests that the consequences of haptic engagement are by no means obvious in nature, and there are many complex mechanisms through which touch might exert its effects on consumer responses.

Our session advances research on haptics and consumer behavior by providing a nuanced understanding of how, when and why haptic cues might impact consumer responses. Across four papers, we document surprising responses to haptic cues in a wide range of behavioral contexts: in-store shopping, online browsing, and interpersonal communications. The papers examine various features of tactile cues, including texture (e.g. soft vs. rough), shape (e.g. round vs angular) and vibrotactile feedback (delivered electronically); and demonstrate that these haptic sensations can influence appraisals of the touched stimulus itself (in papers 1 and 4), but also impact incidental judgements (in papers 2 and 3). Accordingly, while each paper individually documents the importance of touch in a different consumer context, collectively the session demonstrates that the antecedents, behavioral outcomes and situational applications of haptic engagement can vary greatly.

In the first paper, Ruan, Peck, Tanner and Wang demonstrate that because rough (vs. smooth) objects are easier to grip, haptic roughness increases feelings of control, and accordingly leads to greater psychological ownership and prolonged interactions. In the second paper, Hadi and Valenzuela find that vibrotactile sensations

(delivered through mobile phones and wearables) can represent technologically-mediated social touch, and ultimately influence both performance and certain incidental judgments (e.g. sender attributions). Streicher and Estes explore how haptic exposure to an object can facilitate visual processing and choice of other seen products. Finally, Chung, Chakravarti, and Zwick examine how online product research via different interfaces (e.g. desktops vs. tablets) can subsequently influence haptic judgements offline. All of these papers are in advanced stages of completion, with multiple studies run.

Importantly, these papers highlight that there are many different processes through which haptic cues might impact consumer responses. We accordingly draw upon various theoretical frameworks to explain the behavioral outcomes: psychological ownership (Ruan, et al.), mediated social touch (Hadi and Valenzuela), crossmodal fluency (Streicher and Estes), and contrast-priming (Chung et al.). By focusing on the underlying processes, we address calls to more critically examine the mechanisms through which sensory cues exert their effects (Krishna 2012). The progressive approaches and novel results are sure to induce a lively discussion, and are likely to appeal not only to haptic/sensory researchers but to a broader audience interested in product design, multi-channel retail, and consumer-technology interaction.

Grip not to Slip: How Haptic Roughness Leads to Psychological Ownership

EXTENDED ABSTRACT

In a series of studies, we found that haptic roughness leads to a greater perception of psychological ownership, and longer interactions, compared to smoothness. We conjecture that this is because rougher objects are easier to grip leading to more control, an antecedent of psychological ownership.

As one of the most important sensations, touch is prevalent in consumers' interactions with products. We touch a mouse when using computers; we touch its cover and screen when using a cell phone; we touch money or credit cards when consuming. It has also been well established by previous research that haptic sensation plays an important role in consumers' decisions and evaluations of products (e.g., Holbrook 1983; Peck and Childers 2003). However, in the domain of marketing and consumer behavior, most prior research on touch focuses on the individual aspect (e.g., Citrin et al. 2003; Martin 2012; Webb and Peck 2015), the comparison between the presence and absence of touch (e.g., Grohmann, Spangenberg and Sprott 2007; Peck and Shu 2009) and the valence of touch (e.g., Peck and Wiggins 2006). Limited research has explored the effect of different tactile attributes of products and the influence they may have on consumers.

In this research, we investigate the effect of haptic roughness on psychological ownership. We hypothesize that haptic roughness, compared to smoothness, would increase people's physical control over the product being touched, which would, in turn, lead to greater psychological ownership (Furby 1980; Pierce, Kostova and Dirks 2003). We next report three studies in which we find empirical evidence supporting our hypothesis.

In Study 1, we selected two sports bottles as stimuli, one of which has a textured surface and the other of which has a smooth surface, with all other attributes being the same. Participants were

randomly given one of the two sports bottles and were told that they had three minutes to evaluate the bottle, after which they filled out a questionnaire asking their evaluations of the bottle including the measure of psychological ownership. Three items measuring psychological ownership—"I feel like this is my bottle," "I feel a very high degree of personal ownership of the bottle," and "I feel like I own this bottle"—each on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) ($\alpha = .83$), were embedded in the questionnaire. We also included the valence of touch, the weight of the bottle, the appearance of the bottle, and how easy it was to hold. The results supported our main hypothesis that participants had greater psychological ownership towards the sports bottle with a textured surface than the one with a smooth surface ($M_s = 3.44$ vs. 2.57 ; $F(1, 50) = 6.61$, $p < .05$), with no significant differences on all other attributes of the bottle (all $p_s > .10$). We expected a difference in terms of the easiness to hold each bottle, as it was an indicator of physical control. Yet the results only showed the expected pattern, but with the difference being non-significant ($M_s = 4.04$ vs. 3.71 , $F(1, 50) = .50$, $p > .10$). We suspect it was because the single item did not reflect all aspects of physical control and thus was not a good measure.

Study 2 sought to replicate and extend the findings of Study 1 using a behavioral measure. Specifically, we asked participants to view and evaluate commercial posters on the computer. They were required to view at least six ads. After six ads, they could continue to view more ads or stop at any time as they wished, as we told them in the instructions: "If you are enjoying the task, continue to view ads. If you are not enjoying the task, feel free to stop at any time after the first six ads." Participants were randomly assigned to one of the two conditions, which differed only in the computer mouse used. In one condition, we used a normal mouse with its surface being relatively smooth, whereas in the other condition, we used the same mouse but made its surface rough. Consistent with our hypothesis, compared to the smooth mouse, participants using the rough mouse viewed and evaluated more posters ($M_s = 21.77$ vs. 15.29 ; $F(1, 146) = 5.27$, $p < .05$), and felt that they had more control over the mouse ($M_s = 5.87$ vs. 5.29 ; $F(1, 146) = 6.17$, $p < .05$). However, we failed to find that control mediated the effect of roughness on the number of posters viewed.

Both Study 1 and Study 2 involved real touch. According to Peck, Barger and Webb (2013), however, even haptic imagery would increase perceived ownership. Therefore, we wanted to explore, in Study 3, whether the effect of haptic roughness would still hold when touch is imagined. In specific, participants were presented with a poster of a mug and were then asked to imagine they were holding and playing with the mug with their hands for approximately 30 seconds. At the end of study, participants indicated their perceived ownership toward the mug ($\alpha = .88$). The only manipulation was the verbal description on the poster: we described the mug as textured in the textured condition and smooth in the smooth condition. Consistent with our hypothesis, the results revealed a significant positive effect of haptic roughness on perceived ownership ($M_s = 4.21$ vs. 3.17 ; $F(1, 42) = 5.82$, $p < .05$).

In Study 1, participants felt more ownership of the textured bottle compared to the smoother bottle. We expected this to be due to the increased physical control, an antecedent of ownership. However, this did not reach statistical significance. Study 2 revealed that using a rough mouse (compared to a smooth one) affords more control and participants viewed more ads when using the rough mouse. However, control did not mediate the relationship between texture and ownership as expected. In the final study haptic roughness increased ownership feelings, even when participants were not actually touching, but imagining touch. From our research, we conclude that a tex-

ured surface, compared to a smoother surface, encourages longer interaction and more ownership. However, while control may be increased with a textured surface, this may not be the only mechanism through which texture leads to more ownership. Further research is required to delve more deeply into the process by which this occurs.

Good Vibrations: Consumer Responses to Technologically-Mediated Social Touch

EXTENDED ABSTRACT

Device notifications are often administered with vibrotactile sensations (e.g. on mobile phones, wearables), yet little research has examined the psychological and behavioral implications of this haptic feedback. We explore how vibrotactile alerts can represent technologically-mediated social touch, and ultimately influence both performance and certain incidental judgments (e.g. sender attributions).

While gadget designers have traditionally focused on visual and auditory functions of user interfaces, increasing attention has turned to haptic considerations in technological product design (Vanhemert 2015). Vibration is by far the most widely used haptic feedback mechanism in small devices (e.g. mobile phones and wearables), because the technology is compact and relatively low in power usage (Bark et al. 2008). Yet despite the widespread use of vibrotactile feedback, surprisingly little research has examined consumers' psychological and behavioral responses to it. Some work has documented the attentional and efficiency-based benefits of vibrotactile feedback (e.g. vibrotactile warnings improve reaction times of fighter pilots, Sklar and Sarter 1999). However, in everyday consumer product applications, vibrotactile stimulation is often accompanied by a message, call notification, reminder, or other communications content. We suggest that in addition to performing the utilitarian function of alerting consumers, these vibrotactile sensations may also carry conceptual importance. Specifically, we propose that telecommunication content accompanied by a haptic alert might be perceived differently than the same content accompanied by alerts in alternative modalities (e.g. auditory). This hypothesized distinction is supported by research that suggests our sense of touch operates differently than other modalities, in that it represents our "most proximal" sense (Montagu and Matson 1979). That is, in contrast to visual, auditory, and olfactory cues, which might be perceived while a stimulus is at a distance, haptic cues typically require the stimulus to contact one's body (Jones and Lederman 2006, Peck 2010). This characteristic is especially important in a telecommunications context, where interpersonal correspondence transpires over a distance. We argue that because haptic sensations are so uniquely associated with immediate proximity and contact, telecommunications accompanied by haptic sensations should help make the exchange feel more personal and human-like.

Scholars in computer science indeed suggest that vibrotactile feedback technology can allow consumers the ability to "touch" each other in the distance, and have deemed this a form "mediated social touch," in that it allows users to convey and receive haptic information through technology (Haans and Ijsselstein 2006). This conceptualization implies that in certain instances, vibrotactile feedback may essentially function as a surrogate for interpersonal touch. Interpersonal touch itself has been shown to evoke a sense of closeness and human connection, and effectively influence people's social behavior (e.g. increasing compliance with requests, improving attitudes towards services, and strengthening bonds between people; see Gallace and Spence 2010 for a review), regardless of whether or not the tactile contact itself is remembered explicitly. In the cur-

rent research, we argue that just as interpersonal touch can improve consumer responses, so can technologically-mediated social touch.

We hypothesize that vibrating alerts will lead consumers to perceive communications as more personal, and this technologically-mediated social touch should ultimately improve individuals' evaluation of the interaction and their performance on related tasks. Three laboratory studies provide support for our hypothesizing. In study 1, participants ($N=60$) received mobile phones set to either beep or vibrate upon receiving text messages. Participants received a series of text messages intended to provide encouragement (e.g. "You're doing great! Keep it up,") while attempting a physical challenge (balancing on one leg for 5 minutes). Binary logistic regression confirmed a significant main effect of message alert on performance ($\chi^2=4.29, p<.04$), in that participants in the vibrotactile alert condition were more likely to successfully remain on one leg for the duration of the challenge than those in the auditory alert condition.

In study 2 ($N=86$), we explored the impact of vibrotactile alerts in a different product category (smartwatches) and a different task (a "steps challenge," where participants marched to get as many steps as possible in five minutes). Participants again received a series of encouraging text messages. Messages were accompanied by one of three alerts: auditory vs. vibrotactile vs. auditory+vibrotactile. Adding the third condition allowed us to test whether Study 1 effects were driven by the inclusion of vibrotactile sensation or by the absence of auditory cues. Pedometers on participants' smartwatches recorded the number of steps achieved, and ANOVA results confirmed a significant main effect of message alert on the steps achieved by participants ($p <.02$). Planned contrasts demonstrated that while there was no difference in performance between the vibrotactile vs. auditory+vibrotactile conditions, subjects in both these conditions outperformed those in the auditory condition, suggesting that improved performance was driven by the inclusion of a vibrotactile cue.

Study 3 ($N=56$) was similar to study 2, but in addition to measuring performance, we collected several potential process measures: sender attribution ("Who do you think was sending the text messages?") rated on by whether attribution was to an automated system/machine or a human source), message evaluation (e.g. "The text messages were nice,"), and self-reported arousal. Further, we measured overall technological competence as a potential moderator, since previous research suggests low competence should exaggerate the value of haptic feedback. ANOVA results confirmed a significant positive effect of vibrotactile alerts on the number of steps participants performed ($p<.02$). While there was a marginal effect of vibrotactile alerts on arousal ($p<.07$), this did not mediate the effect on performance, and the impact of vibrotactile alerts on performance was still significant when controlling for arousal ($p<.04$). We used a sequential mediated moderation model to examine the mechanism through which a message alert x technological competence interaction might influence task performance. The sequential mediation analysis (Hayes 2013, model 6) supported our hypothesized path: Message Alert x Technological Competence interaction \rightarrow Sender Attribution \rightarrow Evaluation of Messages \rightarrow Task Performance (95% CI excluding zero). This suggests that especially for those low in technological competence, the positive effect of the vibrotactile alert on task performance was due to increased human attribution and evaluation of the communication respectively.

In sum, our studies support that vibrating alerts lead consumers to perceive communications as more human-like. This technologically-mediated social touch improves individuals' evaluation of the interaction, contingent on their level technological competence, and, subsequently, their performance on related tasks. These findings

have important implications for consumer compliance in multiple domains such as health or physical performance training.

Multisensory Integration of Touch and Vision During Product Evaluation and Choice

EXTENDED ABSTRACT

Touching a product affects evaluation of that product. Here we demonstrate for the first time that grasping one product increases choice of another haptically similar product, and that this effect is mediated by visual fluency and moderated by the visual density of the product display.

Touching a product affects perception and evaluation of that product (Grohmann et al., 2007; Krishna, 2006; Peck & Childers, 2003; Streicher & Estes, 2015). Shape perceptions from touch activate a corresponding shape representation in the visual cortex (Masson et al., 2015; Snow et al., 2014), and hence haptic exposure to a familiar object facilitates visual recognition of that object (Reales & Ballasteros, 1999; Pesquita et al., 2013). Can haptic exposure to an object facilitate visual processing and choice of *other* seen products of the same shape and size? This would be important because consumers often visually evaluate products while grasping some other object (e.g., another product, a cell phone, etc.).

Grasping a Red Bull slim can should increase the *visual fluency* of other slim cans, because the haptic exposure activates a visual shape representation, which then visually primes recognition of objects with that shape. And given that fluency improves product evaluations (e.g., Janiszewski & Meyvis, 2001; Lee & Labroo, 2004), we predicted that grasping a product increases choice of another product that is haptically similar but spatially distant (H_1), and that this effect is mediated by visual fluency (H_2).

As visual perception becomes less reliable (e.g., blurred), haptic perception assumes a greater role in object recognition (Ernst & Banks, 2002; Pesquita et al., 2013). One marketing factor that may influence the reliability of visual information is the density of the product display: Relative to sparse displays, crowded displays reduce the visual focus on any given product. We therefore predicted that the effect of haptic exposure on product choice is larger among crowded product arrays than among sparse arrays (H_3).

Study 1 tested H_1 and H_2 . Participants ($N = 140$ students) extended their right arm directly out to the right while viewing a computer display straight ahead. Some participants had a 0.5-litre plastic bottle or 0.33-litre aluminum can of Fanta placed into their hand (*visuo-haptic* group), whereas others viewed the display without grasping anything (*visual-only* group). Simultaneously with placement of the product in the hand (or not), original-size images of a Fanta bottle and can appeared on the computer display straight ahead. Because the right arm was extended laterally while the gaze was directed ahead, participants were unable to see the haptic stimulus. The haptic stimulus was always the container appearing on the right position of the display. Participants rated the visual fluency of both products (adapted from Labroo et al., 2008), and chose one of them to have as reward for participating.

A product (left, right) \times group (visual-only, visuo-haptic) ANOVA on visual fluency ratings indicated an interaction, $F(1, 138) = 4.57, p < .05$: Whereas the left product was equally fluent across groups, $p > .3$, the right product was more visually fluent in the visuo-haptic group than in the visual-only group, $t(138) = 2.33, p < .05$. The right product was also chosen significantly more often among the visuo-haptic group (60.0%) than among the visual-only group (42.9%), $\chi^2(1) = 4.12, p < .05$, thus supporting H_1 . Visual

fluency ratings mediated that effect of haptic exposure on product choice (95% *CI* of indirect effect = .0848–2.622), supporting H_2 .

Study 2 tested H_3 . Participants ($N = 205$) stood with their eyes closed and extended their right arm backward. An experimenter placed one of three chocolates (i.e., 50-gram bar, a 60-gram square, or an egg) in the participant's hand, and participants then viewed a product arrangement on a table. The *sparse display* group saw one chocolate bar and one chocolate square on the table, whereas the *crowded display* group saw 18 replicates of each. In the *haptic match* condition, participants grasped either the chocolate bar or the chocolate square, whichever was presented on the right of the display. In the *haptic mismatch* condition, participants grasped the chocolate egg. An experimenter then removed the haptic stimulus and product arrangement, and participants chose one of the previously seen products as reward for participating.

A logistic regression with haptic exposure (mismatch = 0, match = 1), visual density (sparse = 0, crowded = 1), and their interaction as predictors, and with product choice (left = 0, right = 1) as the criterion, revealed a main effect of haptic match, *Wald* $\chi^2 = 4.15, p < .05$. Participants were more likely to choose the product on the right of the display while grasping something of the same shape than while grasping something of a different shape. The interaction was also significant, $\chi^2 = 5.73, p < .05$, revealing a stronger haptic effect with crowded displays ($\chi^2 = 9.99, p < .01$) than with sparse displays ($\chi^2 = 3.52, p = .06$). In sum, grasping one product increased choice of another haptically similar product, especially with crowded visual displays, thus supporting H_3 .

Discussion. Prior studies had shown that grasping a product can affect consumer behaviors toward that grasped product (e.g., Grohmann et al., 2007; Peck & Childers, 2003; Streicher & Estes, 2015), and neuroscientists speculated that haptic exposure to one object may facilitate visual processing of another object (Gepstein et al., 2005). The present research provides the first evidence that grasping one product can affect the visual processing and choice of another product that is haptically similar but spatially distant. Moreover, our experiments controlled both conceptual fluency (because the product choices were always of the same brand and product) and motor fluency (because the haptic matches and mismatches entailed the same body posture and motor action) while targeting a specific perceptual modality (i.e., vision), thus isolating the processing mechanism to visual fluency. Another novel contribution is to demonstrate the compensatory relationship between vision and touch in product evaluation. When visual information is somehow degraded (e.g., by decreasing clarity), then haptic information assumes a greater role in object recognition (Ernst & Banks, 2002; Pesquita et al., 2013). Consequently, we showed for the first time that the effect of touch on product choice is accentuated by crowded product displays, which may overload the visual system and hence increase reliance on haptic information.

It Feels Softer Than It Looked: Contrast-Priming Effects of Touch-Screen Users in Multi-Channel Shopping

EXTENDED ABSTRACT

In multi-channel retailing, very little research has examined the impacts of webrooming (researching product options online) on subsequent offline retail experiences. In this study, we examined (1) whether webroomers evaluate physical products differently from single-channel shoppers and (2) whether computer device types moderate webroomers' product evaluations.

Before purchasing a product, consumers often compare product options in multiple retail channels by switching between on-

line stores and brick and mortar stores. One of these multi-channel phenomena is called *webrooming*, which involves extensive online product comparisons followed by visits to a brick and mortar store (Stilson, 2014). In 2014, about 88% of consumers said that they webroomed, in that they regularly researched products online before purchasing from a physical store (Interactions, 2014). In this paper, we examined whether webrooming influenced consumers' final product evaluations and how the evaluations differed by computer device type.

Research has found that repeated exposure to a trait activates the meaning of the trait, and the meaning further primes or activates closely associated trait categories (Higgins, Rholes, & Jones, 1977). This assimilation/contrast effects are visible in retail environments. Consumers tend to make judgments that either assimilate or contrast to the primed trait of a salesperson (Stafford, Leigh, & Martin, 1995). When primed to a positive brand, consumers evaluate other brands negatively (Levin, 2002). When primed to price, consumers choose a more affordable product considering price over quality (Mandel & Johnson, 2002). It is likely that webroomers encounter similar priming experiences because they browse multiple products with similar properties. For example, when they view multiple blankets, they are repeatedly exposed to the softness of blankets. However, very little research has examined the impacts of extensive online browsing on subsequent offline retail experiences even though webrooming has been one of the common shopping trends for the last few years. In this study, we examined (1) whether multi-channel shoppers (webroomers) evaluate physical products differently from single-channel shoppers and (2) whether computer device types moderate the impacts of webrooming on product evaluations.

Experiment 1

We used a 2 (objects: soft vs. firm) x 2 (devices: touch interface vs. mouse) between-subjects design. Participants were randomly assigned to four different conditions, which differed by the type of object and device. Eighty university students participated in the experiment.

We conducted the experiment in a behavioral research lab. The touch-interface conditions used a tablet PC, and the mouse conditions used a desktop computer with a mouse, a keyboard, and a desktop monitor. In each device condition, twenty browsed soft objects only while the other 20 interacted only with firm object. After viewing similar *firm* products online, participants evaluated a physical target object as being *softer* than those who had been primed to softness. After viewing *soft* products, they evaluated the same target as being *firmer* than those exposed to firmness. However, this effect was statistically significant among mouse users only ($p < .001$), and the device type did not differ from each other ($p > .05$).

Experiment 2

To compare product evaluations between multi-channel and single channel shoppers, we added a single channel condition to the previous design, using 2 (objects: soft vs. firm) x 3 (channels: touch interface vs. mouse vs. no device) between-subjects design. The no-device condition (single channel) did not have online sessions prior to examining a set of physical products while the two other conditions (multi-channel) browsed either soft or firm products online using either a touch interface or a mouse. We conducted this experiment in the same lab where we conducted the first experiment, and 213 university students participated.

We found a significant interaction effect between channels and products on product texture evaluations ($F(2, 207) = 33.66, p < .001$). Both multi-channel conditions (touch interface and mouse)

evaluated the same products they saw online as being firmer than the single channel condition, indicating significant contrasting effects. In the soft-object conditions, touch-interface users (vs. mouse) evaluated the same products as being firmer ($p < .03$), but the device effect was not significant in the firm conditions ($p = .12$). Attitudes toward the same physical products were more positive in the single-channel conditions than in the multi-channel conditions ($F(2, 207) = 10.63, p < .001$), and this difference was significant in the soft-object conditions only.

Overall, the findings of this study contribute to marketing research and practitioners in several ways. First, our study is one of the first studies on webrooming behavior and fills the gap in the multi-channel retail literature. Second, this study provides strong evidence that webrooming behavior affects consumers' product evaluations at brick and mortar stores. Third, this evidence suggests that practitioners should better capture an integrated analysis of their customers' activities in both online and offline channels in order to reduce the gap between webroomers and single-channel shoppers. Lastly, the findings highlight the role of computer input devices in multi-channel shopping experiences and suggest that consumers are more likely to find the texture of physical products different from what they see online if they use a touch interface (vs. mouse).

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Not Your Mother's Celebrity Endorsement: Novel Pathways of Celebrity Influence

Chairs: Lea Dunn, University of Washington, USA
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Paper #1: Consumers with Stars in their Eyes: The Influence of Celebrity Product Placement on Brand Perceptions and Behaviors

Adriana Samper, Arizona State University, USA
Freeman Wu, Arizona State University, USA
Daniele Mathras, Northeastern University, USA
Andrea Morales, Arizona State University, USA

Paper #2: Social Media and Celebrity Endorsement: How Social Connections can Impact Endorsement Effectiveness

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JoAndrea Hoegg, University of British Columbia, Canada
Abhishek Borah, University of Washington, USA

Paper #3: When Celebrity Ad Placements Backfire

Claudiu Dimofte, San Diego State, USA
Negin Latifi Kasani, ESSEC Business School, France

Paper #4: Peripheral Endorsement: How Perceptual Congruence with Celebrities Can Benefit Brands

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Andrew Kuo, Louisiana State University, USA
Rebecca Rast, Louisiana State University, USA

SESSION OVERVIEW

Celebrities are featured in 20% of all advertisements (Solomon 2009). This form of influence significantly affects brands featuring celebrities (Feldman 2007). Interestingly, close to half of the ads aired during the 2016 Super Bowl featured celebrities, presumably because research finds that celebrities have a direct influence on brand stock (Agarwal and Kamakura 1995). However, as the forms of media that consumers use evolve, so might the ways in which consumers perceive and interact with celebrities. For example, with the propagation of social media, seeing celebrities living their "real lives" is increasingly common. In addition, the proliferation of celebrity endorsements has led to increased attention to the fact that celebrities are being paid by companies and may not truly believe in the brand. These changes to the marketing environment may, in turn, have implications for the effectiveness of traditional celebrity endorsement. Given the billions of dollars spent on celebrity endorsements, the continued examination of celebrity influence and endorsement effectiveness is of keen interest to marketers.

Unlike previous endorsement research, we explore novel pathways of celebrity influence and examine how new media and placement types impact celebrity endorsement. In the first paper, Samper, Wu, Mathras and Morales consider how brands can take advantage of the increased visibility of celebrities' real lives by examining the effect of "celebrity product placement" relative to more traditional forms of celebrity endorsement. The results reveal that celebrity product placement is more effective than celebrity endorsement in improving brand attitudes and purchase likelihood. This effect is driven by increased celebrity trustworthiness and perceptions that the celebrity sincerely likes the brand.

In the second paper, Dunn, Hoegg and Borah examine how certain forms of social media alter the nature of consumer-celebrity interactions, impacting the effectiveness of celebrity endorsement. This paper finds that social media platforms which feature conversational design (e.g., Twitter) imply direct celebrity-consumer communication and enhance consumers' perceptions of their similarity to and connection with the celebrity. This connection has positive outcomes

for celebrity endorsement, including decreasing reliance on product-celebrity match and increasing positive response to negative publicity.

The third paper examines another novel form of celebrity endorsement practice wherein ads featuring celebrities are placed within media content featuring the same celebrity. Dimofte finds that while this strategy has a positive effect on attention and recall, attitudes require a celebrity-product match and must appear during current media content. This effect is driven by the consumer's motivation to process the celebrity.

Finally, the fourth paper discusses how the proliferation of celebrity endorsements raises consumers' persuasion knowledge. Rice and Kuo explore a unique avenue through which celebrity endorsements can persuade consumers through the peripheral route - perceptual congruence (e.g., perceptual overlap with brand features).

Overall this session questions several issues with regards to the effectiveness of traditional celebrity endorsement practice in today's marketplace and demonstrates how newer forms of media have the potential to change the nature of celebrity influence. Overall we expect this session to be of interest to researchers studying celebrity endorsement, product placement, and digital marketing.

Consumers with Stars in their Eyes: The Influence of Celebrity Product Placement on Brand Perceptions and Behaviors

EXTENDED ABSTRACT

The promotion of a product or brand through candid use by celebrities, also known as "celebrity product placement," is becoming an increasingly popular strategy to garner mass media exposure (Ashbrook 2011). For example, the success of popular brands such as UGG has been attributed to candid photos of celebrities wearing the sheepskin boots in their daily lives (Jones 2007). These photos are highly desired by consumers and entertainment news magazines alike, and if a brand is pictured being used by a celebrity, it can serve as a valuable marketing tool. Accordingly, "celebrity gifting," or the practice of sending celebrities free products in hopes that they will be photographed using them, has grown in recent years (Blackall 2010). While researchers have documented the effects of traditional product placement in television and film (e.g., Russell 2002, Wiles and Danielova 2009), attention to celebrity product placement (CPP) in the academic literature is scant at best. In the present research, we examine the effectiveness and underlying driver of this underexplored marketing strategy compared to typical celebrity advertisements in improving brand attitudes and purchase likelihood.

Unlike celebrity endorsements, ads or traditional product placement, consumers are much less savvy to the influence of CPP. Indeed, a pretest of 124 MTurk participants confirmed that 65% felt that the products depicted in paparazzi photos were ones celebrities purchased themselves (vs. were given to them for free). This lack of awareness allows CPP to capitalize on the positive associations imbued by the celebrity to the focal product (McCracken 1989) while operating outside the realm of persuasion knowledge. Because of the ostensibly candid nature of CPP, we propose that it increases beliefs that the celebrity sincerely likes the brand being used. This notion is consistent with the correspondence bias, which states that when people observe a behavior, such as a celebrity using a product in a paparazzi photo, they are inclined to believe that the behavior

corresponds with the individual's genuine disposition (Gilbert and Malone 1995); that is, the depicted celebrity's true interest in the product. Because consumers imbue the products that celebrities use and like with positive meaning (McCracken 1986), CPP use should increase brand favorability and purchase intentions.

Study 1 provides initial evidence that CPP is more effective at increasing brand attitudes than a celebrity advertisement. Participants ($N=190$) were randomly assigned to one of two conditions: celebrity advertisement versus CPP. All participants saw the same image of Ryan Gosling with a brief description of how he drinks Bucks County Coffee (the focal brand). However, the ad condition displayed the "Bucks County Coffee" logo while the CPP condition displayed the word, "Stargazing" (implying a candid photo). Participants viewed the images, completed filler measures, and indicated how positively they viewed Bucks coffee. They also completed measures of Gosling's perceived interest in Bucks. Results revealed that participants rated Bucks (but not other coffee brands) more favorably in the CPP ($M=4.06$) versus ad condition ($M=3.72$; $p<.03$). Further, participants believed Gosling was more sincerely interested in Bucks in the CPP ($M=4.92$) versus ad condition ($M=3.83$; $p<.0001$). A serial bootstrapping mediation analysis supported our predicted pathway whereby CPP vs. Ad \rightarrow Celebrity Interest in the Brand \rightarrow Brand Ratings ($B=.20$; 95% CI=.03, .40).

In Study 2, we replicate these findings with celebrity Jessica Alba and the 'nau' clothing brand. As in Study 1, CPP vs. endorsement increased brand ratings, which were driven by increases in perceptions that Alba sincerely liked the brand. The same mediation pathway was significant.

In Study 3, we investigate a boundary conditions. Specifically, we manipulate trustworthiness to mitigate this effect. We reasoned that if participants did not trust the celebrity, then the celebrity's sincerity of interest would no longer be predictive of brand interest. Participants ($N=150$) were randomly assigned to a 2 (image type: CPP vs. ad) \times 2 (trustworthiness: low vs. high) between-subjects design. Participants first read a short magazine article. In the low trustworthiness conditions, this article stated that Alba's own 'Honest' natural goods line (an unrelated brand) involved questionable business practices. In the high trustworthiness condition, the article described the noble goals behind Alba's 'Honest' brand. In an ostensibly unrelated study, participants were presented with a CPP or ad image of Jessica Alba wearing 'nau' clothing. After completing filler questions, participants rated how positively they viewed the 'nau' brand along with 9 other filler brands. A 2 \times 2 ANOVA revealed a significant image type \times trustworthiness interaction for nau ($p=.01$) but not for the other brands. Whereas in the high trustworthiness condition, CPP ($M=4.83$) increased evaluations of nau relative to the ad ($M=4.22$; $p=.01$), in the low trustworthiness condition, there was no such difference ($p>.75$), revealing that suppressing perceived trustworthiness can attenuate the benefits of CPP.

In Study 4, we further explore our underlying process by manipulating our mediator, the perceived sincerity of the celebrity's interest in the brand, with a new celebrity and product. Participants ($N=246$) were randomly assigned to a 2 (image type: ad vs. CPP) \times 2 (sincerity of interest manipulation: article vs. control) between-subjects study. To manipulate sincerity of interest, half of the participants read a magazine article describing how celebrity paparazzi shots, though seemingly candid, are typically staged. The other half did not read an article. Next, all participants viewed either an ad or CPP image with Jennifer Lawrence wearing MiH jeans, a new luxury brand. Participants rated their likelihood of making a purchase from MiH along with 9 other filler brands. A 2 \times 2 ANOVA on purchase likelihood revealed a significant image type \times sincerity of interest interaction for MiH jeans ($F(1, 242) = 4.36, p < .04$) but for not the

other brands. Whereas participants in the control condition indicated greater intentions to purchase from MiH in the CPP ($M=2.70$) versus ad condition ($M=1.86$; $p=.001$), no such difference emerged for those who were led to believe celebrity interest was insincere ($p>.60$).

In sum, four studies reveal that celebrity product placement is indeed more effective than traditional advertisements and mediated by perceived celebrity interest in the brand.

Social Media and Celebrity Endorsement: How Social Connections can Impact Endorsement Effectiveness

EXTENDED ABSTRACT

Celebrity endorsement has been employed as a marketing strategy for over 150 years and makes up 20-25% of all advertisements (Feldman 2007; Shimp 2000). Advertisements containing celebrity endorsers are rated more favorably and garner higher purchase intention than non-celebrities endorsers (Atkin and Block 1983). The shift in marketing communications through social media for both firms and celebrities warrants renewed investigation into how celebrity endorsement impacts consumer decision making. In regards to celebrity endorsement, social media has effectively changed the way in which consumers relate to celebrities. Traditionally, celebrities were at arm's length from the public – elegant and glamorous, but mysterious and unknown. Gone are the strictly scripted interactions with consumers. Social media such as Twitter allows celebrities to communicate directly with their fans. This research examines how this shift in communication has implications for the effectiveness of celebrity endorsements.

Endorsement research has generally found that celebrity endorsement is an effective promotions strategy, as celebrities make advertisements more believable and enhance message recall (Agrawal and Kamakura 1995). Several criteria have been identified as contributing to the effectiveness of a celebrity endorsement, including the attractiveness and likeability of the celebrity, the extent to which consumers believe the celebrity genuinely likes the product, the perceived fit between the celebrity and the product (Atkin and Block 1983; Kahle and Homer 1985; Kamins 1990; Kamins and Gupta 1994). This paper argues that another important factor to be considered is the perceived similarity between the celebrity and the consumer. We propose a two-step process whereby consumers who feel connected to the celebrity will feel more similar and subsequently find the ad more effective.

This research demonstrates that microblogging social media sites like Twitter enhance perceived dialogue (a form of interaction) between consumers and celebrities and thus, may enhance the social connectedness that consumers feel. Social connection can be created through direct or indirect interaction with another and can increase liking for the individuals within a group and enhance perceived similarity among group members (Forsyth 1999). Thus, we predict this social connectedness should lead to perceived similarity to the celebrity. Perceived similarity can increase liking and susceptibility to persuasive consumer appeals (Jiang, Hoegg, Dahl and Chattopadhyay 2010). Thus, this perceived similarity should lead to more effective celebrity endorsements. Specifically, we hypothesize that this perceived similarity reduces the "product fit" problem of celebrity endorsement, whereby there must be a fit between the celebrity and endorsed product in order for consumers to believe the veracity of the endorsement. In addition, we show that perceived similarity buffers both a celebrity and endorsed brand against negative publicity.

In Study 1a, we show that following a celebrity on a microblogging site causes consumers to feel more similar to the celebrity than following them on a standard social network. We manipulated whether participants read a scenario about an article about a celebrity's social

media usage. The participants read that the celebrity's favorite social media platform was either Twitter (microblogging) or Facebook (social networking) and that they either followed the celebrity or did not. Results showed that participants that followed the celebrity on Twitter felt more connected and more similar to the celebrity than either those that followed the celebrity on Facebook or did not follow the celebrity on Twitter. In addition, we found that social connectedness mediated the relationship between social media usage and similarity.

In Study 1b, we use a 2(Social Media: Twitter v. Facebook) x 2(Person: Celebrity v. Publicist) between-subjects design and show that this increase in social connection and similarity through Twitter usage only occurs when the celebrity (not a publicist) runs the social media account. In addition, results show that within each media type, those participants who show higher degrees of connectedness feel more perceived similarity to the celebrity. Together, studies 1a and 1b demonstrate that microblogging sites appear to bolster perceptions of similarity through perceived social connectedness.

In Study 2, we extend this social media impact on perceived similarity paradigm by showing a positive impact on celebrity endorsement. To test this, we created actual celebrity endorsement ads for celebrities that were either known to use Twitter (Neil Patrick Harris and Kim Kardashian) or not use Twitter (Paul Rudd and Megan Fox). These ads either featured an endorsement for a product that matched the celebrity (high product fit) or did not match the celebrity (low product fit). Results found that for non-Twitter celebrities, there was a traditional positive effect of product fit on brand attitudes. However, when the ads featured Twitter celebrities, there was no difference in brand attitude for high or low product fit advertisements. As in studies 1a and 1b, the Twitter celebrities were seen as more similar to the participants than the non-Twitter celebrities. Finally, we found that participants rated the low fit product as a significantly better fit for Twitter celebrities than non-Twitter celebrities. Study 2 shows that not only does social media engagement lead to higher perceptions of similarity, but that these perceptions can reduce the necessity of product fit in subsequent celebrity endorsements.

In Study 4, we show that not only does increased perceived similarity enhance endorsed-product evaluation regardless of fit, but they also buffer brand evaluations against negative celebrity information.

The primary goal of this research was to demonstrate how the unique aspects of microblogging sites versus social networking sites can influence the effectiveness of celebrity endorsement. Little research thus far has looked into the impact of social media sites on traditional marketing efforts. Our research provides one of the first empirical investigations of how different forms of social media maintain distinct communication purposes for consumers. We show that nuanced differences in the sites impact the perceptions of connectedness that consumers have toward celebrities, which subsequently alters feelings of similarity between consumers and celebrities. These feelings enhance the persuasiveness of celebrity endorsements. The current research contributes to this body of work by revealing how celebrities can be perceived as more similar to consumers—through feelings of social connection—effectively resulting in an additive influence of attractiveness and similarity on endorsement.

When Celebrity Ad Placements Backfire

EXTENDED ABSTRACT

Firms often employ “attention-getting devices” (Broniarczyk and Gershoff 2003) such as a practice referred to as “context-sensitive advertising.” In a particular instantiation of this technique, ads are being created to feature celebrities that are also being featured in the

surrounding media context (e.g., TV show, magazine article, website content, etc.).

The intuition behind using celebrities in advertising was captured by early consumer research. McCracken (1989) argued that in this case a meaning transfer process occurs from the celebrity onto the promoted product, while subsequent work by Kamins (1990) suggested that a certain degree of congruity between celebrity and the product is necessary for this transfer to be successful. Presumably placing such ads within editorial content that features the same celebrities (e.g., sitcom actors, football players) would only bolster these effects through enhanced fluency, although consumer research has not addressed the issue directly. Furthermore, prior research has shown that the impact of the mere announcement of a brand celebrity endorsement on stock returns is positive, suggesting that the use of celebrities in advertising is viewed as a worthwhile investment by the financial markets (Agrawal and Kamakura 1995).

This work assesses this positive perception of celebrity advertising and cautions that the indiscriminate use of celebrities in ads can in fact have deleterious effects on brand equity. In particular, it looks at celebrity ads that are placed within media content that features the same celebrities (e.g., a Papa John's pizza ad featuring quarterback Payton Manning during a Denver Broncos football game in which Manning plays). The research also attempts to explain the mechanism that underlies the presumed positive effects of such ads, as two potential explanations appear credible: consumers may pay more attention to ads featuring the same celebrity as the preceding media content due to either the enhanced fluency they experience (i.e., an ability-to-allocate-attentional-resources account) or the superior motivation they have (i.e., a willingness-to-allocate-attentional-resources account). Finally, this work looks at the temporal fit between the celebrity's dual roles (i.e., ad plus live football game vs. old sitcom episode rerun) to argue that a temporal mismatch can produce negative consumer brand attitudes.

In Study 1, participants (373 students from a business school's marketing subject pool) were exposed to a recent magazine article about Hollywood that referenced the actress Eva Longoria, which was then followed by three print ads, including (in the second position) the focal one for the Starbucks coffee brand. In the treatment condition, the ad featured Eva Longoria enjoying a cup of coffee. The control condition involved a similar ad featuring actress Penelope Cruz (the two celebrities were equally familiar to our sample and the ads were judged comparably across a variety of dimensions; both actresses were seen as a good fit for the brand). Contrasts on the main attitudinal measure found that that ad wherein the celebrity was the same as in the contextual material was evaluated significantly more favorably than the celebrity ad lacking this match (on a 7-point scale, $M_{no.match} = 4.14$, $M_{match} = 4.49$, $t(371) = 2.63$, $p < .01$).

To assess mediational effects, the related SPSS macros provided by Preacher and Hayes (2004) were employed. All of the criteria for mediation were established (including a significant Sobel test: $z = 3.48$, $p < .001$), providing evidence that motivation to process completely mediates the effect of celebrity fit on attitudes. A non-parametric bootstrap estimate of the indirect effect was estimated to lie between 0.0253 and 0.1879 with 99% confidence, suggesting that the indirect effect was significantly different from zero. Importantly, similar analyses for the ease of processing variable found no evidence of mediation.

A holdout sample from the same population was exposed to a version of the study wherein the treatment condition involved the actress Sofia Vergara (pretests found that she was seen as a relatively less appropriate brand spokesperson). This lack of fit produced the expected drop in consumer attitudes: $M_{no.match} = 4.05$ vs. $M_{match} = 3.53$; $t(371)$

= 3.23, $p < .001$. As predicted, the context-ad match created by the use of the same celebrity creates more consumer motivation, but this leads to more careful scrutiny of the ad and the fit that this celebrity has with the promoted brand. When this fit is lower, attitudes suffer.

In Study 2, participants (244 students from a business school's marketing subject pool) were exposed to an excerpt from a car-themed old episode of the *Seinfeld* sitcom series (from 1996) or one from a recent episode of Jerry Seinfeld's *Comedians in Cars Getting Coffee* web series that was then followed by three video ads, including (in the second position) the focal one for the Acura car brand (in particular its new NSX model). In the treatment condition, the ad featured Jerry Seinfeld demonstrating his desire for the car in various humorous situations. The control condition involved a similarly humorous ad that featured British celebrity chef Gordon Ramsey (pretests suggested that both celebrities were equally familiar to our sample and that they were a good fit for the car brand; the ads were judged comparably across a variety of dimensions). As expected, the new car model was judged most poorly when promoted by Jerry Seinfeld after an old episode of the *Seinfeld* sitcom (on a 7-point scale, $M = 2.84$), moderately when promoted by Gordon Ramsey ($M = 4.04$), and most favorably when promoted by Jerry Seinfeld after a current episode of his *Comedians in Cars Getting Coffee* web series ($M = 5.28$).

Overall results suggest that using celebrities in advertising should be pursued while accounting for (1) the extent to which media content employs the same celebrity, (2) the perceived celebrity-product fit, and (3) the extent to which the media content is current. Studies in progress expand on the latter aspect by assessing the role that consumers' temporal construal plays in the process and the extent to which the temporal mismatch may occasionally be beneficial (e.g., for a modern car an old *Seinfeld* prime may be detrimental, but the same prime may be advantageous for a wine brand).

Peripheral Endorsement: How Perceptual Congruence with Celebrities Can Benefit Brands

EXTENDED ABSTRACT

Celebrity endorsements have been shown to benefit brands in multiple ways, including improved brand attitude (Kahle & Homer, 1985; Kirmani & Shiv 1999), transferred meaning (McCracken 1989; Langmeyer & Walker 1991), strengthened self-brand connection (Dwivedi et al. 2014), improved brand recall (Kamins et al. 1989; Ohanian 1991; Kelting & Rice 2013) and raised stock prices (Elberse & Verleun 2012). A recent study found that 14-19% of advertising in the U.S. utilized celebrity endorsements (Creswell 2008); as the percentage is even higher in other countries (e.g., Japan at 43%) and increasing worldwide (Pringle 2015), scholars and practitioners alike realize the importance of understanding how consumers are influenced by these endorsements.

The Elaboration Likelihood Model (Petty & Cacioppo, 1986) is a theoretical framework commonly applied to explain consumer response to celebrity endorsement. This model proposes that a persuasive appeal (such as advertisements) may influence consumers through two potential routes of persuasion, the central or high involvement route, and the peripheral or low involvement route. Consumers will often scrutinize the "source congruence" between a celebrity and a brand as a critical argument of the endorsement to be evaluated, influencing the brand measures through the central route (e.g., Kamins et al., 1989; McCracken 1989; Kirmani & Shiv, 1998; Rice et al., 2012). Conversely, consumers may also rely on simple peripheral cues when making brand evaluations through a low involvement route (e.g., Kahle & Homer 1985; Kirmani & Shiv 1998; Kang & Herr 2006; Rice et al. 2012).

As the use of celebrity endorsements becomes more prevalent in advertising, the level of consumer persuasion knowledge (Friestad & Wright 1994) of the tactic increases. This increased knowledge could lead to mitigation of the benefits of the practice as consumers adjust for this knowledge in their responses. This mitigation may be particularly in the central route to persuasion where consumers evaluate the degree of congruence as the strength of a persuasive argument and think extensively about the connection (Petty & Cacioppo, 1986; Kirmani & Shiv, 1998), which could make the persuasive appeal more obvious. The risk of losing the benefit is even greater in light of recent findings that negative associations with the celebrity are often more likely than positive associations to transfer to brands (Campbell and Warren 2012). Thus, as consumers scrutinize the endorsements, those with weak congruence or negative associations may lead to less favorable brand evaluations.

Notably, prior research has typically described source congruence as a conceptual construct, based on factors such as the overlap between a celebrity meaning and the brand (McCracken 1989) or the expertise of the endorser in relation to the product category (Ohanian 1990). Conversely, the current research investigates whether celebrities with no conceptual overlap with a brand may still be of benefit to the brand through an overlap of perceptual factors (e.g., phonetic similarity between the celebrity and the endorsed brand), even in the absence of conventional endorsements. We define this term as perceptual congruence, and we explore the mere association effect (Dimofte & Yalch, 2011) and the fit-as-fluency effect (Kuo & Rice, 2015) with experimental designs as competing pathways through which perceptual congruence may influence brand assessments.

Experiment 1 ($N = 197$) tests whether a brand could benefit from perceptual congruence with a celebrity. We created four conditions to which participants were randomly assigned by manipulating the presence or absence of an article on a celebrity's charity work prior to ad exposure as one factor and the perceptual congruence of the brand as a second factor (by changing a sporting good's brand name from one that was phonetically similar to the celebrity featured in the article to one that was dissimilar). Brand attitude toward the sporting good (which was identical except for the brand in all conditions) was the critical dependent variable. ANOVA revealed a significant article presence x brand name interaction ($F(1,193) = 3.94, p < .05$). Planned contrasts demonstrate that there was no difference in brand evaluations due to presence or absence of the celebrity article when the brand was phonetically dissimilar ($p > .7$). However, when the article featuring the celebrity was present, the perceptually congruent brand was rated significantly more favorably by respondents than when the article was not shown ($F(1,193) = 5.58, p = .019, M = 5.63$ vs. $M = 5.04$). Further analyses revealed mediation effects of perceptual congruence.

Experiment 2 ($N = 141$) offers additional evidence of the effects of perceptual congruence by introducing a new category, motor oil. The experiment also explores two mechanisms through which perceptual congruence could act on brand attitude, a fit-as-fluency (Kuo and Rice, 2015) type effect due to previous exposure to a phonetically similar celebrity name, or a mere association (Lee & Labroo, 2004; Dimofte & Yalch 2011) effect caused by positive associations transferring from the perceptually related (but conceptually incongruent) celebrity by adding negative and neutral article valence conditions to the design and removing the no article conditions of experiment 1. ANOVA results revealed a significant valence x brand interaction ($F(2, 135) = 3.32, p = .04$). Replicating the results of the first study, there was no significant effect of valence within the brand with no perceptual congruence ($p > .6$), but the perceptually related brand attitude was significantly more favorable for the positive ce-

lebrity article valence ($M = 6.15$) than either the neutral ($M = 5.45$) or negative ($M = 5.56$) article conditions (p 's $< .03$)

If brand attitude was solely influenced by the perceptual fluency of the brand name, the data would show a main effect of brand such that the perceptually congruent brand was always favored across valences. However, the results are more consistent with a mere association mechanism, where the data show an interaction in which the positive article about the celebrity led to (1) significantly more favorable brand attitude than the negative and neutral articles for the perceptually congruent brand of motor oil, and (2) no difference among article conditions for the brand of motor oil with no perceptual congruence.

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“Because its 2016”: Documenting the Persistence of and Challenge to Gender Stereotyping in the Marketplace

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Paper #1: Identifying and Explaining the Sex-Gap in Consumer Responses to Product Failures: Gender Stereotypes Create Victims Out of Women

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Paper #2: Female Gamers: An Investigation of Gendered Consumer Vulnerability

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Jenna M. Drenten, Loyola University Chicago, USA

Nicholas Pendarvis, University of South Carolina, USA

Paper #3: Resistance to Gender Stereotyping in Advertising Institutions

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Catherine Coleman, Texas Christian University, USA

Ozlem Hesapci, Bogazici University, Turkey

Paper #4: Perceptions of Changing Beauty Norms: An Exploratory Study

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SESSION OVERVIEW

This session highlights the complex ways gender stereotypes are both perpetuated and challenged in today's marketplace across a variety of contexts, and through the use of varying methodologies. Conflicting stereotypes and treatments of men and women are persistent in society and play out in billion dollar industries, from fashion to beauty products to video games. Women are on the one hand shown disdain and contempt, and on the other defended and coddled (Glick and Fiske 1996). Both sexes are expected to adhere to gender norms, which are reflected and reinforced in marketing (Mazur 1986; Zayer and Coleman 2015; Zayer and Otnes 2012). The current research investigates i) the treatment of men and women by industry and society and its relevance to the marketplace, and ii) how gender stereotypes are maintained and combated in these intersecting domains. This session explores these issues across a wide range of intersecting domains (industry, consumer protection/regulation, online communities, and male-dominated subcultures) with methodological diversity (qualitative methods, experiments, and archival data analysis).

The first paper identifies a novel way in which gender stereotypes play out in the marketplace and its implications for firms and consumer protection. Across tens of thousands of consumer complaints with various agencies, consumers were more likely to complain about a harmful product failure when the victim was a woman as opposed to a man. Experimental evidence further supports this finding. Evidence for the role of gender stereotypes in this process is also presented (i.e., men are seen as independent agents while women are cherished and protected).

The second paper presented looks at how women are stereotyped and treated in the historically male-dominated domain of video gaming, where women are sexualized and seen as imposters. Drawing from social dominance theory (which explains the origin and maintenance of social hierarchies and oppression), female gamers were interviewed to understand the harassment experienced by wom-

en in gaming (both on and offline). Women's experiences of disempowerment and vulnerability caused by interactions with the gaming industry and culture decrease their expectations for cultural change.

The third paper offers a more positive outlook on the possibility for change by drawing from institutional theory to explore the macro forces that contribute to the resistance of gender stereotypes in advertising institutions. This research analyzes in-depth interviews with advertising professionals from the United States, United Kingdom, and Turkey, in order to shed light on the regulatory, normative, cultural and political forces that facilitate or hinder individuals within these organizations in resisting gender-stereotypical content in advertising.

Finally, the fourth paper utilizes social media as a tool for examining how consumers are reacting to changes of beauty stereotypes in the media. Brands have begun to feature plus-size models in the media more frequently. This research uses an iterative approach to identify themes in Facebook comments that represent consumer sentiment and attitudes about shifting stereotypes about beauty in the media. Overall, although there is approval for diversifying the definition of beauty, a strong discourse of promoting obesity and unhealthy behavior is also present.

Identifying and Explaining the Sex-Gap in Consumer Responses to Product Failures: Gender Stereotypes Create Victims out of Women

EXTENDED ABSTRACT

Every year, thousands of consumer complaints are made to regulatory agencies, including the Consumer Product Safety Commission, Federal Trade Commission, among others. These incidents often cause severe injury or death, and cost the U.S. more than \$1 trillion annually (CPSC). They are the basis for numerous lawsuits and recalls, and can cost companies millions of dollars. Therefore, consumers' perceptions of harm, blame, and desire for punishment, are of great consequence for many institutions.

The current research asks if the sex of the victim matters is how such incidents are interpreted and reported. We draw from ambivalent sexism theory (Glick and Fiske 1996) to understand how gender stereotypes shape consumers' perceptions of product failure incidents. Specifically, because gender stereotypes present men as independent agents and women as dependent and requiring protecting, we proposed that when a woman (vs. a man) is a victim of a product failure, consumers will i) see increased harm done, ii) blame the company more, and iii) show an increased tendency to complain about the product failure.

Benevolent sexism is a specific form of sexism that presents women as, fragile, pure, and requiring protection (Glick and Fiske 1996). This paternalistic view of women has the consequence of denying women agency and efficacy; those seen as more capable of suffering are increasingly seen as passive and as victims of negative outcomes (Gray and Wegner 2009). Conversely, men are stereotyped as tough, independent agents, and these traits are associated with a diminished capacity for suffering and pain (Gray and Wegner 2009; 2011). Thus, gender stereotypes have the consequence of presenting women (vs. men) as more capable of being victims. We should there-

fore observe that consumers will be more likely to complain about a product failure when the victim is a woman vs. a man.

Study 1 analyzed over 13,000 consumer complaints to the Consumer Product Safety Commission (CPSC) and found that a disproportionate number of complaints were made for female vs. male victims, despite the fact that a) male injuries were on average more severe, and b) hospital records show that men are more frequently the victims of product-related injuries (National Electronic Injury Surveillance System 2014). Moreover, female victims most outnumbered male victims when a husband was complaining about a harm done to his wife vs. a wife complaining about a harm done to her husband. These results are consistent with stereotypes of men as being tough, independent agents, and women as fragile and requiring protection. To help support this claim, a state-level measure of gender stereotyping (associating men with careers and women with housework) was obtained from a large dataset (Xu, Lofaro, Nosek, and Greenwald 2016; $n = 926,310$). Using hierarchical linear modeling, it was found that state-level endorsement of traditional gender stereotypes predicted the victim sex-gap in consumer complaints at the state-level, controlling for the ratio of men and women in each state.

For Study 2, a similar analysis was conducted on 833,112 vehicle complaints made to the National Highway and Traffic Safety Administration's Office of Defects. Victim sex could not be assessed directly, but we searched each complaint for the words "wife" and "husband," which largely corresponded to husbands referring to incidents involving their wife, and vice versa (respectively). As in Study 1, there was a significant victim sex-gap in consumer complaints, despite the fact that men get in more accidents and drive 1.5 times more miles per year than women (Insurance Institute for Highway Safety 2015).

Having illustrated a real-world tendency to increasingly report product failures when the victim is a woman (vs. man), we conducted a series of experiments to further capture and illuminate this effect. In Study 3, participants (100 men, 105 women, $M_{age} = 37.76$) were presented with a scenario adapted from a complaint filed with the CPSC, where a parent complained that their child's finger was able to get stuck in the viewing hole of a kaleidoscope toy and required medical assistance. We manipulated the sex of the victim in a between-subjects design. Participants then rated the blameworthiness of the child, parent, and manufacturer. As predicted, participants saw the female victim as less at fault than the male victim, and saw the manufacturer and the parents as more at fault when the victim was female (vs. male).

Past work has shown that benevolent sexism, and paternalistic stereotypes more broadly, depict groups such as women as high on warmth (kind, sociable, sincere), but low on competence (e.g., efficacy, confidence) (Glick and Fiske 1996; Fiske, Cuddy, Glick and Xu 2002). Targets perceived in this way are easier to think of as victims (Gray and Wegner 2009; 2011), and elicit sympathy, pity, and the desire to help and protect (Cuddy, Fiske, and Glick 2007; Grey and Wegner 2011; Fiske et al. 2002). Study 4 ($n = 342$, $M_{age} = 39.03$) tests the role of these perceptions in judgments of male vs. female victims and company blameworthiness. Participants read a scenario where a man vs. woman was the victim of a reading lamp exploding, causing cuts and lacerations. Participants rated the seriousness of the incident, their emotional response (sympathy, pity, desire to help and protect), and manufacturer blame (seeing the manufacturer as at fault, wanting reimbursement for the victim, and wanting to complain to a regulatory agency or file a lawsuit).

Results found that participants saw the situation as more serious, and blamed the manufacturer more, when the victim was a

female (vs. male). Moreover, the effect on manufacturer blame was mediated by perceived harm and the participants' emotional response to the victim (i.e., sympathy, pity, desire to help and protect). In other words, gender stereotypes make it easier to see women (vs. men) as victims, and explained the observed effect of victim sex on manufacturer blame.

Across 4 studies, we provide evidence of a sex-gap in how people attribute blame to companies for product failures, and that gender stereotypes (i.e., men as independent agents and women as requiring protection) can help explain this sex-gap. Implications for consumers, companies, and consumer regulation are discussed.

Female Gamers: An Investigation of Gendered Consumer Vulnerability

EXTENDED ABSTRACT

In 2014, an Internet culture war ensued called #Gamergate, in which an alliance of anti-feminist video gamers began criticizing and threatening feminist gaming advocates who argued for greater positive representation of women in the video gaming industry (Parkin 2014; Schroeder and Borgerson 2015). Despite the recent surge in public harassment and sexism against women in the gaming community, females represent a growing demographic in the \$15.4 billion video gaming industry. However, both men and women believe playing video games to be a "particularly masculine pursuit" (Selwyn 2007, p. 533). In a consumption context largely categorized as a "man's world", our research aims to understand how female video gamers experience, navigate, and cope with the male-dominated culture.

We ground our analysis in social dominance theory, which explains the origin and consequence of social hierarchies and oppression and assumes that we must understand the processes that maintain and produce discrimination at multiple levels of analysis, including cultural ideologies, institutional practices, and relations of individuals (Pratto, Sidanius and Levin 2006). Our investigation takes a similar approach to understand how multiple processes, at different levels, work together to create a potentially vulnerable consumption environment (Baker, Gentry, and Rittenburg 2005). Our research employs a phenomenological approach that focuses on the lived experience (Pollio 1982) of thirteen female gamers between the ages of 20-29, who were interviewed to better understand how female gamers experience and make meaning from their interactions within a gendered consumption context.

Our findings suggest the gaming subculture is characterized by a prevalence of gender-based consumer harassment, systematic disempowerment in the marketplace, and a defeatist attitude toward future cultural change. Due to space limitations, we use one participant's experiences to exemplify our collective findings.

Prevalence of Gender-based Consumer Harassment

"Gamer girl" stereotypes contribute to an environment wherein female gamers are harassed and disrespected through verbal abuse in online chat communication and being hounded within games themselves.

It's kind of like we are not taken seriously. We have to be separated from "real gamers." Like the game is not for us; they just forget about us as gamers. But, there are not other options really, you just have to do or not play. And sometime people can be just mean. You get called all sorts of really derogatory things, whether you are winning or

losing. You are losing because you are a girl or winning because you are a whore. (Corrine)

Corrine, a video game store manager and gamer, agrees with other participants that "gamer girls" are stereotypically sexualized and perceived as imposters in the gaming community.

Disempowerment in the Marketplace

Female gamers' negative gendered experiences extend to the offline, retail environment, as participants discussed discrimination in purchasing video games. Female gamers develop coping strategies to merely shop for games—not just play them. Corrine states that while she is working, customers often seek out advice from men and she advises female colleagues to "develop tough skin." She also experiences gender-based disempowerment as a female shopper.

For us, going into a [video game store], everyone just assumes that you are there buying a game for a significant other. Going in as a shopper, a lot of time you are approached differently because you can't be there buying a game for yourself...right? ... I don't think that they are realizing they are doing it, I don't think it's a purposeful thing but it's just an ingrained thing. It's a male thing. (Corrine)

Corrine's warnings reflect a disempowerment discourse similar to Henry's (2005) work, identifying experiences of disempowerment as a function of self-perceptions emerging from systematic inequities (e.g., social class, access to material and economic resources). Our research highlights gender disparities in the gaming community, as women often adopt the role of "impotent reactors" who must constantly confront the potential for subjugation and "prove" themselves in the gaming community.

A Defeatist Attitude toward Cultural Change

Participants discussed potential solutions to improve the female gaming experience; however, participants were doubtful the industry or gaming community would change. Corrine discussed her pessimism.

Their hands are tied, they really are...because they don't want to lose the male gamers or the female gamers. They have systems where you can report a player, and yes if they get reported so many times they get removed from the game and their computer code is banned from playing the game. But with a quick reset of the computer, you can get back on...their hands are tied. (Corrine)

Corrine and others remain doubtful that the actors and marketplace institutions, with the power to bring about change, are actually motivated to do so.

Collectively, our findings suggest consumers experience multidimensional vulnerability (e.g., individual, marketplace, and cultural) in a gendered consumption environment. At the individual level, our findings depart from existing consumer research by highlighting how consumers can experience discrimination and harassment in multiple dimensions during a consumption encounter; experiencing negative social value both "in play" through in-game harassment and "at play" through verbal assaults in chatrooms while playing. At the marketplace level, gendered disempowerment is rarely explored as part of the shopping process. In addition, the gendered retail employee perspective offers dimensionality to an understanding of vulnerable experiences in a consumption field. At the cultural level, female

gamers experience hopelessness associated with the prospect of changes within the field. The culturally embedded gamer girl stereotype provides a foundation upon which characteristics of consumer vulnerability flourish, including a culture of gender-based consumer harassment, systematic disempowerment in the marketplace, and conflicting actions and attitudes toward future cultural change.

Resistance to Gender Stereotyping in Advertising Institutions

EXTENDED ABSTRACT

Scholars have pointed out the long history between marketing and gender (Maclaran 2012; Bettany et al. 2010). Research exploring gender portrayals in advertising across different countries has often been examined using Hofstede's cultural values of masculinity/femininity (Hofstede 1980) or has focused on identifying stereotypical portrayals. Other scholars have taken a macro perspective revealing how advertisers think about gender in the creation of ads, but focus on one site of study (see for example Shao, Desmarais and Weaver 2014 work on ad practitioners in China). More recent research advocates for an institutional perspective in examining gender portrayals in advertising (Zayer and Coleman 2015) where multiple actors contribute to an iterative process whereby certain gender ideologies are privileged and disseminated throughout society. The current research uses institutional theory as a foundation to examine how advertising professionals engage in "institutional resistance" (Lawrence 2008) with regard to the use of gender stereotypical messages in advertising.

Specifically, through the analysis of in-depth interviews, we examine how advertising executives across the U.S., UK, and Turkey conceptualize the use of gendered messages in their advertising institutions and the strategies they engage in to resist (or comply with) stereotypical gendered practices.

Forty-three in-depth interviews were conducted with advertising professionals across a range of agencies and cities, and with professionals serving in varying ad functions including strategy, creative, account planning. The three countries were selected as sites for data collection because they provided an opportunity to observe varying institutional forces at play—differing regulatory environments, varying cultural values and norms. Initial exploratory analysis was conducted to compare and contrast how ad professionals conceptualized the use of gender in advertising and how (if) they engaged in resistance to the use of gender stereotyping.

In the U.S., three strategies were identified with regard to how individuals engaged in resistance to employing gender stereotypical advertising messages. These included 1) personal normative stances 2) resistance based on incentives and 3) resistance based on perceived cultural norms. That is, individuals engaging in resistance drew from narratives and discourses at various levels—the personal, organizational and socio-cultural levels.

In the UK, our exploratory analysis reveals similar resistance strategies to those in the United States. Comparative analysis of these contexts, in which regulatory and cultural influences are different, exposes specific ways in which varying individual and institutional factors inform each other to either facilitate or impede resistance or conformity strategies. In applying their own personal beliefs and values, some of the advertising professionals resisted perceived normative dilemmas and, further, demonstrated a sense of responsibility to consumers to produce engaging, rewarding content. Some also referenced governmental and industry regulatory measures, which in some cases supported their resistance efforts or affected the saliency of resistance concerns. Further, these regulatory measures reflected

or affected perceived cultural norms. At other times, when regulation and personal normative stances were absent or not salient, professionals referenced business-driven incentives.

Ad professionals in Turkey possessed a keen understanding of the importance of gender issues in advertising and discussed how the Turkish advertising landscape remained plagued by structural (i.e. decision making processes within the agencies, agency-client relationship) as well as cultural problems in the appropriate portrayals of gender. In addition, the agency environment was described as one of the most gender equal working spaces within the country, with women dominating top management teams. However, despite this, professionals pointed to the fact that in the current structural and cultural systems and political climates of Turkey, they were largely not able to resist stereotypical gendered advertising practices. Turkey was described as experiencing an increasing level of conservatism with meaningful class and ethnic differences. As such, advertising professionals tried to negotiate the advertising landscape, including balancing the demands of clients who were risk-averse in this dynamic culture. This unique climate may provide one explanation for the discrepancy between personal and institutional objectives stated by ad professionals in the responsibility that advertising executives felt with regard to gender stereotyping.

In sum, our initial analysis suggests that the strength and interaction of regulatory structures and cultural norms influences individual advertising professionals' resistance (or conformity) strategies by framing the ways in which they approached issues of gendered representations. When both cultural and regulatory practices reinforced stereotypically gendered messages, professionals had more difficulty resisting problematic depictions. Yet, they were highly aware of the importance of gender issues, in part as they had to negotiate cross-cultural issues between global clients and national markets. When regulatory and cultural practices discouraged stereotypical representations, concerns over stereotypical representations posed a less salient dilemma and did not require professionals to grapple with personal normative critiques.

Perceptions of Changing Beauty Norms: An Exploratory Study

EXTENDED ABSTRACT

Society has long struggled with how women are portrayed in the media, particularly stereotypes of beauty. The traditional beauty stereotype depicts ultra-thin women – sizes that are unobtainable for most women. Indeed, the negative effects of idealized imagery on female self-perceptions are well documented (Micu, Coulter and Price 2009). Recently, some brands have diverged from the thin-ideal by featuring women of different sizes and shapes. How are consumers reacting to this divergence of beauty? Provided the public calls to feature more realistic size women, it could be consumers are embracing these changes. However, prior work has demonstrated female consumers prefer thin imagery, despite it impairing their self-perceptions. Thus, there seems to be contradictory findings in how consumers perceive images of beauty in the media. The purpose of this study is to examine consumer response to recent events in which brands have demonstrated more inclusivity of different body types.

A qualitative study was conducted to address the research question: How are consumers reacting to changing images of women in the media that deviate from traditionally constructed beauty norms? To examine this research question, we concentrated on three specific events in the past year: the plus size clothing retailer Lane Bryant's lingerie ad campaign #Imnoangel, plus size model Tess Holliday being featured on the cover of People magazine's "body issue,"

and plus size model Ashley Graham being featured on the cover of Sports Illustrated magazine. Consumer comments posted to stories from the Facebook page of CNN, Yahoo, NBC, and Huffington Post were downloaded. These outlets were chosen because they are representative of mainstream media. To gauge initial consumer response we downloaded comments that were published at the time of the event. A total of 6,000 posts were downloaded. Specifically, for each news outlet's Facebook page, a total of 500 comments were downloaded. This resulted in a total of 2000 comments for each event. To ensure an authentic catalog of response was captured, the comments included consumer posts in the form of response to the story as well as dialogue between consumers. For each event the downloaded comments were posted within 48 hours of the story.

As is customary in qualitative research (Belk, Fischer, and Kozinets 2013), our analysis iterated with our data collection. Through this process, both researchers independently sought to identify emergent themes, while referring back to the literature (Spiggle, 1994). We then deliberated, debated, and iterated to identify a set of convergent themes. Following the guidelines offered by Miles and Huberman (1994, p. 62) our coding was influenced by our research question.

The following findings represent the prevailing theme from each event identified at this stage of analysis.

The most prevalent theme emerging from comments related to Tess Holliday's appearance on the cover of People magazine focuses on health concerns related to obesity and whether it is appropriate to make a clinically overweight woman into a "role model." Additionally, the tone of comments discussing Holliday's unhealthy weight tended to be vitriolic critiques: *"Enjoy your diabetes, heart disease, high blood pressure, increased stroke risk, increased risk of pregnancy complications and birth defects, and certainty of being an UNEMPLOYED model once this silly 'fat acceptance'fad is over."*

While obesity and health concerns are present in online comments about Ashley Graham's Sports Illustrated swimsuit edition cover, the most prominent discourse here centered around whether or not a body type such as Graham's belongs on the cover. Commenters who felt Graham was overweight tended to criticize Sports Illustrated for featuring an unattractive larger woman in the issue. Additionally, there was a strong sentiment that this particular cover pandered to an overly politically correct society: *"That large girl should not be in that tiny swimsuit. If she wants to pretend that she's attractive and pretend that she's not overweight, that's fine for her. But I don't need your 'curves' agenda shoved into my face when I'm trying to enjoy reading a magazine."*

Interestingly, the dominant discourse surrounding the Lane Bryant #Imnoangel campaign was less about the appropriateness of featuring plus size models and more about whether the models truly represented "plus-size" women or were a more idealized version of plus-size: *"All these girls in this pic are a size 14-16, which is the smallest size Lane Bryant offers. Lane Bryant why don't you market to the type of clients who really shop from your stores? To me this company is still marketing the "smaller" sized females and are fearful to advertise the real BIG GIRLS!!"*

Across all three events, the predominant theme identified thus far focuses on the health of the featured plus size models. The majority of these comments indicate anger and frustration that unhealthy women are being presented in mainstream media outlets and lament that these changes only further the obesity crisis facing the US.

These findings lend evidence to the notion that consumer schema has a significant and important impact on attitudes. Congruity theory is a helpful framework for understanding how consumers respond to brand images that are not consistent with their existing

schema. In the case of the Sports Illustrated swimsuit edition, the dominant discourse is one that indicates many consumers found the image of a plus sized model to be incongruent with their brand schema for the magazine. This led to negative comments about both the model and the brand. Similarly, the strongly negative sentiment toward Tess Holliday appears to be rooted in consumers' perceptions of what the cover model of People magazine's "body issue" issue represents as a role model. On the other hand, Lane Bryant is a brand identified with plus size women so we see the discourse is less focused on the models being too big and rather on whether they were plus sized enough.

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The Influence of Tracking Time on Judgments of Experiences, Time, and the Self

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Selin A. Malkoc, Washington University in St. Louis, USA

Paper #1: How “Time until the End” Influences Actual versus Predicted Consumer Experiences: A Resource Allocation Account

Claire Tsai, University of Toronto, Canada
Min Zhao, Boston College, USA
Nicole Robitaille, Queens University, Canada

Paper #2: When an Hour Feels Shorter: Salient Endpoints Contract the Perception and Consumption of Time

Gabriela Tonietto, Washington University in St. Louis, USA
Selin Malkoc, Washington University in St. Louis, USA
Stephen Nowls, Washington University in St. Louis, USA

Paper #3: Movement through Time and Space Shapes Psychological Distance

Eugene Caruso, University of Chicago, USA
Leaf Van Boven, University of Colorado Boulder, USA

Paper #4: Neglecting Decline: Biased Views of Personal Development Driven by Failure to Recall and Predict Negative Change

Sarah Molouki, University of Chicago, USA
Daniel Bartels, University of Chicago, USA
Oleg Urminsky, University of Chicago, USA

SESSION OVERVIEW

Consumers regularly keep track of their time by attending to the passage of time (Sackett et al. 2010), planning out their activities (Lynch, Netemeyer, & Spiller 2010; Tsai & Zhao, 2011), marking their time (Zauberman et al. 2010), and monitoring their behavior over time (Kivetz, Urminsky, & Zheng 2006). The papers in this session build on and extend this literature by examining unique outcomes of tracking time. Together, they explore how tracking time by attending to the unfolding of a current experience (paper 1), by scheduling (paper 2), by estimating temporal distance (paper 3), and by recalling personal events over time (paper 4) influence consumers' perception of the current experience (paper 1), time (papers 2 and 3), and the self (paper 4).

The first paper, by **Tsai, Zhao, & Robitaille**, examines how tracking progress toward the end of a negative experience influences the unpleasantness of the experience. In particular, the authors propose that the unpleasantness of negative experiences can depend on the amount of time left until the end of the experience. While consumers predict that a negative experience will become less aversive over time, the authors demonstrate that experiences become more unpleasant when there is less time until the end.

Next, paper 2, by **Tonietto, Malkoc, & Nowlis**, examines how tracking time through scheduling influences consumers' unscheduled time by creating boundaries around free time. The authors argue that boundary tasks increase the salience and rigidity of the endpoint of time intervals, leading the endpoint to feel perceptually more finite and thus contracted. The authors demonstrate that unaccounted time that ends in a boundary scheduled task feels subjectively contracted, leading consumers to do less with their available time.

The third paper, by **Caruso & Van Boven**, examines how consumers track time by judging psychological distance from the present. In particular, movement through time is perceived analogously to movement through space, leading physical movement toward (vs. away from) an event to reduce psychological distance. Analogous

to physically moving forward or back, consumers perceive that they are continuously moving towards events in the future but away from events in the past. In line with this, the same objective length of time feels shorter if projected into the future than into the past.

Finally, the fourth paper, by **Molouki, Bartels, & Urminsky**, examines how consumers track personal change over time. In particular, the authors compared predicted, actual, and recalled personal change over the course of a year. They demonstrate that both prospectively and retrospectively, consumers underestimated personal change while overestimating perceived improvement. Although consumers tend to both improve and decline over time, they are more likely to remember past improvements and selectively neglect declines, and made nearly uniformly positive predictions of future change.

Together, the papers in this session contribute to our understanding of how consumers track their time and their ensuing judgments. In so doing, the papers identify unique drivers of biases in both prospecting and recall (papers 1 & 4), asymmetries between past and future judgements (paper 3), and the malleability of time (papers 2 & 3).

How “Time until the End” Influences Actual versus Predicted Consumer Experiences: A Resource Allocation Account

EXTENDED ABSTRACT

Consider two passengers, Chloe and Debra, who have just passed two subway stations. Chloe has two more stations to go, whereas Debra has ten more. Who would feel more tired now? While their experience should be similar given the same distance traveled, in the present research, we posit that their experiences can be a function of the amount of time left until the end of the trip. Further we propose that time until the end will have differential effects on predicted and actual experiences. Specifically, when predicting a future experience, people are forward looking and thus would focus on the affective state following the end of the experience (Elster and Loewenstein 1992; Loewenstein 1987; Tversky and Griffin 1990). Therefore, for negative consumption events, people might focus on the relief at the end and expect the events to be less aversive toward the end. However, when actually experiencing the events, people might focus more on the ongoing experience (Tversky and Griffin 1990). Therefore, time until the end signals the effort that they have exerted (Drolet and Gibb 2003), which affects their experience negatively (“I am tired because I have used up nearly all my coping resources or mental effort”).

To test our hypothesis, we first conducted a field study using subway passengers. Participants were passengers who were either riding (experiencers) or waiting for (predictors) the subway. Participants were either asked to report how they felt during their subway ride (experiencers) on a 7-point scale (1 = not at all tired, 7 = extremely tired) or predict how they would feel after riding the subway for two stops (predictors) on the same 7-point scale. To calculate participants' current location and total trip distance, we asked participants to record at which subway station they got on (experiencers) or were waiting (predictors). Experiencers also reported which subway station they had just passed. All participants reported at which station they planned to get off.

As expected, predictors who had shorter trips (shorter time until the end) predicted the experience of riding the subway for two stations into their journey as less negative than those who had longer trips (longer time until the end), even though they would have travelled the same distance ($t(1, 80) = 3.86, p = .053$). By contrast, the results reversed among experiencers: regression analysis showed that passengers rated their experience *more* negatively when they had less time until the end of their trips ($\beta = -1.69, t = -2.30, p = .02$). To compare experiences and predictions, we examined the ratings for experiencers who had traveled two stops when taking the study. As expected, those on shorter trips rated their experience more negatively than passengers who still had a long way to go ($t(1, 33) = 8.85, p = .006$). The results supported our hypothesis.

In study 2, we replicated our findings with university students. Study 2 employed a 2 (role: predictor vs. experiencer) \times 2 (time until the end: short vs. long) between-subjects design. Participants were told that they would need to do eight or 18 sets of a handgrip exercise. To control for effort and task difficulty, we asked participants to hold up an object for three seconds during each set using their non-dominant hand. After trying out the handgrip, predictors forecast how pleasant, negative/positive, and tired they would feel after doing seven sets of exercise by moving unmarked sliders (not at all; extremely/positive/very tired). At this point, time until the anticipated end would either be three seconds (1 set left; 8-set condition) or 33 seconds (11 sets left; 18-set condition). Experiencers did seven sets and then evaluated their experience. To explore the underlying mechanism we asked all the participants to report how painful they would expect the rest of the task to be. All the items were measured using unmarked sliders with proper anchors. Data were recorded by the computer using a 0–10 continuous scale.

Consistent with study 1, a two-way ANOVA revealed a significant two-way interaction ($F(1, 102) = 9.95, p = .002$). Planned contrast showed that predicted experience was less aversive when time until the end was shorter ($p = .03$). (Higher number indicates less aversive experience.) However, the results reversed for the experiencers ($p = .02$), even though they all did seven sets. Mediation analysis using 5000 bootstrap (Hayes 2013) confirmed that the anticipated pain partially mediated the direct path.

Study 3 further tested our hypothesis concerning the experiencers and employed a 2 (time until the end) \times 2 (need to conserve energy) between-subjects design using a similar handgrip exercise. If participants felt they had ample energy during the exercise, they would expect the remaining exercise to be less aversive and have lower need to conserve and allocate their energy during the exercise, thereby weakening the effect of time until the end.

All participants sampled a fruit juice prior to the handgrip exercise. They were told the beverage was either a new energy drink (low need to conserve energy) or a new fruit juice (control – need to conserve energy). They then proceeded to the handgrip exercise. A two-way ANOVA revealed a significant two-way interaction ($F(1, 107) = 5.41, p = .02$). As in study 2, control participants rated the experience as more aversive when they had less workout time remaining ($p = .03$). However, the effect disappeared when participants thought the juice was an energy drink ($p > .24$).

In sum, evidence from three studies demonstrate that people intuit that a negative episode feels less aversive if the end is near, but in reality, the episode actually feels worse when the end approaches. Our findings add to research on duration knowledge and affective misforecasting.

When an Hour Feels Shorter: Salient Endpoints Contract the Perception and Consumption of Time

EXTENDED ABSTRACT

Scheduling is a widely adopted strategy for organizing time, and consumers often schedule several of their activities while leaving intervals of “free” time open in between (Southerton 2003). While prior research has examined effects of scheduling on the individual scheduled tasks (Milkman et al. 2012; Tonietto and Mallick, forthcoming), how the intervals of unscheduled time created by scheduling may be perceived and consumed remains unexamined. In the present work, we propose that intervals bounded by scheduled tasks will feel subjectively contracted, limiting the use of that time. In particular, we propose that by creating boundaries that mark a salient end to intervals of free time, scheduled tasks can make these intervals feel perceptually more finite and thus contracted.

Perceived finitude is driven by two principles: the salience and the rigidity of the endpoint such that time feels perceptually more finite (1) when the end of the interval is more salient (Kaufman, Lane, and Lindquist 1991; Weiss 2014), and (2) when the end represents a rigid and sharp change (Weiss 2014). We propose that because boundary tasks embody both of these principles when they mark a salient, rigid end to an interval, such intervals will feel perceptually more finite compared to equivalent intervals that lack such boundaries, leading time to subjectively contract. Importantly, only boundaries that fulfill the two principles of perceived finitude should contract time. Therefore, we predict that only terminating (vs. initiating) boundaries that mark a rigid (vs. flexible) end to an interval will contract time. Importantly, we argue that boundary tasks will also have downstream consequences for the consumption of available time. In particular, once time feels contracted, it should also feel less sufficient and more constrained, reducing consumers’ willingness to spend their time. As such, we predict that intervals that saliently end in a scheduled boundary task will be consumed less effectively and productively. Eleven studies provide support for these propositions.

The first set of studies provided initial evidence that boundary tasks contract time, using a correlational field study (Study 1A) and a randomized lab experiment (Study 1B). In Study 1A, conference attendees estimated the time before a presidential address to be shorter if they had scheduled to attend it, compared to those who had not planned to attend. In Study 1B, participants evaluating a one-hour interval indicated that time felt shorter when it was bounded by an upcoming task than when it was not, and this effect was mediated through perceived finitude of the interval. To establish that boundary tasks uniquely contract subjective, but not objective time, in Study 2, we asked participants to estimate both the objective time they had and the subjective amount of time they felt they had to spend reading a book during a one-hour interval. We find that while objective estimates of time did not differ, participants evaluating a bounded interval felt that they had subjectively less time. Thus, we find that temporal contraction is driven by subjective, rather than objective differences in perceived time.

In Study 3, we aimed to show that boundary tasks would contract time perception for both desirable and undesirable boundary tasks, establishing that savoring towards a future task could not account for our effect. To test this, participants imagined either an hour available later (no boundary), an hour available before a dinner with friends (desirable boundary), or an hour before a dentist appointment (undesirable boundary). Countering a savoring based account, we find that time felt contracted prior to both the desirable and undesirable boundary tasks. Importantly, anticipating a fun dinner did

not differ from a dentist appointment, demonstrating that the mere presence and not the valence of the boundary task drives the effect.

In Study 4, we next sought to examine whether the effect would uniquely manifest for boundaries that terminate (vs. initiate) the interval, in line with the first principle of perceived finitude. Participants were given a hypothetical calendar for the day and indicated their perceived duration for four intervals throughout the day. Two of these intervals preceded a terminating scheduled task where one of the intervals (bounded) ended when the terminating task began. The other two intervals followed from an initiating scheduled task where one of the intervals (bounded) began when the initiating task ended. Replicating earlier results, time subjectively contracted prior to a terminating boundary. However an initiating boundary did not contract time. Building on this result, in Study 5, we tested whether the effect would only occur if the boundary task was specifically (vs. roughly) scheduled, and thus represented a rigid end to the interval. To test this, participants indicated the perceived duration of an interval that was either bounded or unbounded by either a specifically (i.e., coffee from 2:00pm-3:00pm) or roughly scheduled task (i.e., coffee sometime between 2:00pm and 5:00pm). Consistent with the second principle of perceived finitude, only the specifically scheduled task contracted time. That is, a boundary task only contracts time when the end is rigid and inflexible such that the terminating task must specifically mark the endpoint of the interval in order to contract time.

Finally, five studies (Studies 6A-6E) explored whether bounded time, in addition to feeling shorter, may also be underutilized. We find that people choose to take part in fewer tasks during bounded intervals (6A-6B), and perform fewer productive and extended tasks, opting instead for shorter and less productive tasks (6A and 6C). In addition, during bounded intervals, participants forgo both desirable leisure and productive work activities (6D), as well as financially superior options (6E) that could objectively be completed within the available time.

Together, these results identify a unique driver of time perception, finding that intervals bounded by a terminating scheduled task feel contracted. Our results establish that how consumers structure and organize their day around scheduled tasks has important implications for how they perceive and consume their free time.

Movement through Time and Space Shapes Psychological Distance

EXTENDED ABSTRACT

Time is an abstract concept that is only experienced indirectly, which makes the very notion of time difficult to comprehend. Once people move beyond the narrow spans of time that their biological clocks, broadly speaking, are capable of tracking, they conceptualize time by building mental representations that draw from their direct experience with spatial distances (e.g., Boroditsky, 2000; Lakoff & Johnson, 1980, 1999). The idea that travel through time has a direction—reflected in numerous metaphors, such as the “arrow of time” and “moving through time”—implies a spatial relationship. As a result of this mapping of time onto space, both literally and metaphorically, people’s movement through space can affect their representation of movement through time (Boroditsky, 2000; Casasanto & Boroditsky, 2008; Miles, Nind, & Macrae, 2010).

Here we explore two implications of the metaphorical mapping of time and space. We suggest that people’s experience of movement through time is analogous to their experience of movement through space in that they perceive the distance between the self and future events as continually diminishing whereas they perceive the distance

between the self and past events as continually increasing. Just as diminishing spatial separation makes objects seem spatially closer and increasing spatial separation makes objects seem spatially more distant, diminishing temporal separation makes events seem temporally closer and increasing temporal separation makes events seem temporally more distant. We hypothesize that this spatial metaphor of events in time implies two phenomena. First, physical movement toward events in space should reduce their psychological distance to the present. Second, there should exist a fundamental asymmetry in the psychological distance of past and future events whereby future events are psychologically closer to the present than past events of equivalent objective distance. We tested these predictions in a series of studies.

Study 1 tested our prediction that physical movement toward events in space would reduce their psychological distance to the present. Participants wrote down six personally-relevant events (e.g., “my final exams”) on separate sheets of large paper, which an experimenter taped to a door at the end of a long hallway. All participants reported how psychologically distant each event was. Some participants made these evaluations from a stationary position approximately 4 feet away from the posters; some participants made these evaluations from a stationary position approximately 30 feet away from the posters; and some participants made these evaluations after physically moving toward the posters (i.e., walking from 30 feet away to 4 feet away) or away from the posters (i.e., walking from 4 feet away to 30 feet away). We found that people who walked forward reported that these events were psychologically closer than did people who walked backward or who were in a close or far stationary position.

The next two studies tested whether future events are psychologically closer than past events of equivalent objective distance. In each study, participants were asked to imagine a point in either the past or in the future, and to report the point’s psychological distance. When considering specific times (one month, one year; Studies 2a-2b) or specific events (Valentine’s Day; Study 3), people reported that the future was closer than the past.

In Study 4, we experimentally reversed the spatially-grounded arrow of time by manipulating the direction of participants’ apparent physical movement, which we reasoned would influence their orientation to the past and future. Some people had the (virtual) experience of moving forward in space, consistent with their natural orientation of thoughts, whereas others had the (virtual) experience of moving backward in space, reversing their natural orientation of thoughts. Consistent with our predictions, we found that people’s virtual movement moderated the temporal asymmetry in psychological distance, such that backward movement eliminated the tendency for future times to be psychologically closer than past times.

The existence of this temporal asymmetry has important implications for theories of psychological distance that assume temporal symmetry (e.g., Trope & Liberman, 2010), and for theories of episodic memory that assume people remember the past in largely the same way that they imagine the future (e.g., Addis, Wong, & Schacter, 2007). More broadly, we believe that the temporal asymmetry in psychological distance reflects a general “bias toward the future” whereby people are psychologically oriented toward the future more than the past (Parfit, 1984). This future orientation is highly functional, as future events can typically be acted upon more successfully than past events. The fact that action can facilitate the realization of future desires but not past ones may help explain why people devote more resources to prepare for things that lie ahead than for things that lie behind. This is in part why it makes sense for car windshields to be bigger than rearview mirrors and for the meteorologist to dis-

guess the weather for the upcoming week rather than the preceding one. Thus, just as people mobilize resources to prepare for approaching sights and sounds, they apparently have a more general tendency to prepare for the (approaching) future by reducing its psychological distance from the here and now.

Neglecting Decline: Biased Views of Personal Development Driven by Failure to Recall and Predict Negative Change

EXTENDED ABSTRACT

Imagine yourself ten years in the future. Will you be fundamentally the same person you are today, just with grayer hair? Or will you be a significantly changed individual with different preferences, values, and personality characteristics? Because our conception of what we will be like in the future is central in guiding our decisions (March, 1978), making incorrect predictions about how we will change (or not change) over time can lead to undesired outcomes. For example, consumers who hold inaccurate views about their own future preferences might make suboptimal product choices, whether they are selecting between snacks (Simonson, 1990; Kahneman & Snell, 1992) or cars (Busse, Pope, Pope, & Silva-Risso, 2014). More generally, anticipating major change in what defines the self can undermine the motivation to reduce spending (Bartels and Urminsky 2016) and preserve resources for the future (Bartels and Urminsky 2011). Therefore, exploring how people see themselves changing over time and identifying any consistent errors in these beliefs is crucial for understanding and guiding future-oriented behavior.

Research has revealed that people seem to exhibit systematic biases in evaluations of their own personal change. A large portion of this work suggests that people overestimate positive change, seeing themselves on a trajectory of constant improvement (e.g., Wilson & Ross, 2001; Kanten & Teigen, 2008). In contrast, other research suggests that people view themselves as relatively stable going forward. For example, Quoidbach, Gilbert, & Wilson (2013) found in a large cross-sectional study that people systematically underestimate the absolute magnitude of future personal change when compared to the absolute magnitude of remembered past change (though their design did not allow for assessments of actual within-participant change, which left the specific form of the bias unclear).

Taken together, these findings present a puzzle. Do people believe that they have stopped changing, or do they believe the biggest improvements are yet to come? In our study, we directly compare participants' beliefs about their own (absolute and directional) change to their actual change in a one-year longitudinal study in order to develop a more complete understanding of predictive and retrospective biases.

College students from across the United States were recruited by a research firm to answer two online surveys about their self-perceptions, separated by one year. A total of 155 participants completed both surveys. Using similar stimuli to those in Quoidbach et al. (2013), we measured change in three domains: personality (Big Five traits; Goldberg, 1992), personal values (Schwartz, 1992), and preferences (favorite food, type of music, hobby, book, and vacation spot, best friend). At Time 1 (December 2013), each participant provided measures of current personality traits, values, and preferences as well as a prediction of these items one year in the future. At Time 2 (December 2014), participants again provided current measures as well as a recollection of their evaluations one year ago.

In our analyses, we distinguish between degree of absolute change (combining increases and decreases) and directional change (amount of net improvement vs. decline). To analyze directional

change, we conducted a pre-test (N=100), which confirmed that increases in the personality traits and values we measured were viewed positively and decreases in the same were viewed negatively, and identified in which preference categories people saw change negatively or were open to change.

We found that both predicted and remembered absolute change were significantly underestimated relative to actual absolute change for personality ($t(154) > 8.39$, $ps < .001$) and values ($t(154) > 5.54$, $ps < .001$). However, on average, participants also demonstrated a self-improvement bias. That is, for both personality and values, participants predicted ($t(154) > 4.02$, $ps < .001$) and remembered ($t(154) > 2.38$, $ps = .018$) greater improvement than they had actually experienced. This is because people were much more likely to predict and remember positive (vs. negative) changes, despite the fact that our sample actually underwent positive and negative change in equal proportions. Nonetheless, participants were significantly more likely to report remembering negative change than they were to predict it, resulting in a somewhat attenuated positivity bias in recall compared to prediction. Further analysis revealed that the largest errors were made by the subset of people who in fact declined over the course of the year. On average, these participants ignored their decline and instead reported a smaller improvement, simultaneously leading to both an overall underestimation of the absolute magnitude of change and an overestimation of improvement.

Participants also predicted that an average of 1.04 of their initial preferences (out of 6) would change over the following year, while, in actuality, 1.33 out of 6 preferences changed ($z = 2.31$, $p = 0.02$). However, we found that the degree of underestimation differed across the preference questions, $F(5, 766) = 3.86$, $p = .002$. Change was underestimated for items in categories where change was rated as undesirable in our pretest (hobby, music, and best friend), $t(151) = 3.35$, $p = .001$, but not for items where change was rated as neutral (food, book, and vacation), $t(153) = 0.85$, $p = 0.40$. This finding again supports the idea of a positive directional bias: people denied change in preferences when they viewed this change as a bad thing.

Our study reconciles previous findings by demonstrating that people can underestimate the absolute magnitude of personal change while simultaneously holding beliefs that they will continue to improve. Notably, this result emerges because people do not equally underestimate all types of change, but especially deny changes that are viewed in a negative light. Whereas actual change in our sample was evenly peppered with improvements and declines, and individuals acknowledged this variability to a certain extent in their past, the future was seen as uniformly positive. Thus, we suggest that people's self-views do not in fact resemble an "End of History Illusion," with the present moment marking the end of their personal development (Quoidbach et al., 2013). Instead, people think of the present moment as a watershed moment of a different sort: it is the moment when their somewhat rocky past will resolve into a consistent upward trajectory from now on.

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Self-Presentation in Online Word of Mouth

Chair: Francesca Valsesia, University of Southern California, USA

Paper #1: The Influence of Self-Presentation Concerns on Online Reviews

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Paper #2: Social Acceptance and Social Sharing

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Paper #3: Unintended Consequences of Indirect Impression-Management

Kirk Kristofferson, Arizona State University, USA
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Paper #4: Bliss is Ignorance: Happiness, Naiveté, and Exploitation

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“Mostly, we talk to impress.

And sometimes we shut up to impress, too.” – N. Al-Araby

SESSION OVERVIEW

Strategic self-presentation is ubiquitous and is an important driver of word of mouth communication (Schlenker 1980, Berger 2014). Yet, many unanswered questions remain about what drives individuals to select a specific self-presentation tactic while pursuing their self-presentation goals, as well as the behavioral consequences of consumers' self-presentation efforts. Moreover, the proliferation of online outlets for consumers to discuss their purchases, ranging from online rating communities such as Yelp and TripAdvisor to social media sites such as Facebook and Twitter, raises the important question of when and how self-presentation concerns influence online WOM. The four papers in this session address a set of related questions focused on the drivers and consequences of strategic self-presentation in online contexts.

The first two papers in the session explore factors that influence consumers' choice of self-presentation tactics given a specific self-presentation goal. **Valsesia, Nunes and Ordanini** document how members of online rating communities such as Yelp.com are concerned about being perceived as *knowledgeable* by others community members. Moreover, their ratings record affects the particular *self-presentation tactic* they choose to adopt in order to appear knowledgeable: displaying their ability to make good choices early on and exhibiting critical skills later, which results in their ratings becoming increasingly more negative. **Chen** focuses instead on how self-presentation goals and tactics vary depending on the target of the self-presentation effort. She shows WOM is often driven by a desire for social acceptance and that people take *different* approaches (tactics) to fulfill this goal when *sharing* with strangers versus friends. Individuals *self-enhance* when communicating with strangers in order to form relationships, but alternatively focus on connecting socially when sharing with friends in order to maintain existing ties.

The second two papers of the session shift the emphasis to the consequences of individuals' self-presentation efforts. In particular, **Kristofferson and White** focus on the behavioral consequences for the self-presenter of an indirect impression-management tactic: communicating the prosocial behaviors of others. They find that when

individuals publically communicate the positive behaviors of others, the communicator tends to behave less pro-socially on subsequent tasks. Finally, **Barasch, Levine and Schweitzer** look at consequences of self-presentation efforts for the *receivers* of WOM communication. They examine whether the magnitude of emotional displays (e.g., happiness) affects social judgment and interpersonal behavior, and find that very happy people are perceived to be naïve and thus are exploited more frequently. This effect is driven by the common belief that overly positive communicators shelter themselves from negative information.

Taken together, this combination of research sheds light on important factors affecting how consumers choose to present themselves both online and offline, as well as the consequences of individuals' self-presentation efforts, both for the self-presenter and for the targets of their efforts. We expect this session to generate interest among researchers studying impression management and self-presentation, social influence and social judgment, online and offline word of mouth, as well as consumer decision-making more broadly.

The Influence of Self-Presentation Concerns on Online Reviews

EXTENDED ABSTRACT

It is a *truism* that the Internet allows individuals to freely express opinions uninhibited by concerns about the impressions they make on others. A common assumption is that opinions regarding products and services found in online rating forums (e.g., Angieslist.com, TripAdvisor.com, Yahoo Local, and Yelp.com) are unaffected by reviewers' concerns about what readers will think of them, and therefore more reliable. The belief that opinions expressed online are unfiltered is supported by academic research, and the primary argument in support of this is that individuals are protected by the anonymity granted by the web (Sussman and Sproull 1999; Kiesler and Sproull 1992; Dubrovsky, Kiesler and Sethna 1991).

Yet, the most popular consumer opinion platforms have moved away from the notion of “strict” anonymity. Instead, they now encourage social interaction and compel users to build and maintain a reputation within their communities. Consider, for example, Yelp. Each reviewer (“Yelper”) has a public profile page on which, at the extreme, they can use their real name and an actual photograph. The profile summarizes their rating record, including designations of any reviews seen as especially “useful,” “funny,” and/or “cool” by visitors to the site. Further, Yelpers can “befriend” and “follow” other Yelpers, and publicly compliment them on their profile page. The “best” Yelpers are rewarded publicly by Yelp with status by being designated an “Elite Member.” The presence of reputation systems adds a social dimension to online reviewing and has been credited with stimulating participation by promoting accountability (Resnick et al. 2000; Dellarocas 2003). We propose that the absence of absolute anonymity, caused in part by the inclusion of reputation systems on opinion sites such as Yelp and TripAdvisor, results in reviewers who are concerned with what others think about them.

This research is the first to document the influence of self-presentation concerns – and the desire to appear knowledgeable (i.e., competent, skilled and intelligent) in particular – on ratings and reviews published on less than strictly anonymous user-generated review sites. We show these concerns have meaningful downstream consequences, significantly influencing the valence of ratings *dy-*

namically over time. The causal mechanism proposed and validated is as follows. Reviewers are more positive early on because, while new to a community, they are more concerned with being seen as *having made good choices* as a way to display their knowledgeability as reviewers. As the number of reviews in their rating record grows, reviewers become increasingly concerned with being seen as possessing the *critical skills* necessary to discriminate between experiences, and therefore relatively more negative. The result is a meaningful negative trend in ratings based on the number of past ratings in a reviewer's profile.

Three laboratory studies and the analysis of real world data provide compelling evidence in support of the proposed causal mechanism. In study 1A, we asked 126 college students to rate a song, with the aim of either showing they make good choices or are critical and discriminating. Reviewers concerned with showing they make good choices gave consistently higher ratings than reviewers concerned with displaying critical skills ($M_{\text{GoodChoice}}=5.68$ vs. $M_{\text{Critical}}=3.98$, $F(1,124)=19.83$, $p < .01$). In study 1B, we show how the relative importance of these two self-presentation concerns evolves over time, as a function of a reviewer's rating history, in turn influencing the valence of reviewers' ratings. We asked 90 college students to rate 2 songs with the goal of showing: (1) they make good choices (Good Choice condition), (2) are critical and discriminating (either Critical condition), or, (3) more broadly, are knowledgeable reviewers (Knowledgeable condition). Respondents rated the 1st song as if they just joined an online community of music lovers and the 2nd song, after a significant time delay, as if it were the 81st rating they provided. Among respondents giving their first rating, those assigned the goal of showing knowledgeability behave no differently from those in the Good Choice condition ($M_{\text{Knowledgeable}}=6.07$ vs. $M_{\text{GoodChoice}}=5.73$, $F(2,87)=.65$, $p=.52$), but differently from those in the Critical condition ($M_{\text{Critical}}=4.66$, $F(2,87)=5.11$, $p < .01$). The opposite occurred when giving their 81st rating. They behaved no differently than those in the Critical ($M_{\text{Knowledgeable}}=4.97$ vs. $M_{\text{Critical}}=4.24$, $F(2,87)=1.45$, $p=.24$), but differently from those in the Good Choice condition ($M_{\text{GoodChoice}}=6.00$, $F(2,87)=5.55$, $p < .01$). The results reveal a declining trend in ratings for reviewers who want to appear knowledgeable ($M_{\text{First}}=6.07$ vs. $M_{\text{EightyFirst}}=4.97$, $F(1,87)=4.61$, $p=.03$).

We find additional support for our explanation by moderating the effect of declining ratings in Study 2. Consistent with our proposed causal explanation, we document how the effect of providing more positive reviews early on manifests only for reviewers who are *high* in public self-consciousness (concerned with how they present themselves to others – Fenigstein et al 1975), and not for those *low* in public self-consciousness ($\beta_{\text{PSCXPreviousRatings}}=.58$, $p < .01$).

Finally, in study 3, we examine real-world data from Yelp consisting of 190,065 reviews by 48,108 individual reviewers. As expected, the data reveal a significant negative trend in ratings as a function of the number of businesses rated previously, controlling for other factors ($\beta_{\text{PreviousRatings}}=-.0031$; $p=.003$). Lending additional support, written reviews tends to be more positive early in a reviewer's rating history ($\beta_{\text{PreviousRatings}}=.540$; $p=.003$).

Using a multi-method approach, this research contributes to the literature on both impression management and word of mouth. First, we identify specific self-presentation tactics that individuals adopt in order to appear knowledgeable. Second, and more importantly, we show that an individual's use of different tactics evolves over time in a predictable fashion. In the context of online ratings, this implies the same individual can be more or less critical in their opinions with the same self-presentation goal in mind – appearing knowledgeable. Third, we demonstrate that reviewers express online are influ-

enced not only by the rating behavior of *other* community members (Schlosser 2005), but also by reviewers *own* past ratings behavior.

Social Acceptance and Social Sharing

EXTENDED ABSTRACT

Consumers are increasingly sharing product experiences online with both strangers and friends. Despite the prevalence of Word of Mouth (WOM), little is known about *how* and *why* WOM differs based on whether people are talking to strangers or friends. The current paper theorizes that WOM behavior is driven by an overarching goal of gaining social acceptance.

Research in interpersonal relationships theorizes that relationships move primarily through two stages: the *formation* stage and the *maintenance* stage (Clark and Beck 2011). At the formation stage, where people are strangers to one another, potential partners engage in evaluation processes where they attempt to assess the worthiness of each other. In this stage, one important task is to signal one's attractiveness as a potential partner (i.e., make one seem worthy as a potential friend, Clark and Beck 2011). For those who move beyond this initial phase, the relationship moves into the maintenance stage and that people are fully engaged in an interpersonal relationship and are motivated to stay socially connected to one another (Clark and Lemay Jr. 2010).

Given that people's need for social acceptance is fundamental and active in most everyday situations (Baumeister and Leary 1995), it is reasonable to expect this motivation to drive WOM decisions. When communicating with strangers – or people at the initiation stage of the relationship – one's goal is to make oneself appear attractive as a potential friend going forward and so WOM is likely driven by the desire of *self-enhancement*. When communicating with friends – or people in the maintenance stage of a social relationship – one's goals shifts away from self-enhancement since the relationship has already commenced. In this case, WOM is likely shared to socially connect with others, which helps maintain existing relationships. These ideas are tested and confirmed in a series of six methodologically diverse studies.

Studies 1A and 1B show that self-enhancement is an important driver of sharing with strangers. Prior research suggests that being responsible for a good consumption is self-enhancing because it allows people to signal expertise and competence (Wojnicki and Godes 2013) and Study 1A shows that being responsible (vs. not responsible) for a good purchase increases people's willingness to share their purchase experience more with strangers than friends. Study 1B looks at the impact of transparent incentives (i.e., incentives that are easily observed by the WOM recipient, e.g., "tell the hairdresser I told you about him") on sharing. Transparent incentives may be viewed as image-damaging since one could appear avaricious/opportunistic. Consistent with our predictions, the presence of image-damaging transparent incentives (vs. no incentives and non-image-damaging incentives) reduced WOM more with strangers than friends.

Testing the second half of our framework, Study 2 examines whether social sharing among friends fulfills connection goals. Participants were asked to write about a negative personal experience to either a friend or a stranger. If our predictions are correct in that social sharing with friends achieves the goal of maintaining connection, then the act of writing about an experience should generate stronger feelings of social connection when the audience is composed of friends than strangers. To elucidate the connection mechanism, half of participants were instructed to write the WOM with a social connection goal in mind. Based on our theory, explicitly

activating (vs. not activating) this goal before sharing WOM should make people feel more connected to strangers but it should have little effects on friends since the goal of establishing social connections is naturally activated when people share WOM with friends. These predictions are confirmed in Study 2.

Study 3 tests our overall framework and shows mediation. Building on the ideas that positive WOM is often shared to self-enhance (De Angelis et al. 2012; Wojnicki and Godes 2013) and negative WOM is often shared to connect (Pennebaker, Zech and Rimé 2001), we show that people are relatively more likely to share positive (vs. negative) WOM with strangers than friends. Moderated mediation analysis confirms that the relative preference for sharing positive WOM with strangers is driven by self-enhancement concerns and that the preference for sharing negative WOM with friends is driven by social connection concerns.

If Study 3 results are driven by the fundamental desire for social acceptance as we hypothesize, then these effects should attenuate when social acceptance concerns are less salient. To test this, we experimentally reduce social acceptance concerns by manipulating the word of mouth setting in Study 4. In most WOM contexts (e.g., Facebook, Yelp), people can interact with each other in the form of posting replies, asking questions, etc. We theorize that by removing this ability to interact with each other (i.e., people can only post WOM, but not have the opportunity to receive responses from others) social acceptance concerns are reduced since there is little opportunity for having future social interactions/relationships with WOM receivers. Consistent with this line of thought, we show in Study 4 that Study 3 results are mitigated when social acceptance desires are reduced experimentally.

Study 5 provides a final test of our framework and examines people's sharing behavior in the context of an online product platform. Building on the ideas that individuals are more likely to offer help when attempting to self-enhance (since it signals compassion and competence) and seek help when making connections (since it shows vulnerability, Beck and Clark 2009; Clark and Beck 2011), results reveal that relative to strangers, people are *less* likely to offer (vs. seek) advice to friend than strangers on online platforms.

The current work makes three important contributions. First, it provides an overarching framework to understand *how* and *why* people share WOM (to achieve social acceptance). Second, it shows how seemingly unrelated findings from prior research (which are rooted in the stranger context) can be synthesized to show the same thing: people attempt to self-enhance with strangers. Third, the current work shows that previously established drivers of social sharing (found in the stranger context) may not hold in the friend context given the shift in relationship goal from formation to maintenance.

Unintended Consequences of Indirect Impression-Management

EXTENDED ABSTRACT

We all know at least one of *those* people-individuals who post about the positive behaviors of others they are connected to (e.g., sister running a marathon, colleague volunteering at a local charity). What is unclear is the effect that communicating a close other's positive behavior has on the communicator's own subsequent behavior. Does publically communicating the athletic sister's accomplishment motivate the communicator to behave consistently (go for a run) or reduce the likelihood to follow through with the behavior (go for a hamburger)? This research examines the consumer consequences of publically communicating a close other's positive behavior and highlights the role impression management plays in this context.

Consumers have multiple avenues available to present themselves positively to others, such as purchasing products that donate profits to charity (Krishna 2011) or engaging in token support for a social cause (joining a Facebook group; Kristofferson et al. 2014). However, research shows that explicit self-presentation tactics can lead others negatively interpret the target's actions (Berman et al. 2015; Fein 1996). To mitigate this drawback, consumers can resort to less invasive, or indirect impression-management techniques, such as communicating the positive behaviors of others.

We propose that publically communicating the positive behaviors of another other leads to a subsequent decrease in the communicator's own positive behaviors. We propose that when the act of communicating the positive actions of another person is done in a public (vs. private) manner this allows the consumer to feel positively from presenting a positive image to others. As a result, the consumer is less inclined to engage in subsequent positive behaviors themselves. We offer further support for our impression-management claim by varying the communication target (close other vs. acquaintance, S2) and showing this effect among high public self-conscious consumers (S3). Finally, we identify a boundary condition: accountability for the consumer's own behavior (S4).

A pilot study demonstrated this effect in the domain of positively-viewed athletic behavior using a dataset taken from a social networking site (Strava) of a competitive cycling team (76 cyclists, 1,249 communications/kudos, 29,516 KM). Athletes can publically communicate a fellow cyclists' performance by giving 'kudos' for the teammate's performance. As predicted, high communicators cycled significantly shorter average distances than low communicators ($F(1,74)=4.02, p < .05$).

Study 1 tested our predictions in a field study using personal Facebook posts. We recruited individuals ($n=62$) to participate in a Facebook study by offering an entry in a draw to win an iPad. Participants wrote a Facebook post about one of three behaviors: helpful behavior of a close other, average/everyday behavior of a close other, or a helpful behavior that they had performed. At the end of the study, participants were offered the opportunity to be helpful by forgoing their entry in the iPad draw in exchange for us making a \$10 to the World Wildlife Fund (0=No, 1=Yes). Participants who publically communicated a helpful behavior of a close other were significantly less likely to be helpful themselves than participants who communicated an average behavior of a close other ($P_{Other-Helpful}=33.3\%$ vs. $P_{Other-Control}=66.7\%$; $b=-1.39, p < .05$), but no different from those who communicated their own helpful behavior ($P_{Other-Helpful}=33.3\%$ vs. $P_{Self-Helpful}=35.0\%$).

Study 2 replicated the field study using blogging as the public communication medium, and supported our impression-management claim. Undergraduates ($n=132$) were assigned to conditions in a 2 (Task: Communicate, Introspect) x 2 (Target: Close Other, Acquaintance) design and completed the study in groups. Participants in the publically communicate (introspect) conditions wrote a blog post (introspected) about a charitable behavior of either a close other or acquaintance with other participants (~20) in the room with them. Shortly after, they indicated how willing they were to volunteer their time. The expected interaction emerged ($F(1,128)=3.88, p=.05$). Participants who publically communicated the charitable behavior of close other (vs. acquaintance) were less likely to volunteer ($F(1,128)=3.82, p=.05$). This group was also less marginally less likely to volunteer than those who introspected about a close other ($F(1,128)=3.45, p < .07$).

Study 3 further supported our impression-management claim by investigating public self-conscious consumers. Undergraduates ($n=121$) were assigned to conditions in 2 (Communication: Public,

Private) x continuous (Public Self-Consciousness) design. Participants in the public (private) condition wrote a blog post (confidential reflection) about another person's behavior as in study 2 and completed the dependent variable as in study 2. At the end of the study, participants completed the seven-item public self-consciousness scale. The expected interaction emerged ($b=.43$, $SE=.17$, $t=2.50$, $p=.01$). Results showed that high (low) public self-conscious participants were less likely to volunteer when they publically (privately) communicated a close other's behavior (HPSC: $+1.99SD$, $B_{jN}=.68$, $SE=.34$, $p=.05$; LPSC: $-.75SD$, $B_{jN}=-.38$, $SE=.19$, $p=.05$).

Study 4 examined a boundary condition: accountability. Undergraduates ($n=133$) were randomly assigned to one of four conditions in a 2 (Communication: Public, Private) x 2 (Accountability: High, Low) design. The procedure and manipulation used in the communication task is identical to that of study 3 with one change. Immediately after communicating the behavior of a close other, participants were told their subsequent responses would be either discussed (high accountability) or be confidential (low accountability). Participants then completed the dependent variable from studies 2 and 3. The expected interaction was significant ($F(1,129)=4.05$, $p < .05$). When accountability was low, participants publically (vs. privately) communicating the charitable behavior of a close other were less charitable ($F(1, 129)=3.79$, $p=.05$), but no differences emerged when accountability was high ($F(1, 129)=82$, $p > .35$).

In conclusion, we investigate the consequences that communicating the positive behaviors of others have on our own behavior. We demonstrate that publically communicating the positive behavior of close others makes consumers less likely to engage in the behavior themselves, and this decrease is driven by the reception of impression-management benefits.

Bliss is Ignorance: Happiness, Naiveté, and Exploitation

EXTENDED ABSTRACT

Social media has become a ubiquitous channel of communication. Each day, people share billions of items online, including photos and text, and this trend is only increasing (Facebook 2013; System 2014). Through this content, people convey different sentiments to their audience. For example, people might post a happy photo of themselves on vacation or an angry story about bad customer service.

Prior research has shown that individuals automatically infer personality traits from others' emotional expressions (Frijda 1986; Parkinson 1996). For example, scholars have found that expressions of happiness signal affiliation and warmth, whereas expressions of anger signal dominance and competence (Knutson 1996; Tiedens 2001). As a result, emotional expressions have powerful effects on cooperation/competition and bargaining (Dehghani, Carnevale, & Gratch 2014).

Although extant research has advanced our understanding of how valence and other dimensions of emotion (e.g., certainty) influence trait inferences, we know surprisingly little about how a single emotion expressed at different levels of intensity is perceived. But the emotional expressions on social media vary in magnitude, and are oftentimes extreme in nature (e.g., an extremely happy photo or an enraged story). In fact, due to selection in what people post, sentiments in these contexts tend to be more extreme than what people experience more generally (Chou & Edge, 2011). Thus, it is important to understand how the magnitude of emotional displays affects social judgment and interpersonal behavior.

We examine this question in the context of expressed happiness. While prior work has shown that conveying moderate happiness can

increase individual's perceived attractiveness, competence, and liking (Harker & Keltner 2001), we document one cost of displaying happiness at the extreme. Specifically, people perceive very happy individuals to be more naïve than moderately happy individuals. These perceptions reflect the belief that very happy individuals limit their exposure to negative information and use biased information processing strategies to maintain their positive feelings (Isen 1984; Batra & Stayman 1990). As a result of these inferences, individuals are more likely to take advantage of very happy people by offering them biased advice.

Five studies test these propositions with a variety of manipulations, measures, and paradigms. **Study 1** ($n=390$) used a subtle, controlled manipulation of emotion: a target's response on an emotional inventory (similar to the "quiz results" people often post on social media). Participants viewed one of five conditions showing the results of this inventory for another individual, ranging from neutral (6 on an 11-point happiness scale) to moderate happiness (8 of 11) to extreme happiness (10 of 11), and then rated the individual on a 4-item Naiveté scale. Individuals who displayed high levels of happiness were perceived as more naïve than individuals who displayed moderate levels ($B=.24$, $SE=0.06$, $t(387)=3.91$, $p<.001$). These perceptions also followed a curvilinear trend ($B=.11$, $SE=0.04$, $t(387)=2.94$, $p<.01$), suggesting that inferences of naiveté are particularly strong at extreme levels of happiness. We observed this pattern of results for both male and female targets.

Study 2 ($n=209$) replicated these naiveté findings ($F(2,206)=4.95$, $p<.01$) and explored the underlying mechanism. Focusing on three of the five happiness levels from the previous study, a one-way ANOVA revealed a significant effect of emotion on a 7-item scale measuring perceptions of Biased Processes ($F(2,206)=4.88$, $p=.009$). Participants believed that the individual engaged in more biased search and inference processes when he/she was very happy ($M=4.47$) than when he/she was moderately happy ($M=3.99$, $t(139)=2.71$, $p<.01$) and when he/she was neutral ($M=3.98$, $t(135)=2.73$, $p<.01$). In addition, this belief mediated the link between expressions of happiness and perceived naiveté (95% C.I.=[0.053,0.238]). We also ruled out two alternative mechanisms: perceptions that very happy people do not set challenging goals for themselves and that very happy people are overly optimistic.

Study 3 ($n=239$) replicated these findings using facial expressions in photographic stimuli: male and female targets expressing different levels of happiness (naiveté: $F(2, 236)=9.62$, $p<.001$; biased processes: $F(2,236)=9.38$, $p<.001$; 95% C.I.=[0.078,0.240]). We also demonstrated that inferences do not extend to perceptions of very happy individuals' general competence or likeability.

Study 4 ($n=216$) identified a boundary condition. Using a 2 (Emotion: *happy*, *very happy*) x 2 (Seeks-information: *control*, *high*) between-subjects design, we also manipulated whether the target seeks out negative information about a neighbor's house that just burned down. A two-way ANOVA revealed a significant interaction on naiveté ($F(1,212)=4.92$, $p=.03$), such that we replicated the effect of happiness magnitude in the control condition ($F(1,212)=7.91$, $p<.01$), but when very happy individuals sought out negative information, emotion expressions no longer influenced perceptions of naiveté ($F(1,212)=.11$, $p=.74$). Inferences about biased processes again mediated the effect on naiveté (95% CI=[0.193,0.775]).

Study 5 ($n=115$) demonstrated a behavioral implication of expressed happiness. We used a conflict of interest paradigm (Sah & Loewenstein, 2012) in which participants gave advice to a partner for an estimation task (guessing how much money was contained in different jars of coins) and could financially benefit if their partner overestimated the amount. We calculated the percentage by

which participants' advice deviated from the median estimate of each jar's contents, and found that people gave more biased advice to very happy partners ($M=2.46$) than to happy partners ($M=1.46$; $F(1,113)=8.01, p<.01$). This was mediated by perceptions of naiveté (95% C.I.=[0.021,0.608]). In other words, people took advantage of the opportunity to profit from very happy individuals by giving them biased, self-serving advice. Presumably, they expected very happy individuals to be naïve enough to believe it.

Our research underscores the importance of examining emotional expressions at different magnitudes, and has important implications for self-presentation. People who express high levels of happiness on social media may convey the impression that they are naïve and thus may be prone to exploitation. This disadvantage of expressing happiness should also inform "display rules" that prescribe expressions of happiness in many contexts, such as customer-employee interactions and sales (Barger & Grandey 2006; Pugh 2001). By demonstrating the impact of emotion magnitude on impression management, social cognition, and conflicts of interest, the present research offers novel insights for psychology and consumer research and would be of interest to a wide audience at ACR.

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Unveiling the Social Dynamics of Word of Mouth

Chair: Francesca Valsesia, University of Southern California, USA

Paper #1: I Rated It First! Feelings of Psychological Ownership and Consumer Ratings

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Joseph C. Nunes, University of Southern California, USA
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Paper #2: Dancing with the Enemy: Dynamics, Drivers, and Outcomes of Rival Brand Engagement

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Koen Pauwels, Ozyegin University, Turkey
Raoul Kuebler, Ozyegin University, Turkey

Paper #3: Social Distance in Online Reviews: When Negative Reviews Prove Positive for Brands

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Lisa A. Cavanaugh, University of Southern California, USA
Darren Dahl, University of British Columbia, Canada

Paper #4: The Broader Scope of the Experience Superiority—Just Listen!

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SESSION OVERVIEW

Online and offline word of mouth are the most credible forms of advertising for consumers around the world (Nielsen 2015). What social factors influence whether and how consumers decide to initiate word of mouth communication about products and brands? On the flipside, how do social factors influence how word of mouth communication is received? The four papers in this session address these and related questions.

The first two papers focus on social factors that influence the decision to initiate word of mouth communication as well as the content of such communication. **Valsesia, Nunes and Ordanini** focus on online consumer ratings by examining how the number of previous ratings posted for a given product influences the ratings and reviews it receives. They show how the number of ratings already posted for a product influences future reviews due to feelings of psychological ownership for those who come first. **Ilhan, Pauwels, and Kuebler** investigate how fans of a brand interact with the social media ecosystem of rival brands and their fans (e.g., Samsung fans visiting Apple's Facebook page to spoof Apple). The authors define this interactive, intercommunal, and inter-brand practice as 'Dancing with the Enemy' (DwE) and show how it is a behavioral manifestation of rival brand engagement in social media. They study the types, triggers, and consequences of DwE through a multi-method study combining netnography, content, sentiment, and time-series analysis.

The second two papers look at how social factors influence the receiver's reaction to word of mouth communication and their reaction to WOM communication. **Ordabayeva, Cavanaugh and Dahl** look at the receivers of online product reviews to show how negative reviews can sometimes actually be good for brands. They find negative reviews from low- (vs. high-) status reviewers motivate consumers to distance themselves from reviewers perceived as different in status. Social distancing causes negative reviews from low-status reviewers to be less detrimental, albeit the effect is moderated by the consumer's own status. Finally, **Bastos and Moore** look at factors that can increase feelings of social connection in word of mouth communication for the receivers of the content. They show that hearing about others' experiential purchases makes consumers happier

than hearing about others' material purchases. They find the effect is mediated by perceived conversation substantiveness, which in turn increases feeling of social connection with the initiator of the communication.

Taken together, this research sheds new light on how social factors influence the decision to initiate word of mouth communication, as well as the reactions of the receivers of such communication. The authors in this session utilize an array of methodological approaches (ranging from laboratory experiments to content analysis and the analysis of secondary data). We expect the session to generate interest among researchers studying both online and offline word of mouth, social influence and social judgment, as well as consumer decision-making.

I Got Here First! Feelings of Psychological Ownership and Consumer Ratings

EXTENDED ABSTRACT

The rating website Yelp.com confers special status to the first individual who reviews a business on the site. Not only will the reviewer see the number of "Firsts" grow on his or her profile page, but so will other reviewers. Further, first reviews contribute to his or her chances of becoming an "Elite Reviewer," and the reviewer's identifying information (username) will appear prominently on the business' page under the tag "first to review." One obvious motivation for Yelp to introduce this type of incentive resides in its competitive strategy aimed at increasing market coverage. However, the motivation for reviewers – why they care about being the first to rate a business – is less clear.

Previous literature has argued that late reviewers might be discouraged to review a product online if they see a high number of previous ratings, because they might feel they have nothing new to add to the conversation (Wu and Huberman 2008). Moreover, the first individuals to review a product online can often times be qualitatively different compared to late reviewers in their levels of engagement towards the product (Li and Hitt 2008, Godes and Silva 2012). In this paper we argue that being among the first to review a product or service can actually influence *how* an individual feels about the product and hence his or her ratings and reviews. We show reviewers who rate a business early (versus late) are generally more positive due to a tendency to become psychologically attached to businesses for which they can lay claim to being early adopters.

This research is the first to document how consumers who rate products and services online will have a differential feeling of psychological ownership towards the product or service (a distinct type of ownership, which is independent of legal ownership, see Pierce et al. 2003) depending on how many people have evaluated the product previously. More specifically, we show that consumers who are early to rate a product online will have a greater sense of ownership towards the product compared to those who see that many other consumers have already rated product. This is consistent with findings suggesting consumers have a more positive attitude towards products they own (Heider 1958, Beggan 1992) as well as a greater desire to generate positive word of mouth about such products (De Angelis et al 2012). Consequently, we expect reviewers who are among the first to rate a product to be more positive in their ratings and reviews compared to late raters and we expect this effect to depend on their sense of psychological ownership towards the product or service.

Five laboratory studies provide initial evidence in support of the proposed causal mechanism. Study 1 tests whether individuals do in fact systematically provide higher ratings when they are “early” to review a product as opposed to “late.” We find that two hundred and seventy-eight students instructed to rate a video provide higher ratings if they thought only 2, as opposed to 100, other students had rated the video before them ($M_{Low}=9.29$ vs. $M_{High}=8.95$, $F(1,274)=5.38$, $p=.02$).

In study 2, we asked three hundred and eighty-three respondents to rate the work of two contemporary photographers. Each respondent rated the work of one photographer as an “early” reviewer and the other as a “late” reviewer (the order in which they did so was counterbalanced). We find ratings to be higher when respondents believed they were early reviewers ($\beta=.17$, $p<.01$). Moreover, we find our effect to be driven by feelings of psychological ownership. Respondents felt they had more ownership towards the work of an artist they were early to rate ($\beta=.16$, $p=.02$) and this influenced their evaluation of the work ($\beta_{INDIRECT\ EFFECT}=.05$, 95% CI: 0.01, 0.10).

In study 3 we found our effect held even when respondents were told they were *not* responsible for discovering the product. We asked two-hundred and forty-two college students to imagine they had found a YouTube video that they really liked. The video had either 3 or 325,000 “likes”. We find that respondents felt greater ownership towards the video if only three people “liked” it before them ($M_{Early}=3.34$ vs. $M_{Late}=2.77$, $F(1,238)=4.67$, $p=.03$). Moreover, they were significantly more likely to “like” the video themselves ($M_{Early}=4.59$ vs. $M_{Late}=3.88$, $F(1,238)=4.60$, $p=.03$) and this effect was driven by the higher feeling of psychological ownership ($\beta_{INDIRECT\ EFFECT}=.024$, 95% CI=0.04 0.53).

Next, in study 4 we introduce an important moderator of our effect. One-hundred and seventy-seven college students listened to one of two songs, pre-tested to be either liked or disliked by this population (Valence: Positive vs Negative). They were told that the song came from a music website where it had been rated either two or 252 times. We find respondents have a greater feeling of ownership if they listen to a song that has been rated only twice, as opposed to 252 times. Yet, this happens only if they listen to a positive song ($M_{Low}=4.61$ vs. $M_{High}=3.47$, $F(1,173)=7.69$, $p<.01$) and not when they listened to a negative song ($M_{Low}=2.26$ vs. $M_{High}=2.67$, $F(1,173)=1.14$, $p=.29$, $F_{Interaction}(1,173)=7.53$, $p<.01$). Once again, feelings of psychological ownership have a positive influence on the song’s ratings, but only if the song had a positive valence ($\beta_{INDIRECT\ EFFECT}=.71$, 95% CI=0.07 1.41).

Finally, in study 5 we dig deeper into the process. We asked one-hundred and ninety students to read about a hypothetical experience they had at a restaurant and told them they had decided to review it on Yelp. We replicate our effect and also show that feelings of psychological ownership towards a restaurant that respondents were early (as opposed to late) to review were driven by a heightened sense of control over the destiny of the restaurant ($\beta_{INDIRECT\ EFFECT}=.03$, 95% CI=0.00 0.07).

Taken together, the results suggest one reason why consumer ratings tend to decline over time is a decreasing sense of ownership among reviewers given more people have rated the product before them. Such systematic influences on reviews are important to understand for both the review sites (e.g., Yelp) and consumers who utilize these sites.

Dancing with the Enemy: Dynamics, Drivers, and Outcomes of Rival Brand Engagement

EXTENDED ABSTRACT

Have you ever felt the desire to spar with the fans of the opposing team, whether in sports, politics, or in other arenas? Have you ever acted on this desire, for example, like some Samsung fans who travel to Apple’s Facebook page to slam Apple’s new products? In the Apple-Samsung brand rivalry, Samsung fans’ interaction with the “enemy” Apple brand and its fans at Apple’s Facebook site reveal a new type of social media practice propelled by the eminent brand rivalry and by the connected consumers of the digital age who can easily access a number of platforms and connect with other consumers to express their likes, dislikes, and their fanaticism. When it comes to engagement among rivals, it’s not only technology brands like Apple and Samsung that garner fervent fans. We see it in consumer brands (e.g., Coca Cola versus Pepsi, Colgate versus Crest), presidential candidates (Hillary Clinton vs Bernie Sanders), sports apparel (Nike versus Adidas), and entertainment products (Xbox versus PlayStation). Our study is driven by real-life observations that fans of a brand engage and interact with the social media ecosystem – touchpoints and fans – of the rival brands, a practice we refer to as “dancing with the enemy” (DwE). As social media increasingly mediates the consumer-brand relations, these interbrand and intercommunal practices become common for consumers while providing immense opportunities for brand managers to respond to the competition, influence the rival brand’s customers, and amplify the brands’ WOM. Our study is guided by the following research questions: 1) How do consumers engage with the rival brands and rival brand communities in social media? 2) What are the dynamics of rival brand engagement? 3) What are the drivers and consequences of rival-brand engagement?

Consumer engagement has been defined as a positively valenced consumer state “that occurs by virtue of interactive, co-creative customer experiences *with a focal agent/object (e.g. a brand)*” (Brodie et al. 2011, 260, emphasis added). Likewise in practice, social-media marketing and digital brand-management efforts are limited to managing, measuring, and facilitating engagement with company-owned or operated social media accounts on Facebook, Instagram, LinkedIn, or Twitter (e.g., Roederkerk and Pauwels 2016). The brand-specific focus of academics and managers alike ignores consumers’ interaction with the rival brands. Although previous studies have identified competitors and competitive actions as a possible “strong contextual forces affecting customer engagement” (van Doorn et al. 2010, p. 258), these cross-competitive effects, their potential dynamics, and outcomes on customer engagement behavior have not yet been explored.

Before the advent of social media, marketing literature studied consumers’ relation with the rival brands mostly from the transactional perspective of purchase loyalty (e.g., Hotelling 1929) or with a relationship-marketing lens (e.g., Fournier 1998). Those studying popular-brand communities identified oppositional loyalty as a collective communal attitude that dictates consumer’s interaction with rival brands and enforces we-ness in the specific brand community (Muñiz and O’Guinn 2001). Building on the existing approaches of engaging with rival brands, we introduce a quad model that offers a new conceptualization of rival-brand engagement in social media that incorporates rival brands and their communities. Our analysis takes a quadratic approach that goes beyond the dyadic approach (consumer-brand) of loyalty and relationship studies and the triadic approach (consumer-consumer-brand) of the brand community lit-

erature and allows for an interdependent and synergistic conceptualization of rival-brand engagement in social media.

Our multimethod and multicontext study identifies rival-brand contexts that are likely to induce DwE behavior and that display varying degrees of polarization between rival brands operating in different duopolistic markets. We collect data from the main rival brands in mobile phone technology (Apple-Samsung), carbonated beverages (Coke-Pepsi), fast food (McDonald's-Burger King) toothpaste (Crest-Colgate), and sports apparel (Nike-Adidas). We draw on several years of data from the official Facebook pages of each brand.

Through our qualitative analysis, we distinguish three types of DwE: (a) *across*, fans interacting with the social media of both brands in the dyad (b) *discourse*, rival brand fans communicating their thoughts through words on the central brand's social media; and (c) *ripple*, central brand fans reacting to rival brand fan's posts and words on the central brand's social media. Consistent across the studied brands, the results show that DwE occurs for 3.35% of all posts, indicating that our operationalization is distinctive. DwE Across involves 1.45% of all posts, clearly demonstrating the migratory behavior. In each analyzed industry, we observe that rival brand fans migrate and post negative comments on the Facebook page of the focal. Moreover, we note that the % of DwE is the smallest among high-tech brands (e.g. 1.10% and 1.30% for Apple and Samsung, given the higher amount of technical questions and answers), medium for fast moving consumer goods and highest for products associated with competition, such as Nike (6.10%). This aligns with our expectations and implies that DwE is even more prominent in winner-takes-all polarized competition such as rivaling sport teams (e.g. UCLA vs. USC) and in politics (e.g., Hillary-Bernie).

Time series analysis reveals that, for each brand, DwE Ripple is driven by both DwE Across and DwE Within. We find that *DwE is a substantial dynamic driver of both Volume and Valence* metrics of engagement. At the same time, these brand triggers (mostly marketing actions) do drive DwE activity, offering managers concrete levers to pull if it is desirable to increase DwE. DwE activity can be influenced by variables (largely) under managerial control.

In sum, our finding that the fans of a rival brand can positively impact the brand performance of the brands in a brand rivalry broadens the academic understanding of engagement and enriches our understanding of the dynamics of WOM. Existing social-media performance metrics are losing their significance, especially for product categories that are dominated by two major players. Going beyond the commonly adopted war analogies of rivalry, our study illustrates that competition in the dynamic, multichannel, social, and interdependent digital brand landscape is not a zero sum-game, particularly for rival brands that can benefit from collaborative and synergistic approaches to competition.

Social Distance in Online Reviews: When Negative Reviews Prove Positive for Brands

EXTENDED ABSTRACT

Prior research suggests that negative reviews generally have pervasive detrimental effects for product perceptions and sales (Chevalier & Mayzlin, 2006; Goldenberg et al, 2007). This is because negative information is considered to be more diagnostic than positive information (Herr, Kardes & Kim, 1991; Skowronski & Carlston, 1987). However, this literature has overlooked the fact that negative information or product feedback might also be perceived as threatening, especially when it is perceived as highly relevant to the self (Tajfel & Turner, 1986). Since many brands and products are highly relevant to consumer identity (Belk, 1988), negative informa-

tion about such products, just like negative information about the self, may be perceived as a self-threat. We therefore propose that, under certain conditions, negative reviews of identity relevant products can be positive for brands. Our work expands the literature on the curious effects of negative reviews (Berger, Sorensen & Rasmussen, 2010). It also examines the previously overlooked effects of reviewers' and consumers' status in facilitating this phenomenon.

We predict that when brands and products are highly relevant to consumers' identity, a negative review of such a product will be perceived as threatening, and it will motivate consumers to look for ways to distance themselves from the negative (but not positive) information. As a result, a negative review will have less detrimental consequences for products following the negative comments of a socially distant reviewer. Consumers' perceptions of their own status will further determine reactions to low-status and high-status reviewers: high-status consumers will perceive greater distance with a low-status negative reviewer, while low-status consumers will perceive greater distance with a high-status negative reviewer, leading to the opposite effects of a negative reviewer's status on purchase intentions. Provided the central role that identity threat plays in facilitating the effects of negative information, the hypothesized effects will only emerge when the product is relevant to consumers' identity. Three studies test these predictions.

Study 1 (N=253) employed a 2 product review valence (positive/negative) x 2 reviewer status (low/high) between-subjects design to examine consumer responses to an identity-relevant product (Apple Watch). Drawing on the fact that social status is often reflected in individuals' use of language arising from developmental and educational differences (Fernald, Marchman & Weisleder, 2013), status was manipulated by adjusting language (i.e., grammar) within the review. We manipulated the valence of the review to feature either a 5-star product rating with positive comments (and hence non-threatening), or 1 out of 5 star rating with negative comments (and hence more threatening). The review length and product features covered were held constant across conditions. Participants were asked to indicate purchase intentions and perceived similarity (i.e., distance) with the reviewer.

Results revealed that purchase intentions were generally higher after positive (vs. negative reviews) and after low-status (vs. high-status) reviewers. However, these main effects were qualified by a significant valence x reviewer status interaction ($F(1,249)=5.10, p=.025$). Whereas the status of the reviewer did not influence purchase intentions for positive reviews, purchase intentions were higher after negative reviews written by low-status reviewers rather than high-status reviewers. Perceived similarity ratings revealed an identical pattern of results: participants distanced themselves more from the low-status (vs. high-status) reviewer but only when reviews were negative. Perceived distance mediated the effect of the valence x reviewer status interaction on purchase intentions.

Study 2 (N=140) tested the moderating role of consumer status and product identity relevance using a 2 product identity relevance (manipulated: high/low) x 2 reviewer status (manipulated: low/high) x consumer status (measured: low/high). Lab participants read descriptions and negative reviews of the same web series (i.e., episodic scripted videos released on the Internet) written and produced by students at the same university (high identity relevance) or by students at another university (low identity relevance). They then indicated their interest in each series and assessed their own status.

Results revealed a negative marginal effect of reviewer status (product interest was higher after a low-status than a high-status reviewer), which was qualified by a significant three-way reviewer status x product identity relevance x consumer status interaction

($b=-1.45$, $p=.001$). Reviewer status and consumer status did not significantly change interest in identity-irrelevant series. However, for identity-relevant series, high-status consumers distanced themselves more and expressed greater interest in the series following the negative review by low-status (vs. high-status) reviewers, while low-status consumers distanced themselves more and expressed greater interest following the negative review by high-status (vs. low-status) reviewers.

To enhance generalizability, Study 3 manipulated consumer status and manipulated reviewer status differently. **Study 3** ($N=121$) consisted of a 2 consumer status (high/ low) x 2 reviewer status (high/ low) between subjects. Drawing on Galinsky, Gruenfeld and Magee (2003), participants recalled a time when they had higher (vs. lower) status (defined as a social and a financial position) than people around them. Next, all participants read negative reviews. We manipulated reviewer status by providing a short profile of the reviewer including their occupation (vice president vs. receptionist), education (Ivy League vs. community college) and wardrobe staple (Prada vs. Payless shoes). A pre-test verified that the high-status profile created significantly higher perceptions of the reviewer's social status than the low-status profile.

Results revealed a significant two-way consumer status x reviewer status interaction ($b=.81$, $p=.002$). From the viewpoint of a high-status consumer, a product was perceived to be more attractive if the negative review originated from a low-status rather than a high-status reviewer. However, from the viewpoint of a low-status consumer, a product was perceived to be more attractive if the negative review originated from a high-status rather than a low-status reviewer.

Taken together, our findings demonstrate that negative online reviews are not always detrimental for the reputation of brands and sales of products. Rather, when brands and products are identity relevant, consumers seek to defend them from negative information, particularly when this information comes from sources perceived as socially distant. Hence, the interplay of reviewer status and consumer status is important to managing and understanding the impact of negative reviews.

The Broader Scope of the Experience Superiority—Just Listen!

EXTENDED ABSTRACT

Experiences advance more happiness than objects (Van Boven and Gilovich 2003), and we now know an array of reasons for and boundary conditions of this experiential superiority (e.g., Nicolao et al. 2009). Of note, this thriving field has focused solely on the person making the purchase, so, what we do not yet know is whether the experiential superiority can manifest outside of the actual purchaser's realm. The present work broadens the scope of this research stream and investigates whether the experiential superiority reaches people in other situations. A situation when we are exposed to purchases without necessarily being purchasers ourselves is when we participate in conversations and listen to others share about their own experiences and objects. Does listening to others share about their experiences versus objects bring us different levels of happiness? If so, why?

Looking at the listener, we demonstrate that the superiority of experiential (vs. material) purchases also manifests in people who did not make the purchase and whose only link to it is a conversation. Moreover, we identify a two-step serial mechanism that underlies this effect: conversation substantiveness and social connection (see figure). We conceptualize conversation substantiveness as an involv-

ing conversation where meaningful information is transmitted (Mehl et al. 2010); and social connection as "a person's subjective sense of having close and positively experienced relationships with others in the social world." (Seppala et al. 2013, 412).

Supporting the first pathway, research indicates that experiential purchases are closer to a person's self (Carter and Gilovich 2012), making them particularly suitable for self-narratives. Additionally, conversations about experiences (vs. objects) have a typical narrative structure with a beginning, a middle, and an end (Van Boven and Gilovich 2003), allowing for captivating storytelling and, consequently, a more involving interaction between conversation partners.

In line with the second pathway, research suggests that sharing substantive information is a critical component for the very formation of social relationships (Jourard 1971). This perspective is consistent with social penetration theory, holding that interpersonal relationships improve as individuals share continuously deeper information (Altman and Taylor 1973). By the same reasoning, experience-related conversations carrying higher levels of substantive information appear particularly favorable to social bonding.

In support of the third and final pathway, social connections are one of the most important factors in the cultivation of happiness (Argyle and Lu 1990). In fact, past evidence suggests that healthy social connections are a necessary factor for happiness (Diener and Seligman 2002).

We test these relationships across 3 studies which involve actual, recalled, and hypothetical conversations.

Experiment 1 used a between-subjects design to test the social connection link. Seventy-four participants were randomly assigned to the role of either a teller or a listener. Next, each group was taken to a separate conference room. In the tellers' conference room, participants were given a questionnaire that asked them to recall and write about a previous material or experiential purchase they had made. Next, the questionnaire instructed the tellers about the upcoming sharing activity. In general, they were asked to share about the purchase as they normally would with a friend.

Simultaneously, in a separate conference room, listeners were instructed about the upcoming sharing activity. In general, they were asked to listen to the teller and react as they would in a normal conversation with a friend.

Next, tellers and listeners rejoined and formed pairs of one teller and one listener. Then, each pair went into an individual room. Before starting the sharing activity, they engaged in a two-minute ice-breaking activity designed to get them familiar with each other and acclimated with the idea of conversing. Finally, they begun sharing.

Upon the end of the sharing activity, tellers and listeners returned to their initial conference rooms. Listeners answered 7-point scales (1=Not at all; 7=Very much) designed to assess happiness (How much happiness did you draw from listening about that purchase?), and social connection (e.g., How likely is it that you could be friends with this person?).

As expected, experiential listeners reported greater happiness ($M=4.65$, $SD=1.66$ vs. $M=3.59$, $SD=1.41$, $F(1,36)=4.28$, $p=.046$); and this effect is mediated by their perception of having built a stronger bond with their conversation partner (indirect effect: $\beta=.64$, $SE=.31$, $CI(95\%)=.07, 1.34$), confirming the explaining role of social connection.

In experiment 2, we tested the replicability of experiment 1's finding and, importantly, examined our model in its entirety.

Sixty-one Mturk participants were asked to recall and write about a time when someone shared with them about either objects or experiences. Next, participants answered a two-item measure on substantiveness (e.g., "The topics of our conversation were involv-

ing.” $r=.587$), an extended five-item measure on social connection ($\alpha=.916$), and an extended four-item measure on listener happiness ($\alpha=.974$).

Results confirmed that participants gained more happiness from conversations about experiences ($M_{exp}=4.94$, $SD=1.86$ vs. $M_{obj}=3.62$, $SD=1.89$, $F(1,59)=6.86$, $p=.011$), and that the serial mechanism via substantiveness and social connection (PROCESS, model 6) accounts for that effect ($\beta=.50$, $SE=.22$, $CI(95\%)=.16, 1.05$).

Study 3 employed a different approach to reexamine our model while addressing potential concerns associated with recall-biases and comparisons between objects and experiences that may be deemed incompatible.

Using a framing procedure, experiment 3 instructed 100 Mturk participants to read a text that had supposedly been written by another Mturk person sharing about her/his BBQ grill. The text focused on either the material or experiential aspects of the grill. After reading it, participants were asked to write what they thought the rest of the conversation would be like (a task designed to increase participant engagement in the conversation). Following, they answered the same measures as in experiment 2 on substantiveness ($r=.818$), social connection ($\alpha=.959$), and happiness ($\alpha=.969$).

Results show higher happiness from conversations focusing on the experiential ($M=4.04$, $SD=1.77$) than the material properties of the BBQ grill ($M=3.31$, $SD=1.79$, $F(1,98)=4.22$, $p=.042$); an effect serially mediated by substantiveness and social connection (indirect effect: $\beta=.31$, $SE=.14$, $CI(95\%)=.08, .65$).

Together, findings from experiments 1-3 support the following conclusions: Listeners of experiential sharing gain more happiness from the interaction than do listeners of material sharing; and conversation substantiveness and social connection sequentially mediate that effect. This research shows that the scope of experiential purchases' superiority is wider than previously known.

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The Politicization of Markets: Exploring the Interplay Between Politics and Markets

Chairs: Katja H. Brunk, European University Viadrina, Frankfurt (Oder), Germany

Benjamin J. Hartmann, University of Gothenburg, Sweden

Ela Veresiu, Schulich School of Business, York University, Canada

Paper #1: Market-Mediated Multiculturalism: The Institutional Shaping of the Ethnic Consumer Subject

Ela Veresiu, York University, Canada

Markus Giesler, York University, Canada

Paper #2: Brand Retrofication: How East German Consumers Animate a Retro Brand Market to Create a Revisionist Eastern Consumption Culture

Benjamin J. Hartmann, Gothenburg University, Sweden

Katja H. Brunk, European University Viadrina, Frankfurt (Oder), Germany

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Paper #3: Myth Market Formation and the Irony of Neoliberalism: Insights from the Export of Danish Eldercare to China

Stine Bjerregaard, University of Southern Denmark, Denmark

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Paper #4: Political Consumerism as Neoliberal Therapy: How An Actually Existing Neoliberalism Produces Entrepreneurial Passion

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SESSION OVERVIEW

The interplay among politics, markets, and consumption is of increasing interest to consumer researchers. One stream of past research has looked at how commercialism tends to have depoliticizing effects, transforming political movements and ideas into commodities. Consider, for example, the study on countercultural co-optation in the context of the organic food movement (Thompson and Coskuner-Balli 2007), the work on resistance through cathartic festivals like Burning Man that ultimately supports the market system (Kozinets 2002) or the critical perspective on green marketing (Giesler and Veresiu 2014). Another stream has focused on how consumer groups politicize brands in order to galvanize political resistance (e.g., Holt 2002; Kozinets and Handelman 2004; Izberk-Bilgin 2012; Sandlin and Callahan 2009; Varman and Belk 2009).

However, what remains understudied in this canon is the way in which the markets that situate brands and consumer practices are themselves shaped by political discourses and conflicts, especially neoliberal ones. The purpose of this special session is to elucidate these relationships, which we refer to as the politicization of markets. The session brings together four studies that blend historical analyses of different market systems (and their distinctive institutional characteristics) with insights into how market actors (consumers, producers, institutions, administrators, politicians, popular culture) interpret and shape each system and their actions within it. Thus, the works in this special session seek to collectively unpack the politicization of markets at the nexus of macro-level processes, marketplace resources and micro-level actions and interpretations.

In detail, Veresiu and Giesler begin by presenting an institutional analysis of political mythmaking in Canada to illustrate market-based multiculturalism strategies through which market and political institutions collaborate in the creation of an ethnic consumer subject. Next, Hartmann, Brunk, and Giesler mobilize the context of the po-

litical re-unification between West and East Germany to elucidate how the market for East-German retro brands is shaped by the underlying political conflict between capitalism and socialism. Third, Bjerregaard and Kjeldgaard unfold the discursive formation of a global market for welfare services in the context of Danish eldercare export to China and discuss how this discursive formation and its mythical resources are embedded in wider ideological tensions over the legitimacy of pervasive welfare states. By using the context of the Slow Food movement, Thompson and Kumar will lastly illuminate the continuities and discontinuities that arise as food political discourses are transposed onto different institutional fields and intersect with other discursive systems.

This session is timely because it expands previous perspectives and conceptualizations on various politicized aspects within markets. Thus, the session is particularly relevant for consumer researchers interested in understanding the deeply-rooted politicized and politicizing nature of markets and how this in turn shapes and contours individual consumer actions and interpretations. The session informs theoretical debates on commercial and consumer mythmaking, as well as the formation and shaping of new markets and consumer subjectivities.

Market-Mediated Multiculturalism: The Institutional Shaping of the Ethnic Consumer Subject

EXTENDED ABSTRACT

In the current global climate characterized by increased population mobility, ethnic consumers have become a central concern for consumer researchers. Prior research has investigated the consumer behaviour of African-Americans, Latinos, and Native Americans in the U.S. (e.g., Crocket and Wallendorf 2004; Deshpande, Hoyer, Donthu 1986; Sexton 1972; Shim and Gehrt 1996; Stayman and Deshpande 1989; Wallendorf and Reilly 1983), followed by consumer acculturation agents and outcomes of various (im)migrants in different parts of the world (e.g., Askegaard, Arnould and Kjeldgaard 2005; Chytкова 2011; Dion, Sitz, and Remy 2011; Hu, Whittler and Tian 2013; Jafari and Goulding 2008; Oswald 1999; Penaloza 1994; Üstüner and Holt 2007; Vihalemm and Keller 2011), and most recently, even indigene consumers' responses to immigrant consumer behaviour (Luedicke 2015). However, according to Askegaard and Özçaglar-Toulouse (2011, 220), "while many studies have highlighted the socio-historic structure of ethnicity, little research really focuses on the interactions between individuals, groups (ethnic and non-ethnic groups), and institutions." Hence, by focusing on the lived experiences of different ethnic groups, this body of literature has yet to understand how and why an ethnic consumer subject is created in the first place.

Rather than prioritizing the experiences of individual consumers (Askegaard and Linnet 2011), this paper focuses on understanding the institutional shaping of an ethnic consumer subject. This is a great concern given that "[in] many countries, migration and ethnic diversity represent major challenges at the dawn of the twenty-first century, dividing opinions and assessment between the extremes of multicultural enrichment and the threat to local identities" (Askegaard and Özçaglar-Toulouse 2011, 217). Furthermore, although Zhao and Belk (2008, 241) aptly note that "[t]hroughout history,

consumption has seldom existed outside politics, [...] and the state has been actively involved in the definition and representation of consumers," few studies have unpacked the relationship between the state, institutions, ethnicity, and consumption in greater empirical detail.

In pursuing this increasingly important research imperative, we turn to the sociology of governmentality. According to Michel Foucault (2001, 241), governmentality represents "[t]he ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security." In other words, governmentality can be understood as a process for managing populations through which the shaping role of institutions operates. One such mode of governmentality is neoliberal multiculturalism (Hale 2005; Kymlicka 2013; Mitchell 2004). According to Kymlicka (2013, 109), "neoliberal multiculturalism is the belief that ethnic identities and attachments can be assets to market actors and hence that they can legitimately be supported by the neoliberal state." Hence, when neoliberal multiculturalism is understood as a market-mediated mode of governmentality, intuitions may create ethnic consumer subject positions to manage increasingly diverse populations through the market and consumption.

In this paper, we build on the notion of neoliberal multiculturalism, as well as our institutional analysis of Canada's multicultural marketplace to introduce the concept of market-mediated multiculturalization. We define market-mediated multiculturalization as a fourfold process of consumer socialization through which an ethnic consumer subject is created in order to manage increased population diversity by means of consumption and ensure a nation's economic success. Based on our multiyear analysis of the Canadian marketplace, which includes both institutional and consumer data, we find that market-mediated multiculturalization takes the shape of four interrelated processes: inception, identification, proliferation, and adoption.

During the first phase of inception, institutional and political actors envision an ideal citizen-type in the form of an ethnic consuming subject. This phase is triggered by different minority groups' public crises of legitimacy. During the second phase of identification, industry leaders, analysts, and other business professionals create measures, analyze data, and publish reports on who the ethnic consumer actually is. In this third phase, both public and private institutions proliferate ethnic consumers in the arts, entertainment, media, and other cultural creative spheres. Finally, in the last phase, which we term adoption, indigene and immigrant individuals alike adopt their prescribed ethnic consumer position by engaging with different ethnic products, services, and experiences. During the adoption phase, individuals internalize the idea that ethnic tensions and crises of group legitimacy can best be solved through market forces by naturalizing that their ethnic identity is best expressed through their consumption choices.

Our study contributes to extant scholarship on ethnic consumers, consumer subject formation, and the role of neoliberalism in shaping markets and consumers. First, while past work has looked at how ethnic individuals experience the marketplace (e.g., see Luedicke 2011 for an overview), we highlight how institutions shape this ethnic consumer experience. As such, we also contribute to the literature investigating consumer subject formation (Cayla and Eckhard 2008; Giesler and Veresiu 2014; Karababa and Ger 2011; Moisander and Eriksson 2006). This emergent stream of research has not yet investigated the relationship among consumption, ethnicity, and multicultural ideologies, which our study unpacks. Finally, we

extend the literature on neoliberalism and consumption (Askegaard and Linnet 2011; Bonsu and Polsa 2011; Giesler and Veresiu 2014; Shankar, Cherrier, and Canniford 2006; Zwick, Bonsu, and Darmody 2008) by developing a theorization that explains how the neoliberal political ideology of multiculturalism influences citizens' consumer behaviour.

Brand Retrofication: How East German Consumers Animate a Retro Brand Market to Create a Revisionist Eastern Consumption Culture

EXTENDED ABSTRACT

How and why do retro brand markets emerge? Consumer and marketing researchers have shown increasing interest in the rise of retro brands defined as 'relaunched historical brands with updated features' (Brown, Sherry, and Kozinets 2003a p.19). Previous studies in this area portray the emergence of retro brands primarily as a marketer-driven process. For example, Brown, Sherry and Kozinets (2003b) investigate the pre-requisites for retro brand re-launch and elucidate brand meaning negotiations through which producers and consumers invest retro brands with meanings of authenticity, enchantment, and paradox (Brown, Sherry, Kozinets 2003a).

Although Brown (1999) suspects that, sociologically, the rise of retro brands can be explained with Davis's (1979) nostalgic ethos prevalent in societies undergoing turbulence and transformation, thus creating desires to consume bygone brands as symbolic restoration of a past condition, relatively little is known about how retro markets emerge within and are shaped by larger socio-political trajectories and related ideological tensions. While Thompson and Tian (2008) highlight the role of diverging ideological aims of commercial mythmakers creating competing reconstructions of the American South, and Brown McDonagh, and Shultz (2013) emphasize the role of mythic underpinnings in retro phenomena, the particularities through which consumers mobilize retro brands to serve their ideological aims remains a theoretical mystery. Thus, in this study we ask: how are retro brand markets animated by consumers as a mechanism serving ideological interests? We bring sociological theories of popular memory/countermemory (Foucault 1977; Lipsitz 1990; Thompson and Tian, 2008) and cultural branding to bear on an in-depth analysis of consumers' brand narratives to introduce the concept of brand retrofication as a market-based mechanism through which consumers imbue suppressed market objects from the past with identity significance, thereby animating these brands to potent, in-demand retro brands serving consumers' ideological aims.

To explore these issues, our finished fieldwork leverages the context of the rise of retro brand consumption after Germany's political re-unification, previously a microcosm of geopolitical order (Boyer 2001). Since the end of WW2, the subsequent division of Germany by the Allied Forces into a Western and an Eastern occupation zones—leading to the founding of the two German national states of FRG and GDR, respectively—heralded a specific mythic topology lending East and West Germany dualistic allegorical quality for the larger world views that governed them. While West Germany adhered to capitalist consumer culture, East Germany was characterized by a socialist consumer culture. Thus, consumption has in this context always been a strongly politicized point of competition between capitalist and socialist market ideologies (Merkel, 2006).

Since then, and from the viewpoint of the West, East Germany has been frequently portrayed as an economically, socially, and culturally desolate landscape, contrasting the free and prosperous West with the isolated and backwards GDR. Following the fall of The Berlin Wall, however, East Germans faced a situation of immediate ac-

cess to the desired Western consumption system, but also the instant wipe-out of East German brands and products, inducing inevitable processes of dealing with a neoliberal market system and a capitalist culture of consumption. Alongside these developments, the mythic contrast between East and West took a colonialist turn and provided a template for commentaries on pre-reunification and post-reunification conditions in the two consumer cultures.

In this climate, thriving East German retro brands emerge such as the GDR school kitchen tomato sauce, hotels re-creating the GDR experience, and various everyday GDR products like washing detergents, soft drinks, and snacks, some of which outrival their once-longed-for Western counterparts. Our empirical material collected in this context consists of East German consumer brand narratives collected through introspections and interviews (Brown 1998; Gould 1995; McCracken 1988), netnographic material (Kozinets 2002) collected in various online forums and communities dedicated to GDR brands, as well as historical and pop-cultural material allowing to historicize the rise of GDR retro brands (Brown et al. 2013).

After genealogically tracing the Mythic (German) East, we explore how Eastern German consumers' investment of redeeming meanings into products from the socialist past combats (Western) caricatures of the post-reunified East while creating commercially thriving retrobrands. Thus, we show how GDR retro brand consumption creates a Revisionist Eastern consumption culture by linking ideologically redeeming meanings to cultural and market objects from the past that can be readily mobilized by Eastern consumers to rebuke some of the disparagements perpetuated by stigmatizing political myth. A resulting market-mediated mechanism is the emergence of a retro brand market infused with and shaped by ideological agendas of East German consumers negotiating the dominant popular (Western) memory by creating (Eastern) countermemories.

Based on this, we develop a conceptual model of brand retrofication that highlights co-constitutive identity and retro branding relationships of commercial and political mythmaking. The concept of brand retrofication helps elucidating how and why retro brand markets emerge and foregrounds how retro brand markets are shaped by political ideology negotiations by consumers seeking to create symbolic shelters for (national) identity consumption as well as political and commercial mythmakers. This consumer-driven process of brand retrofication resurrects bygone market objects symbolizing the previous condition of a socialist consumer culture through mobilizing capitalist market mechanisms.

These findings have implications for theoretical debates on commercial mythmaking, retro branding, and national identity consumption. As for commercial mythmaking literatures, our study contributes by foregrounding consumers' ideological aims in co-constitution with commercial and political mythmakers vis-à-vis previous accounts of the ideological aims of commercial mythmakers in reconstructions of the past (Thompson and Tian, 2008). Our study informs retro branding literatures by firstly, how consumers animate retro brands to serve their ideological aims, complementing previous accounts of retro-brand animation serving marketer interests; and secondly, by foregrounding how in these animation processes, historical brands are not necessarily technologically updated by marketers as previously depicted, but rather undergo ideological updating by consumers whilst leaving other brand attributes preferably untouched. Our findings further contribute to literatures on national identity consumption by foregrounding its political dimensions.

Myth Market Formation and the Irony of Neoliberalism: Insights from the Export of Danish Eldercare to China

EXTENDED ABSTRACT

"The new bacon." These were the words employed by a politically leading Danish news media to describe the prospects of exporting Danish eldercare services to China (often referred to as *welfare export*) in a news article published in January 2014. The metaphoric reference to the commercial success of Denmark's long tradition for bacon exports highlights a culmination of past decades' marketization of Nordic welfare models. Here the process of marketization is no longer mobilizing a domestic reorganization of welfare systems alone. It is also seen to take on an outward orientation where public welfare services are discursively reframed as commodities and wishfully associated with a significant commercial potential on global markets.

In this paper we explore the dynamics illustrated above as a process of cultural commodification in a domain not historically associated with market logics, namely public welfare services. The empirical context is the idea of exporting 'Danish' eldercare services to an ageing Chinese society – an idea that was introduced to Danish stakeholders in 2011 with the launch of an export promotion program by the Danish Trade Council in China. While the program was abandoned within less than two years, the idea of exporting Danish eldercare to China had already gained a significant foothold in Danish public debate and had set in motion a series of other activities targeted to the emerging Chinese eldercare sector. We offer a study of the media representations related to this series of events with an analytical emphasis on the discursive framing of export activities and the tropes and metaphors (Lakoff and Johnson 1980) employed to give body and meaning to news stories and public debate.

Significant for the news coverage of the events related to the export of Danish eldercare to China is the general application of a somewhat premature market logic that serves as an overarching frame for the reporting of events. With its consistent emphasis on commercial potential and profit, this dominant market logic may be contrasted with representations of welfare export in the early 1990s where the overarching frame was guided by an altruistic logic prioritizing *helping* or *development* as main motives for export endeavors.

While the more recent prioritization of a commercial motive may be argued to reflect the pervasiveness of a neo-liberal ideology even in social democrat welfare states such as Denmark, the use of tropes and metaphors reveal a second layer in the media representations studied, namely the mythologization of the market for welfare services. This relates to the articulation of the Chinese market for eldercare through a global frontier myth echoing Applbaum's (2000) notion of globalization as a key cultural concept acting as "myth and charter" for transnational corporations' geographical expansion. In this sense, we see the Chinese market potential consistently referred to as an "export adventure," we see the demand assessed in (relative to Danish traditions) mythic proportions, and an urgency inferred with the emphasis on "seizing the opportunity."

Second – and more noteworthy, is the articulation of the market offering through the myth of Nordic welfare. This is seen in how the offering to be exported is often described in curiously ambiguous terms such as "welfare knowledge" or "warm welfare hands." And while referred to with barely concealed pride, the notion of welfare remains detached from its historical and political underpinnings (Barthes [1957] 2012). Discursively, the notion of welfare is thus treated as a depoliticized signifier but endowed with commercial potential that drives the welfare export endeavor.

Contemporary political tensions and issues (Holt 2004, Thompson 2004) are revealed, however, in how the Chinese market for Danish eldercare services is described by way of metaphors that derive from the domestic debate on the quality of the largely public Danish eldercare sector and the future viability of the extensive Danish welfare sector in general. In this way, it is seen how the projection of domestic issues onto a largely imagined international market serves to mediate and negotiate tensions at a national level concerning the role of the nation-state in a competitive global economic order. As such, we understand the mythic articulation of welfare services as a marketable offer, as a collective endeavor at national level that ties into popular memory (Thompson and Tian 2008) of the 'heroic' establishment and continuation of the welfare state. The idea of a global market thus serves as a mediator of national political tensions and becomes a catalyst for collective sense-making regarding the legitimacy and future viability of the extensive welfare system.

While the pervasiveness of the neo-liberal ideology has become a "truth" within both scholarship and popular discourse, few scholars have explored neo-liberalism as something more than an implicit background explanatory framework (Mudge 2008). In this paper we address this gap by discussing the relationships between state and market as it plays out in the context of Danish welfare exports. We find that the employment of neo-liberal principles does not necessarily mark out a one-way road to the diminishment of states in lieu of global markets.

Through the glorification of the market as the mediator of exchange between states, the legacy of a state's cultural and ideological history is mythologized and provided with a commercial value - it becomes a *brand*. Conversely, this articulation of the cultural ideology of the extensive welfare state in commercial terms is used for renewed legitimacy of such a state.

Neoliberalism is hence mobilized as a resource for a renewed legitimization of the welfare state in a globalized world. Neo-liberalism provides a discursive resource or framework for social discourses/practices that simultaneously take neo-liberalism to new heights and turn neo-liberalism on its head using neoliberal logics as a means to a non-neoliberal end.

Political Consumerism as Neoliberal Therapy: How An Actually Existing Neoliberalism Produces Entrepreneurial Passion

EXTENDED ABSTRACT

In recent years the politicization of markets has garnered much attention by marketing scholars. One research stream has focused on the depoliticizing effect of commercialism i.e., the transformation of political movements and ideas into commodities—for example in the work on countercultural co-optation (Zwick, Bonsu, and Darmody 2008) or perspectives on green marketing and agro-food movements that criticize them for promoting the idea that privatized and voluntary solutions to societal problems are preferable to collective organization, legal, political, and regulatory remedies (Guthman 2008; Soneryd and Ugglå 2015). Another stream focuses on how activist groups politicize brands in order to galvanize political resistance (Izberk-Bilgin 2012). Within this stream of research, an understudied issue is how markets that situate brands and consumer practices are themselves shaped by political discourses and conflicts. Consumer research on the ideological shaping of consumer identities has recently begun to focus on the structuring influences exerted by neoliberal discourses (Askegaard and Linnet 2011; Binkley 2007; Bonsu and Polska 2011; Fitchett, Patsiaouras, and Davies 2014; Giesler and Veresiu 2014; Shankar, Cherrier, and Canniford

2006; Zwick, Bonsu, and Darmody 2008; Zwick and Cayla 2010; Zwick and Ozalp 2010). However, these studies tend to analyze neoliberalism as a hegemonic ideology that instills a moralistic belief in consumers that broader societal problems can be resolved through socially responsabilized consumer choices, and in a more self-interested vein, that they can shield themselves from systemic risks through their dietary choices, self-care regimens, etc. (Giesler and Veresiu 2014; Moor 2010; Rose 2007). According to these critical readings, political consumerism (as an ostensible practice of consumer resistance) serves to more deeply ingrain neoliberal ideas and beliefs into the fabric of everyday life through the process of consumer responsabilization.

This interpretation, however, often fails to distinguish between neoliberal interpellations and discursive structures whose histories long predate the era of neoliberalism's pronounced socio-cultural influence on consumer responsabilization such as the Protestant work ethic and the myth of the self-made man, as well as overlook how these neoliberal discourses are re-embedded in contextualized marketplace cultures. Using the context of the Slow Food movement we trace out continuities and discontinuities that arose as discourses that emerged from Slow Food's historical grounding in radical leftist politics were transposed onto different institutional fields with their inherent socio-economic discrepancies and intersected with neoliberal discourses and a therapeutic market logic (Moisio and Beruchashvili 2010; Thompson 2003) as Slow Food became a global brand. We seek to understand the moralistic governance regimes (Foucault 2008) that shape the actions and interpretations of consumers and producers who are embedded in a Slow Food network.

This research is based on in-depth interviews with 19 participants of a North American Slow Food movement network and participant observation at Slow Food events over the course of twelve months. We draw on Foucault's analytic lens of governmentality. Rather than relying upon disciplinary means, modern modes of governance sought to organize the social field in which actions could be taken or to exert a directive influence upon the ways in which individuals construct themselves as social and ethical actors and concomitantly develop the authority to guide the conduct of others (Foucault 2008; Lemke 2001). Prior studies have tended to suggest that responsabilized consumers have been ideologically induced to act in accordance with neoliberal economic orthodoxies (e.g., Giesler and Veresiu 2014) and to see their personal interest as being aligned with the profit maximizing aims of corporate strategies. However, Foucault's concept of governmentality is a *de facto* critique of top-down, hegemonic accounts of ideological domination. Instead, it presents a topological, rather than hierarchical, conceptualization of power relations (Collier 2009). We adopt this topological orientation to study "actually existing neoliberalisms" (Brenner and Theodore 2002, 351).

By tracing the genealogy of Slow Food we find that its ideological origins are far removed from neoliberal doctrines and can be traced to its historical roots in radical Italian political movements and their suspicions of formal institutions and centralized decision making. As the Slow Food movement emerged from this political ferment (subsequently adapted to social changes that lessened popular support for more radical expressions of leftist politics), it began to promote the idea that consumers' could challenge and even disrupt capitalist imperatives, such as efficiency and instrumental assessments of value, by seeking out autonomous pleasures and self-valorizing activities, with food and eating providing a primary context for these acts of everyday resistance. Over time, Slow Food gradually placed a greater reliance on the market as a vehicle for social change such as creating fairer outcomes for workers and sus-

taining threatened culinary traditions, thereby linking consumption with particular neoliberal ideals of responsible citizenship. Rather than consumer responsabilization per se, our findings suggest that Slow Food practices and discourses enact a neoliberal ideal of passionate enterprise which creates an alignment between its members' communal identity, and its historical emphasis on the emancipatory potential of consumption pleasures created outside the auspices of capitalist rationalization, and neoliberalism's edifying vision of entrepreneurial skill building as a path to personal achievement and self-actualization. These invocations of passion need to be affirmed through the experiences of guiding others toward this construction of ethical selfhood. To sustain this alignment, reformulated therapeutic motifs are leveraged to legitimate these passionate engagements and to negate the elitist connotations, and latent sense of class conflict, which have long plagued the Slow Food movement.

This study contributes to the understanding of the heretofore undertheorized relationships among actual existing neoliberalisms, the governmental rationalities that operate through political consumerism and the ideological shaping of consumer identities. It highlights the contextualized processes of socio-economic and cultural restructuring that arise through the intersections among neoliberal discourses (and their normative prescriptions), different institutional fields and the particular histories of marketplace cultures. This topological view of neoliberal governmentalities also explicates how subtle, non-coercive power relations operate as technologies of the self as well as how actors gain or lose ethical authority through market-mediated social interactions and consumption practices.

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Researching Outside the Box: The Cognitive and Motivational Processes of Creativity

Chair: Melanie S. Brucks, Stanford University, USA

Paper #1: The Upside of Messy Surroundings: Cueing Divergent Thinking, Problem Solving, and Increasing Creativity

Kathleen D. Vohs, University of Minnesota, USA
Aparna A. Labroo, Northwestern University, USA
Ravi Dhar, Yale University, USA

Paper #2: The Creative Power of Color Harmony

Nara Youn, Hongik University, Korea
Changyeop Shin, Hongik University, Korea
Angela Y. Lee, Northwestern University, USA

Paper #3: The Pursuit of Creativity in Idea Generation Contests

Melanie S. Brucks, Stanford University, USA
Szu-chi Huang, Stanford University, USA

Paper #4: Creativity in Open Innovation Contests: How Seeing Others' Ideas Can Harm or Help Your Creative Performance

Reto Hofstetter, University of Lugano, Switzerland
Darren W. Dahl, University of British Columbia, Canada
Suleiman Aryobsei, University of St. Gallen, Switzerland
Andreas Herrmann, University of St. Gallen, Switzerland

SESSION OVERVIEW

Consumers regularly engage in creative thinking. For instance, consumers come up with unconventional ways to use existing possessions (Burroughs and Mick 2004), seek out purchases that enable creativity (Dahl and Moreau 2007), and play an active role in customizing new products (Moreau and Herd 2010). In addition, companies have recently been turning to consumers for creative insight, harnessing their creative ideas through online crowdsourcing platforms (Terwiesch and Xu 2008). Yet, in contrast to the importance and ubiquity of creative thinking in consumption, little research has investigated the mechanism of creative thinking. Specifically, what are the key motivational and cognitive processes underlying creativity?

The aim of this session is to contribute to this dialogue of what makes consumers creative and bring attention to this relatively underexplored topic that both consumers and companies value. We will begin with contextual elements of creativity—surroundings and color—and examine how these factors influence creative cognition. Then, we will shift our focus onto the motivational processes of creativity in the context of idea generation contests, examining the effect of goal-setting and social comparison (i.e., observing others' ideas) on creative performance.

First, Vohs, Labroo, and Dhar examine how environmental cues can influence creativity through environmental mimicry. In three experiments, they demonstrate that a messy room enhances three aspects of creative cognition: problem solving, divergent thinking, and convergent thinking. In the second paper, Youn, Shin, and Lee find that another environmental factor, color harmony, can impact not only creative production, but also the perception of creativity. Across six studies, they demonstrate that disharmonious color combinations induce processing disfluency, which activates abstract thinking, leading to improved performance on creativity tasks and intensified perceptions of innovativeness in product and logo evaluations. In the third paper, Brucks and Huang demonstrate that the pursuit of creativity in idea generation competitions could be counterproductive. Through three studies, they show that pursuing the goal to be creative reduces the number of creative ideas generated because the goal-directed monitoring process inhibits divergent thinking. Lastly,

Hofstetter et al. examine how seeing the ideas of others in innovation contests influences creative performance. Across four studies, including a field study using an actual open innovation platform, they demonstrate that seeing prior ideas from other users can facilitate creative performance or hamper creative performance, identifying competition salience as a key moderator.

Together, the four papers in the session enhance our understanding of when and why consumers are creative by capturing creativity in a variety of ways in the lab and in the field: from classic creativity paradigms (e.g., the remote association task, drawings, and insight problems) and perceptions of innovativeness to performance in open innovation contests. Collectively, these papers draw from a wide spectrum of literature including construal level theory, mimicry, goal-setting, self-efficacy, and competition to provide insight into the motivational and cognitive processes of creative thinking. By approaching creativity from different angles, methods, and literatures, we believe that this session will attract a broad audience, facilitate interesting discussions, and cultivate collaborations on topics related to consumer creativity.

The Upside of Messy Surroundings: Cueing Divergent Thinking, Problem Solving, and Increasing Creativity

EXTENDED ABSTRACT

Society frowns upon mess. Mess is presumed to reflect low productivity, income, education, and intellect (Abrahamson & Friedman, 2007). Messy people are stereotyped as uncivil, children are admonished for messiness, workplaces often mandate orderliness, and religions assert that cleanliness and orderliness are next to godliness (Abrahamson & Friedman, 2007). In this research, however, we argue for the upside of mess and propose that messy surroundings cue creative thinking.

There are reasons to believe that messiness and creativity are associated. Everyday language reflects a deep-rooted connection between mess and creativity. Creativity is associated with “outside the box” thinking (Leung et al., 2012), and considered literally, putting away things in a box organizes surroundings. Creativity is linked to wild imagination, and wild is ambiguous, unpredictable, and flexible. So is mess.

A recent paper by Vohs, Redden, & Rahinel (2013) showed — in one study with a fairly small sample for today's requirements — that disorderly surroundings can make people break away from convention and increase novelty-related thoughts. Building on these findings, we posit messy environments cue all sorts of creative thinking. We tested our premise in three experiments.

Experiment 1 employed a 2 (room: messy vs. orderly) between-subjects design. Fifty-one students participated. Depending on condition, participants were placed in an area with neatly-ordered papers or disordered paper. Participants were provided with a puzzle allegedly being tested by marketers. This puzzle is comprised of two loops that are linked and needed to be unlinked. The best solution is to twist the links in disparate ways. Participants were timed completing the puzzle. A one-way ANOVA revealed the expected effect of condition, $F(1, 37) = 4.44, p < .05$. As predicted, participants were quicker to solve the puzzle when seated in messy ($M = .93$ minutes) rather than orderly surroundings ($M = 2.22$ minutes).

Experiment 2: A limitation of experiment 1 is that the task is not one conventionally used in creativity research. Moreover, this exper-

The Creative Power of Color Harmony

EXTENDED ABSTRACT

While prior research focuses on the influence of color on creativity via the symbolic meaning that each color conveys (i.e., growth for green, and openness for blue; Lichtenfeld et al., 2012; Mehta & Zhu, 2009), the current research explores how color may influence creativity via an abstract thinking style that certain color combinations may evoke. We posit that exposure to moderately disharmonious (vs. harmonious or disharmonious) color combinations will result in a disfluent experience that induces abstract thinking (Alter & Oppenheimer, 2008, 2009; Mehta et al., 2012), leading to enhanced cognitive flexibility and creativity (Förster et al., 2004; Mehta et al., 2012). We defined harmonious, moderately disharmonious, and disharmonious color combination of any chosen colors using Moon and Spencer's (1944) theory of color harmony as applied to Munsell's (1919) color system.

The results of six studies provided support for our moderate disharmony hypothesis. In the first study, we compared moderately disharmonious color combinations with "proven" creative colors and showed that instructions printed on green or blue background color induce greater creativity in terms of generating ideas to protect the environment than red or gray, replicating prior research; but more importantly, moderately disharmonious combinations of blue and green lead to greater creativity than the single colors of blue and green.

Study 2 replicated the moderate color disharmony effect on insight problem solving as well as on the Remote Associates Test (RAT) designed to access creative performance. The results showed that participants' processing disfluency experience and their level of construal (BIF; Vallacher & Wegner, 1987) mediated the effect of color harmony on creativity.

In Study 3, we presented participants with a picture of an office, the walls of which were painted different colors, and asked them to imagine working in that office. Participants generated more creative ideas and perceived the company to be more innovative when situated in an office with moderately disharmonious (vs. harmonious or disharmonious) colors. Disfluency and abstract thinking again were shown to mediate the color harmony effect on creative idea generation and perception of company innovativeness.

Study 4 demonstrated the robustness of the color harmony effect in the context of a company logo. Participants judged the company with the moderate disharmonious (vs. harmonious and achromatic) color logo to be more innovative, and considered the logo to be more appropriate for an entertainment company; whereas they considered the company with the harmonious color logo to be more reliable and the logo was more appropriate for a bank.

Study 5 and 6 replicated the color harmony effect on product evaluation using the contexts of a computer mouse (Study 5) and a digital camera (Study 6). Further, the results of Study 6 showed that the color harmony effect carried over to actual behavior—those presented with a moderately disharmonious (vs. harmonious and disharmonious) color design of a camera were more likely to sign up to receive a catalog that provides more information on the camera.

Taken together, these findings provide convergent evidence for a color harmony effect on creativity. People exposed to moderate disharmonious color combinations were more creative; they also perceived environments (e.g., office) and targets (e.g., computer mouse, camera) with moderate disharmonious color designs to be more innovative. This effect is shown to be mediated by their processing disfluency experience that in turn activates an abstract, high level of construal.

iment did not include a cleared (empty) room condition. It is possible that a cleared room encourages creativity just as much as a messy room. Accordingly, experiment 2 made two changes: we employed a standard test of creativity, and we included a cleared room condition which we expected would be similar to the orderly room condition.

Experiment 2 employed a 3 (room: cleared vs. messy vs. orderly) between-subjects design in which performance on the RAT served as the key dependent variable of interest. The cleared and orderly room conditions were expected to serve as conceptual replicates. Seventy-three students, native English speakers, participated. As in experiment 1, participants in the messy or orderly room conditions were seated individually in a workspace comprised of disordered or orderly papers and folders, respectively. In the cleared room condition, the area was clear.

Their task involved reading word-triads and listing a fourth word that connected to each word in the triad. For example, "body" is the solution to the triad, "soul, busy, and guard." Correct responses to each of the eight remote associates were tabulated into a creativity-index.

The results showed that, as expected, participants in the messy room performed significantly better relative to those in the cleared ($M = .32$), $t(39) = 2.08$, $p < .05$, or orderly room ($M = .47$), $t(49) = 1.89$, $p = .05$. In sum, participants in the messy room were more creative. Ancillary analyses (not reported due to word constraints) showed that distraction or distress were not issues that accounted for the results.

Experiment 3 employed a 3 (room: cleared vs. messy vs. orderly) between-subjects design testing creativity of spontaneous drawings. Sixty undergraduate students participated. Participants were randomly assigned to a clear, messy, or orderly condition. Participants drew, on paper, whatever spontaneously came to mind. We adapted Amabile's (1982) method of judging creativity, which was defined as "anything unexpected that produces effective surprise in the observer." Pictures were coded by two independent judges (1 = not at all, 5 = very), which were correlated, $r = .68$, $p < .01$, and averaged. An ANOVA revealed the expected effect of surroundings, $F(2, 57) = 13.17$, $p < .01$. As expected, pictures by participants in messy room ($M = 3.63$) were significantly more creative than those in clean ($M = 2.17$) or orderly rooms ($M = 2.29$), which did not differ.

General Discussion. People are hardwired to respond to environmental cues. Three studies found that messy surroundings resulted in more disparate and disorderly ideas, which increased creativity in a convergent creativity task, a puzzle, and picture drawing task. The effects were observed independent of mood or attention to task. They were also not a function of chronic messiness, but resulted from experiencing situational mess.

While people non-consciously mimic others in their social environments (Tanner et al., 2008), people also seem to mirror their environments in non-social situations, perhaps to better understand and navigate those environments. Thus messy surroundings, which are unpredictable, increase fresh creative thinking.

An interesting question is why people in messy surroundings assimilate thinking towards rather than away from creative cues. Extremely messy surroundings may create sensory overload and shut down thinking altogether, resulting in rejection of a contrast away from creative thinking. Future research should investigate these issues systematically.

The Pursuit of Creativity in Idea Generation Contests

EXTENDED ABSTRACT

Technological advances in the past ten years have provided easy access to consumer creative insight through online crowdsourcing. Platforms are sprouting all over the Internet enabling companies to create contests to solicit creative ideas from consumers. For example, Lay's recently held a "do us a flavor" contest, promising a \$1,000,000 reward to the consumer with the most creative idea for a new chip flavor. The present research explores how pursuing a goal to be creative influences the creativity of the ideas generated in these contests.

Specifically, we propose that the pursuit of creativity can be counterproductive, leading to fewer creative ideas. We motivate our argument by drawing upon the literature of goal pursuit and early creative cognition. When consumers start generating new ideas, they engage in divergent thinking, wherein one must leverage the weak ties in memory and combine this retrieved knowledge into novel ideas (Mednick 1962; Burroughs, Moreau, and Mick 2015). Importantly, this means that divergent thinking is effortful and thrives on unfocused search, which can be inhibited by narrow thinking and judgment. Given that divergent thinking is effortful and that goal pursuit enhances motivation, compared to having no goal at all, pursuing a goal to be creative should enhance creative performance, as previous literature has shown (Shalley 1995). However, goal pursuit also engages a monitoring process that focuses attention on goal-directed behaviors and compares them to the standard set by the goal (Carver and Scheier 1982). We posit that this monitoring process hinders divergent thinking by narrowing attention and judging (blocking) early ideas against a specific and high standard of creativity. Thus, taking both effort and monitoring into consideration, we predict that in highly motivating contexts like idea generation competitions, introducing a specific and high standard to "be creative" will counterproductively reduce the number of creative ideas generated.

We conducted three studies to examine the effect of pursuing creativity on creative performance as well as the underlying mechanism. In Study 1, 152 participants competed in an idea generation contest to come up with alternative uses for a sunglasses case. Participants were randomly assigned to set either a creativity goal (i.e., "to win this competition, your task is to list as many CREATIVE uses for a sunglasses case as possible") or a quantity goal serving as the control group (i.e., "to win this competition, your task is to list as MANY uses for a sunglasses case as possible"); the quantity goal was similarly motivating but did not set a specific standard for the quality of ideas one should generate.

We followed procedures from prior literature on creativity (Friedman and Förster 2001; Vohs, Redden, and Rahinel 2013) to have two independent raters code and compute two dependent measures of creative performance—the number of ideas scoring above a high threshold on novelty (high novelty count) and both functionality and novelty (high creativity count). Participants who had the goal to be creative produced significantly fewer highly novel ideas ($M=2.99$ ideas) than participants with a quantity goal ($M=3.55$ ideas, $p<.01$).

If setting a goal to be creative is counterproductive because it engages a monitoring process that narrows attention, our hypothesized effect should be especially prevalent among people who are high on trait attentional regulation (i.e., high ability to focus). In Study 2, we replicated the effect in Study 1 with a different contest and tested the moderating role of trait attentional regulation. 201 participants first responded to an attentional regulation scale (Diehl,

Semegon, and Schwarzer 2006) embedded in filler scales and then competed in an idea generation contest to come up with names for a new Weather App. Replicating Study 1, we found that participants pursuing the goal to be creative came up with significantly fewer novel ($M=6.26$) and creative ($M=3.11$) ideas relative to the quantity condition ($M_s=7.91$ and 3.82 , respectively, $ps<.001$). Importantly, this effect was moderated by trait attentional regulation ($b = .08$, $z = 1.80$, $p = .07$), such that the counterproductive effect of setting a creativity goal was significant among high attention regulators (trait regulation scores of 3 or above on 5-point scale), but not among low attention regulators.

We posit that the monitoring process hinders divergent thinking by narrowing attention to judge/block ideas using a specific and high standard of creativity. Study 3 directly manipulated the standard set by the goal of the contest to examine this mechanism. 400 participants competed in a competition to come up with non-food related uses for peanut butter and were randomly assigned to a creativity goal (specific and high standard), a quantity goal (no specific standard for the quality of ideas generated), a childish goal (specific but achievable standard: come up with as many CHILDISH non-food related uses for peanut butter) or a baseline condition without any goal. All goal conditions performed better than the baseline, replicating past work that having a goal increases creativity relative to none at all. In addition, as in the previous two studies, participants pursuing a creativity goal came up with fewer novel ($M=3.25$) and creative ideas ($M=0.71$) relative to the quantity condition (4.2 and 0.95 respectively, $ps<.01$); mediation analysis confirmed the driving role of standard clarity/specificity between these two conditions, such that having a creativity (vs. quantity) goal was counterproductive because it set a specific standard. Importantly, participants pursuing a childish goal also performed significantly better ($M_s=4.78$, $.97$ respectively, $ps<.01$) than participants with a creativity goal; mediation analysis confirmed the driving role of standard achievability between these two conditions, such that having a creativity (vs. childish) goal was counterproductive because it set a standard that was low in perceived achievability.

These findings show that pursuing the goal to be creative can be counterproductive due to a goal-driven monitoring process that narrows attention and compares ideas to a specific and high standard of creativity. Our findings connect the literature of goal pursuit with creative cognition and have important implications for theories on creativity, divergent thinking, goal-setting, and monitoring, as well as marketing practices of idea generation contests and consumer creativity.

Creativity in Open Innovation Contests: How Seeing Others' Ideas Can Harm or Help Your Creative Performance

EXTENDED ABSTRACT

Public open innovation contests are becoming an increasingly popular way for firms to generate new ideas. In this research, we investigate how seeing ideas of others (denoted as "prior ideas") in an open innovation contest influences the creative performance of individuals. We propose that the number of prior ideas an individual sees before generating his or her own ideas can both discourage and stimulate creative performance and that competition salience (i.e., when individuals are highly aware of the fact that their ideas are competing against other's performance) drives these effects.

Specifically, we argue that seeing numerous prior ideas in a competition will discourage creative performance due to an increase in the perceived difficulty of the task that in turn negatively impacts

the competence one feels in being able to generate original ideas (H1). Indeed, when the competitive aspects of an open innovation contest are made salient, the prior ideas one is exposed to will directly influence the assessed difficulty in proposing original ideas, i.e. ideas that go beyond what has already been identified (Guilford 1968). The salience of numerous prior ideas as competitors, rather than sources of information or inspiration, will heighten the challenge of separating one's ideas from the pack. Previous research on parallel search in innovation contests adds to this argument by identifying that some ideas occur more frequently with some, the so-called "idea-hubs", being frequently mentioned by different individuals independently (Kornish and Ulrich 2011). Participants' exposure to numerous prior ideas is likely to involve such idea hubs, which then interfere with the individuals' idea generation process by discouraging the expression of ideas that are similar to already mentioned ideas. Similar to production blocking in group creativity tasks (Diehl and Stroebe 1987; 1991), seeing similar competing prior ideas may inhibit individuals from verbalizing their ideas as they occur and distract their own thinking. Consequently, the task of generating original ideas becomes more difficult to participants exposed to an increasing number of prior ideas. Competition salience triggers this effect as it introduces the need to distinguish one's ideas from the prior ones, in order for them to be perceived as original. Task difficulty in turn influences individuals' feelings of competence, which have been found to be malleable and sensitive to task-related cues (Gist and Mitchell, 1992; Tierney and Farmer 2002). Harming felt competence thus reduces individuals' willingness to expend effort (Eccles and Wigfield 2002) and their inner passion to perform the task (e.g., Deci and Ryan 1985; Ryan 1992), undermining their creative performance (Amabile 1998; Tierney and Farmer 2002).

In contrast, drawing inspiration from the cumulative innovation paradigm (Nijstad et al. 2002; 2006; Scotchmer 1991) we also expect that viewing more prior ideas can better stimulate creative performance and increase feelings of competence by making an individual's memory more accessible to the creative process (H2). Cognitive stimulation occurs from prior ideas because they activate concepts and topics that otherwise would not have been activated, potentially leading to new ideas that contain or combine such activated elements in new ways. Nijstad, Stroebe, and Lodewijckx (2002) showed how example ideas stimulate the ideation process of individuals by presenting a series of example ideas prior to participants' own idea generation. This stimulation was shown to enable creative performance as individuals built on the initial examples by leveraging them in their own creations. Dugosh et al. (2000) showed that greater stimulation and creativity can be expected if more example ideas are shown. Competition salience, however, harms this positive effect, and we find that only when competition is less salient does the positive influence of more prior ideas proffer. We thus propose that prior ideas can play a "dual role" in influencing creative performance.

From a managerial perspective, finding ways to reduce the negative effects of prior ideas on creative performance is crucial to ensure the success of open contests. We predict that the negative influence of prior ideas can be mitigated when prior ideas are related in such a way that feelings of competence are not threatened, either by validating an individual's abilities before exposure or by showing more unique prior ideas that impose less constraints on the ideation process. Indeed, numbing the competitive influence of prior ideas can decrease their demotivating effect (Ryan and Deci 2000a), and instead harness the creative benefits of viewing others' proposals.

Our contribution to the literature is defined by the empirical testing of our conceptualization. In a first study, we test the compet-

ing predictions of prior research (Boudreau, Lacetera, and Lakhani 2011; Dugosh et al. 2000; Nijstad and Stroebe 2006; Nijstad, Stroebe, and Lodewijckx 2002) that increasing the number of prior ideas can both stimulate and hinder creative performance utilizing an actual open innovation platform, European-based Atizo.com. Utilizing different measures of creative performance, we find consistent empirical evidence for a negative effect. Our second study varies the salience of competition finding that this contextual difference moderates the identified negative effect, i.e., the competitive threat of prior ideas triggers their negative influence. However, when competition is less salient, the positive effect of prior ideas is shown to manifest. Mediation analyses reveals that an increase in perceived task difficulty and a loss of felt competence underlie the negative effect (after controlling for objective winning chances), and cognitive stimulation provided by prior ideas drives the positive effects identified. In a third study, we buttress participants' abilities by explicitly having them recall a situation where they were successful in generating ideas and find that this approach mitigates the negative effects of prior ideas on competence and results in a more creative performance. Study four identifies the moderating influence of the nature of prior ideas (i.e., whether the prior ideas are unique in nature versus more redundant) on the negative effect. Here we find that the negative effect of exposure to prior ideas is mitigated when unique ideas are shown.

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Religion and Consumption Decisions: Acquisition, Disposition, and Susceptibility to Advertising and Social Influence

Chairs: Keisha Cutright, Duke University, USA
Alison Jing Xu, University of Minnesota, USA

Paper #1: Love It but Leave It: The Divergent Effects of Religiosity on Attitudinal versus Behavioral Brand Loyalty

Alison Jing Xu, University of Minnesota, USA
Nicholas J. Olson, University of Minnesota, USA
Rohini Ahluwalia, University of Minnesota, USA

Paper #2: The Price of Faith: Religion's Role in the Endowment Effect

Vivian Yue Qin, Duke University, USA
Richard Staelin, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA

Paper #3: In God's Hands: How Religion Dampens the Effectiveness of Fear Appeals

Eugenia Wu, University of Pittsburgh, USA
Keisha Cutright, Duke University, USA

Paper #4: Attachment to God Reduces Conformity to the Choices of the Majority

Vivian Yue Qin, Duke University, USA
Alison Jing Xu, University of Minnesota, USA

The next two papers investigate the effects of religiosity on consumers' susceptibility to the influence of external information. The third paper by Wu and Cutright suggests and finds that when God is salient, consumers feel that they will be supported during hard times, and this sense of available support makes them less likely to comply with fear appeals.

The fourth paper by Qin and Xu focuses on the differences in felt attachment to God (i.e., close to God vs. distant from God) among consumers who believe in the existence of God. Results show that strong attachment to God reduces consumers' need for affiliation with other people, who are consequently less likely to conform to the choice of the majority. Moreover, this effect holds for products chosen for private consumption but is attenuated when products are chosen for public consumption.

Given the fundamental role of religion in people's daily lives and the variety of novel findings uncovered in the four papers above, this session should be of interest to a diverse audience, from academics studying religiosity to those researching brand loyalty, decision making, advertising, and social influence more broadly.

Love It but Leave It: The Divergent Effects of Religiosity on Attitudinal versus Behavioral Brand Loyalty

EXTENDED ABSTRACT

Brand loyalty has recently been termed the "holy grail" of marketing (Shugan 2005), representing not only the ultimate goal but also the most challenging one for marketing practitioners (Ahluwalia and Kaikati 2010). The concept of brand loyalty has two facets – attitudinal loyalty and behavioral loyalty. Attitudinal loyalty refers to the psychological attachment or commitment of consumers to a brand. Behavioral loyalty focuses on overt behaviors such as repeat purchase behavior or switching behavior (Ahluwalia and Kaikati 2010). Given loyalty has been increasingly defined as a combination of attitudinal attachment and overt loyalty behaviors (Oliver 1999), little work has explored situations in which attitudinal loyalty and behavioral loyalty may diverge.

Ahluwalia and Kaikati (2010) identified three major factors leading to brand loyalty in the literature: consistent performance, consumer-brand connection, and incentives such as loyalty programs. We assume that affect-laden consumer-brand connection is a more important determinant of attitudinal loyalty; whereas incentives are a more important determinant of behavioral loyalty.

We propose that religiosity enhances consumer-brand connection because religious consumers are more likely to incorporate brands into their self-concept, which thus increases their psychological attachment to their favorite brands. At the same time, religiosity also enhances decision accountability, because religious consumers may constantly perceive that God is watching them and they need to make justifiable decisions. Consequently, when a competing brand offers a switching incentive (e.g., a price promotion), thereby providing an alternative that can be justified by more objective means than one's subjective psychological attachment (e.g., "The competing brand was cheaper" is more objectively justifiable than "I like my favorite brand"), religious consumers are more likely to switch to the competing brand.

SESSION OVERVIEW

Religion plays an important role in many people's daily lives. Worldwide, 80% of people affiliate with a religion (Pew Forum 2012) and over 70% of Americans report that their daily behaviors are influenced by their religious beliefs (Pew Forum 2008, Mathras et al. 2016). Despite the significant impact of religion, few articles published in major marketing journals have systematically investigated its role in consumer behavior, and some articles have treated religion as a demographic control variable or a moderator in studies rather than as a main theoretical construct (Mathras et al. 2016).

The current session brings together four papers answering the call to uncover the psychological mechanisms through which religion may influence consumer behavior. The first two papers explore the role of religiosity in individual decision making, focusing on the acquisition or disposition of products. The next two papers also investigate the role of religiosity in decision-making, but do so by exploring how religiosity influences consumers' susceptibility to external influence such as advertising and others' choices.

The first paper by Xu, Olson, and Ahluwalia demonstrates the divergent effects of religiosity on consumers' attitudinal loyalty and behavioral loyalty. Attitudinal loyalty refers to consumers' psychological attachment or commitment to a brand, whereas behavioral loyalty focuses on repeat purchase behavior or switching behaviors (Ahluwalia and Kaikati 2010). The results show that religious consumers report stronger psychological attachment to their favorite brands, yet they are more likely to switch to a competing brand offering a switching incentive at the time of acquisition.

The second paper by Qin, Staelin, and Fitzsimons explores the role of religiosity in pricing one's own possessions at the time of disposal. In particular, because religiosity increases consumers' contentment with their possessions, religious sellers tend to ask for a significantly higher selling price, resulting in a stronger endowment effect. The hypotheses are supported by results of both experiments and archival data analysis.

Study 1 considered the impact of religiosity on consumers' attitudinal brand loyalty. Participants listed their favorite brand from specific product categories (i.e., a hedonic category – chocolate, and a utilitarian category – toothpaste). After listing each brand, they then indicated their attitudinal loyalty to the brand by responding to a 4-item brand attachment scale from Park et al. (2010). Finally, after a filler task, participants completed the Religious Commitment Inventory (Worthington et al. 2003) as a measure of chronic religiosity. A linear regression with brand attachment averaged across product categories revealed that religiosity was positively related to participants' attachment to their favorite brands.

Study 2 expanded on study 1 by manipulating rather than measuring religiosity, and by exploring the mechanism driving religiosity's positive association with attitudinal brand loyalty. The study used a procedure similar to that of study 1, but before participants listed a favorite brand, half were randomly assigned to a religiosity condition in which they wrote about what religion means to them and how it impacts their life, and half were assigned to a control condition. Additionally, after participants reported their attachment to the favorite brand, their tendency to incorporate various people and things into their self-concept was measured using items adapted from Aron et al. (1992). Replicating the findings of study 1, an ANOVA showed that participants in the religiosity condition (vs. control) were significantly more attached to their favorite brands. Furthermore, this effect was mediated by their enhanced tendency to incorporate other entities into their self-concept, as the mean indirect effect from a bootstrap analysis was significant.

Study 3 investigated whether religiosity's positive effect on attitudinal brand loyalty would translate to greater behavioral loyalty as well. Participants were randomly assigned to either the religiosity priming or control conditions from study 2. All participants then completed a set of scenarios in which they listed their favorite brand in a specific product category (i.e., a hedonic category – ice cream, and a utilitarian category – toothpaste), and indicated on 7-pt scales (*not at all/very much so*) how likely they would be to switch from that brand if a comparable brand entered the market with some type of bonus (e.g., 10% discount). Product category had no effect on participants' switching intentions, so results were averaged across products to form a single switching intention measure for each participant. We expected religiosity to have a positive effect on switching. Consistent with this prediction, participants in the religiosity condition (vs. control) were significantly more likely to switch from their favorite brands to the brands offering an incentive.

Study 4 built on the previous studies by simultaneously examining religiosity's effect on both attitudinal and behavioral brand loyalty. For the same product categories used in study 4, participants first listed their favorite brand. They then indicated their attitudinal loyalty to the brand by completing the 4-item brand attachment scale from Park et al. (2010). Finally, they indicated how likely they would be to switch to a comparable brand offering a bonus (as in study 4). After a short filler task, religiosity was measured as a chronic trait using the Religious Commitment Inventory (Worthington et al. 2003). We predicted that religiosity would be associated with both greater attachment to *and* greater likelihood of switching from favorite brands. Supporting these hypotheses, religiosity was positively related to attachment to favorite brands, but also positively related to switching from favorite brands to other brands offering an incentive. Thus, religiosity was associated with greater attitudinal loyalty but less behavioral loyalty for the same brands.

The Price of Faith: Religion's Role in the Endowment Effect

EXTENDED ABSTRACT

We put forth a new explanation for the endowment effect, namely that sellers' asking prices will be influenced by their religiosity and the associated religious teachings that remind the individuals to be content with what they have, such as the Ten Commandments. Although the Ten Commandments are generally regarded as moral standards in the Judeo-Christian context, other religions (e.g., Samaritan) embrace it as well. Eastern religions teach people to be content as well, including The Ten Disciplines in Hinduism and The Four Noble Truths in Buddhism. With fourteen experiments that either manipulate or measure participants' religiosity, we assess the ways that their religiosity is related to the endowment effect. We also analyze two archival datasets on the posted selling prices of used consumer durables and test how they vary with individual religiosity.

First, we manipulated the salience of religion and tested if it strengthens the endowment effect. In Study 1a, we found that although the endowment effects were present in both conditions, it was significantly stronger in the religion condition, compared to the control condition ($p < 0.001$, $p = 0.05$). Across the two conditions, owners in the religion condition asked for a significantly higher price ($M = 3.94$, $SD = 1.09$; $M = 2.23$, $SD = 1.47$; $p < 0.001$), but no such differences were found in buyers' willingness to pay ($M = 1.80$, $SD = 0.96$; $M = 1.62$, $SD = 1.38$; ns). We also ruled out the alternative explanations of intuitive thinking and fairness concerns. We replicated the findings of Study 1a in four other studies (Studies 1b-1e) with different religion primes and items for sale. All these studies consistently show that when religious beliefs are salient, the endowment effect becomes stronger, compared to the control condition. This is because sellers increase their asking prices when they are temporarily exposed to religion.

These findings on the temporary exposure to religion imply that individuals who have stronger religious beliefs will show stronger endowment effects compared to people who have weaker beliefs. In the next group of studies, we measured participants' religiosity and tested if it was related to asking or buying prices. In study 2a, after the endowment task, the participants indicated their frequency of religious practice by answering "How frequently do you worship or practice religious rituals (e.g., pray, meditate, read scripture)?" on a 6-point scale from "Never" to "Daily" (median, once a week). We found no significant effect of religious practice on buyers' prices ($\beta = -0.16$, ns). In contrast, sellers significantly increased their selling price as their religious practice became more frequent at the marginal level ($\beta = 0.21$, $p = 0.08$). A Johnson-Neyman analysis (Spiller et al. 2013) shows that only the top 76% of the participants on religious practice frequency (i.e., those that indicate they practice slightly more than rarely) defines the region where selling prices are significantly higher than buying prices. We replicated these results with a different measure for religiosity (Study 2b), real transactions (Study 2c), and broader samples (Studies 2d and 2e).

Next, we examined if these effects were caused by participants' contentment beliefs. In one study (Study 3a), we activated religion thoughts in two different ways: religion as a source of security or religion as a source of contentment. Any difference in these two conditions would show that not all aspects of religion equally influenced the endowment effect. We found that the endowment effect was only present in the "religion as contentment" condition ($\beta = 0.84$, $p < 0.001$), but not in the "religion as security" condition ($\beta = 0.18$, $p > 0.4$) or the control condition ($\beta = 0.32$, $p > 0.11$). In three other studies (Studies 3b-3d), we found that only among participants who

strongly supported the values of the Ten Commandments, when they were primed with religion or characterized by strong religious beliefs, they overvalued what they owned and asked for higher selling prices.

Finally, we used two archival datasets to confirm the external validity of our results (Studies 4a-4b). We collected the religiosity ranking using the county-level number of congregations per 10k people in 2010, and the asking prices for iPhone 5 and for three types of popular cars. In the iPhone 5 dataset, we found that controlling for economic environment, demographics and phone conditions, as our measure of religiosity increased, asking prices increased ($\beta = 1.45$, $p < 0.01$). In the car dataset, we not only collected selling prices by individuals but also dealers' pricing. We used the latter to control for unobserved spatial factors that were common for both groups. Heightened contentment involving all the cars on their lot should not be a factor in car dealers' pricing, because their pricing is often determined by financing agreement, refurbishing costs, and the models they are currently promoting. A Johnson-Neyman analysis indicates that dealers' prices do not significantly change with the number of congregations, whereas individuals' prices significantly increase as the number of congregations increases ($\beta = 75.21$, $p < 0.001$).

Our findings offer a wide range of implications for both firms and consumers. First, our results complement current marketing strategies that are targeted at increasing people's purchase likelihood. For example, in highly religious regions, salespeople might want to encourage people to test their products, and thus activate feelings of ownership and increase their likelihood of purchasing. Because consumers with strong religious beliefs may be resistant to trade-in or buy-back programs, managers can frame the message to emphasize how good their used products are and how well they will be taken care of, messages that align with consumers' contentment with their belongings. Second, our findings provide insights into people's pricing behaviors. A recent 2015 survey released by the Pew Research Center shows that Americans are becoming more secular and less religious. It would be interesting to see if the endowment effect becomes weaker over these years. If so, people in the secondhand market might change their prices over time.

In God's Hands: How Religion Dampens the Effectiveness of Fear Appeals

EXTENDED ABSTRACT

For many consumers, the concept of God or another divine being plays a central role in their everyday lives. However, despite the importance of God and religion for many consumers and the extent to which they use such ideology to view the world and make decisions, the implications for marketing are not well-understood. In the current research, we focus on understanding how religion might affect consumer compliance with fear-based advertising.

Fear appeals are persuasive messages that are designed to frighten consumers into compliance with the message's recommendations and they have been used to promote a broad range of consumer products and services, and to address many important public health and safety issues. Research on fear appeals suggests that many factors, including message features (e.g., format, Keller 1999) and individual differences (e.g., self-construal, Block 2005; socioeconomic class, Burnett and Oliver, 1979) determine fear appeal effectiveness.

Research on religion suggests that God and religion often serve as resources that aid consumers in coping with threats and negative emotions. For instance, relative to nonreligious individuals, religious individuals report higher overall subjective wellbeing (suggesting that they cope effectively with everyday negativity) (Myers 2000;

Ellison 1991) and cope better with chronically negative situations (e.g., Koenig, Larson and Larson, 2001), discrete negative life events (e.g., McIntosh, Silver and Wortman, 1993; Newton and McIntosh, 2010), and states of uncertainty (e.g., Kay et al., 2010).

In the current research, we draw on research on fear appeals, religion and coping to suggest that when God is salient, consumer persuasion and compliance with fear appeals is dampened. Specifically, we suggest that when God is salient, consumers feel that they will be supported during hard times, and that this sense of available support leads them to be less likely to comply with the appeal's recommendations.

In study 1, we prime individuals with a standard religion prime or with a neutral prime (e.g., Shariff and Norenzayan 2007) before having them evaluate a fear appeal (an ad for an ADT security system). We find that individuals in the religion condition exhibit less persuasion and compliance to the fear appeal relative to individuals in the neutral condition ($p = .03$).

We replicate this basic finding in study 2. After manipulating the salience of God through an essay writing manipulation, participants evaluated either a high or low fear appeal for flood insurance. Both ads were adapted from a real ad circulated by the National Flood Insurance Program. Consistent with study 1, participants exhibited less compliance in response to a high fear appeal when God was salient than when God was not ($p = .0005$).

In study 3, we explore whether physical settings might serve as a more naturalistic prime of religion. Participants were randomly assigned to participate in our study in either Sage Chapel (a campus Chapel) or Sage Hall (a campus building). Participants evaluated either a high or low fear appeal about the importance of using BPA-free water bottles. Results show that within the high fear conditions, individuals in the chapel condition exhibited lower compliance and persuasion than those in the neutral building ($p = .03$). This difference did not exist in the low fear ad conditions.

In study 4, we identify an important boundary condition for when God salience will and will not dampen fear appeal persuasion: different conceptions of God. Prior research suggests that individuals can vary in the extent to which they perceive God as caring and supportive or as vengeful and punishing (e.g., Shariff and Norenzayan 2011; Harrison et al., 2001). In the context of the present research, we expect that God salience will be associated with support only when perceptions of God are positive. Thus, we assigned participants to scrambled sentence conditions that either heightened benevolent, punishing, or no conceptions of God. Participants then saw either a low or high fear ad about the importance of wearing sunscreen. Results show that when God is perceived as benevolent and supportive, individuals exhibit less compliance to a fear appeal than when God is perceived as punishing ($p = .05$) or when God concepts are not activated ($p = .02$).

In study 5, we examine whether the dampening effect of God salience on fear appeals might be unique to God, or whether the salience of other supportive entities might lead to the same effect. As pre-testing indicated that family/friends and health care providers can serve as important sources of support in individuals' lives, we manipulate whether participants are thinking about God, family/friends or health care providers and measure their intentions to comply with a fear appeal. Results reveal that participants reported lower fear appeal compliance intentions when God was salient relative to each of the other conditions where God was not salient ($p < .05$). In other words, our effect appears to be unique to the sense of support that is evoked from thinking about God. Together, these studies enhance our understanding of both religion and advertising by revealing how notions of God provide a psychological buffer that

may unintentionally reduce consumers' compliance with fear-based appeals.

Attachment to God Reduces Conformity to the Choice of the Majority

EXTENDED ABSTRACT

Attachment is a strong disposition for people to seek proximity to and contact with a specific figure (Bowlby 1969). The figures individuals are attached to can be parents, peers, partners, and even pets (Kurdek 2008). In this project, we focus on one particular attachment figure that is understudied in the marketing field: God (e.g., Kirkpatrick 2015).

Previous literature has shown that a close relationship with God has positive effects on individuals' well-being, self-image, and meaning in life (e.g., Stroebe, Draper, and Whitehead 2013), due to enhanced feelings of love, support, and approval. We propose that close attachment to God and the accompanying sense of support may reduce individuals' need to be affiliated with others (i.e., make them more independent). In marketing contexts, consumers who have acquired an independent self-construal are more likely to make decisions based on their own preferences rather than conforming to the choice of the majority. This effect occurs only when consumption decisions are made for private consumption. When the public consumption context highlights the social pressure to conform, consumers are more susceptible to the choice of the majority.

In all studies, we focused our investigations on consumers who believed in the existence of God. In study 1, participants indicated their chronic attachment to God by rating the extent to which they agreed with three statements (e.g., I know God is there when I need him/her). They then watched a 30-second commercial on bottled water and rated how much they enjoyed the ad and how interesting the ad was on 11-point scales. Bogus ratings of other participants were provided on the rating sheet, and they ranged from 9 to 11 (Janes and Olson 2000). Conformity was measured by assessing a) whether participants' ratings fell into the range of the bogus ratings, and b) the average ratings of participants. Analyses of both dependent variables indicated that as attachment to God increased, participants' ratings were less likely to conform to the bogus ratings. This study demonstrates the negative correlation between attachment to God and conformity. In the next study, we manipulated attachment to God to establish causality.

In study 2, we manipulated attachment to God through an essay-writing task. Participants were asked to think and write about a moment when they felt close to God (high-attachment condition) or a moment when they felt distant from God (low-attachment condition). They then indicated how they conduct themselves regarding conformity (e.g., non-conforming, obedient; Duckitt et al. 2002) on 5-point scales. Conformity was measured by averaging the four ratings. Results showed that priming attachment to God reduced participants' tendency to conform to others. Study 3 replicated the results of study 2 by using a different prime and a different measure of conformity. Specifically, attachment was manipulated through scramble sentence tasks and conformity was measured by the choice between two equally priced artworks – one was endorsed by 80% of previous customers, whereas the other was endorsed by 20%. We found that participants primed with attachment to God were significantly less likely to choose the more popular artwork.

Study 4 further demonstrated the negative influence of attachment to God on choice conformity with behavioral measures. Participants first completed the essay-writing prime, and then were told that they could choose a notecard as a gift. Two different types of

notecards, which were pretested to be equally attractive, were presented on a table together with a bogus sign-up sheet. The relative popularity of each type was manipulated by varying the number of cards taken (as indicated on the number of sign-ups on the bogus sheet) and the number of cards still available. Specifically, there were 21 sign-ups for the more popular card and only 5 were still available; whereas there were 6 sign-ups for the less popular card and 15 were still available. The popularity of both cards was counterbalanced. The results show priming attachment to God reduced participants' likelihood of choosing the more popular card.

Our conjecture of the above effect was that attachment to God could be a substitute for attachment to other people. If so, priming attachment to God should make individuals feel more independent and subsequently less likely to follow the crowd. Study 5 tested this underlying mechanism. Participants first completed the essay-writing task that manipulated attachment to God. They then made choices between two artworks and between two coffee tables. One option in each pair was endorsed by 80% of previous customers, whereas the other was endorsed by only 20%. The likelihood of choosing the more popular options across both product categories served as the main dependent variable. In addition, participants rated four statements (e.g., When I think of myself, I often think of my close friends or family also) assessing their relational interdependence self-construal on 5-point scales. Again, priming attachment to God reduced choice of majority endorsed products, which was mediated by reduced relational interdependence self-construal.

Study 6 tested a boundary condition of the proposed effect. We hypothesized that attachment to God should only reduce conformity when products are consumed privately. The proposed effect should be attenuated when products are consumed in public. We used the same essay-writing priming task and then asked participants to choose between two decoration options either for their bedroom (private context) or for their living room (public context). The results revealed a significant two-way interaction of attachment to God prime and consumption context. Simple effect analyses showed that priming attachment to God reduced conformity only when participants chose a decoration for the bedroom, but had no effect when they chose a decoration for the living room.

In sum, this research demonstrates the negative influence of attachment to God on conforming to the majority choice. It also enhances our knowledge of the role of religion in consumer decision-making and contributes to the social influence literature by uncovering a new antecedent of choice conformity.

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A Sensational Session: Understanding the Effect of Sensory Cues on Choice and Consumption Decisions

Chairs: Monica Wadhwa, INSEAD, Singapore
Kuangjie Zhang, Nanyang Technological University, Singapore

Paper #1: The Color of Indulgence: How Dark Color Influences Indulgent Consumption

Kuangjie Zhang, Nanyang Technological University, Singapore
Monica Wadhwa, INSEAD, Singapore
Amitava Chattopadhyay, INSEAD, Singapore

Paper #2: Strumming the Chords of Your Mind: The Effects of Lyrical Music versus Instrumental Music on Construal Level and Choice

Xiaoyan Deng, The Ohio State University, USA
Xiaojing Yang, University of Wisconsin-Milwaukee, USA
Lei Jia, The Ohio State University, USA
Hyojin Lee, San Jose State University, USA

Paper #3: The Crunch Effect: Food Sound Salience as a Consumption Monitoring Cue

Ryan S. Elder, Brigham Young University, USA
Gina S. Mohr, Colorado State University, USA

Paper #4: Choice and Quantity in Conflict: Post-Taste Food Consumption and Inferences of Self-Control

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Anirban Mukhopadhyay, Hong Kong University of Science and Technology, China

SESSION OVERVIEW

Consumers are frequently exposed to a wide range of sensory cues in their consumption environment. Inputs from such incidental sensory cues can have a far reaching impact on consumption preferences (Krishna 2012; Krishna and Schwarz 2014). The primary objective of this session is to contribute to our understanding of sensory marketing by elucidating the interactive relationship between sensory cues and consumer decision making. Each of the four papers included in the session focuses on a different sensory modality, thus allowing for a broad, yet coherent understanding of research on sensory marketing. The first two papers explore the impact of extrinsic sensory cues, color of product packaging and ambient music, on consumer preferences. The latter two papers complement the first two papers by investigating the impact of intrinsic sensory cues, such as the sound and the taste of food, on consumption behaviors.

The session will begin with a focus on the impact of a highly prevalent visual sensory cue, color of product packaging, on consumption preferences. Specifically, the first paper by Zhang, Wadhwa, and Chattopadhyay focuses on the impact of darkness of colors on one's preference for indulgent consumption. Their findings show that the impact of darkness of color on indulgent consumption depends on whether the positive or negative aspect of the indulgent consumption is made salient. When the positive (negative) aspect of indulgent consumption is made salient, darker colors increase (decrease) preference for indulgent consumption.

The second paper by Deng, Yang, Jia, and Lee extends the scope of the first paper by investigating the effect of a different sensory cue, auditory cue, on consumer preferences and decision making. Their findings show that exposure to lyrical music, compared with instrumental music, evokes a higher level of mental construal. Conse-

quently, while exposure to lyrical music increases consumers' preference for products that are superior on desirability features, exposure to instrumental music increases consumers' preference for products that are superior on feasibility features.

The third paper by Elder and Mohr compliments the first two papers by examining the impact of intrinsic sensory cues on consumption behaviors. They explore the impact of product-related auditory sensory cue, the sound the food makes, on consumption quantity. Their findings show that the salience of the food sound can serve as a monitoring cue to help consumers regulate their food intake. Specifically, they find that increasing the salience of the food sound reduces consumers' consumption quantity.

The fourth paper by Oh and Mukhopadhyay investigates the impact of yet another

product-related sensory cue, taste of food, on consumer choices and consumption

decisions. Their findings show that people's consumption behaviors based on the sensory cue of taste exhibit very different consumption patterns from what one might have predicted based on the choices, which were driven mainly by the visual cues.

Together, this session brings together four papers, which are in final stages of completion, that provide cutting edge insights into how sensory cues prevalent in our market place drive consumer choice and consumption decisions. In addition to attracting researchers interested in the domains of consumer perception and sensory marketing, we expect further interest from those who work within the application areas represented, and those interested in consumer welfare.

The Color of Indulgence: How Dark Color Influences Indulgent Consumption

EXTENDED ABSTRACT

As a ubiquitous visual cue in the marketplace, color plays a crucial role in driving consumers' purchase decisions (Bercea 2012). One important dimension of color, which is imbued with powerful symbolic meanings, is the degree of darkness (i.e., value) of color. In this research, we examine the impact of dark colors on consumers' preference for indulgent consumption.

Recent research suggests that people associate dark colors with sin in moral judgments (Sherman and Clore 2009). This research seems to suggest that dark colors should lead consumers to think of indulgent behaviors as sinful, thereby reducing indulgent consumption. However, in the current research, we argue that dark colors could also enhance indulgent consumption. Specifically, we propose that dark colors are more broadly associated with indulgence. Anecdotal evidence provides some support for this proposition. For example, in everyday language, phrases such as "dark temptations" or "dark desires" are often used to describe indulgent behaviors. Findings from two pilot surveys we conducted provide further support for this association between dark colors and indulgence. Since indulgence contains both positive aspect of pleasure and negative aspect of sin (Khan and Dhar 2006), we argue that the impact of dark colors on indulgent consumption depends on consumers' relative focus on positive versus negative aspects of indulgence. Specifically, when consumers focus on the positive aspect, darker colors can enhance

consumers' preference for indulgent consumption. In contrast, when consumers focus on the negative aspect, darker colors can reduce consumers' preference for indulgent consumption.

We tested the aforementioned color of indulgence hypothesis across four studies. In all studies, holding the hue and chroma dimensions constant, we manipulated only the degree of darkness (i.e., value) of the color cues. Study 1 followed a 2 (color: bright vs. dark) \times 2 (focus: pleasure vs. sin) between-subjects design. Specifically, we instructed participants to focus on either the negative (high calorie content) or positive (tastiness) aspect of an indulgent product (movie popcorn). We used red as the hue of the packaging color and manipulated the degree of darkness of the packaging color. Our findings show that when participants focused on the pleasurable aspect (i.e., tastiness of the popcorn), dark (vs. bright) packaging color enhanced their intention to consume the popcorn ($M = 6.98$ vs. $M = 5.75$, $t(199) = 2.82$, $p < .01$). However, when participants focused on the sinful aspect (i.e., calorie content of the popcorn), dark (vs. bright) packaging color reduced their intention to consume the popcorn ($M = 5.35$ vs. $M = 6.24$, $t(199) = -2.63$, $p < .01$).

Study 2 replicated the color of indulgence effect by using a different hue (blue) and a different indulgent product (buttercream cupcake). The study followed a 2 (color: bright vs. dark) \times 2 (focus: pleasure vs. sin) between-subjects design. As in study 1, we instructed participants to focus on either the sinful (calorie content) or pleasurable (tastiness) aspect of the cupcake and manipulated the level of darkness of the product wrapper. In addition to replicating the findings of study 1, this study further shows that when consumers focused on the pleasurable (vs. sinful) aspect of indulgence, dark, as compared with, bright color induced a greater sense of feeling right toward the indulgence. This subjective sense of feeling right toward indulgence mediated the impact of dark colors on indulgent consumption ($b = 0.97$, bootstrapped 95% CI excluded zero: 0.56 to 1.42).

In study 3, we examined a non-food indulgent consumption context—impulsive purchase. In particular, we used a promotion card for designer sunglasses and manipulated the level of darkness of the color of the card. The study followed a 2 (color: bright vs. dark) \times 2 (goal prime: pleasure-seeking vs. self-control) between-subjects design. Findings of this study show that the effect of dark color on consumers' impulsive purchase intention for a pair of designer sunglasses was moderated by the relative salience of the goal state. When participants were primed with a pleasure-seeking goal, dark (vs. bright) color increased the sense of feeling right toward the indulgence, thus increasing the intention to purchase the designer sunglasses ($M = 4.60$ vs. $M = 3.84$, $t(278) = 1.96$, $p = .05$). However, when participants were primed with a self-control goal, dark (vs. bright) color decreased the sense of feeling right toward the indulgence, thus decreasing the intention to purchase the design sunglasses ($M = 2.76$ vs. $M = 3.46$, $t(278) = -1.79$, $p = .07$).

In study 4, we provided further support for the color of indulgence effect by examining the impact of dark versus bright colors on consumption of entertainment news. The study followed a 2 (color: bright vs. dark) \times 2 (goal prime: pleasure-seeking vs. self-control) between-subjects design. Subsequent to the goal-priming manipulation, participants were told that they would read a total of 10 blog articles from two websites: Business Buzz (business and financial news) and Entertainment Buzz (fashion and celebrity news). Descriptions of the two websites were presented on either a dark or a bright color display background. Participants indicated the number of articles they would like to receive from each website, and they subsequently took their time to read the corresponding composition of 10 news articles they had selected. Our findings show that participants primed with a pleasure-seeking goal chose to read a greater

number of entertainment news blogs when exposed to dark ($M = 6.72$) versus bright ($M = 5.94$, $t(239) = 2.02$, $p = .04$) color background. However, this effect was reversed when participants were primed with a self-control goal ($M = 5.57$ vs. $M = 6.26$, $t(239) = -1.77$, $p = .08$).

Together, these results provide converging support for the color of indulgence effect. When consumers focus on the pleasurable aspect (vs. sinful aspect) of indulgence, dark colors as compared with bright colors increase (vs. decrease) consumers' preference for indulgent consumption. Our results also show that this color of indulgence effect was mainly driven by the dark color. Our findings provide important implications for both marketing and consumer welfare.

Strumming the Chords of Your Mind: The Effects of Lyrical Music versus Instrumental Music on Construal Level and Choice

EXTENDED ABSTRACT

Past research has investigated how music genre, tempo, volume, etc. affects consumer behavior. The vocal versus instrumental component of music, however, has not been studied. Voices and instruments are the two performing media of music (Kamien and James 1988). We use the term "lyrical music" to refer to vocal music with lyrics (i.e., songs) and the term "instrumental music" to refer to the instrumental version of a song which is devoid of lyrics or singing. We examine the effects of lyrical music versus instrumental music on consumers' mental construal and their subsequent product decisions.

We first posit that listening to lyrical music activates a high level of construal because lyrics connect the auditory stimuli to broader, more abstract concepts such as love, betrayal, happiness, sadness, etc. and help listeners interpret what they are hearing in higher level terms. The lyrics of many songs are scripted under common themes (Desmond 1987). These song themes readily activate the existing cognitive schemas in listeners (Schank and Abelson 1977). As a result, listeners often process song lyrics in a top-down, schematic fashion (Hansen and Hansen 1991), deriving the main theme of a song based on a few key lines or even a few key phrases of its lyrics which are sung repetitively. Previous research shows that quite often there is a lack of word-by-word, localized processing of song lyrics (Greenfield et al. 1987) and even when lyrics are available, its comprehension is imperfect and listeners oftentimes include schema-consistent contents (though not existent in the song) when asked to recall the lyrics of the song (Hansen and Hansen 1991).

Second, we theorize that listening to instrumental music induces a relatively lower level of construal because the lack of song lyrics renders schematic processing less likely and higher order meanings not available for average listeners. Instrumental sounds per se do not provide meaning due to the lack of well-accepted conventions that connect musical expression (the audible aspect, or sound) to musical content (the semantic aspect, or meaning) (Baroni 1983). As such, the auditory experience is semantically obscure (Kamien and James 1988). It is also perceptually "concrete" (Baroni 1983, p. 182) because perceiving a musical piece as a whole first requires a bottom-up, localized processing of individual musical elements to understand the syntactical relationships among them (Tillmann, Bigand, and Madurell 1998). For average listeners, however, this localized processing is sticky. Based on music puzzle tasks, Tillmann et al. observed that "...local processing of harmonic cadences prevails over global processing" (p. 160) and listeners focus on individual musical segments and interpret them in narrower, more isolated contexts rather than the overall structural of the musical piece.

We test our key assertions in studies 1-3 using well-established measures of construal level. In Studies 1-2, participants listened to the song *A Whole New World* (with vocals) or the song's instrumental version (without vocals). Both versions lasted for about four minutes and were identical except that the lyrical version included sung words. Participants in Study 1 completed the 25-item Behavioral Identification Form (BIF, Vallacher and Wegner 1989). Analysis conducted on the BIF scores (0-25 with higher numbers indicating a tendency to engage in high-level interpretation) revealed that those listening to the lyrical (vs. instrumental) music were more likely to use high-level description to identify a target behavior ($M_{\text{lyrical}} = 13.95$ vs. $M_{\text{instrumental}} = 12.55$; $F(1, 73) = 7.69, p = .01$). Participants in Study 2 engaged in a shoe categorization task (Lee, Deng, Unnava, and Fujita 2014). Analysis performed on the categorization scores (0-1 with higher numbers indicating a tendency to categorize based on functional form, a high-level feature, versus aesthetic details, a low-level feature) showed that those listening to the lyrical (vs. instrumental) music were more likely to categorize based on functional form ($M_{\text{lyrical}} = .91$ vs. $M_{\text{instrumental}} = .78$; $F(1, 88) = 5.98, p = .02$).

In Studies 3AB, participants listened to the lyrical versus instrumental version of *Before I Fall in Love*. Study 3A utilized a video segmentation task (Lee et al. 2014) in which participants segmented a stream of behavior into meaningful sections by clicking their mouse when, in their judgment, one meaningful action ended and another began. Study 3B employed a picture segmentation task in which participants divided the floorplan of a house into as many areas as made sense to them. We anticipate that lyrical (vs. instrumental) music leads to segmentation that highlights fewer (vs. more) chunks. Analyses showed that those listening to the lyrical (vs. instrumental) music had fewer clicks ($M_{\text{lyrical}} = 15.12$ vs. $M_{\text{instrumental}} = 17.65$; $F(1, 90) = 4.15, p = .045$) in Study 3A, and indicated fewer areas ($M_{\text{lyrical}} = 10.38$ vs. $M_{\text{instrumental}} = 12.02$; $F(1, 83) = 4.59, p = .035$) in Study 3B.

The next two studies show that the higher (vs. lower) level of construal activated by listening to lyrical (vs. instrumental) music, as a procedural mind-set, can influence consumers' subsequent product decisions. In Study 4, after listening to the lyrical versus instrumental version of *Take Me to Your Heart*, participants made a choice between a restaurant with superior primary (food) but inferior secondary (dining view) features and a restaurant with inferior primary but superior secondary features (Wan and Agrawal 2011). The analysis revealed that lyrical (vs. instrumental) music induced greater preference for the restaurant with superior primary feature ($M_{\text{lyrical}} = 7.49$ vs. $M_{\text{instrumental}} = 6.71$; $F(1, 64) = 4.62, p = .04$).

Study 5 tests the proposed mediation mechanism by priming global versus local processing. If lyrical (vs. instrumental) music indeed activates a global (vs. local) processing style, then the effect of music should be *strengthened* when participants are primed with a *consistent* processing style (i.e., global/lyrical and local/instrumental) but *weakened* when the priming task is *inconsistent* (i.e., local/lyrical and global/instrumental). After the music manipulation (same as in Study 4), participants viewed a map of a foreign city and were instructed to focus on its global shape versus details (Förster, Liberman, and Kuschel 2008). They then made a choice between a furniture with superior desirability aspects and a furniture with superior feasibility aspects (Aggarwal and Zhao 2015). A 2 (lyrical vs. instrumental music) \times 2 (consistent vs. inconsistent prime) ANOVA revealed a significant interaction effect ($F(1, 116) = 3.95, p < .05$); among participants assigned to the consistent primes, those in the lyrical/global (vs. instrumental/local) condition reported the highest (vs. lowest) preference for the furniture with superior desirability ($M_{\text{lyrical/global}} = 7.00$ vs. $M_{\text{instrumental/local}} = 5.07$; $F(1, 116) = 8.93, p = .003$);

whereas participants assigned to the inconsistent primes (those in the lyrical/local and instrumental/global conditions) reported very similar preferences for the furniture with superior desirability ($M_{\text{lyrical/local}} = 6.22$ vs. $M_{\text{instrumental/global}} = 6.13$; $F < 1, n.s.$).

In addition to contributing to literature on music effects by shedding light on how listening to lyrical versus instrumental music may alter consumers' level of information processing, this paper advances construal level research by adding a novel, sensory factor to the repertoire of antecedents of construal level. The ease of implementation of this factor suggests that marketers can use lyrical versus instrumental music as a convenient nudge to influence consumers.

The Crunch Effect: Food Sound Salience as a Consumption Monitoring Cue

EXTENDED ABSTRACT

We expand the research focusing on intrinsic sensory cues on consumption by exploring how the intrinsic auditory cues elicited during consumption impact consumption quantity. Across three studies, we show that increased attention to the sound the food makes, or food sound salience, leads to reduced consumption. Our research adds to the literature showcasing the impact of sound on flavor perception and consumption (Christensen and Vickers 1981; de Liz Pocztauruk et al. 2011; Demattè et al. 2014; Spence 2012). We choose to focus on food sound salience as sound has traditionally been the "forgotten" flavor sense (Spence 2015), leading to its underutilization in flavor perception.

An important determinant of food regulation is whether consumers are provided with the opportunity to monitor their consumption. Just as the sight of consumed food helps consumers monitor their food intake (e.g., Geier, Wansink, and Rozin 2012), we predict that drawing attention to the sound of the food may also serve as a consumption monitoring cue. Formally, we hypothesize that increasing (vs. decreasing) food sound salience will lead to less food consumption. The sound that a crunchy food makes when it is consumed provides an intrinsic cue of consumption such that when the consumer no longer hears the sound of the food, an auditory pause in the consumption experience is created. Alternatively, when the crunch of the food is not salient, and the natural pause points created by the sound are not available, the ability to monitor consumption is impaired.

In our pilot study, 223 undergraduates rated the importance of each sensory experience in what they eat, how much they eat, their level of enjoyment, as well as how quickly they get bored of the eating experience. As we hypothesized, sound was expressed to be less important, compared to vision, taste, smell, and texture, in determining when participants decide to start eating, stop eating, and how much participants would enjoy the meal (all comparisons with sound Bonferonni corrected, $p < .05$). Participants also stated that they become bored of the sound of eating food more quickly than they do of the other sensory modalities (Bonferonni corrected, all $p < .05$).

In study 1, 181 undergraduates were randomly assigned to one of three conditions. Participants were told to eat cookies as they normally would, as loudly as they could, or as quietly as they could. The latter two conditions were manipulations of food sound salience, while also allowing us to explore any differential impact of intensity. Participants were instructed to eat at least one cookie, but could then eat as many as they wished. Despite finding no significant differences in perceived taste or quality of the cookies across conditions, we found our predicted significant main effect of food sound salience. Specifically, the food sound salience conditions led to less consumption than the control condition ($M_{\text{food sound salience}} = 2.61, M_{\text{control}} = 3.38$; $F(1, 179) = 4.73, p < .05$). As the predicted effect of food

sound salience on quantity consumed might be a function of making other sensory cues more salient as well, the primary aim of study 2 was to directly manipulate food sound salience without incurring an additional effect of mindfulness on the eating situation.

In study 2, 67 undergraduates were randomly assigned to either a high or low food sound salience condition. Food sound salience was manipulated by adjusting playing sound through headphones during consumption (-29.5 dbFS for high food sound salience, 14.5 dbFS for low food sound salience). We pretested this manipulation, with louder levels of white noise leading to a weaker ability to hear oneself chew than quieter levels of white noise. Participants were given a bowl of pretzels to consume while listening to the noise in their headphones. As predicted, participants in the high food sound salience condition consumed significantly fewer pretzels than those participants in the low food sound salience condition ($M_{low} = 2.75$, $M_{high} = 4.11$; $F(1, 64) = 5.27$, $p < .05$).

In study 3, we explored the managerial implications for food sound salience. One hundred twenty-three undergraduates were assigned to either the high or low food sound salience condition. We manipulated food sound salience through a verbal product advertisement for pita chips, with the high (low) food sound salience condition focusing on sound (taste) attributes. Participants read the advertisement, and then were instructed to eat as many pita chips as they wished. As a result of this manipulation, participants ate significantly fewer pita chips in the food sound salience condition than in the taste salience condition ($M_{sound} = 4.79$, $M_{taste} = 5.86$; $F(1, 120) = 4.21$, $p < .05$).

Across three studies, in which we operationalize food sound salience through different methods, we show a consistent negative relationship between the salience of a food's sound and food intake. Our findings also illuminate the importance of understanding sensory cues as influential factors in food consumption. While existing research places little importance of the role of intrinsic sound in the consumer food environment, we demonstrate that the salience of a food's sound can in fact significantly impact the quantity of food a person eats.

Choice and Quantity in Conflict: Post-Taste Food Consumption and Inferences of Self-Control

EXTENDED ABSTRACT

Imagine you have to choose between chocolate cake and fruit salad, a classic measure of self-control introduced by Shiv and Fedorikhin (1999). Since chocolate cake is relatively more tasty but unhealthy (i.e., a vice; Wertenbroch 1998), a choice of chocolate cake is interpreted as lack of self-control. Correspondingly, a choice of fruit salad (a virtue) is interpreted as high self-control. The simplicity and intuitive appeal of this heuristic have led it to be widely adopted by consumer researchers. However, it is not without its shortcomings. First, people may simply choose an option because of a dislike for the alternative, with no implication for self-control. More importantly, food choice may not be indicative of quantity. After having tasted some appetizing food, the decision of when to stop eating is also indicative of self-control, and independent of the decision of which food to eat. You may choose the chocolate cake (and thereby be classified as having low self-control), but only eat a single forkful – evidence for high self-control that is completely missed by the researcher. In this research, we explicitly test how trait self-control relates to choice versus quantity in situations such as this, and find that actual intake is in fact systematically discrepant from choice.

Food consumption can be analyzed as a two-stage process: consumers make a choice and then decide how much to eat (Wansink and Chandon 2014). Hence, choice and quantity intake should

both be investigated to fully understand the operation of self-control. However, most research has studied choice (with Fedorikhin and Patrick 2010 being an exception), and this is potentially problematic since food consumption quantity is heavily dependent on the sensation of taste (Metcalf and Mischel 1999), which only occurs post-choice. Consequently, simply basing inferences on observed choices may lead researchers to ignore important consequences such as actual caloric intake.

The over-consumption of calories is the most significant contributor to obesity (Livingston and Zylke 2012). While vices are of course best consumed in moderation, overconsumption of virtues may also be problematic. For example, salads can be higher in calories than burgers (Melnick 2013), and these virtue calories tend to go under the radar. In this research, we report two studies that measure actual intake conditional on choice of vice versus virtue. We tested how individual differences in dietary self-control maps onto (a) the choice between a virtue and a vice, and (b) actual caloric consumption.

Study 1 followed Shiv and Fedorikhin (1999), employing a single-factor between-subjects design with food type manipulated as vice vs. virtue and dietary restraint measured (Herman and Polivy 1980) as domain-specific self-control. Participants ($N=124$) were given a “taste test” and asked to choose either M&Ms or almonds (pretested). They were then given 40 grams of their chosen food in a plastic cup to taste as they worked on a puzzle solving task, designed to constrain processing resources during consumption. Participants were free to eat as much as they wanted while they worked on the puzzles, and their cups were weighed after they left the lab to estimate their caloric consumption.

Interestingly, dietary restraint had no influence on choice. Since we allowed free choice and then measured intake of the chosen item conditional on choice, there is a potential endogeneity problem. To address this, we analyzed consumption quantity using an endogenous treatment regression model, which follows a two-stage procedure (similar to the analysis of purchase quantity conditional on brand choice; Krishnamurthi and Raj 1988; see also Galoni and Noseworthy 2015). The data did not have a significant endogeneity problem ($\rho = -.49$; $\sigma = 4.79$; $p = .48$). The regression revealed a significant interaction between food type and restraint ($B = -2.08$; $p = .05$). Follow-up analyses revealed, importantly, that unrestrained eaters ate more if they had chosen the virtue than if they had chosen the vice ($p < .05$). In contrast, restrained eaters tended to eat directionally less of the virtue than of the vice ($p = .12$). Similar patterns were obtained using a simple linear regression. These results are surprising because the choice of the virtue did not lead to uniformly low consumption quantity or caloric intake. Rather, chronic self-control influenced food intake in a different way from food choice—unrestrained eaters ended up consuming higher calories when they chose the virtue than when they chose the vice.

Study 2 ($N=390$) extended study 1 by adding a cognitive load factor, exactly as in Shiv and Fedorikhin (1999). We manipulated cognitive load by instructing participants to memorize either an 8-digit or a 2-digit number, following which they continued to the food tasting task as study 1.

Unrestrained eaters were more likely to choose the vice under high (vs. low) cognitive load ($p < .01$), successfully replicating Shiv and Fedorikhin (1999; study 2). Unlike in study 1, the test for consumption quantity contingent on choice revealed endogeneity—there was a significant correlation in residuals ($\rho = -.77$; $\sigma = 11.02$; $p < .01$). Accounting for this, the discrete-continuous model revealed a significant interaction between cognitive load, food type, and restraint ($B = -5.63$; $p = .01$). Follow-up analyses revealed that restrained eaters consumed less of the virtue when under high (vs. low) cognitive load

($p < .05$). In contrast, and replicating study 1, unrestrained eaters ate more of the virtue when under load ($p = .06$). Moreover, under high cognitive load, unrestrained eaters consumed significantly more calories from virtues than from vices ($p = .01$). Cognitive load did not have an effect at any level of dietary restraint for those who chose vices.

By measuring actual intake after food choice, two studies show convergent evidence that consumption patterns tell a very different story from what may be inferred by simply observing choice. Given a choice of a virtue, cognitive load increased intake among unrestrained eaters while it decreased intake among restrained eaters. Essentially, the decision to continue versus stop eating is very different from the decision (of what) to start eating, and has very different implications for inferences of self-control.

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Advances in Mental Accounting

Chairs: Kristen Duke, University of California, San Diego, USA
On Amir, University of California, San Diego, USA

Paper #1: A Price-Purchase Paradox

Shirley Zhang, University of Chicago, USA
Christopher Hsee, University of Chicago, USA
Abigail Sussman, University of Chicago, USA

Paper #2: The Influence of Categorical Framing on Budgeting

Miaolei Jia, National University of Singapore, Singapore
Xiuping Li, National University of Singapore, Singapore
Leonard Lee, National University of Singapore, Singapore

Paper #3: Spending or Stockpiling: Consumers' Decisions to Redeem Loyalty Program Points

SoYeon Chun, Georgetown University, USA
Rebecca Hamilton, Georgetown University, USA

Paper #4: Mental Accounting of Guilt: Decoupling Guilt from Consumption

Kristen Duke, University of California, San Diego, USA
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SESSION OVERVIEW

Mental accounting, or the way in which consumers catalog, analyze, and recall their spending, has important consequences for happiness and financial health. Research in this domain has uncovered several features that affect both spending and satisfaction, such as categorization, representation in different currencies, and purchase timing. The goal of this session is to present novel and complementary insights on the rich dynamics of mental accounting through examining these features.

This series of four papers explores how consumers' methods of mentally and emotionally tracking their purchases and consumption decisions influence their subsequent choices and satisfaction. We collectively demonstrate that this mental tracking can influence the amount consumers spend, what they spend on, and how they feel about those expenses across different resources (money, loyalty points, and self-control).

In the first paper, Zhang, Hsee, and Sussman show how price promotions can *reduce* purchasing. The authors show that consumers may view the quantity at which the price increases in such a promotion (e.g. after reaching unit X under a promotional discount on the first X units) as a stopping point in their purchase decisions; this cue shifts mental budgeting, which can reduce the quantity purchased.

The second paper extends the focus from single-item mental budgeting into category-wide financial budgeting. Jia, Li, and Lee establish that consumers set higher budgets when they budget for multiple component subcategories rather than creating a single overarching budget. Consumers tend not to naturally consider more indulgent expenses, but actively estimating expenses in component subcategories fosters greater elaboration on these non-essential purchases. Actual shopping decisions reveal that this elaboration can lead consumers to spend more overall.

Next, Chun and Hamilton compare consumers' willingness to spend loyalty points and money when they have equivalent budgets in both currencies. The authors show that the design characteristics of loyalty point programs, such as the numerosity of points awarded, systematically influence consumers' choices between spending cash and spending points. Although use of non-cash currencies can reduce the pain of paying, especially for indulgences, making loyalty points more fungible can undermine this benefit.

The final paper extends mental accounting to the emotional pain that accompanies indulgence. Duke and Amir demonstrate that consumers can emotionally "pre-pay" their guilt by mentally budgeting in advance for an indulgence, which boosts net utility at the point of consumption. This is accomplished by decoupling the guilt associated with *choosing* from the guilt stemming from *consuming* indulgence, and allowing the former to depreciate in the period preceding consumption.

Collectively, these four papers provide a fresh understanding of methods consumers use to mentally track their resources and purchases. Counterintuitively, we find that price discounts can encourage consumers to buy *less*, that budgeting with more careful thought and elaboration – especially on indulgences – can encourage consumers to buy *more*, and that making loyalty points easier to use can *lower* consumer satisfaction. We believe this session will have a broad appeal, drawing researchers investigating financial decision-making, pricing, context effects, hedonic consumption, and self-control, as well as judgment and decision-making.

A Price-Purchase Paradox

EXTENDED ABSTRACT

We investigated how changes in the price of a product influence consumers' purchasing and consumption behaviors. Specifically, we examined cases where the first few units are discounted or free. Intuitively, offering discounts or free samples should boost sales. However, we propose that there are situations when consumers purchase fewer units of a product when a discount or free sample is present versus absent, a pattern contrary to economic price sensitivity. Further, we find that this pattern is moderated by the number of products available for purchase at a discounted price. Consumers may take the quantity at which the price increase occurs as a stopping point in their purchase decisions, but only if the quantity is within a reasonable range of their initial preference. We tested our hypotheses across 5 studies in a variety of domains ranging from food to consumer products to energy consumption.

In Study 1, we told college students that they could eat as few or as many M&M's as they wanted over a 5-minute period. Participants received either 1 M&M or 5 M&Ms as free samples. Each additional piece would cost 1 cent and the cost would be deducted from their final payment. We found that participants ate significantly fewer chocolates when the first five pieces were free than when only the first piece was free ($M_s = 8$ vs. 16; $p < .05$), despite the fact that participants in the former case on average paid a lower unit price for each of the chocolates they consumed (0.38 vs. 0.94 cents). Further testing revealed that participants ate fewer chocolates when they received five free samples than when there was no free sample present ($M_s = 8$ vs. 17; $p < .05$), suggesting that, contrary to normative predictions, consumers may purchase fewer units of a product when more units of that product are discounted.

We replicated the basic effect in the next two studies, with other forms of price increases than price discounts and free samples. In Study 2, we asked MTurk workers to imagine that they were buying an espresso machine. We manipulated the price increase in the form of a sales tax. Participants were told that the sales tax varied in their state from 2% to 8%. In the no-increase condition, the sales tax was always 8%. In the other condition, the sales tax was 2% for items

under \$50 and 8% for each dollar spent above \$50. We found that participants opted to purchase a significantly less expensive espresso machine when the sales tax was initially low but would increase beyond \$50 than when the sales tax was always high ($M_s = \$71$ vs. \$64; $p < .01$).

In Study 3, we manipulated the unit price of household electricity consumption in a hypothetical scenario, and found that participants chose to consume less energy per month if the unit price of electricity started to increase at a relatively high household consumption level than if it increased at an extremely low level.

We further looked into the mechanism underlying these effects in Studies 4-6 and tested boundary effects as well as possible mediators. We propose that consumers are not only sensitive to prices, but also sensitive to price increases. They take the quantity at which the unit price increases as a stopping point in their purchasing decisions, but they do so only if the quantity is within a reasonable range, a range that is close to their initial preference. For example, if consumers are offered a 10ml free sample of yogurt and they initially prefer eating around 50ml, they may still purchase 40ml or more after trying the free sample since 10ml is too little to satiate their appetite. However, if consumers are offered a 30ml free sample, then they might be sufficiently satiated and prefer not buying any more since the price of the next 20ml is higher. Here, in our definition, 30ml would be within the reasonable range of their initial preference, but 10ml would not be.

To test the relevance of the reasonable range, we ran Study 4 with two parts. In a pretest, we elicited participants' perceptions of a reasonable range for the price of a new keyboard (i.e. the minimum and maximum prices they would spend on a keyboard) as well as their preferred price. Based on the pretest, we manipulated price increases in the form of a sales tax. In the central experiment, we told participants that a 9% sales tax applied to items above a preset cost. The cost varied in terms of where it fell in the pre-tested range of reasonable keyboard prices. We found that participants were willing to spend significantly less on a keyboard if the tax applied to a keyboard at a reasonably low price but not if the tax applied at an unreasonably low price. However, we also found that participants were willing to spend significantly more if the tax applied at a high price, irrespective of whether it was reasonably or unreasonably high.

We manipulated the reasonable price range and price increase in Study 5, in which participants reported their willingness to pay for a sofa set. Participants were told that they would pay for the sofa with two credit cards, one with a high interest rate and the other with a low interest rate. The low-rate card had a spending limit of \$100 (vs. \$400). We replicated the basic effect in the narrow range conditions (i.e. an expert suggested that this purchase should cost around \$500 to \$1,000), but found the opposite in the wide range conditions (i.e. purchase should cost \$100 to \$1,300). We tested perceived reasonability of certain prices as possible mediators of the effect in Study 6.

In summary, we found that 1) consumers may purchase fewer units of a product if the unit price of the product is discounted (or free) up to a certain quantity than if there is no discount; 2) this basic effect is moderated by how close that quantity is to the quantity that consumers initially preferred.

The Influence of Categorical Framing on Budgeting

EXTENDED ABSTRACT

Consumers frequently set budgets for various types of consumption. The budget that they set for various mental accounts can have a significant impact on their subsequent spending behavior (Cheema and Soman 2008). In this work, we investigate how different ways of

setting budgets affect the size of the budget that consumers set and, in turn, their actual spending.

Specifically, we test two methods that consumers typically use in personal-finance budgeting. First, consumers can set budgets for different constituent categories in order to derive an overall budget ("categorical framing"). Alternatively, they may set an overall budget with or without considering its constituent categories or components ("overall framing"). We propose that consumers set a higher overall budget when they do so under categorical framing than under overall framing.

Our reasoning consists of two steps. First, categorical (versus overall) framing increases elaboration of the constituent subcategories during budgeting. Prior research on numeric judgment has revealed that unpacking an overall category into its subcategories increases elaboration of each subcategory (e.g., Kruger and Evans 2004; Tversky and Koehler 1994). Second, increased elaboration makes individuals think more about the items that they want and desire. Overall framing limits elaboration, hence individuals are more likely to consider only the expenses that are salient in their minds, which, in most cases, are the necessities; categorical framing leads to increased elaboration, hence individuals are more likely to consider the items that they want and desire besides the necessities. Therefore, categorical framing leads individuals to set a higher overall budget than overall framing.

Study 1 was conducted to test this hypothesis. Participants ($N = 117$) were randomly assigned to one of three conditions. In the *categorical* condition, participants were asked to set individual budgets for their next-month spending in six major consumption domains (i.e., accommodation or rent, food and drinks, transportation, entertainment, clothing, and other expenses). The budgets set for the six categories were then summed to derive their overall budget for the month. In the *overall-with-reminders* condition, participants were asked to set an overall budget for their next-month spending, with the six aforementioned consumption domains provided as examples. Finally, in the *overall-without-reminders* condition, participants were asked to set an overall budget without being reminded of the consumption domains.

An ANOVA revealed a significant effect of budget framing on participants' set budgets ($F(2, 114) = 10.07, p < .001$). Contrast analysis further indicated that participants set a larger budget under categorical framing ($M = \$785.39, SD = \537.20) than either overall-with-reminders framing ($M = \$478.27, SD = \$321.06; p = .003$) or overall-without-reminders framing ($M = \$387.24, SD = \$329.49; p < .001$). There was no significant difference in budget between the two overall-framing conditions ($p = .22$).

Since study 1 did not reveal a significant budget difference between the two overall-framing conditions, we included only the *overall-with-reminders* condition in the studies reported later as a more conservative test: Compared with overall-without-reminders framing, overall-with-reminders framing provides individuals the same amount of information about constituent subcategories as categorical framing does.

Study 2 was conducted to test whether the effect of categorical framing on set budget is due to greater consideration of wants and desires that categorical (vs. overall) framing induces. The procedure of study 2 was similar to study 1 with two exceptions. First, we asked participants ($N = 96$) to set budgets for *next-week* spending. Second, we added a process measure. Specifically, we asked participants to indicate the extent to which they agreed with the following statements on a 7-point scale: "I focused on the items that are desirable;" "I focused on the items that I would love to spend on;" "I focused

on what I want to buy” (These three items were averaged to derive a *want-focus* index, $\alpha = .76$).

Replicating the results of study 1, participants set a larger budget under categorical framing ($M = \$170.41$, $SD = \$111.12$) than overall framing ($M = \127.00, $SD = \$81.50$; $F(1, 94) = 4.84$, $p = .03$). As expected, categorical framing ($M = 4.80$, $SD = 1.22$) made participants focus more on what they wanted than overall framing ($M = 4.34$, $SD = 1.35$; $F(1, 94) = 3.04$, $p = .08$). Furthermore, mediational analysis (Preacher and Hayes 2008) revealed that categorical framing had a marginally significant effect on want focus ($\beta = .46$, $p = .08$), and that controlling for categorical framing, want focus had a significant effect on set budget ($\beta = 18.92$, $p = .01$). Because the 95% confidence interval (.26 to 27.56) for the indirect effect did not include 0, the mediation was significant.

Study 3 was conducted to test whether categorical (vs. overall) framing increases individuals' spending. At a department store entrance, shoppers ($N = 230$) were approached to complete a short survey in exchange for a free-gift coupon. Embedded in the survey was the framing manipulation. In the *categorical* condition, shoppers were asked to estimate how much they would spend in each of the nine product categories sold by the department store. In the *overall* condition, they were asked to estimate how much they would spend in the store overall with the nine product categories provided as examples. After participants had finished their shopping, we collected shoppers' receipts when shoppers redeemed their coupons.

Replicating the results of studies 1 and 2, shoppers set a larger spending budget under categorical framing ($M = \$197.36$, $SD = \$171.91$) than overall framing ($M = \80.17, $SD = \$50.64$; $F(1, 228) = 50.25$, $p < .001$). More importantly, using actual spending as the dependent variable, an ANOVA revealed that shoppers spent more under categorical framing ($M = \$81.70$, $SD = \$89.10$) than under overall framing ($M = \$61.62$, $SD = \$66.21$; $F(1, 228) = 3.79$, $p = .05$).

In conclusion, we demonstrate across three studies that categorical (vs. overall) framing leads individuals to set a higher budget and also spend more. This framing effect is due to categorical (vs. overall) framing leading individuals to think more about what they want.

Spending or Stockpiling: Consumers' Decisions to Redeem Loyalty Program Points

EXTENDED ABSTRACT

Loyalty programs are designed to reward customers for buying more or buying more frequently from a firm. Typically, customers earn points for the dollar value of the purchases they make (e.g., United Airlines' Mileage Plus program awards points for each dollar spent) or the number of purchases they make (e.g., My Starbucks Rewards customers initially earned stars for each transaction), which can then be exchanged for products and services. In a sense, these loyalty program points function as a currency that consumers can spend on products and services instead of spending money.

Over the past several years, many loyalty programs have tried to make the points earned by their members more valuable by making them more fungible (e.g., allowing members to redeem points on other ecommerce sites and to pay with a combination of points and money; Dreze and Nunes 2004). However, we argue that there are key differences in the way consumers spend points compared with money. For example, consumers may feel more justified in spending loyalty points than cash on indulgences (Kivetz and Simonson 2002), and using currencies other than cash reduces the pain of paying (Prelec and Loewenstein 1998). Moreover, research suggests that consumers may derive value from “stockpiling” rather than spending

loyalty program points, even when the points are easy to redeem and the points have no value outside the loyalty program (Stourm et al. 2015).

We examine differences in the way consumers think about loyalty program points as compared to money, and how they choose whether to make a purchase with loyalty program points or money. We find that consumers' choices to use loyalty program points or money for a specific purchase are systematically shaped by the design characteristics of the loyalty program. For example, loyalty programs vary in the number of points they award per dollar spent. Some programs, like My Starbucks Rewards, give customers very few points per dollar: one star is awarded per multiple dollar transaction. Other programs, like United Airlines' Mileage Plus, give customers many times more points than the dollars they spend: for non-elite members, five points are awarded per dollar spent. Recent research on numerosity effects suggests that the conversion ratio between loyalty program points and the currency consumers typically use can lead to systematic overspending or underspending when redeeming loyalty program points (Raghubir and Srivastava 2002; Wertenbroch et al. 2007). Raghubir and Srivastava (2002) show that when the nominal value of a new currency is a multiple of the home currency (e.g., points in the Mileage Plus program), consumers tend to spend less, but when the nominal value of a new currency is a fraction of the home currency (e.g., stars in My Starbucks Rewards), consumers tend to spend more. Thus, loyalty program design characteristics, such as the number of points awarded per transaction or per dollar spent, can shift consumers' preferences for using loyalty points or money when purchasing goods and services.

In a series of studies, we show that consumers' willingness to spend points vs. money is systematically influenced by several loyalty program design characteristics that influence the perceived conversion rate between points and money. In our first study, 358 participants imagined that they were purchasing airline tickets for a series of five trips they would take over the next year. For each trip, they were given a budget in both points and dollars, and they decided whether to redeem their points or pay in dollars and save the points for other trips. We varied between subjects whether participants received training to help them understand the conversion between dollars and points, the ease of mentally converting points to dollars, and the numerosity of loyalty program points. We also varied the price level of the flights within subjects. Consistent with past research (Stourm et al. 2015), we find that participants tend to “stockpile” loyalty points even though points have no value outside the decision context. We also find significant effects of training, numerosity and price level on participants' willingness to redeem points. These manipulations influence the perceived conversion ratio between loyalty program points and money, such that points seemed more valuable relative to money in some decision contexts than in others. However, one limitation of our first study is that we do not know whether these results are due to the specific nature of loyalty program points or whether they are more general to spending in an unfamiliar currency.

In our second study, we addressed this limitation by comparing consumers' choices between spending loyalty program points vs. money to their choices between spending in a familiar vs. unfamiliar currency. We asked 386 participants to imagine they would be visiting friends in three different cities. In one condition, participants chose whether to spend loyalty program points vs. dollars, and in another condition, they chose whether to spend foreign currency vs. dollars. The foreign currency we chose for this study has been used in previous work examining numerosity (Wertenbroch et al. 2007). Using this hypothetical currency allowed us to manipulate the numerosity and stability of the exchange rate for the loyalty program

points and foreign currency in exactly the same way, providing a relatively clean test of the generalizability of our results across multiple currencies.

Across these two studies, we see quite clearly that the design characteristics of loyalty programs – such as the numerosity of loyalty program points, the stability of points prices, and the price level of the items that can be purchased with points – have systematic and significant effects on consumers' willingness to spend loyalty program points instead of stockpiling them. Because these design factors influence the perceived value of loyalty program points, they are critical to consider when thinking about how to motivate consumers to join loyalty programs and earn points as well as when thinking about how to engage members as they stockpile and redeem their points.

Mental Accounting of Guilt: Decoupling Guilt from Consumption

EXTENDED ABSTRACT

Indulging, or consuming a vice, elicits two separable outcomes: intrinsic enjoyment and guilt (Ramanathan and Williams 2007; Chen and Sengupta 2014). We propose that the timing of a decision to indulge in relation to the indulgence episode itself can alter consumers' overall utility *during* consumption by decoupling the guilt associated with the choice from that associated with consumption. In particular, we demonstrate that “precommitting” or planning in advance to consume a vice reduces guilt, but does not affect intrinsic enjoyment, providing higher net utility at the time of consumption.

Failure at self-regulation is one common source of consumer guilt (Dahl, Honea, and Manchanda 2003), an unpleasant emotional state characterized by feeling one has fallen short of his/her internal standards of conduct (Baumeister, Stillwell, and Heatherton 1994). This self-conscious emotion can emerge quickly (Ramanathan and Williams 2007) and decays over time (Kivetz and Keinan 2006). We propose that consumption of a vice elicits guilt associated separately with the *choice* to indulge and with the *experience* of indulgence. Reaching the decision to indulge brings about the former, which can then decay in the period leading up to the actual indulgence experience. As a result, the net guilt felt at the point of consumption will be lower.

The result of this decoupling process aligns with that of Prelec and Loewenstein (1998), who find that the awareness of having to pay for an experience reduces utility during the experience itself. For example, going on a cruise vacation and knowing one must pay for it later can reduce enjoyment of the vacation in the moment. However, pre-paying for the vacation before it begins can prevent this attenuation effect. In a similar fashion, we show that consumers can mentally pre-pay for the “sin” of consuming a vice and increase utility from consumption.

In study 1, participants who recounted a time in which they pre-committed to indulge (vs. those who recounted a time in which they made the decision in the spur of the moment) indicated feeling less guilty ($t(200) = -4.55, p < .001$) and regretting the indulgence less ($t(208) = -2.98, p < .01$). In turn, these participants also indicated higher overall enjoyment of the indulgence ($t(208) = 2.44, p = .02$), and felt happier about having indulged ($t(206) = 3.57, p < .001$). According to our theorizing, decision timing should affect net enjoyment through its influence on negative self-conscious emotions, but should not affect the intrinsic pleasure the experience itself provides. As expected, after controlling for feelings of guilt and regret, the effects of condition on enjoyment and net happiness were no longer significant.

In study 2, we sought to directly control for any differences due to the types of indulgent experiences to which participants may choose to precommit. Participants read three scenarios in which two focal actors both indulged in the same experience. However, in each scenario, one actor reached the decision to indulge with more time before the indulging episode. As predicted, across all scenarios, this actor was expected to feel less guilty (p 's $< .001$), to experience less regret (p 's $< .001$), and to feel happier about having indulged (p 's $< .01$).

In study 3, we directly induced indulgence guilt in a controlled laboratory setting. At the beginning of the experiment, half of participants (“precommitters”) were told they would be taking part in a taste test later in the session and could choose between ½ of a Krispy Kreme glazed donut and 3 baby carrots. They made their selections and then proceeded to a filler task. The other half of participants began the filler task immediately upon entering the laboratory. One-by-one, each participant in this “immediate” condition was taken to a separate room, learned about the taste test, chose a food option, and immediately consumed the selected food. After eating, each participant was interviewed by research assistants about his/her food choice and the thought process that led to its selection. After each participant in the immediate condition had completed the taste test and the interview, the precommitters individually consumed their preselected items and were interviewed. The percentage of participants choosing the indulgent food (the donut) over the virtue food (carrots) did not differ by condition (precommitters: 61.1%; immediate condition: 60.0%; $\chi^2(1) = 0.01, p = .9$).

The vocal responses of participants who had selected the indulgent food (the donut) were analyzed using Layered Voice Analysis software to identify several emotions (Nemesysco 2009). These emotions loaded onto 3 factors (1: energetic, excited, angry, and concentrated; 2: upset, stressed, uncertain, and embarrassed; and 3: content). Responses differed by condition only on factor two: precommitters expressed significantly less stress, uncertainty, embarrassment, and upsetness in the interview than did immediate participants ($M_{\text{precommit}} = -0.17$ vs. $M_{\text{immediate}} = 0.18, t(121) = -2.03, p < .05$). Thus, precommitting to indulge lowered the negative emotions participants experienced during an indulgence episode.

In study 4, we will show that precommitting to vices changes consumers' actions and intentions following consumption. Existing research suggests that guilt induces a motivation to atone for transgressions and engage in reparative behaviors (e.g. Tangney et al 1996; Lindsay-Hartz, De Rivera, and Mascolo 1995). As precommitting to consume a vice results in less guilt at the time of consumption, it should produce less motivation to engage in reparative actions thereafter.

In four studies, we find that separating the decision to consume from a consumption episode can reduce the amount of guilt experienced during consumption, increasing net utility at the point of consuming. This work suggests an additional benefit of a decision to “precommit to an indulgence.” Kivetz and Simonson (2002) propose that consumers may select an indulgent reward (rather than cash) to receive in the future as a means to precommit to treating themselves to pleasurable products and experiences, which they otherwise might forgo for more utilitarian necessities. We build on this work to suggest that, not only will consumers experience more indulgences by precommitting to consume them, but they will also appreciate those indulgences more.

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Competitive Papers—Full

Keep It Simple Stimuli: Brain-Vetted Elements of Movie Trailers Predict Opening Weekend Ticket Sales

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ABSTRACT

We propose a novel method to predict movie ticket sales based on the stimulus complexity of the associated advertisements (i.e. movie trailers). We identify characteristics of movie trailers (e.g. semantic and visual clarity) that promote neural similarity (i.e. Cross-Brain-Correlation) among moviegoers at a commercial theater and foreshadow commercial success.

INTRODUCTION

The film industry has enticed consumers with movie trailers for over a century. When the first movie trailer debuted in 1913, it was heralded as “an entirely new and unique stunt” (Hoeftling 2010). Now ubiquitous and highly competitive, movie trailers are the products of substantial investment. A single movie trailer can take six months to produce and Hollywood spends over \$3 billion per year on cinematic advertising (Faughnder 2015). Putting that into perspective, annual movie trailer production costs more than buying a movie ticket for every person in the United States (average ticket price is \$8.70, IMDb.com, Inc., Seattle, Washington; US population is 323 million, US Census Bureau).

Given the film industry’s high upfront advertising costs, there is substantial interest in advance predictions of the commercial success of movies. Researchers have identified potential early indicators of financial outcomes such as aspects of a movie’s script or whether the movie is a sequel (Eliashberg et al. 2006). In particular, Eliashberg et al. report that sequels tend to outperform stand-alone movies in ticket sales and that advertising for sequels is more efficient since moviegoers have prior knowledge of the base story. Additionally, there has been a rapid increase in scholarly attention to the effects of individual cast members on film revenue. A star actor’s participation in a film is often interpreted as implicit endorsement of the project, and endorsements by popular figures have been broadly successful in advertising campaigns (Choi et al. 2005). Specifically, a star actor garners an average of \$3 million in additional ticket sales for a film, but often the compensation paid to these actors cancels out the marginal increase in theatrical revenues to the film studio (Elberse 2007). Eliashberg et al. also cites the rising cost of talent (especially for sequels) as a factor that complicates revenue predictions.

High revenue movies, by definition, attract a wide audience, which suggests that the corresponding movie trailers were broadly appealing to the moviegoer population. Qualitatively, members of a captivated audience behave similarly: laughing, flinching, or gasping at the same time, looking in the same direction, and maintaining an attentive physical posture. Recent research has identified neural underpinnings for such behavioral resemblances; neuroscientists have discovered that brains act similarly while processing certain stimuli, such as memorable movies, television shows, advertisements, and stories (Hasson et al. 2004, Furman et al. 2007, Hasson et al. 2008ab, Avidan et al. 2009, Regev et al. 2013, Barnett et al. 2015). These results suggest that measuring neural similarity is a promising technique to distill aspects of stimuli that contribute to collective appeal and action.

In this work, we offer a neuroscientific lens to characterize basic elements of successful movie trailers. We use portable electroencephalography (EEG) systems to record the neural activity of moviegoers at a commercial movie theater, and then we compute neural similarity throughout each of the trailers (Study 1: EEG Field Study). We hypothesize that movie trailers that promote relative neural similarity will be more memorable (i.e., higher recall rates) as measured in a survey immediately following the movie. In this survey, we also confirm the supremacy of trailers by asking moviegoers which factors influence their decision-making process; the majority of moviegoers use trailers to decide which movie to watch.

After movies are released, there are countless factors that influence moviegoer purchase decisions, including online user reviews, recommendations, popular excitement, and critical acclaim. However, before the movies are released, most of the aforementioned factors are unavailable (by definition) to moviegoers; therefore, trailers are even more important regarding purchase decisions of opening weekend movie tickets. Therefore, we measure the commercial success of a trailer as its corresponding movie’s opening weekend domestic ticket sales. Thus, we additionally hypothesize that neural similarity during movie trailers will correlate with their respective opening weekend box office performances.

In Study 2 (Characterization of Stimuli), we dissect quantifiable stimulus attributes of movie trailers. We hypothesize that numerous measures of complexity will be negatively correlated with neural similarity; conversely, simpler advertisements have more uniform effects across multiple brains. We investigate standard measures of semantic complexity, such as the number of words, sentences, questions, and unique speakers per unit of time (Flesch 1948, Kincaid et al. 1975). Additionally, we measure the proportion of speaking time versus non-speaking. We also study visual complexity, which we assess as the average entropy (i.e., statistical randomness) of each frame of the movie trailer; low-entropy images are relatively uniform in intensity whereas high-entropy images have many bright areas and dark areas (see example in Figure 1). Accordingly, high-entropy images often have many focal points for visual attention (Itti et al. 2005). In turn, we hypothesize that these stimulus characteristics will correlate with neural engagement and will subsequently influence opening weekend ticket sales.

Lastly, we propose a linear model to predict the commercial success of a movie based on its trailer. Our model incorporates previously studied indicators (i.e., whether the movie is a sequel) along with the semantic and visual complexity of its advertisement. We seek to demonstrate that stimulus attributes that facilitate neural processing can, themselves, be applied towards predicting theatrical revenues.

METHODS

Study 1: EEG Field Experiment

Subjects and Procedure

Fifty-nine subjects watched trailers and movies while undergoing EEG recordings at a commercial theater that we partnered with for the study (AMC Theatres, Northbrook, Illinois; NYSE: AMC). Subjects were given free admission to a movie of their choice that they had not previously seen from a list of the theater's regular showtimes. Subjects were also offered free soft drinks and popcorn before the movie, but were not allowed to consume these concessions while undergoing the EEG recordings to avoid interfering with the neural measurements. Subjects were fitted with an electrode cap with a circumference of either 54cm or 58cm depending on head size and comfort with the cap's tightness. While the subjects were wearing the caps, a washable conductive gel was placed with a syringe at each electrode site on the subjects' scalps. For each showtime in our study ($n = 44$), we collected data from multiple subjects seated next to each other at a preferred row dedicated for the study. All subjects were native English speakers with normal hearing who provided informed consent. Additionally, we explained the experiment to other moviegoers and theater staff (not participants) in the vicinity to avoid interruptions.

EEG Data Acquisition

Subjects' neural data were collected using 32-channel EEG systems (Brain Products GmbH, Gilching, Germany) at a rate of 250 samples per second. Each electrode connection was verified to be functioning properly (i.e., detecting electrical activity from the scalp) before starting the recording. Neural data were acquired from diverse brain regions; the 32 EEG electrode sites were distributed across the entire scalp according to the actiCAP 64Ch Standard-2 (green holders) montage (Brain Products GmbH, Gilching, Germany).

Free Recall and Survey Data

Immediately following the movie, subjects were asked to participate in a survey about the content that they viewed (e.g., movie plot recall, movie trailer recall), their general movie preferences (e.g., favorite genre), and factors that influence their movie selection (e.g., user reviews, scores, recommendation from friends, spontaneous decision at theater, viewing trailers).

Cross-Brain-Correlation Computation

We computed moment-to-moment synchrony in EEG data across subjects experiencing the same audiovisual stimuli, which we deem Cross-Brain-Correlation (CBC). At each electrode site, we measured neural activity over time as the power (dB) of alpha oscillations (also known as Berger's wave; cf., Berger 1929) in the recorded EEG data, which are commonly associated with attention to visual stimuli (Klimesch 2012, Dmochowski et al. 2014). To do this, we performed a Short-Time Fourier Transform (STFT) of the raw EEG signal at each timestep, filtered the resulting Power Spectral Density (PSD) matrix, and multiplied the common logarithm (base 10) of the PSD matrix by 10; we then assembled a time series of activity at the given electrode site that was then correlated with the stimulus-matched time series of activity at the corresponding site for each subject. At each timestep, we averaged the correlations at a given electrode site for every pair of subjects. Finally, we averaged across the 32 electrode sites to arrive at a single value of neural similarity at each timestep, thus producing the CBC time series. The CBC values were normalized to range from zero (minimum) to one (maximum) for ease of comparison. Additionally, as a control for eye

blinks and muscle movements, which primarily affected the front two electrode sites on the forehead (Fp1 and Fp2), we repeated our CBC computations without those channels and found that these differences were negligible with respect to all of our findings.

Stimuli. Across all 44 trials, subjects viewed 5.84 ± 1.26 trailers (*mean \pm standard deviation*) prior to their selected movie. Subjects' movie selections corresponded with 13 trailers presented more than once and subsequently recalled by more than one subject. These trailers represented movies that ultimately earned over \$1.25 billion in domestic ticket sales. Trailers were consistent in length (136 ± 20 seconds), but diverse across other dimensions of visual and semantic complexity. Five of these trailers corresponded with sequels while the other eight advertised movies were stand-alone original stories.

Study 2: Characterization of Stimuli

Movie Trailer Transcription and Coding

We manually transcribed each trailer in order to perform programmatic text analysis. We used standard word processing applications to count sentences and words. We also manually coded each trailer to determine the proportion of speaking time (i.e., character dialogue or narration) relative to the entire video clip. Additionally, we manually counted the number of questions and the number of unique speakers for each trailer with one exception (an advertisement for a nature documentary did not lend itself to these two measures).

Visual Complexity Computation

We programmatically measured the entropy (i.e., statistical randomness) of the intensity image. For a uniformly intense image (meaning every pixel has equal brightness), entropy is zero; conversely, an image of random pixel intensities (e.g., "snow" displayed on analog televisions when no signal is received) is maximally entropic (normalized to 1). Next, we computed the average entropy across all frames for each trailer, which corresponds to its overall level of visual complexity (i.e., disorder).

Supplemental Stimuli

We extended our data by adding the trailers corresponding to the ten all-time highest grossing movies according to the Internet Movie Database (IMDb.com, Inc., Seattle, Washington), seven of which were sequels. We repeated the same steps to characterize the stimuli (manual transcription and coding, programmatic word counts and visual complexity computations). Accordingly, the combined dataset in this study consists of 23 movie trailers (12 sequels and 11 stand-alone original stories).

RESULTS

In Study 1 (EEG Field Experiment), we found that viewing trailers was the single most important factor influencing movie selection: 33 subjects (55.9%) reported deciding which movie to watch based, in whole or in part, on viewing trailers. Out of the remaining 26 subjects (44.1%), subjects were approximately split between deciding based on user reviews, recommendations, and other factors (e.g., showtime). Subjects' preferred genre had a mild effect on the use of trailers: 50.0% of those that prefer action, 54.5% of those that prefer comedy, and 61.1% of those that prefer drama reported making purchase decisions based on trailers.

Subjects' average Cross-Brain-Correlation (CBC) values throughout each movie trailer were highly correlated ($r = .66$, $p = .01$) with their associated levels of recall following the movie, which is consistent with previously documented links between neural similarity and memory (Furman et al. 2007, Hasson et al. 2008a, Barnett et al. 2015). Furthermore, movie trailer CBC was highly correlated

($r = .51, p = .08$) with the corresponding opening weekend domestic ticket sales. However, the CBC-sales relationship was weaker ($r = .22, p = .45$) for later weeks of distribution presumably as other influential factors besides trailer viewing (e.g., user reviews, recommendations) became available.

In Study 2 (Characterization of Stimuli), we observed that CBC was negatively correlated with numerous measures of stimulus complexity. (In other words, simpler movie trailers tend to generate higher CBC). For example, a movie trailer’s proportion of speaking time, which relates to the amount of speech processing undertaken by audience brains, has a strong negative correlation ($r = -.78, p < .01$) with CBC. Similarly, CBC was negatively correlated with words per minute ($r = -.77, p < .01$), sentences per minute ($r = -.67, p = .01$), questions per minute ($r = -.58, p = .05$), and unique speakers per minute ($r = -.61, p = .04$). Visual complexity (average entropy per frame; see Methods) also had a strong negative correlation with CBC ($r = -.72, p < .01$).

Next, we used the aforementioned stimulus characteristics that correlated strongly with neural similarity to predict opening weekend ticket sales for all 23 movies in our extended trailer dataset. Collectively, these movies comprised \$1.96 billion in opening weekend sales; however, there was wide variation in the opening weekend success of each movie, which ranged from \$113,301 (*Bad Words*) to \$247,966,675 (*Star Wars: The Force Awakens*; all-time highest grossing opening weekend performance). On average, a movie in our data set earned $\$85.10 \pm \78.68 million in its opening weekend.

The proportion of speaking time was again the most influential stimulus characteristic; proportion of speaking time had a strong negative correlation ($r = -.67, p < .001$) with opening weekend ticket sales. Words per minute, speakers per minute, and questions per minute each had correlations of approximately $-.60$ ($p < .01$), while sentences per minute had a slightly weaker, but still statistically significant, relationship with opening weekend performance ($r = -.44, p = .04$). Likewise, visual complexity had a strong negative correlation with opening weekend sales ($r = -.62, p < .01$). Additionally, all of these characteristics were negatively correlated with ticket sales in later weeks, although these relationships were consistently weaker (see Table 1 for all correlation values).

These measures of stimulus complexity can be used in concert to produce even stronger predictions of opening weekend ticket sales. To demonstrate this point, we present a simple linear model that incorporates both semantic complexity and visual complexity. Additionally, given the prior literature suggesting that sequels outperform stand-alone movies (cf., Eliashberg et al. 2006), we incorporate whether or not a movie is a sequel. Therefore, we determined model coefficients via linear regression with three variables: (i) proportion of speaking time, (ii) visual complexity (entropy), and (iii) a sequel indicator variable (one if the movie a sequel; zero otherwise).

Furthermore, since ticket sales cannot be negative, our prediction equals the greater of zero and the result of the following expression (coefficients rounded; units in \$ millions):

$$267 - (142 \times \text{Proportion of Speaking Time}) - (241 \times \text{Visual Complexity}) + (82 \times \text{Sequel})$$

Despite the model’s simplicity, its predictions are highly correlated with actual opening weekend ticket sales ($r = .89, p < .001$; see Figure 1 for illustration). Moreover, the model is particularly diagnostic regarding whether or not an opening weekend will exceed \$90 million (the optimal binary threshold value). Nine of the 23 trailers were assigned predicted opening weekend sales in excess of \$90 million, and all of those movies indeed earned over \$90 million in their opening weekends; conversely, none of the other 14 movies earned over \$90 million in their opening weekends. Therefore, although limited to our dataset of 23 movies, our “\$90 million test” has 100% sensitivity (0% false negatives) and 100% specificity (0% false positives). (see Figure 1)

DISCUSSION

The collective results of both studies offer numerous insights into the elements of movie trailers that engage brains and ultimately promote ticket sales. Measures of complexity throughout movie trailers consistently opposed both neural similarity and the commercial success of the corresponding movies. Therefore, the film industry should heed time-honored minimalistic design principles (cf., US Navy’s “keep it simple, stupid”) in order to maximize impact to the brains and wallets of moviegoers.

Nonetheless, our work has substantial limitations and many opportunities for refinement. For example, we average neural activity across all 32 electrodes in our computations of neural similarity; however, we believe that a subset of brain regions could produce more precise, modality-specific measures (e.g., the most posterior electrode sites correspond with visual processing areas). Relatedly, our predictive model is not meant to suggest that the perfect movie trailer has no speaking and no visual complexity; our model assumes that trailers will conform to the same overall style and communicate key information about the upcoming movie in an orderly manner.

The specific format and distribution of movie trailers also makes it difficult to generalize our conclusions to other areas of advertising, but our studies provide an experimental paradigm by which the techniques discussed herein can be tested. Our approach may be applicable in other areas of cinematography; perhaps optimizing stimulus attributes can help make the feature films themselves (i.e., not just their advertisements) more engaging. Outside of entertainment, fields such as education (i.e., to minimize classroom distractions) and politics (i.e., streamlining persuasive arguments)

Table 1: Movie Trailer Stimulus Complexity is Negatively Correlated with Neural Similarity and Ticket Sales. Descriptive measures of each stimulus characteristic are presented in the table; as indicated by the high standard deviations, trailers varied significantly along these dimensions. The table also displays correlations of each characteristic with CBC, with opening weekend ticket sales, and with later week sales (*, **, and *** represent p-values less than .05, .01, and .001, respectively).

Stimulus Characteristic	Mean ± Standard Deviation	Correlations		
		Neural Similarity (CBC)	Opening Weekend Sales	Later Sales
Proportion of Speaking Time	35.77% ± 18.93%	-.78**	-.67***	-.33
Words/Minute	81.13 ± 37.56	-.77**	-.63**	-.26
Sentences/Minute	14.16 ± 8.08	-.67*	-.44*	-.24
Speakers/Minute	2.72 ± 1.18	-.61	-.61**	-.37
Questions/Minute	2.04 ± 1.74	-.59*	-.59**	-.43*
Visual Complexity (Entropy)	.71 ± .17	-.72**	-.62**	-.48*

*, **, and *** represent p-values less than .05, .01, and .001 respectively

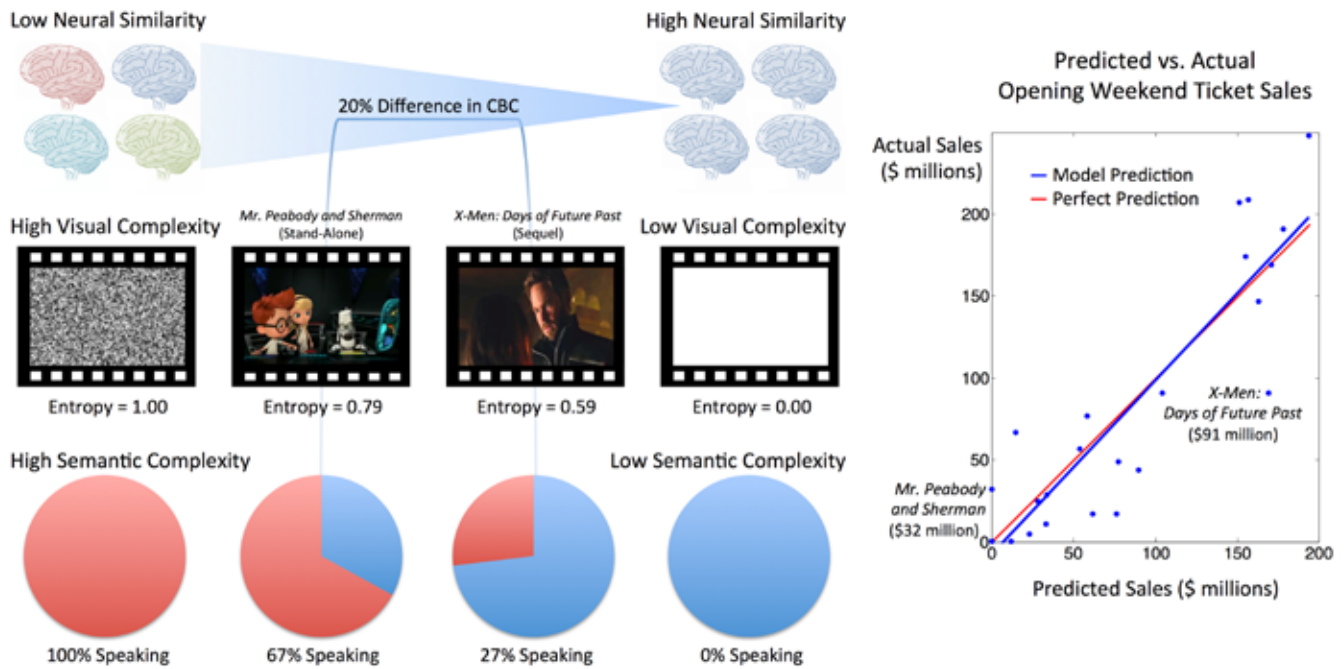


Figure 1: Movie Trailers with Less Visual and Semantic Complexity Generate Higher Neural Similarity and Ticket Sales. The left portion of the figure presents sample data from two trailers: *Mr. Peabody and Sherman* and *X-Men: Days of Future Past*. The latter achieved 20% higher CBC and 184% higher opening weekend ticket sales than the former. These sample images were selected because they each had entropy values within 2% of the average entropy throughout their respective trailers; therefore, these images illustrate the difference in visual complexity between the two trailers. For comparison, an image with maximal entropy (normalized to 1) is displayed on the left and a blank screen (zero entropy) is displayed on the right. The pie charts below indicate the proportion of speaking time (red) versus non-speaking time (blue). The graph on the right plots the predicted versus actual opening weekend ticket sales for each trailer. The predictions were calculated according to the aforementioned linear model. The blue line depicts the best-fit regression of the model predictions, which nearly matches the red line that depicts the hypothetical perfect prediction (i.e., predicted sales always equal actual sales)

could similarly benefit from a bottom-up approach to improving their respective stimuli.

In particular, movie trailers are incredibly rich stimuli and our work merely addresses their most basic characteristics. Other factors including content familiarity, music, cinematographic style, story comprehensibility, sequencing of narrative events, stimulus dynamics, actor popularity, harmony of elements, and artistic novelty are more challenging to measure, but may offer even greater predictive power with respect to neural and commercial outcomes. The commercial success of a given movie may also be affected by external factors such as the competitive landscape (i.e., what alternatives moviegoers face at a particular time) and seasonal variation in movie theater attendance. Increasing content exposure time (i.e., by advertising for a longer period of time or by repeating messages) has been an effective advertising strategy across industries (Campbell et al. 2003), so advertising expenditure would be another variable to control for in future work.

Our results show that, with all other artistic and commercial qualities being equal, movie trailers that minimize extraneous complexity have more consistent positive effects on the minds and future purchases of moviegoers. Thus, reverse engineering advertising content with a neuroscientific lens is a promising avenue for continued study.

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Revisiting The Ghetto: How The Meanings of Gay Districts Are Shaped by The Meanings of The City

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ABSTRACT

This paper explores how LGBT consumers' understandings of their local LGBT district are negotiated alongside their understandings of the broader urban context. The data include 31 in-depth interviews. This paper contributes to the LGBT literature but also broader academic discussions about the meaning of place and space in consumer lives.

INTRODUCTION

This paper explores how Lesbian, Gay, Bisexual, and Transgender (LGBT) consumers interpret their local LGBT district in relation to other places in the city. Existing research has provided two competing understandings of LGBT districts, framing them as 'gay villages' (Haslop, Hill, & Schmidt, 1998) or 'gay ghettos' (Kates, 2002). The gay ghetto understanding has been cited more frequently, and is arguably the most influential of the two perspectives. However, it assumes that LGBT districts are embedded into cities where LGBT identities are not accepted. Drawing on data from 31 interviews with LGBT consumers in Manchester, UK, this paper argues that the gay village perspective may provide a more useful understanding. The gay village perspective frames LGBT districts as commercial servicescapes, rather than subcultural places of resistance and community. This paper contributes to the literature by exploring how recent social changes have transformed LGBT consumers' understandings of place, and how marketing and consumer researchers should adjust their own understandings accordingly. It also takes into account the experiences of lesbian and transgender consumers, who are often overlooked in existing accounts. Finally, this paper also contributes to the consumer research literature on place and space, exploring how the meanings of a place are negotiated in conjunction with the meanings of the broader context.

LITERATURE REVIEW

The original *ghetto* was a district of Venice where Jewish people were forcibly confined in the 1500s, but the term has since been adopted by sociologists to refer to any urban district dominated by a particular minority group (Ghaziani, 2015, p. 314). In the twentieth century LGBT 'ghettos' began to emerge in many Western cities (Hammack & Cohler, 2011). Following on from Soja's (1980) notion of the sociospatial dialectic, it could be argued that ghettos are the materialisation of "a conspicuous and locally dominant subculture that is socially isolated from the larger community" (Levine, 1979, p. 1739). One of the most famous, San Francisco's Castro district, was described by an LGBT activist as a "refugee camp for homosexuals [sic]... a ghetto, out of self-protection." (Wittman, 1970, pp. 67-68) This emic definition suggests that, in the LGBT context at least, the term ghetto is associated with segregation and stigmatisation, but also community and safety (Hubbard, Gorman-Murray, & Nash, 2015).

In marketing and consumer research, Steven Kates (1998, 1999, 2000a, 2000b, 2001, 2002, 2003, 2004) is the key author for those interested in understanding the 'gay subculture of consumption' (Kates, 2002). He adopted an ethnographic approach to data collection, immersing himself in "the downtown gay ghetto" of a Canadian city to generate insights about the gay subculture (Kates,

2002, p. 385). This LGBT district features prominently in his understanding, and his choice of the term 'ghetto' was deliberate. Kates (2002, p. 386) argued that "homosexuality was still somewhat stigmatized" in the Canadian city that he studied, so the gay ghetto was a place of "community" where LGBT consumers "felt safe and secure to walk, talk, behave, and consume in as open a way as they wished". Gay ghettos could be understood as heterotopian places, "where alternative forms of social organisation take place" (Chatzidakis, MacLaran, & Bradshaw, 2012, p. 497). It is within the ghetto that LGBT consumers re-learn how to consume, use consumption to express subcultural affiliations, and resist the heteronormative mainstream market (Kates, 2001, 2002, 2004).

In many cities local residents and tourist marketers adopt the term 'gay village' rather than gay ghetto (e.g. Collier, 2014; Nash, 2006, 2013; Simpson, 2012). The term village suggests geographical concentration without invoking the connotations of segregation or stigmatisation that come with the word ghetto (Hubbard et al., 2015, p. 290). Haslop et al. (1998, p. 318) studied the gay village of Manchester, a city in the North West of England. They noted how their participants did not express feelings of 'community' or 'safety' when discussing the gay village. These participants experienced far less homophobia in the rest of Manchester, and thus "did not feel compelled to visit a bar purely on its homosexual status" (Haslop et al., 1998, p. 322). Instead, Haslop et al. (1998) argued that Manchester's gay village should be understood as a servicescape because it was more like a tourist destination than a subcultural refugee camp (see also Binnie & Skeggs, 2004; Simpson, 2012). Gay villages are commercial places that differ from other locations in a largely superficial or aesthetic way, rather than being heterotopic or subcultural places.

In marketing and consumer research there has been little attempt to compare or contrast the gay village and the gay ghetto perspectives. In sociology and geography these two perspectives have been considered alongside one another, but largely through a chronological narrative where gay ghettos transform into gay villages as LGBT people become more accepted (Ghaziani, 2015; Hubbard et al., 2015). Indeed, some researchers propose that many Western countries have entered a 'post-gay' era where LGBT people experience stigmatisation so rarely that they no longer see their sexuality as a defining or dominant identity (Ghaziani, 2011; Ng, 2013). In 'post-gay' cities the demand for gay villages is low, making them economically unviable and thus under threat of dissolution (Brown, 2014; Ghaziani, 2014; Nash, 2013).

All three perspectives, but particularly the chronological narrative, implicitly suggest that the meanings of a LGBT district can only be understood in relation to the broader urban contexts in which they are embedded. However, the chronological narrative overlooks those LGBT consumers who continue to experience discrimination (Brewis & Jack, 2010; Duggan, 2002; Heaphy, 2011; McDermott, 2011), and who may therefore still seek out places of safety and community (i.e. ghettos). It also fails to acknowledge that some LGBT-oriented places and festivals, such as gay pride events (Ammaturo, 2015), continue to thrive. Finally, the account overlooks the fact that Haslop et al. (1998) published their gay village perspective four years before Kates (2002) wrote about gay ghettos. These 'out of sync' exceptions question the chronological narrative. However, they do not challenge

the underlying assumption that the meanings of LGBT districts are defined (in part) through comparisons and contrasts to other places within a city. This paper seeks to provide a more nuanced understanding of LGBT districts by exploring this implicit semiotic relationship in more detail.

CONTEXT AND METHOD

This paper revisits the research context of Manchester, almost two decades after the research by Haslop et al. (1998). Manchester is a British city with a very “visible and publicly accessible” LGBT district, known locally as the Gay Village (Simpson, 2013, p. 284). Researchers have noted how this place is a “regional magnet” for LGBT people (Simpson, 2012, p. 1) and cosmopolitan heterosexuals (Binnie & Skeggs, 2004; Haslop et al., 1998). Of the many intersecting streets within the Gay Village, Canal Street is the most famous and is often used synecdochically to refer to the whole LGBT district. This street was made particularly famous by the 1999-2000 television show *Queer as Folk*, a show that presented the gay subculture to the masses in positive, but sometimes shocking, ways (Skeggs, Moran, Tyrer, & Binnie, 2004).

In 2015 a show by the same writer, *Cucumber*, explored contemporary LGBT lives in Manchester. Notably there were only a few fleeting scenes set in Manchester’s Gay Village. This representation of LGBT Manchester echoes discussions in the local and national media about the diminishing role of Manchester’s Gay Village (e.g. Collier, 2014). The argument goes that Manchester is renowned for tolerating and even celebrating LGBT people (Senior & Dalton, 2011; Simpson, 2012, p. 2), so LGBT-specific places are no longer necessary. At the same time, LGBT social groups (such as gay rugby clubs), specialist venues (such as saunas), and specialist events (like Sparkle, the transgender festival) still thrive in Manchester (see Simpson, 2014, p. 152). This contradictory evidence suggests that Manchester and its LGBT district defy easy categorisation under a single, overarching narrative. Instead there may be multiple to explore.

To explore these narratives the first author conducted 31 semi-structured interviews with LGBT residents of Manchester. Existing research has generally constructed LGBT samples through ethnographic immersion in a LGBT district (Haslop et al., 1998; Kates, 2002). As sampling from Manchester’s gay village could potentially limit the range of experiences that would be expressed, a directory of LGBT leisure groups was used to identify potential participants (see Simpson, 2014). Three groups agreed to participate. The committee of each group disseminated an information sheet about the study via email, and individuals volunteered to participate by contacting the researcher directly. Interviews were audio-recorded, transcribed, and then analysed in NVivo. As the interviews and data analysis continued the first author began approaching members selectively (Glaser & Strauss, 1967), seeking to diversify the sample further. In the final sample six participants identified as lesbians, one as transgender, and one as asexual. Ages ranged from mid-twenties to late sixties, with a fairly even spread of participants in each age group (20s, 30s, 40s, and 50s). A range of occupations and economic backgrounds were covered, but the sample was predominantly white and university educated.

The interviews varied in length from 23 to 115 minutes, but generally lasted just over an hour. They were conducted in locations that were suitable for audio recording but also comfortable for participants. Interviewees were given no remuneration for participation. The interviews were fully transcribed, at which point details were omitted or altered to ensure participant anonymity. Interviews covered a range of topics connected with the participants’ sexual identity

and their lifestyle. Analysis followed an initial process of open coding, where the research identified interesting themes in the data, followed by a process of categorising, where these themes were organised to reveal recurring patterns (Belk, Fischer, & Kozinets, 2013).

FINDINGS

The findings suggest that LGBT consumers interpreted Manchester’s Gay Village in multiple different ways. Manchester’s Gay Village featured as a topic in all of the interviews, often being raised by the interviewees before the first author asked a specific question on the topic. During analysis the authors began to notice that participants’ understandings of Manchester’s Gay Village were often related to their understandings of Manchester as a city.

A number of the interviewees argued that an LGBT-specific district was unnecessary in contemporary Manchester because the city was such an accepting place for LGBT people. Several participants spoke about how they felt comfortable holding hands with their partners in public. Participants provided only a couple of passing references to homophobic incidents in Manchester, none of which were based participants’ own experiences. Within this context of acceptance, participants did not associate the gay village with strong feelings of safety (c.f. Kates, 2002; Levine, 1979; Wittman, 1970). Many participants interpreted the gay village as a site of consumption, rather than a place of community. When seeking new consumption experiences or pleasant consumption environments, these participants ranked features such as price, atmosphere, food, or décor above the “homosexual status” of a place (Haslop et al., 1998, p. 322). Participants described Manchester’s gay village as overpriced, lacking atmosphere, alcohol-oriented, and generally an undesirable place to be.

Given the above, it is perhaps unsurprising that many interviewees rarely socialised in the gay village. One of the most frequent visitors was Lee, a gay man in his late 20s, but even he only visited once a week. Other participants could not even remember the last time that they had been to the gay village. These participants were highly critical of those who visited Canal Street regularly, arguing that they ‘ghettoised’ themselves by doing so. Such over-consumption was viewed as tantamount to self-imposed social segregation, at least in an accepting city such as Manchester. Kates (2002, p. 393) noted that those who consumed “exclusively in the geographic and social confines of the gay area” were referred to as ‘ghetto queens’. The data here suggested that this symbolic threshold was far lower in Manchester. It was not just those who consumed ‘exclusively’ in the LGBT district that were viewed with disdain, but also those who went there ‘regularly’. Some participants saw weekly visits to the LGBT district as too regular, but for others even monthly consumption was described as unnecessary.

The re-interpretation of the gay village as a consumption site was a common theme across the majority of interviews. However, participants who defined themselves as lesbians or as older gay men tended to distance themselves from the gay village more than most. In contrast to the more upmarket or ‘mature’ consumption venues that could be found in the rest of Manchester, they argued that the bars and clubs found in the gay village were mostly oriented towards the lifestyle of young, single gay men. For instance, most bars in the gay village offered cheap alcoholic drinks and played loud dance music, rather than providing high-quality food and places where people could talk to one another. Young, single gay men in the sample often echoed this interpretation. Some even argued that the gay village should diversify to better serve the needs of other LGBT people. However, these consumers also re-interpreted the gay village in a more positive way. The cheap drinks and ‘unsophisticated’

music found in these places were described as the perfect setting for ‘trashy’ nights out and weekends of excessiveness. The gay village became a site for “trash and excess”, a cultural trope that has long been associated with LGBT consumers (see Visconti, 2008, p. 124). These young and single gay men felt that the gay village provided unique (and even tailored) consumption experiences that could not be found elsewhere in Manchester. Importantly, such experiences of trash and excess were carefully “compartmentalised” (Goulding, Shankar, & Elliott, 2002, p. 263). The young and single gay men in the sample felt that the gay village was somewhere that they should only visit from time to time (c.f. Kates, 2002, p. 386).

While a number of venues in the gay village focused on young, single gay men, other venues had identified alternative target audiences. Mary’s House was a bar styled around the theme of a traditional English pub; it had quiet ambient music, real ale, and good quality food. Other venues provided high tea, carnivalesque drag shows, and other experiences that could not be found in the rest of the city. The participants who spoke about these alternative venues in their interviews were also the participants that spoke about Manchester as a multicultural city. The gay village was framed as a place within which to experience ‘LGBT culture’, with Manchester being understood as a mosaic of different cultures. This understanding was most clearly articulated by Hannah, a lesbian in her 40s, who compared “gay bars” in present-day Manchester to “Jazz clubs” or “Irish pubs”. In other words, LGBT venues were themed places where different LGBT cultures were packaged and sold as experiences. This contrasts with Kates’ (2002) understanding of LGBT districts as sub-cultural ghettos.

While the majority of participants described Manchester as an accepting place for all LGBT consumers, some were reflective that Manchester was not always so inclusive. A number of participants described transgender consumers as a potentially vulnerable group that continued to use Canal Street as a place of safety and community. Robin, who was the only self-identifying transgender person to be interviewed in this study, described how the gay village was the hub of the regional transgender community. Robin cited Sparkle, a national transgender festival based in the city of Manchester, as an illustrative example of this. Robin also felt that venues in the gay village were far more likely to be considerate of transgender issues than venues in other parts of Manchester. For instance, one bar constructed a unisex changing area specifically for transgender patrons. Robin argued that the gay village remained an important place for the transgender community because transgender people still experienced discrimination in the rest of Manchester. While other participants described few experiences of discrimination, Robin provided two personal accounts of transphobia. Transgender consumers were not the only vulnerable group mentioned by participants. Lesbian, gay, or bisexual people from certain religious, ethnic, or socioeconomic backgrounds were also cited as groups who might continue to experience discrimination, even in an accepting city like Manchester. For such consumers the gay village was understood as a place of safety and community (i.e. a positive ghetto) because the rest of Manchester was seen as a socially and physically dangerous place to consume openly as LGB or T.

DISCUSSION

The findings suggest that LGBT consumers’ understandings of their local LGBT district depend, at least in part, on their understandings of the broader urban context. Understanding these places within their urban context avoids adopting a single overarching narrative, a zeitgeist of stigmatisation or acceptance. Rather it provides a more nuanced account that takes into consideration the multiple coeval

perspectives of consumers. The findings suggest that the gay village understanding provided by Haslop et al. (1998) is still the most appropriate way to understand Manchester’s Gay Village. Participants use the gay village as a source of unique consumption experiences, a place to consume a commodified gay culture. This suggests an alternative narrative to the inevitable decline of LGBT places provided by recent research (i.e. Ghaziani, 2014). However, the data also suggest that Kates’ (2002) ghetto perspective can also be useful to understand some LGBT consumers’ experiences in supposedly ‘post-gay’ cities. The findings suggest that instead of one narrative or theoretical understanding, researchers should use multiple perspectives simultaneously to explore diversity of experiences that can co-exist within the same city.

Haslop et al. (1998) argued that gay villages could be understood as servicescapes (see also Rosenbaum, 2005). The findings here provide some support for this argument. Building on Hannah’s suggestion that venues in the gay village are like ‘Jazz clubs’ or ‘Irish pubs’, it is argued here that the literature on themed environments may be helpful (Borghini et al., 2009; Kozinets et al., 2002). The owners of LGBT venues may carefully design their environments to draw on cultural tropes, just like the sports-themed ESPN Zone draws upon sporting culture (Sherry Jr et al., 2004). Future research may seek to draw more links between the culturally informed research on servicescapes (Diamond et al., 2009; Kozinets, Sherry Jr, et al., 2004), and research into commodified subcultures (Goulding & Saren, 2007; Rinallo, 2007; Schouten, Martin, & McAlexander, 2007). In doing so, new insights into the relationships between subcultures, commodification, and servicescapes may be gleaned. Researchers may also wish to adopt a more critical perspective than the exploratory approach adopted here. For instance, what negative consequences might the commodification and thematisation of LGBT culture have for LGBT people and politics?

Cresswell (2004, p. 7) defines a place as “a meaningful location”. The interpretation offered here suggests that the meanings of LGBT districts are negotiated within a web of other meaningful urban locations. This interpretation may provide some transferrable insights for marketing and consumer researchers who are interested more broadly in space, place, and consumption. According to Visconti, Sherry Jr, Borghini, and Anderson (2010, p. 513), places can be understood as “appropriated sites where social interactions, sense of belonging, collective memories, and shared identities occur.” However, researchers generally focus on interactions *within* a particular location when they explore how consumers, producers, materialities, and practices co-construct the meanings of places (Borghini et al., 2009; Kozinets, Sherry, et al., 2004; Sherry Jr et al., 2004). Only fleeting attention is given to relevant influences outside of these spatial borders (Diamond et al., 2009; Penalzo, 1998). The findings here suggest further attention should be given to the semiotic relationships *between* places. For instance, Exarcheia is understood as an anti-capitalist heterotopia partly through its contrast to the rest of Athens, which is pro-capitalist (Chatzidakis et al., 2012). However, residents and visitors that interpret Athens differently may construct an alternative understanding of Exarcheia as a place.

Future research could overcome the limitations of this study by developing a more diverse sample. Particular attention should be paid to recruiting more transgender and bisexual participants. It may also be interesting to include heterosexuals in the sample, people who consume places in the gay village without self-identifying as LGBT. Future research may also seek to include the perspectives of LGBT venue owners, managers, or designers. Such perspectives would allow researchers to consider whether producers also interpret (and design) gay villages as themed environments. Finally, the

analysis of this study is limited to the urban context of Manchester. It may be useful to conduct a comparative study of two or more cities with LGBT districts. Indeed, following Visser's (2013) critique that LGBT districts are a largely Western phenomenon, it would be particularly interesting to study cities where LGBT districts have not formed. For example, Visconti (2008, p. 118) describes the "limited number of gay pubs and meeting places" in the Italian context, while Hsieh and Wu (2011, p. 400) describe a number of "gay havens" that are dispersed across Taiwan. Such isolated places may have different meanings for LGBT consumers than geographically concentrated LGBT districts. Investigating these places may provide new theoretical perspectives that fall outside the existing tripartite framework of ghettos, villages, or dissolution.

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How Sexy can a Paper Clip get?

Evidence for the Transfer of Erotic Meaning to “Unsexy” Products

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ABSTRACT

Marketing practitioners claim that sex in advertising only works for products that are related to sex. The presented experiment underpins that this folk hypothesis is not true. Via semantic conditioning (a variant of evaluative conditioning) erotic meanings can be transferred to any product including those totally unrelated to sex.

INTRODUCTION

Practitioners of advertising repeatedly claim that sex in advertising only works when the product is related to sex (Ogilvy, 1985). Advertising Professor Jef I. Richards from the University of Texas is cited with the statement: “Sex sells, but only if you’re selling sex.” (Kalb, 2012).

In their comprehensive analysis of research on the effectiveness of sex in advertising Lull and Bushman (2015) come to the conclusion that sex does not sell at all. However, most of the research reviewed solely considers variables like memory, valence of an attitude or intention to buy. In contrast, for many cases the primary intent of sex in advertising would be to load up the product with erotic content in order to give it an erotic image. Only little attention has been paid to the question whether sex in advertising is successful in reaching this goal. Moreover, the practitioner’s claim cited above has rarely been challenged: Is it really impossible to “sex up” an unsexy product?

To address this issue we use a variant of evaluative conditioning. This kind of conditioning can be defined as the classical conditioning of liking or disliking by pairing a neutral stimulus (CS) with an unconditioned stimulus (US) which has a clear positive or negative valence (De Houwer 2009). The mechanisms behind evaluative conditioning, however, are not limited to elicit liking alone. Procedures similar to those of evaluative conditioning have also proven to be effective in changing meanings of the conditioned stimuli. These procedures have been labeled as a kind of “concept learning” (Glaser and Walther 2013) or “non-evaluative conditioning” (Förderer and Unkelbach 2011). For instance, Förderer and Unkelbach (2011) were successful in making neutral people seem more athletic by repeatedly presenting them with athletic people.

We use the paradigm of non-evaluative conditioning to prove that in the case of transferring erotic meaning to a product the effect is not restricted to certain stimuli. To do this we add an additional factor to the standard conditioning procedure: We present erotic and non-erotic US along with products that do have an erotic meaning on their own as well as with products that do not.

Moreover we hypothesize that the conditioning effect is not due to an effect on confounding variables. It can be argued that pairing neutral CSs with erotic USs may not go beyond evaluative conditioning after all: Since “erotic” for most people is a positive attribute the conditioning procedure may only transfer valence but no meaning. If the pairing of a product with an erotic stimulus results in higher evaluations on an attribute like “erotic” this may only be the result of an unspecific and general enhancement of the product’s evaluation. To make sure that the product really gets a different meaning it should be demonstrated that the conditioning effect cannot be reduced to valence alone. Accordingly, we hypothesize that pairing a neutral CS with an erotic US has a much stronger effect on the ascription of attributes like “erotic” and semantically similar attributes (e.g., “exciting”) than on the evaluation on attributes like “good”.

To test these hypotheses we conducted an experiment in which erotic meaning was transferred to both “sexy” and “unsexy” objects. The acquisition of the attribute was captured by explicit ratings but also by an indirect measure, a semantic version of the affect misattribution procedure (AMP; Payne, Cheng, Govorun, and Stewart 2005). The indirect measure was important to make sure that the objects really acquired an erotic meaning and that the effect was not due to demand characteristics or explicit memory of the exposure during the conditioning stage.

METHOD

The experiment used a standard EC procedure (Walther, 2002) to transfer the attribute erotic from erotic pictures (USs) to pictures of neutral objects (CSs). However, in contrast to regular conditioning procedures, we used two different sets of stimuli for CSs: One set of six objects consisted of objects which presumably were well suited for being charged with an erotic meaning while another set comprised six objects which were totally unrelated to sex and was thus not unsuitable for a transfer of erotic meaning. We will refer to these two sets of stimuli as “sexy” and “unsexy”. This results in a two by two factorial design in which all conditions were varied within groups. The two factors were conditioning (erotic vs. nonerotic USs) and suitability (“sexy” vs. “unsexy” objects).

As “erotic” is most likely a positive concept we controlled for valence in two ways: Firstly, we selected USs which were equal in valence. Secondly, we collected ratings of CSs valence and eroticism to be able to control for valence statistically.

Material

Conditioned stimuli

As CSs we used a sample of twelve objects half of which were regarded as very “unsexy” whereas the other half was supposedly well suited for being connected to an erotic content. We took these stimuli from the results of a preliminary study. More specifically, a sample of N = 32 participants was instructed to name objects which are well suited for being charged with an erotic meaning as well as objects which are very poorly suited to acquire an erotic meaning. These lists consisted of classes of objects. For example furniture or office supplies were frequently mentioned as “unsexy” objects, whereas jewelry, candles or alcoholic beverages were frequently mentioned as “sexy” objects. As CSs two sets each containing six pictures were chosen which showed either potentially erotic or unerotic objects (see figure 1 and 2 for examples).

“Sexy” (i.e., potentially erotic) objects were: Candles, strawberries, jewelry, chocolate, perfume and beer

“unsexy” objects were: Writing desk, chair, sticky notes, paper clip, writing pad, folder

To make sure that the objects were otherwise neutral (except for their potential erotic content) pictures did not show any hint on an existing product or brand.

Unconditioned stimuli

USs were generated from ratings participants gave in the first stage of the main experiment. In this stage participants rated a sample of 40 pictures, presented in randomized order, on a scale from 1 to 7 as to whether they consider this picture to be erotic (= 7) or not (= 1). The pictures comprised of males, females, and couples (hetero- and



Figure 1: Example for a “sexy” (left) and an “unsexy” object (right) both used as CSs that were well or poorly suited for gaining erotic meaning

homosexual) in different degrees of nudity but not in pornographic poses. For each participant the six pictures with the highest ratings were adaptively chosen as USs for the conditioning stage. This was done as long as the highest ratings were not lower than 4. For participants who did not give a rating of 4 or more for at least six pictures USs were taken from a standardized set of pictures, the International Affective Picture System (IAPS; Lang, Bradley and Cuthbert, 2008). The six erotic IAPS Items were chosen from the sample of “erotic couples”. This ensured that they would appeal to both men and women. The IAPS stimuli are standardized – among others – with respect to valence and arousal. To make sure that the chosen pictures were equally attractive and arousing for both sexes we chose stimuli for which the difference of the mean values for valence and arousal for men and women were minimal.

As nonerotic USs we chose stimuli depicting sport and adventure (e.g., skiing, paragliding). The rationale behind this selection is that control stimuli should closely match the erotic material with regard to positivity and excitement. Analyses of the IAPS stimuli showed that sport-pictures closely matched the chosen erotic pairs in three respects: Arousal, positivity and minimum difference between men and women on both dimensions. So if one has to look for pictures that are just as positive and exciting as erotic pictures without the erotic content, pictures of sports and adventure would be a good guess. Note however that the control stimuli we employed are not an exact match of the erotic UCs as long as participants chose their own erotic material in the first stage.

Participants and procedure

$N = 112$ participants completed all dependent measures. 56 women and 52 men took part in the experiment. Four participants provided no information on their gender. Participants were mostly students or visitors on the open house of a public university. Mean age was 24.30 ($SD = 7.75$). Participation was completely voluntary. There were no incentives such as monetary payments nor course credits. However, participants were served coffee and cake while being debriefed in a different room after the experiment.

For the programming we used Inquisit 4.0.4.0 (2013) by Millisecond Software. During the experimental sessions participants were seated in front of a PC and were told that they would see a number of pictures they should evaluate. Participants were placed in semi-cubicles during the experimental sessions. This ensured that they were not able to interact with each other. They were also told about the other parts of the experiment, one of which – the conditioning stage – consisted of a mere presentation in which no input was required. Participants were also informed that in the third part of the

experiment they were asked again to evaluate pictures or symbols. The initial instruction explicitly hinted on the total duration of about 20 minutes. Participants were asked to abort the experiment at the beginning if they should be afraid not to have this 20 minutes time for being concentrated on the experiment.

At the beginning of the experiment participants rated a number of erotic pictures on a scale ranging from 1 “not erotic at all” to 7 “very erotic”. Participants could take any time they wanted for this task. A new picture was presented whenever participants provided their rating by entering the appropriate number and hitting the return button. Based on these ratings the computer selected the USs for the following conditioning stage by taking the pictures which were rated highest as erotic stimuli. As mentioned above, control stimuli for the conditioning stage were a fixed set of stimuli depicting sports and adventure.

The following stages of the experiment roughly follow the procedure employed by Förderer and Unkelbach (2011). In the conditioning stage, CS–US pairs were presented. They were assigned randomly anew for each participant. Since there were six “unsexy” products and six “sexy” (i.e., potentially erotic) products a total of twelve pairs were presented. Half of the CSs were presented together with an erotic US, the other half was presented along with unerotic USs. Each pair was presented six times, resulting in 72 pairings. CSs were visible for 1,5 s alone, then the respective US appeared for another 2.5 s. CSs were presented in the upper half of the screen and USs in the lower half. After a pause of 1.5 s, the next pairing was presented.

For the dependent measures, half of the participants completed the indirect measure (SMP) first and then rated each CS on a number of six attributes on 5-point scales; the other half completed the ratings first and afterward the SMP.

For the explicit ratings each CS was presented on the right side of the screen while ratings could be done on the left side. The attributes were “sexy”, “erotic”, “good”, “likeable”, “wild” and “exciting”. The main dependent variable on the explicit measure was the mean of the two ratings for “sexy” and “erotic”. Ratings of the other attributes should account for two potentially confounding variables: Valence and arousal.

For the SMP, participants were instructed they would see two pictures in rapid succession, the first being a familiar picture and the second being a chinese character, a Kanji. They were told that the first picture served as an orientation stimulus and they should decide whether the Kanji represents a word with an erotic or nonerotic meaning as fast as possible. They should react only to the Kanji and not to the preceding picture. Each trial consisted of a CS being visible for 75 ms, followed by a blank screen for 125 ms and a Kanji for 100 ms. A black-and white noise picture immediately replaced the Kanji until participants made their decision by pressing one of two marked keys on the keyboard (see Imhoff, Schmidt, Bernhardt, Dierksmeier and Banse, 2011, for a similar approach). Since Kanji were judged on a conceptual level the procedure is labeled SMP for “Semantic Misattribution Procedure” After finishing the dependent measures all participants were thanked and debriefed.

RESULTS

In the following paragraphs CSs that were paired with erotic USs will be labeled “erotic”. CSs that were paired with nonerotic USs will be labeled “nonerotic”. Remember, that half of our CSs supposedly were unfit for being charged with an erotic meaning. These stimuli are labeled “unsexy”. Accordingly those stimuli for which an erotic meaning seemed appropriate are called “sexy”.

Gender of the participants had no effects in all analyses, therefore we omit this factor from the analysis report.

Direct Rating. The six explicit ratings for each CSs were aggregated to three variables: one rating for “erotism” as the mean of the single ratings of the attributes “erotic” and “sexy”, another rating for “valence” as the mean of “good” and “likeable” and a third rating for “arousal” as the mean of “wild” and “exciting”.

We calculated participant’s mean ratings of these three variables for the six erotic CSs and the six nonerotic CSs and compared them within a repeated-measures ANOVA. As predicted, CSs repeatedly paired with erotic USs were rated as being more erotic ($M = 2.35, SD = 0.98$) than CSs paired with nonerotic USs ($M = 1.92, SD = 0.73; F(1, 111) = 25.25; p < .001$). Valence ratings for erotic and nonerotic CSs did not differ significantly ($M = 2.87, SD = 0.76$ vs. $M = 2.94, SD = .74; F(1, 111) = 1.89; NS$). However, erotic CSs were also rated as more arousing ($M = 2.21, SD = 0.86$) than nonerotic CSs ($M = 2.03, SD = 0.80; F(1, 111) = 10.91; p = .001$). So it seems that the conditioning effect does only spread to a conceptual confound of “erotic” but not to an evaluative confound. This supports the assumption that the conditioning procedure indeed transfers meaning and not valence alone.

But are erotic stimuli only effective in charging suitable objects with an erotic meaning? To address this question we assessed the conditioning effect separately for “sexy” and “unsexy” CSs. The mean ratings for erotism can be found in table 1. They were analyzed in a two (conditioning: erotic US vs. nonerotic US) by two (suitableness: “sexy” vs. “unsexy” products) ANOVA. Results indicate both a strong effect for conditioning ($F(1, 109) = 21.72, p < .001$) and for suitability ($F(1, 109) = 235.06, p < .001$). This latter effect suggests that the “unsexy” products we chose were indeed not sexy at all. But that does not mean that the pairing with the erotic USs had no effect. When paired with an erotic US “unsexy” products got higher ratings for erotism than after pairing with a neutral US. The effect of the conditioning procedure is not stronger for suitable products than for unsuitable ones (see table 1). The interaction between conditioning and suitability is not significant ($F(1, 109) = 0.31, p = .58, NS$).

SMP. Of course the direct and explicit evaluation of an object that has repeatedly been paired with erotic stimuli goes along with high experimental demand. Therefore it is important to replicate the results with a more indirect method. Participants completed a variant of the Affect Misattribution Procedure (AMP, Payne et al. 2005) in which they had to decide whether the meaning of a Kanji comes from the field of sexiness, sensuality, erotism or affectionateness.

We computed the probability to judge a Kanji as having an erotic meaning when it appeared after erotic compared to nonerotic CSs. Table 1 presents these probabilities. We analyzed them with the same ANOVA as the direct ratings: Kanji following erotic CSs were more likely judged as erotic than Kanji following nonerotic CSs ($F(1, 109) = 11.03, p < .001$). The probability of an “erotic” judgment was also significantly higher when the Kanji was preceded by a “sexy” product as opposed to an “unsexy” product ($F(1, 109) = 4.13, p = .044$). However, again there was no interaction: The effect

of pairing with an erotic stimulus was not stronger for “sexy” than for “unsexy” products ($F(1, 109) = 1.60, p = .21, NS$).

So in all cases conditioning of an erotic meaning was successful: Regardless of the measure (direct or indirect) or the type of CS (sexy or unsexy) erotic meaning was significantly stronger for stimuli paired with an erotic US.

DISCUSSION

The results clearly support the notion of a transfer of meaning from USs to formerly neutral CSs. By simple repeated pairings with erotic stimuli neutral objects acquired an erotic meaning. It should be noted that only few studies have demonstrated a transfer of a specific attribute through evaluative conditioning independent of and beyond valence (see Förderer and Unkelbach, 2011, or Glaser and Walther, 2013, for exceptions). The transfer seems robust in the sense that conditioning of erotism can be proved on direct and indirect measures. Highlighting the attribute through priming (like Olson, Kenrik and Fazio, 2009, did) was unnecessary.

The main purpose of this study was to challenge the popular notion that sex in advertising only works for products that are related to sex. To do this we extended the regular conditioning procedure by including an additional factor: the expected suitability of the CS for conditioning. Or results suggest that erotic advertising works for any product, at least if you consider an erotic evaluation of the product as a main target of sex in advertising.

Our results also raise questions concerning the real effects of sex in advertising. After all it has already been demonstrated that erotic advertising has poor if not adverse effects on variables such as memory, favorability of attitude or purchase intention (Lull and Bushman 2015). It seems, however, that one obvious variable has been neglected in this discussion. When it comes to the actual content of an attitude toward the product, sex in advertising seems to have exactly the effect that the advertiser must have had in mind.

What does that mean for marketing and consumer behavior beyond the refutation of a popular notion? Maybe research on the effectiveness of sex in advertising has asked the wrong questions. Whether erotic advertising has a positive effect depends on the variable under consideration. Pairing a product with erotic stimuli may not affect buying intentions, memory or favorability directly, but it does affect the attributes ascribed to that product, which in turn may have their own effects on memory, attitudes or buying intention. Thus the effect of sex in advertising on variables more relevant to marketing may be more indirect. For instance, erotic advertising may affect implicit attitudes more than explicit evaluations. It may also affect implicit memory instead of explicit memory.

Future research should also address the issue of product choice after erotic conditioning. Existing evidence (e.g. Lull and Bushman 2015) does not encourage the expectation that sex has a strong and direct effect on product choice. This may be because erotic image interacts with other variables before it affects product choice. For instance some consumers may act on the (implicit) rule that an erotic paperclip may have poor quality. Another interacting variable may

Table 1: Mean Eroticism-Ratings and mean probabilities of erotic responses for “sexy” and “unsexy” products after presentations along with erotic or nonerotic stimuli

	Erotic US				Non-erotic US			
	“sexy” products		“unsexy” products		“sexy” products		“unsexy” products	
	M	SD	M	SD	M	SD	M	SD
Mean erotic-Ratings¹	2.88	1.07	1.79	1.09	2.46	0.97	1.31	0.57
Mean probabilities of erotic responses to Kanji	.52	.29	.45	.30	.41	.27	.38	.28

N = 112; ¹ Values range from 1 to 5; higher values indicate high ratings of eroticism

regard self concept: It has been shown that brand personalities “rub off” on consumers, especially when they contribute to a desired self (Park and Roedder John 2010). As it seems sexiness can be part of a product’s attributes even if the product itself has little relation to sex and the attribute is ascribed only in an automatic and implicit manner. Still it is possible that in situations in which sexiness contributes to a desired self the more erotic product is preferred over the unerotic one, regardless of the product category and regardless of where the erotic attributes come from. From the same reasoning follows that it should be questioned if experiments in controlled settings are appropriate to evaluate effects of sex in advertisements on consumers’ preferences, since in a typical experimental situation participants are rather unlikely to desire a self in which sexiness plays a dominant role.

Among the limitations of the study is the narrow scope of products which were supposed to be unfit for erotic advertising. Although our results strongly support the expectation that our “unsexy” products were not related to sex we only used products from two classes: furniture and office supplies. Future research should demonstrate that the results really can be generalized to other “unsexy” products.

Another limitation is that we only showed short time effects of conditioning. It has already been demonstrated that conditioned responses to products can persist over weeks (Grossmann and Till 1998). It remains an open question, however, whether this stability also applies to effects of semantic conditioning.

Finally, our data of course do not support a null hypothesis according to which there is no difference whatsoever between suitable and unsuitable products when it comes to the effectiveness of sex in advertising. It may still be that conditioning works better with some products than with others. What the data suggest, however, is that – contrary to what many advertisers and consumers believe (Kalb 2012) – via conditioning almost any product can be “sexed up”.

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Perpetual Dispossession: An Exploration of Ownership without Possession

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ABSTRACT

We examine disruptions in the consumption cycle as possessions are divested of meanings but never disposed. This perpetual process of dispossession results in legal ownership of objects without explicit incorporation into the self. Through an ethnographic approach we examine factors contributing to perpetual dispossession and discuss implications for the extended self.

INTRODUCTION

The consumption cycle is a process consisting of object acquisition, consumption, possession, and disposition (Arnould and Thompson 2005). A separate process called dispossession is used to remove meaning from objects prior to their disposition, which is the final act of physical and/or legal severance of control over an object (Roster 2014; Young and Wallendorf 1989). This study examines factors that disrupt disposition, as well as the processes by which consumers indefinitely retain dispossessed objects. We refer to this process as perpetual dispossession, in which an object is emotionally or psychologically dispossessed but never physically disposed. This understudied phenomenon results in a disruption of the consumption cycle causing objects to enter a purgatory-like state in which they are neither incorporated into the self nor discarded.

Previous literature has examined intrinsic individual factors contributing to object retention. However, this stream of research has failed to consider extrinsic factors that deter disposition of unvalued objects. Likewise, previous research has examined objects incorporated into the extended self without legal ownership (Chen 2009), but the inverse relationship remains unexplored. This paper attempts to address these gaps by examining multiple factors that disrupt disposal causing unvalued objects to be legally owned but perpetually dispossessed.

LITERATURE REVIEW

Consumption Cycle

Previous work has conceptualized the consumption cycle as a process of acquisition, consumption, possession, and disposal (Arnould and Thompson 2005). Possessions are often consumed and/or incorporated into the extended self as a function of their value. Such objects derive value in a number of ways including acting as props for social roles and identity narratives (Ahuvia 2005; Kleine and Kleine 2000), and by signifying relationships (Kleine, Kleine, and Allen 1995). Other important factors in determining an object's value are its associated feelings of attachment, meaning, and satisfaction (Kleine and Baker 2004). High-attachment objects are closely linked with the possessor's self-worth, which increases the strength of the self-possession link and serves as a deterrent to disposal (Ferraro, Escalas, and Bettman 2011). When attachment, meaning, and satisfaction begin to decrease, objects decline in value and typically become candidates for disposal (Jacoby et al. 1977; Parsons and Maclaran 2009).

Prior to disposal objects are dispossessed, which entails the use of various processes to psychologically or emotionally detach oneself from a possession (Roster 2001). Once an object is removed from the self, it is ready for disposal, which signifies the final physical and legal severance of control over an object (Roster 2001). Objects are often disposed if they no longer provide utility, meaning, or satisfaction (Vanier et al. 1987), fail to contribute to the owner's

identity or self-image (Belk 1988; Phillips and Seago 2011), and during role transitions (Young 1991).

While we believe this traditional view of the consumption cycle is accurate, we show that there may be disruptions in the cycle that prevent objects from reaching the final disposal stage. In this study, we focus on disruptions in the liminal process between dispossession and disposition, in which objects are psychologically and emotionally dispossessed, but not physically disposed for an indefinite period.

Intrinsic Traits Influencing Object Retention

Nearly all prior work on object retention has examined how intrinsic personal traits increase the likelihood of object retention. Most recently, Haws et al. (2012) introduced the concept of product retention tendency as a "consumer lifestyle trait that reflects an individual's general propensity to retain consumption-related possessions." This is similar to what Coulter and Ligas (2003) refer to as a "packrat". Additional traits including consumer frugality (Lastovicka et al. 1999) and materialism (Richins and Dawson 1992) can also deter disposition. Similarly, Rindfleisch, Burroughs, and Wong (2009) found that individuals retain unneeded objects in order to maintain a sense of security. While these previous studies examine how individual differences can contribute to object retention, we add to the literature by examining how object or storage characteristics can contribute to perpetual dispossession.

Hoarding

Hoarding is a psychiatric disease recognized by the American Psychiatric Association (Herring 2014). It is important to distinguish the behaviors of our informants from those of clinically diagnosed hoarders (Haws et al. 2012). Hoarding is characterized by holding on to possessions too long, cluttering the home, failing to clean, and harboring too many things (Herring 2014). These possessions are typically "stored" in non-marginal living spaces causing clutter and disorganization (Maycroft 2009). In this study, we spent considerable time in informants' homes and made efforts to identify characteristics of hoarding as described in previous literature (Herring 2014). No hoarding behaviors were observed in our participants.

METHODS

This study employed an ethnographic approach combining observation and depth interviews. Semi-structured interviews (McCracken 1988) were conducted with 16 informants (10 female, 6 male; age range from 24 to 75). Each interview lasted from 40-80 minutes. All interviews were conducted in informants' homes and were audio recorded. Informants were recruited through personal networks and snowballed through the networks of initial informants. Informants were purposively selected to gain insight into the phenomenon and provide a diverse range of perspectives.

Each long interview began with grand tour questions (McCracken 1988) about storage and disposition habits, followed by a discussion of each informant's storage spaces. Next, the interviewer was led on a tour of the informant's storage spaces, during which the informant identified objects with little current value in terms of associated meanings and attachment (Sivadas and Venkatesh 1995). When an object was found in the ambiguous state of being neither currently valued nor disposed, it was discussed in detail to understand the processes by which the object was dispossessed but re-

tained. This process was repeated with multiple objects to elicit various discourses regarding the meaning associated with these objects, factors contributing to retention, and the potential for future disposal.

Our data collection and analysis were iterative. Initial interviews were analyzed to develop understandings of emic motifs by allowing the “emergent nature of the phenomena reveal its characteristics to the researchers” (Tadejewski 2006). Comparisons were made to refine, challenge, and modify these themes during subsequent data collection and analysis (Spiggle 1994).

FINDINGS

While the objects we found varied greatly across informants on a number of factors (acquisition, length of ownership, monetary value, etc.), they were all discussed as having little sentimental or functional significance causing owners to express uncertainty about retention. Previous studies have discussed how intrinsic personal characteristics can increase the likelihood of retention. Our findings replicate this work by showing that individual traits such as high product retention tendency, materialism, waste reduction, and collecting tendencies can lead to object retention. In addition, our findings also show that certain properties of the object or disposal situation can prevent disposition

Object Disruption Factors

Our findings indicate that certain characteristics of the object can influence retention, even if the product is not incorporated into the owner’s extended self.

Investment Guilt

Investment guilt occurs when past investment in an object disrupts disposition by creating feelings of guilt associated with disposal. In these situations, individuals did not place current value on the object in terms of incorporation into the self, but rather felt some connection to its past valuation. Grace offers an example:

“I bought this this blender like 5 years ago...I used it a few times and realized it wasn’t going to work for what I needed. Since I had already used it, I couldn’t return it...since it was so expensive, I didn’t feel right about getting rid of it...That being said, it hasn’t moved off that shelf in probably 5 years...”

Relational Guilt

Previous research has explored the relational significance of possessions (Csikszentmihalyi and Rochberg-Halton 1981). Such objects can serve as mementos of key relationships in the life narrative (Ahuvia 2005) and as sources of “inalienable wealth” in the case of heirlooms (Curasi, Price, and Arnould 2004). However, in these situations, the object is still incorporated into the self. Our findings suggest that a dispossessed object’s value is often not derived from the object itself or from the relationship it signifies. Rather, its significance can stem from the value the third party places on the object. Ellie discusses how disposing of such objects might evoke feelings of guilt:

“This is a bunch of my old stuff from when I was a kid. I will probably get rid of most of it when my mom dies, which sounds terrible, but it’s the truth. I know she loves that I have it, so in my mind it is better to keep it for her sake than to throw it out. [I: So do you feel any attachment to the objects because of your mother?] Not really. I don’t even know what most of it is. I just keep it because I know mom likes that I have it.”

Connell and Wong (2011) also found that individuals use consumption relationships with close others as an attempt to extend their personal identity. If that extension is rejected, it can cause feelings of resentment or abandonment from the extender. Thus, our informants felt guilt over the potential resentment that would accompany disposal.

Future Value

Informants also reported keeping objects for their potential future value. In each case, the object either had been stripped of value through dispossession or was never incorporated into the self upon acquisition. However, these objects were retained for future use if the need should arise.

Frank: “These [golf clubs] used to be my uncle’s...I always wanted to get into golf so he gave them to me. I’ve probably had them for 15 years. I just never got around to playing but always wanted to keep them just in case I ever decided to give it a try.”

Frank reported keeping his golf clubs because they signify an ideal role he hopes to one day assume. Other informants reported keeping objects for roles they plan to assume in the near future. Previous studies have found that individuals keep objects because of their potential future value for themselves or others (Coulter and Ligas 2003) and that possessions can act as props or signifiers of past, present, and future roles (Kleine et al. 1995). Prior research has also discussed identity-related possessions as objects an individual perceives to be useful for enacting a particular identity or role (Kleine et al. 1993) and that objects play various roles in different life stages (Gentry, Baker, and Kraft 1995). Our findings show that objects providing no value or significance for the current self may be kept for their value in a future role, even if the individual is uncertain when, or if, this future role will be assumed.

Passing on the responsibility of disposal

When feelings of guilt were associated with the thought of disposal, informants discussed their plans to pass the responsibility of disposal on to others.

“My mother in law gave me this handmade [item]. I think it’s hideous, so of course I don’t put it out. It just sits in a closet. [I: Will you ever get rid of it?] I never could. I will probably give it to one of the kids. Whichever one of them is [lucky] enough to get it can figure out how they want to get rid of it.”

Alice’s response shows that her actions will free her from the guilt of disposal by making another individual responsible for disposition. This guilt is relational in nature, and respondents self-regulated their behavior in order to avoid guilt associated with transgressing against another (Baumeister, Stillwell, and Heatherton 1994).

Effort Disruption

We also found that various factors can prevent disposal when ongoing value assessments are conducted (Roster 2001). The first is effort disruption, in which owners compare disposal effort with retention value.

Ellie: “I guess I could have a garage sale, but that sounds like a lot of time and energy that I don’t have. I guess I could just donate them...but who knows if I’ll get around to it. It just seems easier to leave them where they are as long as we have the space. I know that’s a terrible explanation, but it just seems so much easier than the alternatives....”

Ellie's motive for retention is greater than the effort required for disposal. Although some individuals may inherently be more likely to expend effort for disposal, our findings suggest that there are characteristics about the object and the storage location that can increase the perceived disposal effort.

Locational Disruption

Linda: "I mean, I don't know why I would throw any of this stuff away as long as we have the space to keep it. If we did throw it away, then our basement would just be empty."

As shown in Linda's discourse, the availability of storage space was also found to significantly influence the intrinsic, object valuation and disposal effort factors that disrupt disposition. This relates to previous work on the rise of consumerism and increasing average house sizes in America (Jacobs 2015). As available space and the desire to accumulate possessions increases, it becomes more difficult for individuals to dispose of things, even unvalued objects.

In addition, an object's storage location can deter disposition by preventing ongoing value assessments from occurring. Many informants described objects as "out of sight, out of mind". This metaphor often described objects kept in marginal storage locations (McCracken 1986).

Beth: "I need to put those things on a garage sale or take them on my next trip to goodwill. But the next trip or the next sale will come and go and I'll never remember to get them. It's kind of an out of sight out of mind kind of a thing. I see them periodically, but not often enough to remember to do something with them."

Informants also reported that objects in storage tend to hide in plain sight. An object's location can become so seemingly natural that the owners fail to notice them.

Ellie: "See, when I said that I don't even notice this stuff, I meant it. Here sit two old, metal sifters that we have probably had for three years sitting on this shelf...I think they have just been sitting on that shelf for so long that I think they belong there...It's like they aren't even there. The only way I would notice them is if they weren't there. You know, if they weren't in their spot."

Ellie's discussion of the sifters show little attachment, nor do they serve as a link to other people, yet they have sat in the same spot on the garage shelf for years. The absence of explicit significant meanings indicates the sifters are not part of Ellie's current sense of self. They have been divested of meaning but not disposed, resulting in perpetual dispossession. Ellie's discourse also indicates that dispossessed objects seem to have a "place" in their storage location (Strasser 1999). Therefore, not only do objects blend into their environments, but owners also feel that they belong there. This blending effect was common across most informants and was more prevalent in high traffic storage areas. Clearly disposition cannot occur when the owner is not aware of the object's existence. This reinforces findings by Korosec-Serfaty (1984) who found that consumers often lose track of their accumulated possessions.

DISCUSSION

Our findings show that the process between dispossession and disposition is often disrupted, causing objects to enter a state of perpetual dispossession, in which they are legally owned but not explicitly incorporated into the owner's sense of self. In other words,

objects become mired in this purgatory-like state when they are divested of meanings, but not disposed. While previous research indicates that dispossession occurs only after possessions are selected for disposal, our findings show that objects can be dispossessed when disposal is not the ultimate intent. In these situations, meaning is removed from an object in terms of its contribution to the owner's current extended self, but the object is retained due to characteristics of the object or its storage location.

The objects we examined did not explicitly contribute to the owners' current senses of self. Rather, objects were valued for something they once contributed in the past or may contribute in the future. This indicates that objects can have liminal significance as they once contributed to a past role, become obsolete in current roles, but may again be needed in some future role. This relates to the notion of liquid modernity, as individuals have more fluid and less well-defined extended selves through the assumption of various identities, roles, and relationships (Bauman 2000). Thus, product retention may occur due to anticipated or potential future shifts in identity. If an object is retained due to one of these aforementioned factors, owners often experience feelings of guilt associated with disposal. When individuals experience such guilt, the object is dispossessed indefinitely until the disposal responsibility can be passed on.

Available storage space also disrupts disposition by initially causing owners to retain divested objects or by preventing objects from being evaluated as candidates for disposal. The increasing availability of storage space and its importance to the American consumer is a sociocultural phenomenon influencing consumption in the United States as the household is seen as a "box to be filled with commodities" (Hayden 1984). This phenomenon can be traced to post-World War II America as the government established policies encouraging urban dwellers to move to new suburban developments with larger houses, creating an association between dwelling space and affluence (Jacobs 2015). This caused house size and the accumulation of possessions to become synonymous with success and prosperity, resulting in an increasingly materialistic culture. This has also resulted in what Cushman (1990) refers to as the "empty self", an identity in which individuals are soothed by consumption, but are never satisfied. The combined effect of these phenomena is increased retention of dispossessed objects, regardless of their current value or contribution to the self.

In addition to increasing storage space, lack of object visibility can also disrupt disposal. In some instances, visibility was low due to storage in inaccessible or marginal locations. Additionally, many informants reported that objects in more accessible locations tended to blend into their storage environments. Many informants reported not noticing objects in plain sight or that objects had a "spot" in the storage space. This is similar to Coupland's (2005) findings on the "Invisible Brand" in which "household members are so habituated to the stable presence of the brand over time that it recedes into the background... [and] can go unnoticed for lengths of time" (Coupland 2005). Our findings show that Coupland's framework extends beyond household brands and includes dispossessed objects kept in storage. One possible explanation for this lack of visibility is increasing clutter in the American home (Arnold and Lang 2007). Clutter is more common because the average American household has accumulated double the possessions as their counterparts 25 years ago (Schor 1991). Increased accumulation results in a mismatch between the amount of owned goods and amount of space in which to store them (Whybrow 2005), resulting in increased difficulty when selecting objects for disposal.

Our findings also show that the effort associated with disposal is another significant factor that impedes disposition. Disposal effort

is very complex, consisting of intrinsic traits like procrastination and laziness, cognitive factors like object valuation, and situational factors like the storage location (Senecal, Lavoie, and Koestner 1997). The perception that much effort is required for seemingly simple tasks such as disposing of small, mundane objects may result from increasing consumer busyness. This sociocultural phenomenon results in Americans associating high levels of busyness with success or affluence (Greenfeld 2005). As individuals create the illusion of self-importance through busyness, mundane tasks like the disposition of unwanted goods may seem too menial to warrant valued personal time. Thus, goods are retained through perpetual dispossession.

In addition to the retention of dispossessed objects, our results can have broader implications in regards to our understanding of the extended self. Belk's (1988) original conceptualization of the extended self suggested that all things considered "mine" are considered "me", or incorporated into the extended self. Subsequent work has distinguished between possessions that are "me" and "not me" in terms of their relevance to particular identity narratives (Kleine et al. 1995). Our findings support Kleine et al.'s position that certain owned objects are incorporated into the extended self while others are not. We refer to the latter as a state of owning without possessing.

While previous studies have examined the use of possessions and consumption to help solidify identities during transitional periods (Mehta and Belk 1991; Noble and Walker 1997), we find that objects are often purposely held in a state of perpetual dispossession as owners wait for various identities to be assumed. Our findings also further develop this conceptualization by presenting the extended self as a fluid state in which objects are incorporated and dispossessed as they do or do not provide value in terms of functionality, sentiment, and attachment (Ball and Tasaki 1992; Kleine and Baker 2004), contribution to roles and identity narratives (Ahuvia 2005), and relationships (Wallendorf and Arnould 1988). In other words, while our findings do support previous research that possessions have value to the self in these various ways, they also suggest that this contribution can be temporary in nature. Possessions can be incorporated into the self for a period as they provide value, but then be dispossessed when this value diminishes or is no longer relevant to the owner.

Our findings also indicate that divestment of meaning, or dispossession, is not an end-all process only used to prepare an object for disposal. Rather, divestment processes (McCracken 1986) may be used to temporarily or indefinitely remove meaning. Objects often stay in this state of perpetual dispossession until their value is rediscovered or assumed in a different role or identity, at which point the object is reincorporated into the self (Noble and Walker 1997). Further research should explore the repeated dispossession and reincorporation of possessions into the self as a result of various roles and identities being assumed.

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Consuming a Machinic Servicescape

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ABSTRACT

Consumer encounters with servicescapes tend to emphasize the harmonic tendency of their value-creating potential. We contest this assumption from a critical non-representational perspective that foregrounds the machinic and repressive potentiality of such consumption contexts. We offer the airport servicescape as an illustrative example.

INTRODUCTION

The site of the service encounter, the *servicescape* (Bitner 1992; Hooper, Coughlan, and Mullen 2013; Wakefield and Blodgett 1994), has become a mainstay in the literature on the threshold of managerial and consumer marketing. While the literature on servicescapes typically describes how service encounters are facilitated, provide value, or engage consumers in value creating activities (Ezeh and Harris 2007), little in terms of critical scholarship has been directed towards the idea of servicescapes, even though our society is increasingly colonized by commercially motivated spatial configurations that promise meaningful consumer experiences (Denzin 2001; Holt 2002; Kozinets and Handelman 2004; Sherry 2008).

Notable exceptions from cultural perspectives notwithstanding (Kozinets et al. 2004), servicescapes have largely been conceptualized from the marketing perspective as manageable, logic-bound spaces that, providing they are efficiently planned and operated, offer harmonious opportunities for value co-creation (Grönroos 2011; Vargo, Maglio, and Akaka 2008). Under this lens, service failure constitutes a preventable outcome of service fault: an anomaly of the system rather than the system in its 'natural' state (Ezeh and Harris 2007). For Hoffman and colleagues (2003), for instance, service failure occurs when a service is either missing, slow, defective, poorly articulated, or else contaminated. Nilsson and Ballantyne (2014) contend provider firms are "not always able to influence the value-creation process in ways they would like", unless they recognize the "underlying functional, technical, symbolic and social dimensions which frame the meaning of a particular servicescape" (p. 377). A unifying theme of managerially oriented contributions is that servicescapes can and ought to be managed.

This conceptual study marks the beginning of the exploration of instances in which servicescapes can be said to be exerting an influence on the service 'recipient' that cannot be fully accounted for by understanding the value provision of the service. We provide an alternative view where the servicescape provides a milieu that is never politically innocent. For instance, servicescapes are often constructed to attract a particular clientele, either implicitly or explicitly, on account of their age, gender or appearance (Rosenbaum 2005). Nor are servicescapes always directed towards individuals that would be consumers of the service by virtue of their own volition. Often when travelling, for instance, consumers have little option other than to traverse a commercialized servicescape to reach an exit (Pütz 2012).

We shift our gaze to service encounters that have run amok – servicescapes that continue to add service components that exceed control and organize not in accordance with mutually co-created benefits but in monstrous forms, where organizing is not assumed to tend towards harmony but rather its opposite (Thanem 2006). These

perspectives, which draw from non-representational literatures (Hill, Canniford, and Mol 2014), offer novel conceptual tools for theorizing consumption in servicescapes that question the individualism (Thompson, Arnould, and Giesler 2013) that manifests methodologically as the *emic* voice that assumes active cognitive meaning-makings by the consumer. This allows for theorizing on questions of collective domination, injustice, and inequality (Peñaloza and Venkatesh 2006) – all possible affective relations of the service encounter. We conceptualize the airport servicescape as an exemplar of a service encounter with a machinic logic where consumption is not sufficiently explained by the notion of meaningful experiences of value co-creation.

THE AIRPORT SERVICESCAPE

As sites of travel departure and arrival, airports serve many functions that directly facilitate consumption. They offer spatial possibilities for consumers to engage with airline services and constitute consumption environments created and shaped to a large extent by retailers (Folkes, Koletsky, and Graham 1987; Rowley and Slack 1999). Beginning with duty-free tobacco and liquor sold to trans-Atlantic travellers in Shannon, Ireland in 1947, the airport context of consumerism thereafter emerged worldwide (Newman and Lloyd-Jones 1999). Latterly, airports have emerged into 'airports-as-firms', offering "an array of different value propositions: attractions for tourists and aviation enthusiasts, congressional and logistics facilities, shopping venues and consulting services" (Jarach 2001, 119).

Akin to other servicescapes, airports are sites of a wide array of consumption instances, posing either favorable or adverse outcomes that vary in their degree of controllability and predictability. Crawford and Melewar (2003) describe airports as sites of heightened consumer anxiety, fear, and excitement, accentuated by travel stress. While this is conducive to heightened impulse purchasing, such consumption can only be facilitated by stress-reducing design – thus airports should be both aesthetically pleasing and functional (Bowes 2002). Fodness and Murray (2007) describe the airport as "an elaborate servicescape ... similar to a hospital, with many corridors, queues, signs and complex interactions" (p. 493). Rowley and Slack (1999) note that airports, due to consumers' experiences of global travel, facilitate a sense of "timelessness and placelessness" (p. 363) for consumers in transit. Similarly to hospitals, supermarkets and motorways, airports thus reflect what Augé (1995) terms 'non-places' and Castells (2000) 'places of flow'. Both lack a history and sense of identity and are judged primarily on their capacity to transfer users from one point to another in as smooth and error free a fashion as possible. Airports are also often the first and last points of traveler contact from the perspective of tourism consumption, and thus airport experience has a strong bearing on travellers' future expectations and intentions (Martín-Cejas 2006).

Consumption in airports often consists in frustrating and problematic experiences (Crawford and Melewar 2003; Pütz 2012; Rowley and Slack 1999). In the extreme, it has been noted that airport 'security theatre' (as opposed to 'security reality'), elaborated in the wake of 2001, has played no role in thwarting recent attacks (The Economist, 2015). Highly visible security rituals have not been able

to guarantee passenger safety against ‘inside’ jobs (Metrojet Flight 9268), external attacks (Malaysian Airlines Flight 17), or technological malfunction (Malaysian Airlines Flight 17). However, airport service contexts continue to prosper (Crawford and Melewar 2003; Rowley and Slack 1999), indicating that any straightforward notion of benign value co-creation fails to capture the emergence of these consumption contexts and the performative ways they become reenacted through their mundane repetition.

While the airport consumption experience has many unique characteristics, a recurring theme in the literature is the idea of its manageability and its value generating potential. We will now offer an alternative logic of machinic becoming to provide a new way of describing and problematizing the airport consumer experience – a view that questions the manageable and foregrounds the ‘monstrous’.

PHILOSOPHICAL REFOLDING – BECOMING-MACHINIC, BECOMING-MONSTROUS

Gilles Deleuze and Félix Guattari (1977, 1987), in addition to their various single-authored works, collaboratively wrote some of the most influential non-representational accounts in the recent tradition of French philosophy. While it is impossible to construct any comprehensive account of their approaches here, their project firmly centered upon constructing a new image of thought that would be of ‘emergence’. Their work has had little impact upon consumer research (Hietanen, Rokka, and Schouten 2014), but their ideas, which foreground an ontology of incessant change rather than assuming that nature (or thought) aims for a harmonious systemic order or equilibrium, have received greater recognition in organization theory (Thanem 2006). We believe adapting their ontology can bring forth a new perspective to services research sharing a threshold with consumer culture theory (Arnould 2006; Peñaloza and Venkatesh 2006).

In contrast to most marketing and consumer research accounts that base their ontology on human rationality and individual agency, for Deleuze and Guattari all relations (both human and nonhuman) are in becoming; a production of intensities that attract or repulse. This is affect that is beyond the representational; a form of surplus of raw desire that is in constant excess of rationalistic accounts (Thanem 2004). Thus, while a conventional account of services would see problematic situations as merely faulty or as epiphenomenal hindrances to the intended service (Grönroos and Voima 2013; Morgan and Hunt 1994; Ravald and Grönroos 1996), in this view the ‘problematic’ is purely productive (Genesko 2014). It produces an excess of relational affect. All relations are in mutual becoming, and thus also it is the tendency for humans to become-machinic when thrust into relational becoming with machinic emergence (Deleuze and Guattari 1977, 1987).

In its view of the machinic, the Deleuzoguattarian approach breaks from rationalistic aspirations of humanity by postulating that oppression and subjugation are not emotive states which desire avoids. Quite the opposite, we desire to be controlled by a structuralist logic we embody from a very early age (Deleuze and Guattari 1977, 1987). Moreover, a Deleuziguattarian perspective of becoming one with the environment is not a matter of Aristotelian distinctions of the external and the internal (Deleuze 1994). We do not walk into a space as external things. Rather, we construct the space itself through presence in space and social interactions. It is not mimesis (Marks 2000), but rather the idea that space cannot occur without embodied participation in it.

Next, we argue that the airport servicescape, through its tensions and performative events (security checks, pronounced distinctions between the have-nots and the privileged, unpredictability of service

encounters and the like), is best described as a machinic becoming where technologies, operators and consumers become engulfed in a systemic becoming that has long since escaped any conceivable form of rational service provision.

MACHINIC ENCOUNTERS IN THE AIRPORT

We identify three machinic performances of the airport servicescape which we term (1) conspicuous stratification, (2) the contradiction of unpredictability and linearity, and (3) security theatre. These collectively manifesting performances invite all participants to submit and enter into a relationship of becoming with and within them.

Processes of stratification both implicitly and explicitly segregate passengers by way of wealth, physical ability, and sexuality within the airport context. In an implicit sense, luxury boutiques and high-end restaurants housed in airport terminals constitute restrictive zones whose services cater to affluent travelers but actively discourage those less privileged. In an explicit sense, business and first class passengers are granted privileged access to lounges and fast track queues from which economy passengers are formally excluded (Wu 2014). On the flight itself, it is often only a conspicuous curtain that separates economy from business and first class. The curtain, usually left open during take off and landing, is tantalizingly drawn closed during the flight itself, during which time higher-paying passengers enjoy superior meals and entertainment than lower-paying passengers (The Economist 2016). One could argue that nowhere else in contemporary western society is social class distinction as visible as in the airport servicescape.

Physical disabilities, accentuated within the context of the security check, constitute a second form of stratification. Upon entering the metal detectors, for instance, travelers are processed before spectating passengers and airport employees. Pütz (2012) notes the manner by which this temporary isolation poses a challenge for travellers walking unaided, but constitutes an “insurmountable barrier for others” (p. 15), such as infants and the disabled. By virtue of their wide thoroughfares, disability ramps, and support vehicles, airports are constructed to accommodate disabled passengers. However, these very same provisions also draw attention towards these disabilities. Another form of stratification is evident in the observable limit on equality that lies in the function of the physical security check (Mann 2011). Primarily as an organizational response to issues of privacy, travelers are instructed by security personnel to divide into males and females before being patted down (Pütz 2012). That this form of screening is embraced by the majority of passengers and practiced in airports universally is indicative of the human desire to, in some fashion, submit to its machinic order. In all, the airport is machinic insofar as stratification occurs and segregating insofar as that stratification is conspicuous.

A second machinic property of the airport servicescape lies in the contradiction of linearity and unpredictability. Put simply, though airports constitute a near universally defined set of practices, arranged in a specific order, which seasoned travellers can negotiate with ease, they also engender a high degree of unpredictability. Delays are all too common, hour-long stopovers can suddenly extend to full days, and random drug and explosives checks can be sprung upon unsuspecting travellers (Pütz 2012). Professional security continually monitors passengers; and passengers consciously and unconsciously surveil one another (Foucault 1977). As a result, inappropriate behaviors, like drunkenness, are treated with greater severity than in analogous service encounters. Airport servicescapes possess a linear quality consistent with Lovelock and Wright’s (1999) notion of being ‘in the factory’. Whereas consumers can voluntarily leave

most service encounters, airports reflect an extreme of the ‘in the factory’ metaphor with no obvious provision for passengers to turn back. Once on the plane, that plane will continue to its predefined destination and passengers only emerge at the end of the assembly line. Recognition of the gravity of entering the airport machinery is visible in passenger body language as they enter the security check. As Pütz (2012) notes, on stepping through the metal detector “travelers duck while passing it ... other travelers take a deep breath before stepping through the metal detector. Some pause right in front of it and take one large step, as if passing a point of no return” (p. 18).

A third machinic property of the airport servicescape is security theatre. This term, referenced in previous studies of airport and border security encounters (Amoore and Hall 2010; Walsh 2015), describes the irrational fashion in which security checks are conducted. High technology and staffing costs expend supplier resources and protracted queuing wastes the time of travellers. This takes place despite little evidence security checks increase overall passenger safety, for safety is an illusion conferred in the iterative practice of security checking rather any measurable outcome (Walsh 2015). In addition to this, airport security machinery primes users to enact the persona of ‘the passenger’ as deemed desirable by airport staff, airlines and other passengers. In their study of borders, for instance, Amoore and Hall (2010) emphasize how assemblages of technologies and calculations that form the sequence of the securitized border serve to authorize its actions. By differentiating bodies that must wait, stop, pass or turn back, travellers are disciplined to understand they must adopt prescribed behaviors to ensure timely passage. Since most seek only hassle-free travel, passengers strive to avoid potential conflicts, as inconsequential as they may be. This further guides desire to comply with the machinic. Passengers, for instance, often remove watches, sunglasses, and other accessories in imitation of others further ahead in the queue, rather than wait to be instructed to do so themselves by security personnel (Pollner 1979).

The capacity consumers display to render themselves compatible with machinic assemblages has been explored within the servicescape literature. Studies have shown humans are highly sensitive to environmental cues: for instance talking softly and slower when lights are slow and the service environment is perceived as formal (Nilsson and Ballantyne (2014). By contrast brightly lit service encounters tend to be louder and communication exchange is more frequent and fast paced (Lewison 1991; Hoffman and Bateson 2002). In similar fashion, Pütz (2012) notes that the closer travelers come to the checkpoint itself and to the perceived sense of formal observation and security scrutiny, the quieter they become. Passengers avoid looking directly at travellers who are patted down, but nevertheless seek to take cues from the exchange as to how they should behave once their turn comes. When it does, travelers avoid direct eye contact with the security official but also avoid staring dreamily into space: “they are able to observe the situation out of the corner of their eye and stay cooperative” (Pütz 2012, 174).

AN ONTOLOGY OF THE MACHINIC SERVICE ENCOUNTER

The purpose of this conceptual study has been to open novel ontological avenues for theorizing the consumer experience of a service encounter. Employing a Deleuzoguattarian perspective that emphasizes the relational emergence of affect, we have attempted to introduce an alternative conceptual space to how 1) servicescapes have been written as manageable wholes that assume an equilibrium-logic (Ezeh and Harris 2007; Grönroos 2011; Vargo, Maglio, and Akaka 2008), and 2) to the view that privileges consumers’ individualism and cognitive meaning-making prevalent in consumer culture theory

(Thompson et al. 2013). While we posit that the service encounter in servicescapes such as the airport emerge as assemblages where the consumers enter into a collective mode that can be described as becoming-machinic, our approach is not devoid of humanism in the sense that we remain conceptually interested in how the airport is a primary exhibit of how consumption manifests under the (1) conspicuous stratification, (2) the contradiction of unpredictability and linearity, and (3) security theatre. The airport, as a service encounter is an example of monstrous organizing (Thanem 2006) *par excellence*, and in all its machinic tendencies is a site where discipline is performed both as a condition of its own systemic properties and collectively between consumers themselves.

The idea of machinic becoming is marked by a certain precognitive condition, the sense through which humans are affectively drawn to, or repulsed from, becoming constitutive of and embodying the contexts and socially and technologically unfolding performances. A Deleuzoguattarian logic of desiring has the tendency to actively seek its own repression and subjugation, which is embodied when one ‘becomes’ a machinic part of the spatial organization itself (Deleuze and Guattari 1977, 1987). We argue for a novel logic in culturally oriented consumer research that questions the capabilities of the individual to maintain a cognitive distinction with him/herself and the performative context s/he encounters. This is how the airport has a systemic tendency that evolves by centripetally feeding the system itself for itself. If conventional theorizing on services would hold, it should be straightforward to rectify the inconsistencies and contradictions of how the airport service encounter unfolds. Thus, we are faced with the idea that airports are, as they manifest now, either supposedly approaching something deemed the managerial optimum, or then there may well be a relational space of becoming not well addressed by the extant literature. Neither alternative seems to have received adequate attention.

We thus postulate that, with the particularities of the airport consumption experience notwithstanding, the monstrous (Thanem 2006) is inherent in all events of sociotechnological organizing. An airport as a service encounter seems to be a fitting example of this, but similar emergent relationality could potentially take place in all servicescapes where the consumer is required to pass through and adhere to a market logic. Additionally, the airport offers an illustrative example of an ultra disciplined urban space. This is not a simple idea of surveillance, but rather a collective policing that goes on among people going through the ‘system’ (“doesn’t she know what she is doing in the security check? Why would you bring your family with you as a nuisance to all other travellers?”). Yet, we are not attempting to dissect the machinic encounter of the airport-scape. Rather, we see it *in toto*, as a totalizing system without limit, a holistic desiring-machine, inhabited by desiring-technologies and desiring-consumption.

This is one reason why passengers display a willingness to give themselves over to the machine: only through compliance with the airport apparatus can passengers secure a swifter passage. This compliance is reinforced by what Pütz (2012) defines as architectural design and procedural rules. The former is reflected in permanent fixtures (i.e. walls and gates) and impermanent fixtures (ropes and other movable elements that channel passengers into forming a queue) engineered to narrow the possible actions that could happen at any given checkpoint. The latter manifests in unambiguous written and unwritten rules that reduce the many imaginable behavioral patterns at a security point to those few deemed acceptable and desirable. To return to the machine metaphor, this process is akin to (1) priming subjects as they enter the machine and (2) sifting out inappropriate, contaminated, perhaps even dangerous, subjects before they enter the machine (Pütz 2012).

In addition, there is a future call to pay increasing attention to the breaks in the machinic code of the servicescape. While its logic remains totalizing, it is unlikely that it can 'be total'. Every act of subversion by the servicescape consumers or operators (removing the temporary barriers so as to not have to zig-zag lengthily in the queuing apparatus, the officer cracking a joke during the security check ritual) pierces the machinic and renders it visible. Under different logics, such phenomena have been called ludic agency (Kozinets et al. 2004), microemancipation (Brownlie 2006), or the molecular tendency within every system that operates to produce molar or structural rigidities (Deleuze and Guattari 1977, 1987; Guattari 2007; Thanem 2006). Nevertheless, these subversive acts of resistance seem to hardly contest the overall functioning of the airport servicescape and its repetitious performative unfolding.

If non-representational theorizing continues to gain ground in consumer research (Canniford and Shankar 2013; Hill et al. 2014; Hietanen and Rokka 2015) there is also another pressing issue that the Deleuzoguattarian logic of machinic becoming of social relations can inform us about. This is the problem of subjectivity. Unlike practice-based theorizing and actor-network perspectives that generally stress the surface level of human and technological interactions (Latour 2005; Warde 2005), Deleuze and Guattari (1977, 1987) make human desire for subjectivity one of their central focuses, even if this subjectivity is inherently always fleeting, elusive and incomplete. Thus Deleuze and Guattari foreground the politics of the human who continues to incessantly desire subjectivity (Genosko 2009). In the airport servicescape, the potential for such desire may seem bleak. The question in consumer research thus becomes: what kinds of subjectivities are we able to imagine in the machinic orders of commercialized and stratifying servicescapes? In line with Denzin (2001), it calls for research that incites and informs action or what could, even if only conditionally, bring about possibilities for 'revolutionary consciousness' (Bogue 2003).

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Why Negative Political Ads Don't Work on Gen Y

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ABSTRACT

This study demonstrates that televised political negative advertising generates high levels of negative emotions and emotional intensity upon Gen Y consumers. These responses are developing negative attitudes towards political advertising and brands that may have far reaching generational societal and political impacts long past the end of the campaign.

INTRODUCTION

Televised political advertising is the workhorse of the political marketing campaign. From the moment of the election date announcement through to the close of polls, television remains the dominant platform for message delivery for politics. Campaigns are traditionally waged on the visual and visceral levels against opponents, with an emphasis on messages that encourage the rejection of opponents through negativity. Conventional trade wisdom indicates that attacking, discrediting and creating fear of the alternative party offerings has been the effective platform for campaigning (Garra-mone 1984; Lau, Sigelman and Rovner 2007; Merritt 1984).

However, the rise of the media savvy Generation Y and Generation Z may present an opportunity to return to pitching claims to governance by a positive value proposition, offers of polity and policy. With the rise in social media, ease of access to fact checking of negative claims, and an inoculation to attack rhetoric born of growing up in the internet era, the Gen Y and Gen Z vote may not be vulnerable to the message strategies of the older generations.

This paper studies the emotive reaction of Generation Y voters to political advertising campaigns. It tests the responsiveness and resonance of the campaign messages on a cohort of both potential voters (locals) and non-voters (outsiders) to examine how the content elements of the message result in emotive responses.

LITERATURE REVIEW

Political Marketing

Political marketing is a combination of rules of thumb, heavily documented statistically designed interventions and folk wisdom. Formally, political marketing is defined by Hughes and Dann (2009) as:

“...a set of activities, processes or political institutions used by political organisations, candidates and individuals to create, communicate, deliver and exchange promises of value with voter-consumers, political party stakeholders and society at large.”

Of interest to this paper is the requirement for political marketers to communicate a promise of value to the voter-consumer, stakeholders and society at large. As such, the literature review examines the value creation in political advertising messages, the process of political advertising delivery and the sub-elements of advertising linked to the political value creation.

Promises of Value

Promises of value within political communications divide on the axis of positive messages to sell of promise of gain in voting for the branded party, and, negative imagery that implies potential for loss involved in the success of opposing political parties (Hughes and Dann 2006). It should also be noted that the value offering is also different in politics, as commercial campaigns can operate entirely without stated or implied identification of loss in their communication of a value of-

fering to targeted markets. Whereas as a commercial product such as funeral insurance may pitch on the out-of-pocket costs to the family, it still emphasizes the personal cost of leaving the loved ones unprotected. In contrast, negative political campaigns can be broader statements of “Don't risk X” where X is an abstract concept such as the natural environment, industry, or economic conditions (Hughes & Dann 2010).

Political Advertising: Communicating the Promise

Advertising is the dominant method used to create awareness, and subsequently, one of the most costly items in the campaign. In the 2014 US mid-term elections, \$1 billion was spent on advertising (Wesleyan 2014). The 2012 United States elections, inclusive of the Presidential election, federal, state and local elections was over \$US 3 billion (Fowler and Ridout 2013). Fowler and Ridout (2013) and Ridout, Franz and Fowler (2014) work emphasized the development of targeted television advertising for audience specific reactions - generation of specific short responses rather than long-term relationship building (Goldstein and Ridout 2004). This identifies an increasing problem for political campaigns of needing to operate within a short-term results focus that overemphasizes short term promises tailored to the nearest election result, but one that comes at the expense of brand building and relationship development with key market segments.

At the same time, Blumenthal (1982), Goldstein and Ridout (2004) and Needham (2005) discuss the era of the permanent campaign whereby parties are constantly in a campaign mode, but do their persuasion of undecided voters in the short election campaign period. The perpetual campaign, fatigued by the need to constantly move message and market, often resorts to short term “sales” strategies near elections to create the desired result. As with commercial marketing, aggressive discounting, sales orientations and short termism has a detrimental impact on the value of the brand in the eyes of the consumer. Yet the perceived efficacy of the negative message in downselling an opponent, or discounting cost of adopting the less scary alternative is taken as a marketing truism in much of the political practitioner's playbook.

Consumer Engagement with Voting

Voting in the political process is surprisingly viewed as a low involvement product based on consumers having a high level of distrust in political brands and political messages, and perceived limited engagement post-purchase decision (Dann & Hughes 2008). As a low involvement, low commitment product, political marketers often focus on the brand switching behaviour of the swinging voters, and tailor message strategies around short term promises of loss or gain (Dann & Hughes 2008). This approach assumes that there will be a fast transformation of voters from low involvement state to high involvement decision making through messages based on arousal states (Bradley, Angelini and Lee 2007; Rossiter and Bellman 2005). As a low involvement product (Rothschild & Ray 1974), political advertising has become largely dependent on generating brand decisions through emotive responses to advertising stimuli. Prior advertising studies on Generation X and Baby Boomers have found negative images tended to create higher levels of arousal and recall than positive images (Cacioppo, Tassinary and Berntson 2007; Lang 1991; Lang et.al. 1996, 1999, 2000).

Politics and Generation Y

As generational change takes effect in the voter blocs, marketers find themselves pitching to a media savvy audience of Gen Y

consumers who have grown up on a diet of media awareness. The consequence of the changing of the guard of the youth vote represents a significant opportunity to re-examine message strategies developed for passive audiences (Boomers, Gen X) who were captive in limited media channels, and with restricted avenues of response against the attitudes of a Generation Y cohort. As young voters have been regarded as having higher levels of cynicism and mistrust in political brands than other voters, the conventional call to action through negative advertising may not be the most effective message strategy for the Generation Y market. The question for this study then is whether negative imagery has a similar impact on the Generation Y cohort, which leads to the formulation of the hypotheses:

Hypothesis 1: Respondents will have higher levels of arousal for negative messages than for positive messages

Hypothesis 2: Negative messages will generate higher overall levels of emotive response than positive messages

Arousal will be measured using Self-Assessment Manikin scale (Russell and Mehrabian 1977; Lang 1985; Rossiter and Bellman 2005). Emotive response in this exercise is measured by the volume and nature of emotions captured from the Geneva Emotion Wheel. Details of the measure are outlined in the methodology.

INSTRUMENT AND MEASURES

Data was collected on each advert using 2 specific measures. Respondents filled out Morris's (1995) Self-Assessment Manikin (SAM), followed by Scherer (2005) Geneva Emotional Wheel (GEW).

Self-Assessment Manikin (SAM)

The Self-Assessment Manikin is a non-gender specific graphic character that measures the type 1 emotions of pleasure, arousal and dominance (Russell and Mehrabian 1977; Lang 1985; Rossiter and Bellman 2005). Hypothesis 1 is tested using P-A-D element of Arousal, with Pleasure used as a secondary measure of advertising content. The advantage of the SAM measure as a correlating item in the study is the speed of response to non-verbal measures (Lang 1985; Morris 1995). SAM allows for the specific emotional measurement of each advertisement shown to the respondent and can be used across dynamic advertisements studies (Lang 1985; Morris 1995).

Geneva Emotion Wheel (GEW)

Scherer's (2005) Geneva Emotion Wheel is the core of the data collection protocol. Using a visual and verbal scale, the GEW measures a range of 20 different type 2 emotions in a quick response method similar to SAM instrument. Figure 1 illustrates the Geneva Emotion Wheel as used in the study. The spokes of the GEW relate each to the family of emotions, with a modified five point scale used to measure level of intensity of that emotion. Further, the wheel is quadrant based on two axis of control (high-low), and the valence running from negative (left) to positive (right). Hypotheses 2 of this study are resolved from the data sourced from the GEW measures.

Advert selection: pacing & content

Political advertisements were selected from a range of online sources to represent a broad spectrum of political views. Each advert was rated for pace based on the established metrics of Bolls, Mueh-

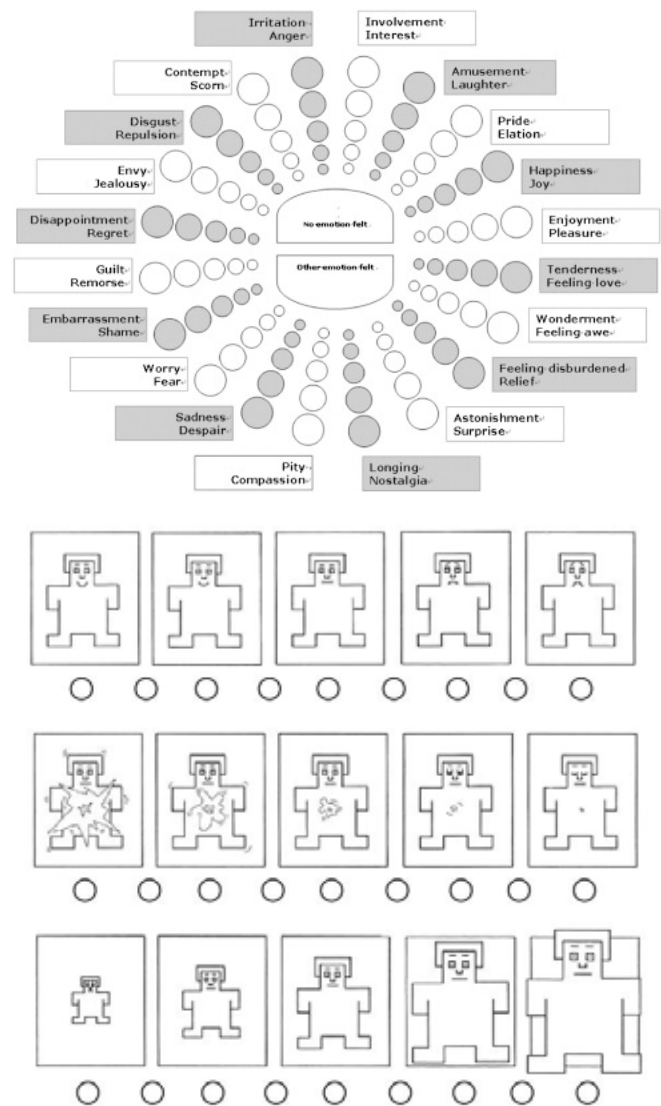


Figure 1: Self Assessment Mannikin and Geneva Emotion Wheel

ling and Yoon (2003) and Lang et.al. (1999,2004). Slow adverts were classified as using between 0 and 3 cuts, medium pace ranged from 4 to 10 cuts, and fast adverts involved 11 or more cuts. Messages were selected from a range of political parties that encompassed the broad spectrum of political views. Eighteen advertisements were selected from an initial pool of 30 possible cases. Advertising content was classified on the basis of the overall message, in line with prior studies (Hughes 2003; Kaid 2012; Jamieson, Waldman and Sherr 2000; Johnson-Cartee and Copeland 1991; Lau et al. 1999). Three considerations were used in advert selection. First, the cohort of adverts needed to represent the current political atmosphere, thus providing coverage for the three primary political parties who account for 90% of the vote, and incorporating minor parties and independents. Second, a mixture of message types were required to create an effect 3x2x2 (primary party x fast/slow x positive/negative) design for the major party adverts, and allocating 6 adverts to non-major parties (others x fast/slow x positive/negative). Finally, all adverts were confirmed to have been screened on prime time, mainstream television in Australia and were not subject to regulatory complaints.

METHODOLOGY

This study used a hybrid methodology of SAM and GEW pictorial research forms. This was chosen based on similar prior studies conducted in the area and the need to capture as quickly and as effectively as possible the emotional response to the stimuli the participants were exposed to. This is one of the major advantages of both the SAM and GEW tools as they allow for rapid collection and measurement of emotional responses as the pictorial tools allow for a more rapid processing and familiarisation of the research instrument, without participants suffering from noticeable survey fatigue. Responses were captured in 5 sessions of 15 respondents. Advertisement presentation order was randomised between groups. Ten minutes was allocated to set up the capture, provide information and instructions. Respondents were shown the first sample advertisement, always numbered 1, and given 60 seconds to complete the first survey page. At the conclusions of the minute mark, a 5 second count in to the next ad would commence, displaying the identification number of the next advert. Respondents were shown 18 political advertisements across the political spectrum and asked to rate the speed of the advert (slow, medium, fast) and the overall tone of the message (positive, neutral, negative) as per the design discussed above. Participants were 71 undergraduate students from a large Australian university who were undertaking second year coursework in a field unrelated to politics or communication. The cohort consisted of 25 male and 33 female respondents, and inclusive of 13 respondents who did not identify a gender. All participants were Generation Y, with the age range from 19 to 32, and a mean age of 22 years. Voting experience was divided with 34 (47.9%) indicating that they had voted in a previous election, and 21 (29.6%) indicating that they were registered as voters for the local state election. Only 32% had prior voting experience with any of the candidates or parties shown in the advertisements.

RESULTS

The results of the study do not support this hypothesis. Advert 10, perceived to be the most negative advert in the study evoked a neutral response in the pleasure score (mean 6.38, SD=1.8) and similarly neutral position in Arousal (mean 6.52, SD=1.77). In contrast, Advert02, which was seen to be relatively negative with a wider range of reactions (mean 4.14, SD 2.05), also created the most excited in Arousal (4.43, SD=1.99) and the most happiness on the Pleasure score (3.81, SD=1.67). Negative adverts did not evoke the expected responses – adverts with the highest sadness ratings in the Pleasure score (Adverts 06, 04, 10 ,16) also evoked some of the calmest responses in the Arousal score. However, adverts with high happiness levels (Adverts 02, 18 11) were not consistent in their responses. Even with Arousal, the most evocative adverts (02, 08, 05) did sit towards the Happiness end of the Pleasure spectrum. Negative advertising did not resonate with the Gen Y audience according to theoretical expectations, and this opens an area of future research and study.

Arousal in this exercise is measured by the volume and nature of emotions captured from the Geneva Emotion Wheel. Two measures are reported to examine Hypothesis 2 – Emotive Intensity and Normalised Emotive Response. Emotive Intensity is the sum of responses in the Geneva Emotion Wheel, where adverts have a greater emotive resonance; more items of the Geneva Emotion Wheel will be recorded by the respondents. Results from the study are outlined in Table 5. As illustrated by Table 1, Positive advertisements had greater emotional intensity, with the highest emotive intensity occurring in Advert 13 (338), Advert 11 (338) and Advert 02 (312). Notably, Adverts 11 and 13 are rated as highly positive by the re-

Table 1: Reactions to Advertising (Summary)
SAM Findings

Advert	Content (negative to positive)	SD	Pleasure (happy to sad)	SD	Arousal (excited to calm)	SD
02Advert	4.14	2.05	3.81	1.67	4.34	1.99
03Advert	4.36	1.86	4.97	1.37	6.68	1.89
04Advert	3.23	1.78	6.58	1.53	6.58	1.56
05Advert	5.64	1.92	4.47	1.50	5.45	2.03
06Advert	3.34	2.15	6.91	1.38	5.98	1.78
07Advert	6.08	1.88	4.52	1.33	5.61	2.08
08Advert	4.09	2.36	4.49	1.82	5.00	2.22
09Advert	3.50	1.94	5.09	1.51	5.55	2.07
10Advert	3.00	1.69	6.38	1.33	6.52	1.77
11Advert	6.75	1.85	4.24	1.61	6.33	2.06
12Advert	4.95	1.82	5.21	1.42	6.60	1.91
13Advert	6.27	2.27	5.31	2.05	6.33	2.09
14Advert	3.56	1.79	5.69	1.17	6.52	1.78
15Advert	3.37	1.70	5.80	1.30	6.31	1.49
16Advert	3.19	1.70	5.81	1.30	6.44	1.75
17Advert	5.69	1.71	4.71	1.49	6.52	1.97
18Advert	6.92	1.46	4.18	1.63	5.70	2.22
19Advert	5.20	2.10	4.89	1.67	5.68	2.09

GEW Findings (Summary)

Ad number	Emotive Intensity (n total responses to GEW)	Pleasure (happy to sad)	Arousal (excited to calm)	Speed (slow to fast)	Content (negative to positive)
10Advert	262	6.38	6.52	4.36	3.00
16Advert	234	5.81	6.44	4.24	3.19
04Advert	286	6.58	6.58	4.53	3.23
06Advert	282	6.91	5.98	4.34	3.34
15Advert	242	5.80	6.31	4.27	3.37
09Advert	240	5.09	5.55	5.30	3.50
14Advert	251	5.69	6.52	4.14	3.56
08Advert	274	4.49	5.00	6.77	4.09
02Advert	312	3.81	4.34	6.42	4.14
03Advert	271	4.97	6.68	4.25	4.36
12Advert	177	5.21	6.60	4.61	4.95
19Advert	262	4.89	5.68	4.97	5.20
05Advert	298	4.47	5.45	6.35	5.64
17Advert	211	4.71	6.52	4.25	5.69
07Advert	242	4.52	5.61	5.17	6.08
13Advert	338	5.31	6.33	3.98	6.27
11Advert	333	4.24	6.33	4.77	6.75

spondents, whereas Advert 2 is towards the negative end of the neutrality rating. Similarly, Adverts with Pleasure scores rated towards Happiness have higher emotive response rates (Advert 02, Advert 18, advert 11) than those rated for Sadness (Advert 06, Advert 04, Advert 10). Finally, Arousal did not reflect emotive response levels with the most exciting advert (Advert 02, Advert 08, Advert 05) not having the highest emotive responses.

Similarly, there is no consistency between the emotive response level, and the content of the advertisement as perceived by the respondents. Given the unexpected reaction of the respondents to the advertising stimulus, further examination of the 3 most negative and positive adverts was undertaken, to look specifically at the emotion generated by the adverts. For consistency, each GEW outcome was converted to a normalized score, enabling graphing on a consistent base line. Advert 10 evoked a strong Irritation-Anger (n 37, mean 3.4, SD1.14) followed by Disgust-Repulsion reaction (n 29, mean 3, SD 1.14) which is possibly indicative of a rejection of this advert by the audience. Advert 04 evoked Worry-Fear (n 32, mean 3.2, SD 1.26) as the strongest response with Irritation-Anger (n 31, mean 2.8, SD1.17) as the next most powerful reaction. This may indicate the effective delivery of a negative message, but the continued rejection of the negative advertising platform. Finally, Advert 16 evoked a strong Irritation-Anger (n 29, mean 3.31, SD 1.16) response, followed by a Worry-Fear (n 24, mean 2.54, SD 1.21). With only two of the three adverts creating Worry-Fear results, and all three having a high level of Irritation-Anger, the Generation Y cohort did react negatively to a negative message. By way of contrast, the top three positive advertisements were examined using a similar normalisation process. Advert 11 had a strong engagement with the audience with a high Involvement-Interest measure (n 37, mean 2.8 SD 1.08), and a positive Happiness-Joy measure (n 35, mean 2.7, SD 1.08).

Similarly, Advert 13 also brought a resounding Involvement-Interest score (n 4, mean 3.7 SD 1.019) and, surprisingly for a positive advert, a powerful Pity-Compassion (n 30, mean 3.4, SD 1.27). Finally, Advert 18 continued the engagement trend with a strong Involvement-Interest (n 34, mean 3.2, SD 1.18) score, and a positive Happiness-Joy measure (n 30, mean 3.1, SD 1.07). Overall, the engagement levels with the positive adverts are very high, and the Involvement-Interest score was consistently either the top or second rate item across the positive advert spectrum. Finally, across all advertisements, the most consistent emotional reaction from the Generation Y cohort was Involvement-Interest (Figure X). From the study, Generation Y respondents are engaged in politics, are interested by political content, and want access to political content – however, they are rejecting the negative messaging strategy, and the so-called “disengagement of the youth” may come from the lack of resonance the attack adverts are finding with an audience seeking substance over bile.

KEY FINDINGS

Implications for Political Advertising Practitioners

There is growing evidence (Bradley, Angelini and Lee 2007) that negative advertising is not as effective in generating an emotional response that creates a behavioural response in favour of the sponsored brand as practitioners are led to believe. The results are notable as they demonstrate that emotional responses to political advertisements are far higher for positive advertisements than for negative advertisements. This is especially so for slow paced positive advertisements. This would suggest that Gen Y voters have more resource capacity to process these advertisements than they would for fast paced advertisements that might reach their capacity for message

processing (Lang 2000). This would mean that a Gen Y voter would have more likelihood of recalling the advertisement in a positive way and developing a more positive attitude towards the sponsoring brand, and their advertisements, than a negative advertisement. These results do suggest that brands that want to be successful in creating memorable and highly effective emotionally responsive advertisements with Gen Y need to use negative messages only sparingly in a campaign. This research also supported that structural elements can influence emotional responses to political advertisements. Fast paced messages, as predicted by Lang (2000) and confirmed by Bradley, Angelini and Lee (2007), do indeed make voters feel more negative emotionally, even where the advertisement is positive. As Gen Y is only in the early stages of political brand experience it is highly questionable whether fast paced messages have any place in a brand's political communication strategy if they actually want to influence these voter's behaviour.

Implication for Governance

As practitioners, reformers and interested parties discuss campaign spending limits, campaign financial reforms and donation declarations, an unusual area of reform may be possible for political marketers. Whereas campaign finance reforms in some democracies are limiting spending on advertising in campaigns, there are no limits proposed on the nature of the advertisement content. If so desired, parties currently can spend their entire political advertising budget on negative messaging. Perhaps the time has come to open the debate on message limitation whereby political campaign messages, both political party and lobbyist-run support campaigns are limited to a 30% public funding cap on negative messaging. Forcing political parties into 70% advertising spend on positive messages, that are promises of polity and policy, and limiting attack adverts, may be the true reform needed to reengage the electorate with the elected. Losing future generations engagement with politics risks the sustainability of the current political system itself. Democracy can and always should allow for freedom of speech, but if this speech comes with a price that will be paid by future generations then it is no longer free and no longer speech that builds a more positive polity for all.

Generation Y: Engagement over Politics

There is much debate on what is causing cynicism and apathy towards the political process by young voters. Whilst prior research has found that levels of cynicism are increasing, the increasing rates of young voters failing to enrol or register to vote is the most telling statistic that young consumers are no longer engaging with democracy in most Western systems. However, across the entirety of the advertising data set, Involvement-Interest was the highest consistent emotional response. This is a generational cohort who want to be heard, want to be part of the process, and the negative advertising message strategy is not meeting their needs, nor addressing their desire for engagement. Engagement will require political marketers to stand for something, to offer a positive value promise, and that may be a bridge too far in the present attack-focused campaign environment.

CONCLUSION

The implications of this study are that whilst negative commercials generate far higher arousal and recall levels over positive ads, the value of this is questionable if it is leading consumers to feel negative emotions connected to a brand. Fast paced political messages also need to be aware that viewers only have a limited capacity for processing televised messages (Lang 2000), and presenting too much information, especially complex information or dense infor-

mation messages due to the high number of cuts, will mean that they will not process the information in the message regardless of how arousing or interesting the message might be.

The findings from this study indicate that it would be better for political brands to focus on slow paced positive messages that generate greater likability and positive emotions, to increase the chances of being elected and to develop more favourable attitudes towards both the brand and the advertisement.

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How Word of Mouth Influences the Storyteller: Does the Effect Replicate in China?

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ABSTRACT

Moore (2012 JCR) focuses on how specific linguistic content in word of mouth (WOM) influences North American storytellers. This research attempts to replicate her research with Chinese storytellers' hedonic experiences. Influenced by Confucianism Chinese storytellers' evaluations are generally lowered by explaining language yet less negative than North American storytellers' evaluations.

INTRODUCTION

Word of mouth (WOM) is the most influential form of marketing communications (Nielsen 2013). While most research starts from the assumption that it is the story-receiver (not the storyteller) who experiences WOM, Moore (2012) challenges this assumption and expands research on WOM.

She shows that the act of storytelling has a particular effect on the storyteller. She demonstrates that explaining language in stories weakens storytellers' evaluations of and intentions to repeat/recommend hedonic experiences but strengthens their evaluations and intentions in the case of utilitarian experiences, regardless of experience valence. Explaining language addresses why experiences happened or why experiences were liked or disliked.

In the four years following Moore's publication, a substantial number of researchers have cited the original article. To date, the overall Thomson Reuters Web of Science and Google Scholar citations counts are 21 and 53, respectively. The article has been cited 3 times in the *Journal of Consumer Research* (JCR) and 3 times in the *Journal of Marketing Research*. It was further awarded the JCR Ferber Award of 2012 and it ranks among the ten most cited JCR articles of 2012 (Harzing 2007).

Other researchers have investigated how WOM of hedonic experiences influences storytellers. Scholars largely converge on the viewpoint that unpacking an enjoyable past hedonic experience into its constituent sub-activities amplifies consumers' retrospective affective evaluation (Cowley 2014, Van Boven and Epley 2003, Vilches-Montero 2015, Vilches-Montero and Spence 2015). Telling the story of an enjoyable past experience also enhances experience duration estimation (Vilches-Montero and Spence 2015) and the self (Chawdhary and Riley 2015). Value derived from talking about experiences (Kumar and Gilovich 2015) and retrospective dilution of the most extremely negative moment in a positive experience (Cowley 2014) explain these amplifications. The previously mentioned articles measure the effects of WOM on storytellers in a western context. In contrast, Yang et al. (2014) show that audience responses moderate Chinese storytellers' experiences.

Despite Yang et al. (2014), however, extant research on WOM influence on the storyteller remains predominantly western, in terms of its empirical findings, and except for Moore (2012, 2015) and Vilches-Montero and Spence (2015), no research investigates explaining language. Meanwhile, in consumer research as in any other field, replications are one of the building blocks of the structures of knowledge. Replications are important for knowledge accumulation, and for gaining greater understanding into new and important effects. As such, Moore (2012) marks a starting point from which to initiate a replication study into a possible WOM effect on Chinese storytellers as well as a meta-analysis across the Chinese and North American samples.

This research highlights the importance of specific WOM content and demonstrates its impact on storytellers from different cultures. More than two millennia ago, upheavals across the East and West sparked ambitious visions of what humans could achieve, spearheaded by two trailblazers: Confucius and Socrates, great thinkers from the ancient world whose ideas still shape consumer behavior (Lian 2002; Yang 2009). They lay the foundations of the modern eastern and western world. While Socrates' philosophy challenged superstitious belief (Plato 399BC/2010), Confucius' vision led to the promotion of 观物取象 ("inferring from metaphors") and 中庸 ("the Doctrine of the Mean") (Legge 1971). Thus, Socrates encouraged his fellow citizens to rationally examine every aspect of their lives, and Confucius believed that moral education could transform both individuals and society. While Moore (2012) explains how Socratic thought influences North American consumers' explaining language and evaluations, the current research focuses on consumers that are Chinese and tests the impact of Confucianism on explaining language and evaluations. Given the morally didactic versus rational bases of Confucian versus Socratic thought, culture should differentially influence overall evaluations of hedonic experiences.

The study needed to meet the replication criterion. Therefore, the study needed to be conceptually related to the plethora of existing research. That is, we focused on hedonic experiences. A replication was performed on Moore's most comprehensive study (3A) with a predefined deviation: Chinese participants instead of North American participants. This way, the consumer research field can learn more about the relevance and boundaries of the effect of WOM on storytellers. We address three hypotheses for which Moore found support in a North American sample:

Hypothesis 1: Individuals using more explaining language will evaluate positive hedonic experiences less positively and negative hedonic experiences less negatively than individuals using less (or no) explaining language.

Hypothesis 2: Individuals using more explaining language will be less likely to repeat and recommend positive hedonic experiences and more likely to repeat and recommend negative hedonic experiences than individuals using less (or no) explaining language.

Hypothesis 3: Individuals using relatively more explaining language will be less likely to retell stories about hedonic experiences than individuals using less (or no) explaining language.

To answer the question of the boundary condition, we also include a meta-analysis across Moore's original, comparably designed studies 2 and 3A and the replication, following Chark and Muthukrishnan (2013) and Rosenthal and Dimatteo's (2001) procedures.

METHOD

The experiment is a replication of Moore’s study 3A: Two hundred and four Chinese, who averaged 24 years of age (20–30 years) and included 63.7% women, participated. All had graduated from tertiary education. Participants were instructed to recall either a positive or a negative dining experience. Participants in the writing conditions then read that Dianping, “the Chinese Yelp”, was trialing a guided online review process, so they would be given a series of sentences with blanks to fill in about their experience. They were told that they could fill in the blanks using any words they wished and as many words as they wished as long as the final sentence was coherent. They were asked to write exactly what they would say in a real online review for a highly inclusive hosting site for reviews of dining experiences, such as Dianping. On the next page of the booklet, participants in the writing conditions saw the explain or the nonexplain story shell. The nonexplain shell had 11 sentences with 22 blanks; the explain shell had explanatory clauses added to eight of the nonexplain shell sentences: “The best part of the whole experience was _____, because _____.” Control condition participants did not see a story shell; they simply recalled an experience without writing about it. Because the participants’ language skills did not necessarily include English, we carried out International Test Commission translation to Mandarin and back-translation procedures on all materials and instruments. Overall, the study was a 2 (valence: positive or negative) × 3 (story shell: explain, nonexplain, or none) between-subjects design.

After writing about their dining experience, participants reported their evaluations of the experience on four 9-point scales, and their intentions to repeat and recommend, as well as their likelihood of retelling the experience on 7-point scales (1 = not at all likely, 7 = very likely. Evaluation scales as well as intention to repeat and recommend the experience scales were standardized and combined into two dependent variables for brevity (evaluation: $\alpha = .98$; intention: $\alpha = .93$). Analyzing them separately yields similar results. Likelihood of retelling was left as a single-item measure.

The meta-analysis featured Moore’s Studies 2 and 3A and our replication. Together, the 3 studies featured 378 participants (204 Chinese and 174 North American). We determined that there was no heterogeneity due to measurement decisions in the studies ($F(2, 15) = 1.76, p > .21$).

RESULTS

To test hypothesis 1, a model using valence, story shell, and their interactions to predict final evaluations ($F(5, 198) = 99.89, p < .001$) showed a large main effect of valence ($F(1, 202) = 487.93, p < .001$, partial $\eta^2 = .71$), and a small valence by story shell interaction ($F(2, 201) = 4.54, p < .02$, partial $\eta^2 = .04$).

Follow-up analyses do not support Moore’s hypothesis 1. Participants in the nonexplain condition who wrote about positive experiences had more positive evaluations ($M = 1.00$) than participants in the control condition ($M = 0.83; F(1, 72) = 4.39, p < .04$). However, the explain condition ($M = 0.96$) differed neither from the nonexplain ($F(1, 71) = 0.61, p > .40$) nor from the control condition ($F(1, 67) = 1.27, p > .26$). Further, participants in the explain condition who wrote about negative experiences had more negative evaluations ($M = -0.78$) than participants in the control ($M = -0.41; F(1, 63) = 22.13, p < .001$) condition but did not differ from the nonexplain condition ($M = -0.56; F(1, 60) = 1.44, p > .23$).

To test hypothesis 2, a model using valence, story shell, and their interactions to predict final intentions ($F(5, 198) = 111.11, p < .001$) showed a large main effect of valence ($F(1, 202) = 545.25,$

$p < .001$, partial $\eta^2 = .73$). However, the interaction effect was not significant $F(2, 201) = 1.20, p > .30$, rejecting Moore’s hypothesis 2.

To test hypothesis 3, a model using valence, story shell, and their interactions to predict likelihood of retelling ($F(5, 198) = 4.41, p < .001$) showed only a medium size effect of valence ($F(1, 202) = 17.15, p < .001$, partial $\eta^2 = .08$). However, the interaction effect was not significant ($F(2, 201) = 0.86, p > .42$) rejecting Moore’s hypothesis 3. See table 1.

Table 1: Standardized Mean Evaluations, Intentions, and Likelihood by Valence And Story Shell, or Culture

		Experiment			Meta-analysis Evaluations
		Evaluations	Intentions	Likelihood to retell	
Positive	Explain	0.96	0.41	0.02	0.88
	Nonexplain	1.00*	0.56	0.20	1.05
	Control	0.83*	0.20	-0.81	0.96
Negative	Explain	-0.78*	-1.24	-1.00	-0.80
	Nonexplain	-0.56	-1.08	-0.45	-0.83
	Control	-0.41*	-1.11	-0.41	-0.66
Positive	Chinese	0.93			
	North American	1.10			
Negative	Chinese	-0.58*			
	North American	-0.96*			

Means marked with an asterisk (*) are significantly different from each other within that category.

To conduct the meta-analysis, final evaluations found in Moore’s Studies 2 and 3A and our replication were examined. A model using valence (the single consistently significant factor across the three studies), culture (Chinese or North American), and their interaction to predict final evaluations ($F(5, 12) = 90.27, p < .001$) revealed a large main effect of valence ($F(1, 16) = 409.33, p < .001$, partial $\eta^2 = .97$) and a large valence by culture interaction ($F(2, 15) = 4.01, p < .05$, partial $\eta^2 = .4$). Chinese and North American evaluations of positive experiences did not differ from one another ($F(1, 8) = .60, p > .40$). Chinese participants who wrote about negative experiences had less negative evaluations ($M = -0.58$) than North American participants ($M = -0.96; F(1, 8) = 10.02, p < .02$, partial $\eta^2 = .59$), as we detail in figure 1.

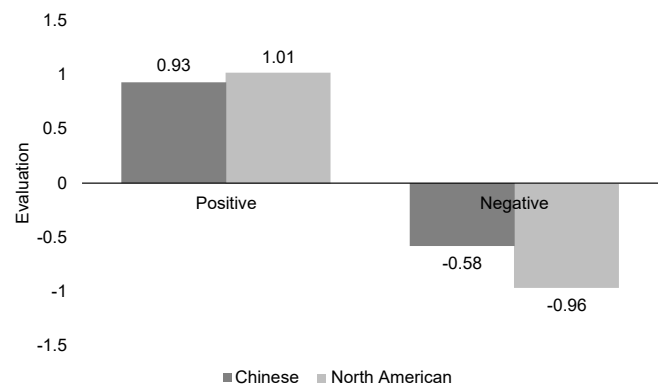


Figure 1: Standardized Mean Evaluations By Valence And Culture: Meta-Analysis

DISCUSSION

Moore (2012) demonstrates that explaining is a key process in altering North American consumers’ evaluations of experiences; compared to those who told nonexplaining stories and to those who did not tell stories, only North Americans who told explaining stories had dampened evaluations of their hedonic experiences. Those who

told explaining stories were also less likely to retell their experience in the future. Further, her studies' story shell method constrained individuals' language use, weakening alternative explanations that these findings are due to differences in the detail or consistency of stories rather than differences in explaining language.

We used the same story shell method to examine the impact of explaining language on Chinese hedonic experiences. We demonstrate that the effects of explaining language on evaluations obtained for hedonic experiences (hypothesis 1) do not replicate for Chinese consumers, arguably due to their Confucian culture (Lian 2002) as we elaborate subsequently. In contrast to explaining for North Americans, *not* explaining why hedonic experiences were purchased or why they were liked increased evaluations of positive experiences for Chinese consumers. Whereas explaining why hedonic experiences were purchased or why they were disliked made evaluations of negative experiences less negative for North American consumers, explaining made evaluations of negative experiences *more* negative for Chinese consumers. Chinese storytellers are more situational in causal attribution of experiences (Morris and Peng 1994). Retrospective dilution of the most extremely negative moment in an experience seems more difficult to endorse.

Hypotheses 2 and 3, that hedonic experiences' individuals explain more influence their intentions to repeat/recommend and likelihood to retell, were not supported. Perhaps Chinese consumers are more willing to repeat/recommend experiences for esteem reasons (Hennig-Thurau et al. 2004) or they acknowledge less the importance of a consistent attitude-behavior relationship (Fishbein and Yzer 2003).

We used a story shell method where individuals write about their hedonic experiences by filling in the blanks of provided sentences. Evaluations may be hard to retrieve and consumers tend to recall the constituent activities of the experience in order to reconstruct them (Cowley 2014). Vilches-Montero (2015) shows that recalling these constituent activities in a packed versus unpacked fashion influences both the reconstruction process and its outcome. This may be a behavior where there is a fundamental cultural difference in play. Unpacking corresponds to the western cultural tendency to process information piece-by-piece. In contrast to unpacking experiences, Chinese cultural disposition dictates that evaluations of experiences are at least partial inferences from metaphors. To complete the story shell, our Chinese participants were asked to recall and write about an experience piece-by-piece; misaligned with Confucianism, this method may have dampened positive hedonic experiences and polarized negative hedonic experiences. Moreover, compared to the non-explain condition, the number of blanks in the explain condition was 36.4% greater. The difficulty of expressing their experience in this unpacked form may have further damped participants' evaluations in this condition. Though self-reported difficulty in writing did not predict evaluations ($F(15, 119) = 0.82, p > .64$), it is possible that social desirability influenced individuals self-reported difficulty in this study.

The meta-analysis provides strong support for a cultural explanation by comparing evaluations and demonstrating the distinctive effect of culture on evaluations. In this study, Chinese and North Americans evaluated positive experiences equally. Our meta-analysis also demonstrates an important cultural difference in WOM: Chinese participants reported less negative evaluations of negative experiences than North American participants.

Taking a morally didactic perspective of our findings indicates that North American consumers do not treat stories of negative hedonic experiences as resources for moral education. In keeping with the high value placed on didactic narrative within the Confucian

tradition however, Chinese consumers are likely to use storytelling to convey public moral standards. Confucianism thus culminates in the behavior formulated above. Evaluation is the expression of the Doctrine of the Mean: a cultural-level attitude that allows Chinese to make a choice that is acceptable. Morality determines this acceptability, that is, what the mean of most (other) humans find acceptable. Not surprisingly, Confucian-typical collectivism has been found to be positively related to response styles that use the scale midpoint and moderate values (Chen et al. 1995).

This work has implications for both consumers telling and receiving stories. Explaining language allows North American consumers who tell stories, to manage their reactions to experiences (Moore 2012). This work shows that the explaining language effect depends on the consumer's culture. While North American consumers can recover from negative hedonic experiences by explaining, Chinese consumers should know to leave explanations unsaid when telling stories. They can savor both positive and negative experiences by not explaining them. To manage this, Chinese consumers should beware of advertising or online review sites that provide vocabularies or story schemas that force them to express experiences in specific ways.

This work shows consumers who receive WOM, that the culture of the storyteller is essential. The impact of the story needs to be balanced against the impact of the culture on the storyteller: while receiving Chinese neutral stories should not influence North American consumers' own evaluations, North American storytellers would have evaluated Chinese neutrally evaluated experiences more negatively, and vice versa for Chinese consumers who receive North American stories. We suggest that story-receivers consider how culture influences the storyteller.

There are three avenues for further research in this area. First, future research could answer the call for more specific linguistic analyses to examine the impact of stories on Chinese consumers. While this paper examined the influence of written, Mandarin WOM on storytellers, Cantonese and other Asian languages could differentially influence storytellers in the transnational, imagined Asian world (Cayla and Eckhardt 2008). Second, scholars should identify other Confucian-related variables that influence Chinese storytellers, such as the power of social norms and the family (Legge 1971). Third, it is crucial to understand the influence of culture on storytellers in general. Consistent with Confucian and Socratic thought, the current research suggests that, on average, explaining why something negative occurred has a positive effect on North American consumers but a negative effect on Chinese consumers, since Chinese consumers likely are more aware of the universal and the mean than North American consumers. Although neither Confucian nor Socratic thought should greatly influence storytellers elsewhere, for instance in India, Buddhism should. That is, Gautama Buddha's thoughts and insights should influence Indian language use and evaluations: while a Chinese storyteller facing a negative experience might believe in the Doctrine of the Mean, an Indian storyteller facing a negative experience might believe in karma (Kopalle, Lehmann, and Farley 2010), with corresponding effects on evaluations and intentions.

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Making of Celebrities: A Comparative Analysis of Taiwanese and American Fashion Bloggers

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ABSTRACT

This study explores fashion bloggers' practices in establishing themselves as persona-fied brands and obtaining the celebrity status. Comparing between 20 U.S. and Taiwanese bloggers this research builds on social practice theory to examine how the fashionable amateurs perform micro-celebrity strategies under the influence of cultural institutional works.

INTRODUCTION

The development of social media has changed the landscape of branding and the dialogue about consumption. Some key consumers in the field, such as fashion bloggers, have attracted significant attention as they play an increasingly important role in shaping the fashion industry (Mora and Rocamora 2015). Prior research has studied how they obtain social capitals (McQuarrie, Miller, and Phillips 2013), negotiate with the fashion industry (Pedroni 2015), create and redefine markets (Dolbec and Fischer 2015; Scaraboto and Fischer 2013), and influence consumers through creating eWOM (Kulmala, Mesiranta, and Tuominen 2013). Though these studies highlight the significance of fashion bloggers, none of them investigate such an influence under different cultural and institutional context. As fashion is a cultural-specific social construct, it is critical to investigate the differences in practices among bloggers of various cultural backgrounds.

Fashion bloggers are important because of their micro-celebrity status and their influence on their followers. In the course of becoming celebrities, they often go through the practices of establishing themselves as persona-fied brands where they carefully articulate their personas with an artistic sense of fashion and taste. To exercise their practices, they have to negotiate with the institutional boundaries, which they helped establish, and are constrained by. Prior study suggests that personification of a brand involves associating human characteristics with brandable qualities within the person (Dion and Arnould, 2015). For bloggers to brand themselves through a persona consists of negotiating the presented self between themselves and the followers, as well as the fashion institutional works by and large. In this study, I propose to examine the practices of bloggers in negotiating their roles toward branded persons from the standpoint of practice theory and institutional works to understand how such practices are developed and formed in two different cultures. Specifically, the study analyzed 10 American and 10 Taiwanese bloggers as an indicative contrast between the East and the West. Among the long list of cultural values, the divergence of high-low context, individualism-collectivism and power distance may be most prominent to distinguish the practices of the two. The study seeks to understand the making of micro-celebrities in such different cultural contexts.

LITERATURE REVIEW

Institution and Practices Theory

The possibility of connecting with others who share similar interests is one of the most valuable outcomes of the development of social media. In the past decades, the market has been witnessing a growing number of individuals who present themselves online and have become "celebrities" that offer many of the features of brands. Persona-fied brands, i.e., branded persons through persona, have become particularly significant in the field of fashion industry. Part of this process is to carefully cultivate their self-presentation to deliver a

desired impression on others (Vohs, Baumeister, and Ciarocco 2005). Prior study on digital self-presentation suggests that individuals tend to exercise favorable self in response to the audiences' preference of self-concept, personality styles and social roles (Jensen and Gilly 2003; Schlenker 2003).

The fashion industry, which has long been Western-centric, has embraced the bloggers in recent years (Pham 2013). It is going through some level of institutionalization of certain key features to include them (Findlay 2015). Bloggers help to establish and redefine boundaries of the institutional works at the market-level in the fashion industry even by their micro-level practices (Dolbec and Fischer 2015). However, these institutional works as such are different in the East and are still largely under development (Pham 2013). Institutional works that constitutes routine practices, norms, and rules that serve to guide and constrain the behaviors of individuals in the fashion industry are somewhat different across the countries. The transactional and social roles of fashion bloggers and their practices can be a reflection of the larger institutional works, but can also be their own practices that they are trying to establish in the institutions.

The differences in cultural values between the East and the West have been well documented in the consumer research literature. Heavily influenced by Legalism, Confucianism and Taoism, people from Eastern cultures, Taiwanese for example, mostly hold incremental beliefs that subscribe to self-cultivation, authorities and the harmony of groups. This is distinct from Western cultures, US for example, where emphasis is on individual uniqueness and people hold an entity belief that talents and values are static (Rattan et al., 2012). Paradigms, such as high and low context, individualism-collectivism and power distance have all been motivated to explain the difference in communication style, identity construction, relationship establishment, and the role of power in the society (Shavitt et al., 2006). It is unclear how individuals negotiate their practices under different institutions. The fashion industry sets an appropriate context for its steady development in online consumption (Salonen, Närvänen, and Saarijärvi 2014) and its developing institutional works in two different cultures.

To focus on the practices within the institution, the practice-theoretical view is adopted. Practice theory defines practices as routine ways of doing things, relating to objects and others, and describing and interpreting the world (Shove and Pantzar 2005). Consumer researchers have focused on many of these practices (Schau, Muniz and Arnould 2009). Recent research on institutional work has highlighted that certain types of practices that are common to individual actors contribute to building institutions, whether intentional or not (Lawrence and Suddaby 2009). Practices include establishing share understandings, procedures and engagements (Schau et al., 2009). In this paper, the framework of practice theory is applied to analyze how individual bloggers negotiate their ways to become branded persons.

Personified Brands and Micro-Celebrities

There are some existing practices in establishing online personas that have been previously studied. Exploring the characteristics of chef-persona, Dion and Arnould (2015) identified the two main practices in managing branded persons. They suggest that there are two facets embedded in persona-fied brands, alchemists and artists. Alchemists embodied the skills and know-how of the industry, whereas artists embraced the artistic sensibility. Brands can be man-

aged depending on the disjunction or conjunction of the different facets. When the two facets are unified, a single person would be the full embodiment of the whole personas. One can argue that as brands develop and grow over time, there will be a need to disconnect the facets and allow different persons to work on the brands as a team. In other words, the capability of distinguishing between different facets could be critical to whether or not a blogger can evolve into a “real” brand. In the same vein, I propose that one of the key practices of fashion bloggers would be dealing with the two facets of persona, creation and execution.

Moreover, establishing intimacy is important in the context of social media, where celebrities can create a sense of closeness with the followers through various practices, including sharing carefully selected personal information (Marwick 2011). Prior research distinguishes bloggers’ self-presentation based on authenticity and credibility. Based on the chosen self-image that is to be portraits online, bloggers carefully articulate how much they would want to reveal their true and/or exaggerated selves and how much commercial and branded exercises should be revealed (Kretz 2013). However, too much personal information whether it is real or fictitious may result in losing mystique as becoming celebrities is a “hierarchical and exclusive phenomenon” (Turner 2006). Prior literature on online personal branding suggests that individuals may try to strike a balance between the front stage, i.e., public personas, and the backstage, private personas (Marshall 2010). The strategic self-disclosure is part of the micro-celebrity practices, which also include thinking of followers as a fan base and thinking of oneself as a brand (Marwick 2013).

Just as having persona-fied brands, establishing micro-celebrity is also a performative practice that can be exercised on a continuum. Other than the values that have been discussed earlier, in the Western context where the concept of personal branding is institutionalized and micro-celebrities abound, fashion bloggers may exercise standard practices where they carefully cultivate their public private-self and manage the interactions with the followers with more care. The legitimacy of the actors’ roles would have already been established as such. Legitimacy, in intuition theory literature, can be defined as ‘a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions’ (Suchman 1995, 574). Just as prior work has identified the plus-sized consumers as having less legitimacy than other categories of consumers in the fashion industry (Scaraboto and Fischer 2013), the legitimacy of the bloggers role may be harder to establish in certain institutions. Bloggers from the country where such a micro-celebrity institution is still in its infancy may be more inclined to be personal and true to their intimate self as the hierarchical structure has yet been established.

METHODOLOGY

To analyze and compare the key practices of successful fashion blogs in different cultures, an applied form of netnography was conducted (Kozinets et al. 2010). The method has been developed to study consumer behaviours online, focusing on the observation of textual discourses (Kozinets 2002). It has also been suggested to be a compatible approach used in conjunction with a practice theoretical framework (Rokka 2010). Focusing on the best practices in the field, 10 most popular fashion blogs from U.S., including Fashion Toast, Fashion Squad, Cupcakes and Cashmere, Sea of Shoes, Song of Style, Karla’s Closet, Atlantic-Pacific, Sincerely Jules, VivaLuxury, and Wendy’s Lookbook, and 10 from Taiwan, including Benshee, oops!!! i am An, Jessica, MAKE UP BEAUTY, Fashion Blog by Kimlafayette, Hannah’s fashionlist, STELLA’S BLOG, MillyQ’s Blog, I ♥ 77, and Little Miss SHOPAHOLIC are included

in the sample. The popularity was evaluated based on the number of page views, the number of replies on blog posts, the number of clicks of links to other websites, and the amount of followers on any related social media site, such as Facebook, Twitter, and Instagram. The blogs are primarily female fashion blogs that discuss clothes, cosmetics, and relevant fashion industry topics and were launched between 2007 and 2011. All bloggers appear to have obtained economic and social capital through their practices, such as sponsored items and fashion shows’ invitations (McQuarrie et al. 2013), which is an indication of their legitimized roles in the fashion industry.

The verbal and visual texts visible in these blogs are analyzed, including both the blog posts and readers’ comments. I focus on analyzing the practices of persona-fied bloggers, personal brands and the process of negotiating their public and private self. The pictures, the writing style, the interactions with the followers, as well as the followers’ comments over time are also examined. Following a theoretical sampling process to maximize the opportunity to develop concepts and identity relationships between concepts (Corbin and Strauss 2014), the analysis built on continual comparisons between the data collected from different blogs.

ANALYSIS AND INTERPRETATION

It is an interactive process to redefine oneself from an amateur blogger and engage customers to a fashionable persona with celebrity characteristics who is well connected in the fashion industry. The results suggest that fashion blogging in two countries share similar norms and values to a certain extent but the practices to develop their personas and legitimize their role as recognized fashion bloggers vary between the countries.

Engaged Customers versus Branded Persona

Though all bloggers illustrate some forms of self-awareness in cultivating their “public private self”, bloggers from the two cultures display a distinct set of practices. U.S. bloggers in general are more conscious in communicating their aesthetics. With professionally shot pictures, mimicking what can be found in fashion magazines, these bloggers carefully cultivate the public persona with an emphasis on fashion sense: “*If there’s one piece of jewelry you should invest in this fall, it’s the statement earring. I’m wearing a pair of oversized hoops from Céline above, perfect for adding an edge to a simple outfit!*” (F.S. 06/10/2015) This post, titled “the statement earrings,” featuring two pictures, one with headshot and the other is a full body shot, and are credited to a professional photographer. U.S. bloggers appear to be aware that their styles are part of the persona and thus part of the personal brands. In order to establish themselves as a legitimate celebrity one day, they need to start distinguish between the artists’ and the alchemists’ roles. They see themselves as the brands that attract the fans.

In contrast, Taiwanese bloggers emphasize far more on the private self in their cultivated personas. On a similar topic about earrings, a blogger posted 10 pictures, which she took from her home studio and with both the products themselves, and the self-portrait pictures from various different angles. She also included a lengthy description with personal stories starting from her breakfast: “*Have any of you tried macha with lemon juices? They taste really nice! I’ve told you that I’ve been crazy about lemon juices lately. I drink it everyday until this morning I thought it’s just too much and dug out my macha powder...*” (b. 21/06/2015). Taiwanese bloggers never really restricted their fashion blog posts to styling only. These bloggers separate themselves from the “real” commercial brands and see themselves merely as vehicles or endorser for them. They are engaged customers who have a good sense of fashion and happen to

enjoy sharing. Unlike U.S. bloggers who see the potential of separating the art from the artwork, Taiwanese bloggers are the artists that piece everything together.

The examples can be seen as a mere exercise of difference in communication style. Taiwanese bloggers, being in a high-context society, realize the need to provide excessive external cues to help the readers understand the contents, whereas U.S. bloggers, being in a low-context society, tend to present straightforward and simple messages. However, they may also signify the influence of different belief systems. Taiwanese culture subscribe to the incremental belief that roles of bloggers may be to guide and help the readers to change, learn and become a better self. The authority of bloggers is established through providing detailed account on how to become like them by including non-fashion related information. Conversely, the American bloggers are more of brands whereby like-minded people gather and share similar interests. Readers are not following the bloggers to self-cultivate but to seek inspiration to construct their identity.

Publicize the Private versus Privatize the Public

The differences in defining personal brands can also be signified by the displays of private and public personas. U.S. bloggers tend not to write anything personal. If there is personal information or private matters, they are often shared only after a professional persona has been established. The private information is there to add some personal touch to carefully cultivate the human aspects of the brands: *"My mom rented a beach house for the holidays so we spent Christmas right near the ocean with all my cousins, aunts, and uncles. Took a few photos so I thought I'd share them with you."* (W. 29/12/2014) Taiwanese bloggers, on the other hand, do not make such a distinction. The blogs often started from a site that shares personal information and only has slowly grown into the status where they hold social capital in fashion and can be seen as opinion leaders. Their personas are the image of girls next door that they proactively reject the celebrity status and insist on being merely commoners.

This becomes even more obvious when comparing the strategic self-disclosure and interactions with the followers by the bloggers from the two countries. U.S. bloggers generally do not engage in conversations with the followers on their blog posts. Most of the comments on the blogs are either spams or affectionate comments from the followers, which bloggers rarely reply. If there is a need to address the audience, the forms of dialogues and interactions often appear to be more public and in the forms of broadcasting, similar to that of celebrities: *"Many of you have asked and many have noticed that I haven't mentioned [code for boyfriend] in a long time."* (W. 27/02/2015) Conversely, Taiwanese bloggers interact frequently with the followers. Most of the observed bloggers reply every single comment on their blogs with either private or public messages and answer the questions in detail. The readers often feel so comfortable with the bloggers and may interact with them as friends. Once a blogger shared with the readers that she is going for a trip to Japan, many made similar comments: *"Would you be able to buy [a branded product that has been previously mentioned by the blogger] for me? I can transfer you the money."* (Q. 05/05/2015) This highlights the distinction between two cultures in terms of how the power can be established. There seem to be a paradoxical "leadership" exhibited by Taiwanese bloggers as they try to maintain both distance and closeness by combining self-centeredness with other-centeredness. Although all bloggers' posts are narcissistic by nature, and the ones from Taiwanese bloggers are perhaps even more so as they tend to include an excessive amount of selfies in their posts, Taiwanese

bloggers strive to be inclusive with their readers and deeply embed themselves in the network.

Bloggers Attain Institutional Roles

These practices then contribute to the development of institutions (or lack thereof) of fashion communities. U.S. bloggers treat their followers as fans and organize their communities as brand communities. The communities are places for fans to share each other's passion in fashion and affections in the bloggers themselves and to interact with one another. This type of brand community often does not require the presence of the bloggers themselves, i.e., the brand, because the brands in this context represent a symbolic value. The readers often comment on each other and help answer each other's questions. In terms of the bloggers' roles in the fashion industry, it is apparent that U.S. bloggers have been considered as real celebrities who have legitimate followings.

On the other hand, Taiwanese bloggers are part of the fashion communities; they are the leaders but are also the moderators. They are the star participants and often treated as the most knowledgeable and senior members of the communities by their readers. The communities are not formed around the personas but around the love for fashion, where bloggers are merely the most well regarded members. Most people when they show affections, they would comment on the appearance or the personalities of the bloggers rather than their fashion sense. The roles of bloggers in the fashion industry in Taiwan are closer to that of endorsers or spokespersons where they proactively explain and promote the items with detailed descriptions. These bloggers are opinion leaders by sharing their personal experiences on using the items.

CONCLUSION

The aim of this study was to explore the core mechanisms of how bloggers attain their roles through their micro-celebrities activities and how the practices differ between two cultural institutions. The result shows that practices in response to distinct cultural institution are important factors to consider in understanding the formation of persona-fied brands. Fashion bloggers and blogs have been extensively studied in the past where their significance in the articulation of the fashion industry and the culture has been proven (Mora and Rocamora 2015). However, most of the studies have been western-centric (Pham 2011); our study highlights that Eastern values, i.e., Taiwanese in our example, can detect a different process of practices formulation in how fashionable and stylish personas are supported and created.

It appears that the usual assumption of distinction between the 'frontpage' (i.e., the public persona) and 'backstage' (i.e., the private persona) does not always apply in persona-fied brands. It is true that one can never truly understand the authentic 'real' self as the promoted 'public private self' is always staged and well articulated (Marshall 2010). However, when the external institutions have yet been established, the practices of such a distinction may prove to be challenging. In the case of our study, fashion bloggers in the Western fashion industry have been recognized as real forces in shaping and guiding fashion (McQuarrie et al. 2013). In the context where practices of micro-celebrities have been legitimized, the bloggers can present their personas with branded persons in mind and only carefully reveal the private self for improving authenticity (Marwick 2011).

In contrast, these practices of micro-celebrities are still under development in Taiwan where only those who have well-established expertise in societal functions can become celebrities. Celebrities are those with 'real' skills and knowledge in certain fields. Senses of

Table 1: Results Summary Table

Practices		Country	Data Instances
Actors	Branded Personas	U.S.	"If there's one piece of jewelry you should invest in this fall, it's the statement earring. I'm wearing a pair of oversized hoops from Céline above, perfect for adding an edge to a simple outfit!"
	Engaged Customers	Taiwan	"Have any of you tried macha with lemon juices? They taste really nice! I've told you that I've been crazy about lemon juices lately. I drink it everyday until this morning I thought it's just too much and dug out my macha powder..."
Presented Self	Privatize the public	U.S.	"Many of you have asked and many have noticed that I haven't mentioned [code for boyfriend] in a long time."
	Publicize the private	Taiwan	Would you be able to buy [a branded product that has been previously mentioned by the blogger] for me? I can transfer you the money."
Institutional Roles	Sponsored influencers	U.S.	"Rocking all shades of blue because Spring is just around the corner and LA is having those gorgeous blue sky days! I love [brand name]'s new collection because it evokes everything I'm currently craving: ocean, freshness, crisp white shirts and denim everything- yes, everything, even pumps!...Thank you [brand name] for sponsoring this post. Styling, writing, and photography is all my own."
	Endorsing opinion leaders	Taiwan	"Let's talk about my recent favorite [brand name]! They have such a wide spectrum of styles that suits individual taste. Let's have a look at their website together. I really like the pictures they took....This article is a collaboration with [brand name]."

fashion and style are regarded as good taste but not a real profession of its own. Under these circumstances that institutions of fashion is still a work in progress, the practices of persona-fied brands based on good taste is more challenging as the bloggers will have to contribute to shaping the larger institutional works while attempting to claim their own power.

Our final key finding is that the communities around fashion bloggers in the two cultural institutions are bounded by the practices that they have created. The shift between public and private is continuously (re-)defined through interactions between bloggers, their readers and the overall institutions. This interactive process is inherent in all practices of persona-fied exercises. The results are limited by the specific blogs and context chosen. While fashion bloggers provide a rich and relevant narrative in which to study social practices and cultural institutions, this research should be extended to other context as well as longitudinal studies to explore how the practices can continuously shape the institutions and how the institutions would change the practices in return.

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From “Moving Consumption” to “Spacing Consumption:” In Search of Consumption Geographies

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ABSTRACT

Based on an ethnographic study of a multi-sited festival this analysis highlights the spatial aspect of mobile consumption. By operationalizing the new mobilities paradigm via a non-representational approach this paper elaborates the concept of spacing consumption as the process whereby practices of consumption emerge as embodied performative and political.

INTRODUCTION

Over the last decade, human sciences have been trying to capture the supposedly increased mobility of society as a result of the flows and movements of people, objects, things, and ideas (Sheller and Urry 2004, 2006). Consumer research studies have been receptive toward this view of the world by producing several conceptual and empirical investigations that emphasize “mobile consumption issues in their worldwide and historical context” (Brembeck, Cochoy, and Moisander 2014, 1).

Consistent with the approach that Brembeck, Cochoy and Moisander (2014) refer to as “moving consumption,” consumer research scholars have analyzed the “embodied sensibilities” of consumers dealing with “mobile-things” (Hansson 2014) and the importance of time and temporality in unpacking the mobile aspects of consumption (Figueredo and Uncles 2014; Dholakia, Reyes, and Bonoff 2014). This present paper aims to produce a further step in the investigation of the mobile nature of consumption phenomena by offering the theoretical concept of “spacing consumption.” This concept captures the mobility of consumption activities in their relationship with their local context by better appreciating the inherent spatial dimension of consumption mobilities. In this effort, the paper resonates with recent work that emphasizes the role of space and place in consumption (Chatzidakis, Maclaran, and Bradshaw 2012; Chronis 2008; Chronis, Arnould, and Hampton 2012; Debenedetti, Oppewal, and Arsel 2014).

To fulfill its aim, this paper identifies non-representational modes of inquiry as an appropriate way to operationalize the new mobilities paradigm in the context of consumer research. In line with recent attempts within the marketing literature to appreciate aspects of consumption activities that are more than representational (Canniford and Bajde 2016; Hill, Canniford, and Mol 2014;), mobilities are seen here as the liaison between consumers and the space produced by them.

CONCEPTUAL FRAMEWORK

The theoretical framework for this paper explores the borders between mobilities and non-representational perspectives. An increasing number of studies in consumer culture theory have endorsed different types of relational ontologies (Canniford and Bajde 2016). The new mobilities paradigm (Sheller and Urry 2004, 2006) represents an approach that is underpinned by a relational ontology as it promotes an understanding of society and the lived experiences of people (and consumers) not as fixed and given but as constantly played out from the relationships between their movements and trajectories. Furthermore, the new mobilities paradigm highlights the significance of materiality, bodily experiences, and emotions in determining how people are connected to their environment and how they make sense of it.

The ideas of mobility and on-the-move consumers have been “trickling down” into consumer research in different fashions. Some studies have endorsed this view by relying on Baumann’s (2000) perspective of liquidity and immateriality as a way to analyze “mobile” travelers negotiating identities via food consumption (Bardhi, Ostberg, and Bengtsson 2010), or some studies see it as a way to understand possessions with regard to global nomads (Bardhi, Eckhardt, and Arnould 2012). Other studies, instead, have embraced the spirit of the new mobilities paradigm theoretically and methodologically. For example, Hansson (2014) illustrates consumers’ experiences of bringing items home from the store, highlighting the value of their “embodied sensibilities” during their trajectories in urban space. Figueredo and Uncles (2014), through their inquiry into temporal management and structuration of consumption, offer a conceptualization of the temporal dimension of consumption mobilities. Similarly, the temporality of consumption experience is illustrated through the lens of mobility in Dholakia, Reyes and Bonoff’s (2014) analysis of the mobile media permeating the contemporary consumption landscape.

The present study extends this debate and appreciates the spatial character of consumption mobilities by identifying three different “modes” through which mobile consumption practices are articulated. These modes stress the aspects of embodiment, performativity, and political dispositions of consumers. Here, performativity refers to the expressive enactment of consumption practices whereby consumers articulate a *mise-en-scène* of bodily movements as a means of engaging in a communicative relationship with other consumers and the environment. Political dispositions, instead, understood in terms of affects through the ideas proposed by Spinozian philosophy, refers to experiential bodily states, or rather the deeply rooted emotional forces that drive the actions of consumers’ bodies and can eventually become a tool to express social differences.

Situated at the core of the new mobilities paradigm is the idea that contemporary society is “in play,” engineered through the movements of people and things that travel across space. Spatiality is indeed implicit in the very concept of mobility. A stimulating angle that combines focuses on both mobility and spatiality can be found by drawing from non-representational theories (Cadman 2009; Lorimer 2005; Nash 2000; Thrift 2000), which have recently been introduced in marketing theory (Hill et al., 2014) to highlight the emotional consumption geographies stretching beyond the realm of sight and visibility (Henshaw et al. 2015). Non-representational theories can be used in this respect in order to envision a research methodology that encourages spatial research practices (Vannini 2015, 4).

METHOD

In order to capture the spatial character of the mobilities implicit in consumption activities, this study identifies consumption practices as its unit of analysis. Following Beyes and Steyaert (2011, 47), this effort intends to complement the established attention to visual and verbal self-reported accounts of participants by gaining insights into the materiality and performativity of spatiality. In line with a non-representational approach to research (Vannini 2015), a “performative ethnography” (Cadman 2009, 6) has been carried out. This resonates with Hill and colleagues’ (2014, 14) call for ethnographers “to expand on research sites, contexts and samples by seeking out

novel ways to describe and track the distributed world of consumption.” Accordingly, the authors of this current study endorse such an approach by immersing themselves into an itinerant and multi-site festival called “Pink Night” (La Notte Rosa) held in 2011.

The Pink Night Festival occurs every first weekend of July in one of the most widely recognized mass-tourism areas in Italy, the Romagna Riviera. The event was conceived by the Department for Tourism of the Rimini Province in 2006 to re-launch tourism and sustain economic development. The festival has been conceived as a participatory celebration in which 110 kilometer coast of “the entire Riviera turns pink” (promotional brochure). The organizers point out that the festival was designed as a response to the traditional format of Light Night or nuit blanche events for which white is instead the main thematic color.

Because of such features, the Pink Night constitutes an appropriate site for analysis. In fact, according to a mobile understanding of space, the festival can be recognized as a way through which the Romagna Riviera is set up “in play” through different activities going through different localities and temporalities. Indeed, the event involves 12 municipalities along the coast with the attractions occurring either simultaneously or at different times along the whole coastal area. In particular, concerts, live performances, fireworks, and other minor happenings are designed by both local administrative bodies and private contributors (for example, shop owners and

hoteliers) with the aim of generating economic turnover around a multi-site experience of thematic consumption. Participants are encouraged to dress themselves in pink clothes and display a variety of pink accessories. The theme of the Festival encourages retailers to propose on the shelves a wide range of pink items and service providers to offer experiences playing around the main color of the celebration. As a result, pink street furniture, special menus at restaurants, lighting games, fireworks, decorated shop windows create an engaging atmosphere.

Data collection started with a preliminary text analysis of official documents as well as selected interviews held with key organizers which allowed the authors to collect background information and become acquainted with the staging of the festival. Subsequently, an intensive investigation of the festival resulted in a four day, around the clock full immersion of the researchers in the event, during which time they closely interacted with the environment and consumers, paying specific attention to how consumers enacted during the Festival across space. Not only were the researchers engaged in observing the bodily movements of the participants, but they themselves were similarly involved in movements, shifting from one location to another in order to capture the spatial practices of consumption within shopping areas and public spaces. This resonates with the spirit of mobility in methodology (Hein, Evans, and Jones 2008) which advocates methods such as observing transfer points, walking while

Table 1

Theme	Embodiment and Corporeality		
Sub-themes	experiencing through multiple senses	adorning the body	consuming together (physical proximity)
Snippets from the data	eating “pink meals” and “pink piadina”; listening to (and following by bike) the “DJ Baba mobile music station”	body painting; purchasing and exchanging wigs and jewellery items	lining up at bars; pub crawling on bicycles; sweating and smelling; men chatting up women and offering drinks; welcoming tourists
Theme	Performativity		
Sub-themes	playing and making believe	making see	being seen
Snippets from the data	dressing up and teasing during bachelor and bachelorette party trips; engaging in ludic and exuberant activities; cheating ticket inspectors and getting free riding on trains; shopping to compete for creating the most shocking pink outfits	showing off pink outfits; checking-in on Foursquare; taking selfies and posting on social media websites; buying and fixing decorations to garnish private houses and shops	posing in front of cameras; adorn small pets with pink items; creating customized T-shirts that create team spirit and sense of belonging; being tagged on Facebook
Theme	Political and affection		
Sub-themes	avoiding	critiquing/contesting	creating boundaries
Snippets from the data	residents traveling “against the flow” and leaving the coastal areas; creating shortcuts to avoid crowded public spaces; creating shortcuts to find peaceful restaurants and attractions	making fun of participants who are not adequately attired; complaining about the decrease in attraction quality in relation to previous editions of the festival	enjoying the chic Pink Night at the Grand Hotel by drinking the special Pink Martini; being left out of the Grand Hotel gates by guards
Theme	Audiencing (traditional aspects of consumption within Festivals)		
Sub-themes	“gazing”	using public space	
Snippets from the data	watching firework shows; seeing gigs; taking pictures of funny people dressed in pink	parking bicycles; parking cars; organizational buyers occupying public land to implement below-the-line activities; neighborhood communities decorating public spaces	
Theme	Coordinating and planning		
Snippets from the data	carrying bikes on trains to travel from attraction to attraction more effectively; lining up on cars while arriving in the attraction areas; discussing alternative routes and plans for the night		

talking, and using time-space accounts to record movement. Mobile researchers followed consumers along their trajectories throughout the event by using cars and bicycles, but most often they traveled by foot.

The observation produced a series of field notes that were digitally recorded on site and then manually transcribed into about 20 pages and several pictures and videos. Further pictures were collected after the event online, via social media websites. Both transcripts and research-driven visual materials became object of a "thematic analysis" (Bryman 2008, 554) that helped create an index of central themes and sub-themes emerging from the data. This was chosen as an appropriate analytical method due to its flexibility, given the presence of heterogeneous types of data including both verbal transcripts describing practices and images illustrating practices.

While the verbal accounts produced by consumers at the festival were often central to understand the meanings guiding their consumption practices, the authors put efforts into capturing spatial and bodily aspects, offering detailed accounts of the movements and gestures of the consumers involved in the festival. In this respect, the present methodology incorporates the "internal design proxemics" construct (van Marrewijk and Broos 2012, 87) as a way to study the "spatial arrangements" and "sociomaterial performances" in consumption practices. Yet, by further considering movements and gestures, the present study integrates the prevalent representational modes of knowledge based on verbal and visual accounts that characterize established research procedures within consumer research (Hietanen, Rokka, and Schouten 2013).

DISCUSSION

Three of the main themes emerging from the analysis of the consumption practices captured during the Festival (see table 1) provide an opportunity to unpack the spatial aspect of the mobilities inherent in consumption activities. While more traditional aspects of consumption usually characterizing festivals are also identified in the analysis (i.e. "audiencing", "coordinating and planning"), the first three themes illustrated in table 1 are discussed to elaborate the concept of "spacing consumption" This concept of is a way to capture the generative movements that constitute consumption activities and simultaneously produce space through consumption practices (see figure 1). Through this conceptualization, consumption is viewed as a particular manner of dwelling and being rooted in space, highlighting the reciprocity between consumers' activities and the space where consumption "happens." In particular, the concept of spacing consumption understands the mobility of consumption practices as characterized by the three aspects which of "Embodiment and Corporeality", "Performativity" and "Political and Affection"(see table 1 and figure 1). These three aspects of practices capture three complementary aspect of the spatiality inherent in the consumption mobilities observed.

Spatial practices as embodied

During the Pink Night Festival, consumers construct their bodies as "space" literally through practices of ingestion such as drinking alcohol during the *pedalata alcolica* (a pub-crawl performed by cyclists) and through the work they do on their bodies by adorning it with pink accessories, thus contributing to the staging of a collective pink landscape in the streets and on the beach. It is through the idea of embodiment that the concept of spacing consumption allows us to better acknowledge aspects of movement that are not only or not at all cognitive and verbalized (Thrift 1997), as evident in the on-the-move consumption of alcoholic beverages and music performed by cyclists following the "DJ Baba mobile music station."

The aspect of embodiment thus understands consumption practices as activities that involve situated "flesh and blood" subjects whose lives unfold through reciprocal interactions with their environment (Thrift 1997). This is in line with accounts of non-representational aspects of consumption which recognize that precognitive corporal knowledge may transcend cognitive elaboration (Hill et al., 2014, 10). Acknowledgments of the significance of embodied experience in consumer research are certainly not unprecedented; for example, Joy and Sherry (2003) note the embodied aesthetic experience of consumers within art museums. Similarly, the significance of the embodied practices of a moving consumer has been highlighted by Hansson (2014) in his study of familial experiences of bringing items back home from the store. The concept of spacing consumption takes this perspective further by implying that consumption is a practical way by which people become involved in their world, create knowledge, and directly interact with their physical environment. This is in line with the argument of Goodman, Goodman and Redclift (2010, 6) who claim that "it is the very consumption of spaces and places by our (non)mobile bodies that gives us somewhere to live and make our lives, act from and be acted upon."

Spatial practices as performative

The pink-colored "flow of consumers," moving from one attraction to the other along the Romagna Riviera, exemplifies the performative character of spatial mobile practices. The moving bodies of pink-attired residents and tourists converge to form a co-constructed performance that shapes a picturesque pink geography along the main streets of the sea-resorts. The aspect of performativity refers to the expressive practices through which consumers engage in showings and presentations among one another and within their environments. This performative aspect (Thrift 2003) is strongly linked to the aspect of embodiment, as one of the principal ways whereby the bodies of consumers participate in consumption practices. This is in line with accounts of non-representational aspects of consumption which may be understood as assembled flows of presentation practices in space (Dirksmeier and Helbrecht 2008).

The theatrical metaphor of performance has often been referred to in consumer research (Chronis 2008; van Marrewijk and Broos 2012) as the idea that consumers perform on a given stage and in front of an audience. However, the concept of spacing consumption suggests a slightly different application of the performance metaphor that draws from the notion of performativity (Thrift and Dewsbury 2000). Consumption practices are not just choreographies enacted by performers on given stages of consumption (retail spaces or in shopping malls), but they might also be activities that contribute to the shape of those environments (e.g. public squares and beaches) and are therefore actively constitutive of them. The carnivalesque parade created by the flows of crowds moving from one attraction to the other between different municipalities and districts illustrates the performative characteristic of consumption. This picturesque flow of bodies becomes in itself an attraction that is able to encourage other consumers to purchase pink items and take an active role in the transformation of the landscape into a diffused experience of carnival.

Spatial practices as political

The aversion against the festival and the presence of tourists expressed by residents traveling "against the flow" and leaving the coastal areas is a spatial manifestation of consumption's political aspect. This is also exemplified by the contradictions observed between the corporeal disposition of consumers and the verbal discourses conveyed by them during the interaction with the researchers of this study. One of the informants, for example, criticized the event

while simultaneously expressing her commitment to it by actively participating in the pink carnivalesque parade.

The political aspect thus refers to the feelings and emotions characterizing consumption practices which result in manifestations of bodily movements and facial expressions. In line with non-representational accounts of consumption, affects can be seen as engines that engender consumers' mobilities that in turn produce change and keep consumption practices in motion (Hill et al., 2014, 11). This may be a promising avenue for consumer culture, as shown by the critical discussion of the affective body and the affective body image developed by Featherstone (2010). The affective character of the consumption practices emerging from the analysis of the Pink Night Festival provides empirical evidence for one of the most thought-provoking tenets of the new mobilities paradigm, namely the "recentering of the corporeal body as an affective vehicle through which we sense place and movement, and construct emotional geographies" (Sheller and Urry 2006, 216).

However, the analysis of this current study emphasizes that these emotional geographies are seldom neutral and rarely implicit in a flat space. In line with Thrift's conceptualization of the spatial politics of affect, consumers' practices appear to be embedded within a field of forces in which issues of control and resistance can emerge and be expressed in the way consumers move or do not move. This hints at the role played by affects in shaping people's political dispositions as highlighted by non-representational theorists (Cadman 2009, 6). The "bottleneck" observed at the entrance of the exclusive event held at the Grand Hotel in Rimini is an expression of mobilities and immobilities inherent in the consumer practices, with consumers being clustered through boundaries that they might not be able to cross.

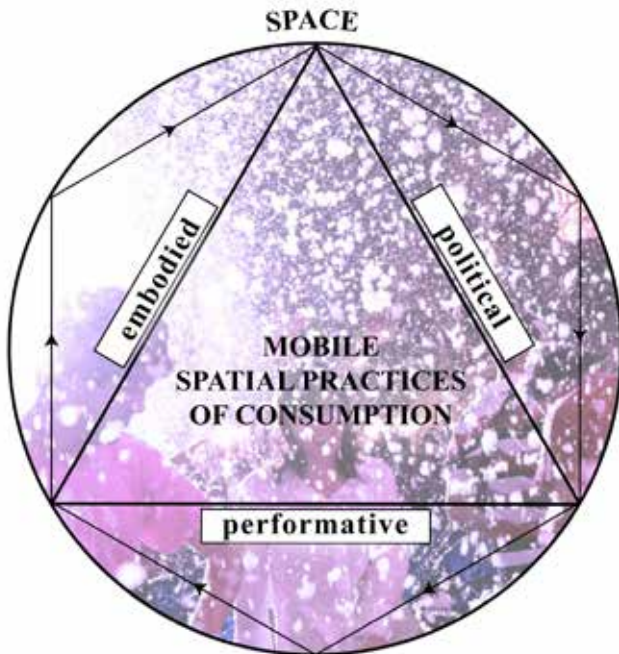


Figure 1: The concept of spacing consumption

CONCLUSIONS

This paper extends the existing literature that examines the role of mobilities in consumer research (Brembeck et al. 2014). This study highlights the spatiality that characterizes consumption mobilities through an account of consumption practices in a multi-site and participatory Italian festival. Following recent attempts to bring relational ontologies into marketing (Hill et al. 2014; Hietanen et al.

2013) and building upon the growing consumer research literature that explores the nexus between consumption and space (Chatzidakis et al. 2012; Chronis, 2008; Chronis et al. 2012; Debenedetti et al. 2014), the present paper argues that the idea of "moving consumption" is inherently spatial and therefore could be further conceptualized as spacing consumption, given the profound relationships between mobilities of products, consumers, and the spaces in which their trajectories are being played out.

Highlighting the spatial aspect of mobile consumption practices implies that the mundane practices of consumers cannot be easily separated from the spaces in which they occur. Consistently, this approach gives due recognition to the reciprocity between the mobility of consumption and the space both resulting and determining those mobilities. Consumption practices can thus be understood as happening in the form of a process of spacing that includes the performance of consumers via a multitude of spatial practices, occurring within a relational space that is in turn also affected by those spatial practices.

Consumption, conceptualized as an activity through which groups use interconnected systems of commercially produced images, texts, and objects to make collective sense of their environments (Arnould and Thompson 2005), could thus be understood as "one of the key relationalities actively constructing and changing spaces and places which in turn recursively affect consumption practices" (Goodman et al. 2010, 13). Accordingly, the construction of space and its consumption are closely intertwined and occur through the embodied and spatial practices of consumers. In fact, it may be suggested through the lenses of non-representational theories that consumption practices are not inherently stable nor are they separated from space, but rather they constitute a way of performing or transforming in the flows of everyday life.

This paper suggests that consumer research could look more closely at the consumption of space as a process that is associated with the construction of space and is based on consumers' activities. In other words, this implies an empirical effort "to detected minutiae underpinning of various consumption contexts" (Hill et al. 2014, 14) – meaning the mobile spatial practices identified in the present study – and "to connect these minutiae to larger scale events" – meaning how multi-site and itinerant festivals contribute to create and change "themed spaces" (Firat, Pettigrew, and Belk 2011) that go beyond the confined forms of theme parks or shopping malls, so as to embrace a whole region and its municipalities.

Echoing the words of Mansvelt (2005), the concept of spacing consumption can be defined as the process through which the mobile practices of consumption emerge as geographies of embodiment, performance, and power. Such an understanding does not restrict consumption to particular consumption sites and spaces, to the end of a commodity chain, to a circuit of culture, nor to practices of self-identification [...]. Rather, various modes of knowledge about consumption can be seen as performative of these things, circulating and being invested with power in situated contexts (Mansvelt 2005, 164).

The main limitation of this study lies in the transitory nature of the empirical phenomenon investigated. Even if the Pink Night Festival well represents the genius loci of a territory, its historical entrepreneurial orientation, and its attitude to adopt synergic event-marketing strategies, the consumption practices studied specifically refer to these particular circumstances. Other multi-site and itinerant festivals should be investigated in different locations, and also different forms of mobile consumption should be taken into consideration other than the forms allowed by the ephemeral character of festivals. Questions about the relevance of aspects such as embodiment should also be addressed by future studies by recognizing the differ-

ent manifestations of materiality and corporeality that characterizes consumption practices that occur in online and virtual contexts.

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A Semiotic Ethnographic Inquiry into the Existential Effects of Chronic Pain on Consumer Behavior

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ABSTRACT

Chronic pain poses unique challenges for consumer research. Methods such as direct questioning and phenomenology fall short because, in the first instance, pain is so subjective as to elude verbalization. In the second instance, the individual encounter of researcher and subject does not provide enough context to produce generalizable conclusions about the population or the condition as a whole. By means of theory development and case analysis, the present paper illustrates how semiotic ethnography led to deep insights about the existential effects of chronic pain on consumers by decoding the non-verbal discourses consumers project into images, rituals, and the organization of domestic space. By comparing and contrasting consumers at various stages of their pain journey, the study also led to generalizable insights about the chronology of pain's effects on consumer experiences over time. The study contributes new methods to the medical research paradigm and also suggests direction for further research into the nature and treatment of chronic pain.

SEMIOTIC ETHNOGRAPHY

Semiotics-based ethnography draws from the dual legacies of Saussure's structural linguistics and the structural tradition in French sociology leading from Durkheim (1997 [1893]), and Mauss (2000 [1925]) to Lévi-Strauss (1974 [1963]) and Bourdieu (1998 [1994]). By drawing attention to the role of social codes in the production of meaning, Saussure (2000 [1916]) found that meaning is a social construction, "produced by someone for someone," not a product of nature. Emphasizing parallels between structural linguistics and culture, Lévi-Strauss eschewed the idea of culture as a transcendent, natural order. He interpreted the field site as a text structured by a paradigmatic system of interconnected binary codes. Binary codes structure the shared, normative, and iterable aspects of culture and account for the dialectical nature of cultural categories such as gender (male/female), power (dominant/dominated), or morality (good/evil). Although Bourdieu criticized structuralism for its overemphasis on universal laws, he nonetheless acknowledged the influence of Lévi-Strauss when he compared the cultural system or *habitus* to a kind of "language" (op. cit. p. 8).

Semiotic ethnography grew out of the debates of American anthropologists such as Sahlins (2004 [1965]), Geertz (1973), and Herzfeld (1983a, b) with structural anthropology in the 1970s and 80s. Though they agreed that, "at least certain aspects of behavior are coded (Joseph 1983, 211)," they underscored the contingent nature of cultural codes in relation to the messy vicissitudes of daily life. It is the semiotic ethnographer's task to reflect upon the emergence and decline of cultural codes over time and expose tensions and contradictions between multiple code systems at play in the site, as between consumers' statements and their ritual behaviors, social interactions, and possessions. Thus the ethnographic disposition is not simply a text, but a kind of performance that stages the intersection of codes, context, and inter-subjectivity in the active production of cultural meaning (Winner 1983). It also puts into play a dialectical relationship between theory and practice, leading Herzfeld (1983a, p. 100) to define semiotic ethnography as the "the pragmatic embodiment of theory." Theory links observable events to their implications for culture as a whole, while the field practice itself exposes ambiguous and even contradictory aspects of the field site which challenge theory. For example, though code theory provides the basis for analyzing

culture, humans rarely conform rigidly to these codes in day to day performance. In this sense, semiotic ethnography describes a practice and an epistemological terrain that grounds the Consumer Culture Theory paradigm in consumer research (Arnould and Thompson 2005).

RESEARCH DESIGN

Twenty-four two-hour ethnographic interviews and observations were conducted across three U.S. markets in the homes of men and women ranging in age from 25 to 65. Respondents were recruited randomly from local telephone directories. The screener specified respondents that had lived with chronic pain for one to ten years and were seeking alternative treatments to the over-the-counter products and prescription drugs they were currently using.

We employed a mixed methodology to account for the effects of chronic pain on the semiotic, psychological, and existential dimensions of consumer behavior. The protocol was ladderized to move from demographic and lifestyle factors to personality and emotion. It included a projective task designed to elicit symbolic associations between respondents' pain experiences and the symbolism depicted in set of abstract paintings. Research included a semiotic analysis of the layout, traffic flow, and the disposition of goods and pharmaceuticals in the home.

CONSUMER LIFESTYLES AND VALUES

Historical advertising for pain relief meds, including pharmaceuticals and OTC drugs, reflect the general emphasis of the medical profession on the physical side of chronic pain. Pain is a radiating red spot on the back or joints, causing patients to grimace and limit their movements. In contrast, findings from the current ethnography shed light on the effects of chronic pain on consumers' spiritual lives, what Jung (1960 [1916]) defines as the ability to transcend the moods and minutiae of everyday life and expand their existential connection to the wider world. Regardless of the length of time that they had lived with chronic pain, all respondents had sought purpose and meaning in their lives through volunteering, expressing themselves through arts and crafts, building additions to their homes, and generally making big plans for the future. The onset of chronic pain disrupted their plans. Their unfinished projects were often visible in the home or yard, sad reminders of the havoc that pain had wreaked on their plans.

Furthermore, respondents seemed more concerned about the effects of prescription pain medication on their cognition and sense of self than about the physical limitations that pain imposed on their lifestyles. Many of them feared becoming addicted if they took prescription drugs because alcoholism either "ran in their families" or they were recovering from addictions themselves. They typically took excessive dosages of over-the-counter medications such as Ibuprofen instead, and were surprised to learn that exceeding the normal dosage of Ibuprofen had potentially lethal effects on their kidneys.

Respondents were very resourceful, developing stratagems to perform daily tasks in spite of their disability. They scooted about the house on stools installed with wheels, they kept two sets of cleaning products, one upstairs and one downstairs, they used "grabber" tools for fetching objects from high shelves, or moved personal items, from medications to foods, to a central location in the family room to avoid walking. They dreaded depending upon family and friends. As

respondents lived with pain over longer periods of time, many still held out hope that they would overcome the pain over time. Still others succumbed to depression and listlessness and centered their days on the next dosage of medication.

THE SEMIOTICS OF PAIN

The image sort exercise prompted respondents to associate pain with the visual elements in a set of Abstract Expressionist paintings, including works by Appel, O’Keefe, Picasso, Mondrian, Kandinsky, Pollack, and Delaney, which focus on the emotional dimensions of visual form rather than specific characters and stories. Respondents picked the top five of the images that best represented pain, on the one hand, and pain relief on the other. Among the five, they consistently ranked at the top two images for pain, including Appel’s *Angry Landscape* (1967) and Delaney’s *Untitled* (1954) and two images for pain relief - Georgia O’Keefe’s *Music Pink and Blue, II*, (1918) and Mark Rothko’s *White Center (Yellow, Pink and Lavender on Rose)* (1950) [Figure 1]. Results from the picture sort exercise suggest that the existential effects of pain on consumers far outweigh its physical effects.



Figure 1: The Semiotics of Pain

Respondents associated the disorderly, rough forms in *Angry Landscape* with the chaotic, unpredictable, moving, and capricious nature of pain. Only secondarily did they speak of the physical sensation of heat communicated by the color red and the sharp, jabbing experience of pain on the body, as represented by the color yellow and the jagged lines. Respondents compared the black in the background to the effects of pain on the mind as deadening, depressing, and dark. They also identified the menacing, face-like forms top left and right of the image with inner demons that hound them day and night. Black outlines set the faces apart from the surrounding swirl of colors and outline eyes and teeth that threaten the viewer. Respondents identified the color blue with the self, which is being reduced and overrun by the colors they associate with negative experiences. As one respondent put it, “Blue is me being blocked by pain.”

Respondents also most frequently associated pain with *Untitled* (1954) by the American artist Beaufort Delaney. Though splashes of red, yellow, and green are toned down by touches of blue and the

white background, the overall design is dominated by the chaotic, swirling movement of brush strokes on the canvas. In reaction to this picture, respondents again emphasized the effects of pain on the self rather than the body. Pain causes mental confusion, loss of control, and disorder. It covers up the “blue,” i.e. the self, as the lines in this picture cover up the blue color, rendering it a shadow of its former being.

From one interview to the next, most respondents associated the same symbols with their various sensory and emotional experiences of pain. Over the course of 24 interviews, the repetition of these kinds of associations gave rise to a kind of “pain lexicon” that consumers used to verbalize their experiences of pain [Table 1]. They gradually replaced vague dictionary terms for pain, such as heat and intensity, with symbols from the pain lexicon, such as colors and forms. They would say, for example, that pain relief expands the color blue (the self) and lightens the color red (intensity).

Table 1: The Pain Lexicon

Signifier	Experience	Category
Red	Intensity	Senses
Yellow	Heat	Senses
Black	Brain-numbing Depression Stasis	Mental outlook Emotion, Mood state Life projects
Blue	The Self	Identity
Jagged lines	Stabbing Threat Mess	Senses Emotion, Mood state Consumer behavior
Squiggly lines	Chaos Disorder	Mental outlook Lifestyle Life projects

THE SEMIOTICS OF PAIN RELIEF

Respondents reported that pain treatments mitigate but do not eliminate pain. In O’Keefe’s *Music Pink and Blue, II*, (1918) and Mark Rothko’s *White Center (Yellow, Pink and Lavender on Rose)* (1950) [Figure 2], pastel colors represent the cooling and softening effects of pain relief. In the O’Keefe, “The blue gets bigger,” suggesting that pain relief improves personal integrity and control. The mind-numbing effects of black and the warming effects of yellow are either absent or under control. The smooth, curvy lines soften pain’s intensity. The pastels in the Rothko painting cool the heat and intensity of the pain. The division of the canvas into two symmetrical halves communicates the sense of order, control, and purpose respondents associate with pain relief. The black line dividing the canvas across the middle reminded respondents that the effects of chronic pain were ever present even though medication may provide relief. By the end of each interview, respondents stopped using words like “relief” or “self” and used symbols from the pain lexicon instead. “The red softens to pink,” “The black goes away,” “The lines smooth out.”

The picture sort exercise gave rise to a shared consumer discourse about the effects of chronic pain on the body, mind, and lifestyles of consumers. Though none of the respondents ever met each other, and though they were recruited randomly from the phone book, there was a high degree of consensus about the meanings they associated with formal aspects of the images such as colors, lines, and shapes. These findings confirm that art is a useful tool for probing the emotional recesses of consumer experience, because a culture’s art forms a kind of universal language of the heart for

the social body. The artwork gave rise to a shared lexicon for both verbalizing ephemeral consumer experiences and finding common ground among a disparate group of patients suffering from the same condition.

Consumers' responses to the artwork also provided a key to understanding the semiotics of their lived environments, reflected in the effects of chronic pain on their ability to clean house, manage their possessions, and keep track of their medications.

THE DYSFUNCTIONAL SIGNSCAPE

The lived environment provides a rich signscape for decoding consumers' values, lives, and lifestyles. It serves as a counterpoint to consumer speech and provides access to consumer experiences that transcend language. It is organized to some extent by cultural codes related to the organization of goods, furnishings and people in domestic space. Social norms such as "cleanliness is next to godliness" define cultural expectations about keeping house and organizing possessions in drawers, cabinets and closets. They structure domestic space along the lines of binaries such as |sacred/profane| and |public/private| domains. Though individuals deploy these codes according to their personal tastes and lifestyles, cultural norms account for the fairly consistent organization of space, possessions, and traffic flow within the home in a given market.

The homes of chronic pain sufferers reflect the gradual breakdown of these cultural norms as the pain persists, creating chaos in their inner and outer lives. The most obvious sign of this decline is hoarding. In the early stages of their disability, pain patients manage the chaos by hiding the mess, beginning with a single closet and expanding into a spare bedroom. Over time, discarded clothing, furnishings, newspapers, dirty dishes, and refuse gradually extend from these enclosures into every area of the home, interfering with basic household functions such as eating and sleeping. They clutter hallways and bedrooms and crowd the living room, leaving very little room to sit down or get into bed. Even the kitchen is piled high with dirty dishes, pans, and garbage. [Figure 2]



Figure 2: The Semiotics of Pain in the Lived Environment

In the homes of long-term pain sufferers, hoarded goods seemed to possess consumers rather than the other way around. They blocked entry to the front door and disrupted consumers' movements within the home. The research team had to remove the mess from chairs and sofas to clear space to sit down. Even bedrooms and beds were piled high with discarded clothing and papers, leaving a narrow space for sleeping. Furthermore, as their homes submitted to the chaos, respondents increasingly dissociated themselves from their surroundings. Respondents dodged piles of hoarded goods as they went about their affairs, as if numbed into a state of denial about the severity of their dysfunction.

Chronic pain sufferers also collapse the boundaries that traditionally set off the sacred space of the medicine cabinet from profane, public areas of the home. The medicine cabinet represents a social and psychological boundary between the use and abuse of

pain medications. As chronic pain encroaches on consumers' lives, they gradually move their medications to the profane, public spaces of the home. They may begin by storing drugs behind kitchen cabinets, but eventually move them to kitchen counters and coffee tables, or hang them in special bags from family room chairs, embedding their medications in daily life. The spatial trajectory from medicine cabinet to public space symbolizes the consumers' growing dependency on pain medications. They double and triple the recommended dosage for over-the-counter pain remedies and become addicted to pharmaceutical drugs.

In other words, chronic pain permeates every area of consumers' lives and transforms conventional spaces of consumption into places of dysfunction. As the chaos increasingly overcomes their homes, the whole family works around the mess by means of dissociation. At one such home, we were interviewing a high school teacher, surrounded by heaps of old junk in the family room, when her teenage son returned home from school. He walked through the mess and clutter up to the equally messy upstairs area, apparently screening out the disaster of his home life. Thus the effects of chronic pain on the domestic environment affect the whole family and are symptomatic of the individual's gradual alienation from their surroundings and a breakdown of their social and psychological integrity.

CONCLUSION

The semiotic ethnography exposed a shared consumer discourse across the data set that led to generalizable hypotheses about the existential effects of pain on consumers' lives. By means of a mixed methodology, the semiotic ethnography exposed parallels between the physical, psychic, and cultural implications of chronic pain for consumers. The picture sort paired colors and forms with pain sensations and highlighted the psychic and emotional dimensions of chronic pain. These insights were reiterated in the semiotic analysis of the social and cultural codes that organize goods in consumers' lived environments.

By highlighting the iterability of this theme across multiple levels of the data, the semiotic ethnography exposed a paradigmatic system in which themes and experiences were reiterated at the levels of sensation, psyche, and lifestyle. The approach triangulates findings across various levels of the data, which lends a certain reliability and objectivity to the semiotic ethnography that eludes interpretive research generally. Rather than rely upon the researcher's ability to interpret the field setting, semiotics draws inferences from the data itself by decoding the consistent association of signs and meanings in the data and identifying paradigmatic relationships between multiple cultural categories, from emotion to spatial semiotics.

The semiotic focus of the research also bridged the gap between consumer insights, marketing strategy and advertising. Findings provided a platform for new product development and marketing for a new form of pain management by discovering an unmet need of chronic pain patients for order and control. Furthermore, by generating associations between consumer experiences and specific signs and symbols, the semiotic perspective produced a set of signs and symbols for potential use in marketing communications.

FUTURE RESEARCH

The current thinking on chronic pain treatment emphasizes the efficacy of various medications on pain's physical effects on consumers (American Chronic Pain Association 2015). However, findings from the current study suggest that the existential effects of pain on consumers' lives - their sense of purpose, order, and control - may actually outweigh its physical effects. If true, the findings suggest that a more efficacious treatment protocol would integrate

pharmaceutical remedies into a holistic process that also treats the psychological and lifestyle dimensions of the disease.

Furthermore, the study prompts further investigation into the cultural factors that allowed consumers to develop a shared lexicon for chronic pain in the colors, shapes, and lines of some abstract paintings. On the one hand, the emergence of the pain lexicon illustrates in microcosm the role of psychic displacement in the theory of symbol formation (Freud, 1955 [1909]), as consumers project their emotional experiences into concrete symbols. However, the present study illustrated how one's personal projections may indeed be informed by shared cultural codes, contributing to the high degree of consensus we observed in the responses from one interview to the next. Future research might compare and contrast responses in this study, which included long-standing American residents, with those of recent immigrants from non-western countries.

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Socialization of the Black Female Consumer: Power and Discourses in Hair-Related Consumption

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ABSTRACT

This research focuses on the socialization process of black women consumers in relation to their haircare practices, reflecting what they have learned about their race and the social stigma and how they deal with it. Such process is distinguished by displays of power and discourses within the consumer's social network.

INTRODUCTION

Consumers are made, not born. In the field of consumer socialization, the pioneering study of Ward (1974) focused on the development of children and teenagers as consumers, highlighting the lasting effects of their early learning throughout life. Ward's work inspired numerous studies, generally focusing on the effects of marketing on children and adolescents, as well as ethical and regulation issues (Belk, Mayer, and Driscoll, 1984; Butter, Popovich, Stackhouse, and Garner, 1981; Donohue, Henke, and Donohue, 1980; John, 1999; Moschis, 1985). Later, such perspective was expanded to encompass the socialization of the consumer in adulthood (Barnhart and Peñalosa, 2013; Casotti and Campos, 2011; Ekstrom, 2006; Moschis, 2007, 2012; Schau, Gilly, and Wolfenbarger, 2009; Shah and Mittal, 1997; Smith and Moschis, 1985). However, consumer socialization related to race is a field yet to be theoretically explored (Ekstrom, 2006).

This research focuses on the socialization process of black Brazilian women in relation to the consumption of hair products and services and what hairstyle represents in social terms (Santos, 2012). In Brazil, blacks and *pardos* (mixed race) comprise 51% of the population (Ipea, 2013), and women in this group embrace a variety of hairstyles; indeed, some use their hair to reflect a political stance against prejudice and to engender racial respect (Globo.com, 2015).

Until its independence in 1822, Brazil was a Portuguese colony. Throughout the colonial period, slavery was practiced. Some female slaves worked as domestics and lived in the houses of the wealthy, under better conditions than those living in the *senzalas* (slaves' quarters). Domestic services included cooking, breast-feeding and child-care for white children, companionship for white womenfolk and housekeeping. This slave group was well acquainted with the tastes of the masters and often exploited this in order to maintain a higher status (Freyre, 2006). This aspect of Brazilian history makes it possible to comprehend the cultural myth of a deeply relational nature, with people prizing relationships and avoiding direct conflict (DaMatta, 1986, 1997).

Brazil abolished slavery in 1888. Freed slaves remained marginalized in society, usually working low-paying jobs. Even now, Black Brazilians face inequality in many aspects of social life. (D'Amario, 2011; IBGE, 2014). Even if qualified, blacks are unlikely to attain prominent positions in companies (Batista and Leite, 2011; Ipea, 2013), and this gap is reflected in their wages. Using the income of a Brazilian white male as a benchmark (100%), white women earn the equivalent of 68.7% of the benchmark, black men, 52%, and black women, 38.5% (Ipea, 2013). However, debating racial differences is not part of formal education in Brazil (Gomes, 2003). Racism is veiled under the guise of social acceptance (DaMatta, 1986). In "a society in which there is no equality among people, veiled prejudice is a much more efficient way of discriminating against people according to skin color, as long as they know their place" (DaMatta, 1986, p. 46).

Goffman's concept of social stigma (1963) helps us understand the socialization process of black women in their consumption habits. A stigmatized person is one who has characteristics socially considered as bad, dangerous, or weak (Goffman, 1963). Link and Phelan (2001) criticize this individualizing perspective and indicate that the concept of stigma has to take into consideration some interconnected components that have influence on it. They "apply the term stigma when elements of labeling, stereotyping, separation, status loss, and discrimination co-occur in a power situation that allows the components of stigma to unfold" (Link and Phelan, 2001, p.367). To a degree, the process of socialization through consumption of these women must reflect the intensification or superimposition of the stigma they face (Lamont and Monár, 2001). Their stigma seems to be reflected in the cultural myth of beauty standards of Brazilians, who value Eurocentric aesthetics (Freyre, 2002).

We seek support in the analysis of power and discourses relations proposed by Foucault (Foucault, 2015; Machado, 2007) to elucidate the socialization process of black consumers. According to the philosopher, power and discourses are always related in a way that is neither fixed nor predetermined and, therefore, must be investigated and understood. Power manifests itself not (only) as a binary opposition between dominated and dominants or as a set of laws and punishments, but as a network of subtle, sophisticated and unstable relations. Power relations are inherent in economic processes, relations related to expertise, kinship relationships, sexual relationships and all social institutions, which are therefore instantiations of socialization.

Moreover, where there is power, there is resistances that follow different types of logic and are irregularly distributed within the power network. Studies in the area of consumer behavior stress the role of resistance and anti-consumption (Cherrier, 2009; Hogg, Banister, and Stephenson, 2009; Kozinets and Handelman, 2004; Suarez, Chauvel, and Casotti, 2012; Thompson, 2014; Sandikci and Ger, 2010). In this context the question that guides this study is: *How the relations of power and discourses influence the consumer socialization of black Brazilian women in a context that devalues their racial origin, especially vis-à-vis haircare practices?*

METHOD

As data collection method, in-depth interviews were used in this research (McCracken, 1988). Fifteen women, aged between 28 and 52, wearing different hairstyles were interviewed. The interviews were conducted in 2015 and each lasted about an hour, resulting in approximately 320 pages of transcription. Five interviews took place at the interviewee's home, which provided an opportunity to photograph their hair products. The remaining interviews took place in public spaces at the interviewee's convenience. The data was subsequently analyzed and organized in categories that would indicate the presence or absence of a certain aspect (Bardin, 2006). An additional development in the analysis involved interpretations, taking into account the context in which a given aspect is present and inferences that might arise from it (Bardin, 2006; De Geer, Borglund and Frostenson, 2004). The objective was to shed light on what lies beneath the analyzed data (Mozzato and Grzybovski, 2011).

FINDINGS

Hairstyles worn by black women reflect what they have learned about their race and the social stigma that black people endure in their socialization process within the sphere of consumption. Such process is distinguished by subtle and dynamic displays of power within the consumer’s social network. These manifestations of power consist of myriad relations with learnings about society as a whole and, more precisely, with the consumer’s learnings. Power can affect the development of new areas of learning and exert influence to make them fit a dominant standard, one that dictates what is “true” and often perceived as absolute. Simultaneously, in the context of a critical self-awareness of race, learnings about resistance emerge in the relation between a black woman and her consumption. Nevertheless, these critical learnings can also bring about change in the active power structure, inducing social change, albeit somewhat slowly. All of this is reflected in consumer behavior.

We developed a conceptual framework (Figure 1) that highlights: (a) power and displays of discourse in the socializing network; (b) the core tension that emerge for those consumers and that revolves around fitting into, or resistance to, the prevailing standard in society; and (c) new discourses and practices, driven by how those consumers deal with such issues.

Power and Discourses Displays Influencing Socializing Processes

In Brazilian culture, the prevailing aesthetic standard is that of the “white biotype.” Curly afro hair is popularly known disparagingly as “bad hair.” The esteem for Eurocentric aesthetics represents a power display that directly affects black women’s connection to their hair, engendering discourse and considerations on how to deal with this situation. Straightening of hair, thereby “erasing” racial traits, becomes a “normal” practice for some. Claudia (age 57, relaxed curls) said, “I thought that straightening your hair was normal, because my hair had to look the same as a white girl’s.” Having lived abroad for many years, Ana Paula (age 38, straightened hair) experienced a contrast in relation to other cultures: “In Europe, I had the kind of hair everyone wanted to copy. Here [in Brazil], you’re encouraged to straighten your hair; but abroad, people are encouraged not to straighten it and to keep their identity.”

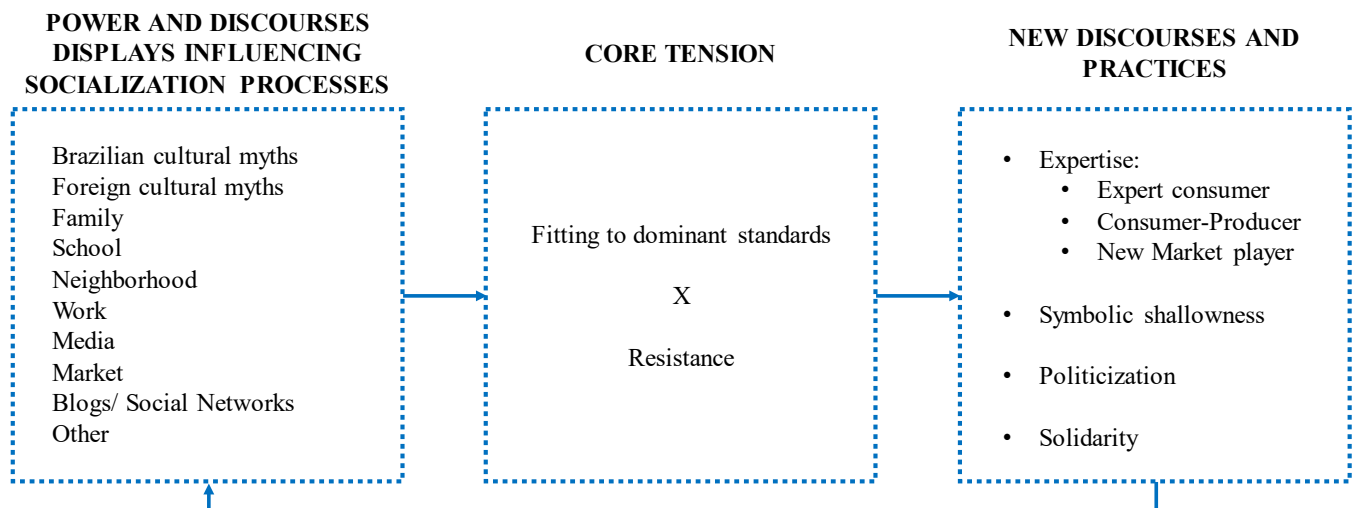
Since childhood, the socialization process surrounding hair and what it entails develops in families and at school. Magda (age 45, hair extensions) recognizes the role of the parents in the reproduction of social representations based on prevailing beauty standards: “At home, the expression [bad hair] cannot be used; it was even the subject of a quarrel with my mother. She told me that one of my daughters had bad hair. She told me it was because she was conditioned by society to do so.” Ana Paula, although the daughter of a white straight-haired woman, had in her black father a figure driving her to straighten her hair: “My father, who suffered a lot of prejudice — I don’t know if he wanted to protect us — always encouraged us to straighten our hair.”

Mothers are particularly important in the socialization process of black women as regards teaching them how to deal with their hair. Magda reproduces aspects of what she had learned with her mother in the socialization process with her own daughters, and made sure they always combed their hair. Amanda (age 38, braided), although the mother of a boy, makes sure he develops an awareness of his roots and to prize natural hair.

However, if family can prevent a black girl from having negative associations related to race, school may be the first environment in which the stigmatized face of what it means to be black in Brazil is revealed. Curly hair is an element of stigma, especially if blacks share a space with a white majority. They learn there is something “wrong” with their hair, their race.

I would get to school and the kids would tease me because no one has this kind of hair. Because I attended upper class schools, and I was the only black kid. (Ana Paula).

The job market, the media and the structure of products and services inculcate seemingly important socializing influences. A person’s hairstyle can mean the difference between landing a job or not. For the interviewees, getting their hair straightened made them more acceptable and served, in a sense, as a mechanism for fitting in socially, thus “erasing” traits of a socially devalued race. “The natural style is the least acceptable. When you go for an interview donning natural hair, you’re going to be eliminated just because of your hair,” says Ana Paula. Iconic black beauties, famous globally, are still lacking in Brazil. The recent presence of black female actors in Brazilian



Dynamic alteration of the power, discourses and socialization processes

Figure 1. Conceptual framework

soap operas might have had an impact on the “new” aesthetic condition of identification of new possibilities of beauty. Products and services geared to such consumers appear limited compared to other consumer groups. Flávia (age 50, white dreadlocks), for example, claims she cannot find suitable products for her hair: “I can’t find them, not even for my daughter’s hair.” Consumption environments tailored to black consumers were cited as spaces that bring black women together, while also keeping them in touch with subjects that are particular and relevant to them. Magda recalls her experience at two black beauty parlors that, although they now longer exist, were a point of references in black aesthetics and definitive in terms of the racial socialization process. An alternative solution is to go online and check out the specialized blogs that can help black women look after their hair and bring them closer to issues related to race.

Core Tension

Black women learn, from very early, the centrality of the stigma they will have to face throughout life. A core tension arises and is reflected in consumption related to hair, i.e., whether to fit in socially or resist against prevailing beauty standards and social prejudice. Regardless of the interviewees’ attitudes, new tensions emerged.

Maria (age 42, straightened hair) explains why she straightened her hair: “everybody, my color or not, but has curly hair, would straighten their hair; so I didn’t want to feel different from the group.” Although straightening her hair may have favored Claudia in the job market, it limited her in other social situations: “I started working and I can remember the huge sacrifice at weekends. Everyone would say, ‘Let’s go to the beach’; and I’d reply, ‘How can I go to the beach? I’ll get my hair wet. It won’t dry at night, and I’ll have to curl it, use a dryer, use hair bobs.’ It was very bad.” Magda notes the cognitive mismatch induced by the prevailing standard: “When I was a child, I was always the black kid. But the beauty standard was white, so it was hard for me to identify with being black.” All the interviewees mentioned having heard someone—black or white—asking a black woman with straightened hair, “why don’t you just accept your hair?” They would reply that people who straighten their hair might suffer social rejection, given that in the minds of some doing so might be construed as “not accepting” oneself as a black person.

She thinks I have to wear natural hair, an afro or curly hair. I’m keen to be seen as an executive, so I think it looks great to have my hair straightened. I don’t know if that’s the ideal but, from my point of view, from everything I’ve experience since my childhood until now, I feel good about myself. (Maria).

Amanda reveals in her narrative the socializing influence from her family and friends, who were members of the black movement and would patronize the same beauty parlor: “[Those professionals] are benchmarks in afro hair and were very close friends with Mom and Dad [...] so customers such as Zezé Motta [actress] were the ‘black in evidence.’” Amanda wore natural hair during childhood and, later on, had it afro permed and braided: “Hair that’s part of my development as a human being. The thing about hair, to black people, is that it amounts to a symbol of resistance, of identity.” Magda shows the impact of resistance in her personality and gender identification by describing the change from a short haircut that is “androgynous” compared to other “more feminine” hair styles: “My shaved haircut [...] is my masculine side, which is very strong in the sense of ‘I will fight;’ so, now I have to work with the softer, more feminine side. And that’s where my hair fits in.” This interviewee’s argument explains how she appears to embody the socially constructed paradigm by associating gender issues and meanings to her black hair. Vilma (age 44, natural hair) sees the rise of a “new”

black woman who comes “learning to appreciate her hair” and hopes for social change driven by this new attitude: “She can appreciate letting her hair grow out and, in so doing, takes care of it so she can be beautiful, wonderful.”

New Discourses and Practices

To cope with the tensions, consumers pursue new discourses and practices that enables them to position themselves more favorably in social reality. Taking care of curly hair is described by the interviewees as a daunting task. The respondents are aware that white women have many more options in terms of products and that it is easier for them to take care of their hair, in stark contrast with the “reality” of black women, which is limited by the market. With such restricted consumption — caused by the dearth of suitable products and services for curly hair — consumers seek out expertise in the subject, both those who wish to straighten their hair and those who opt for natural hairstyles. Some become experts, that is, take ownership of specific expertise about their hair type. Amanda elucidates:

Because we are not represented in the mainstream so to speak, on television, in commercials, in major cosmetics brands, we use other tools. So we have blogs; we create a network of shared experiences. You pass it on to another [...] Much different from the relationship that whites have with their hair.

Other consumers, beyond assuming ownership of learnings about curly hair, may also perform activities traditionally performed commercially. As such, they are considered consumer-producers (Cova and Cova, 2012). Claudia explains that “usually, good products are not formulated for afro hair [...] so you have to plaster your hair with a product that is not meant for it, and wind up with a crazy mix that might end up working if it doesn’t make your hair fall out.”

Our last case related to expertise concerns a consumer who literally became a market player. Indeed, to some extent, Vilma became a hairdresser due to her unsatisfactory experiences with her hair: “I suffered a lot with that, so I said, ‘no; that’s enough! I’ll find a way to do my hair myself and I’ll become an expert in black people’s hair’”.

Besides the pursuit of expertise, we observed another adopted strategy using a discourse of *symbolic shallowness* in relation to black hair, aiming to break the link it has with issues of power and resistance. For Ana Paula, hair is “not necessarily a race thing: it has become a fashion accessory. Sometimes you’re into straightening it because you want to change the shape, the structure, just like you change your clothes.” This strategy of symbolic shallowing is directly at odds with the position of consumers who perceive their hair as an element of black women’s awareness-raising and politicization. As Marilda (age 47, hair extensions) explained:

It concerns accepting yourself as a black woman, accepting your beauty, your natural hair, the way a [black woman] is. Some will speak of ancestry; some will speak of the beauty of Africa, seeking to distance themselves from this Eurocentric beauty. As such, this hair is a proxy for a political place; it represents a political stance.

FINAL COMMENTS

Socialization studies on consumers reveal how an individual enters society, in a context in which, according to Foucault (2015), diverse, subtle and sophisticated displays of power are in place. The subtlety that Foucault refers to is even more expressive in a society such as Brazil’s, which has as a cornerstone a reverence for harmony in personal relations and an avoidance of open conflict, thus

Table 1: Black Female Consumers Socialization Universe

Power and Discourses Influences in Socialization Process	Core Tension: To fit or to resist?	New Discourses and Practices
<ul style="list-style-type: none"> • Stigma and eurocentric aesthetics standard circulating in Brazilian culture • Contrasting in relation to mentioned foreign cultures • Parents raising (or not) critical awareness about racial issues • Exposure in school and other environments of white majority reinforcing stigma • Job market ruling acceptance of hair styles • Market offerings limiting consumption • Market environments and blogs tailored to black consumers promoting learning experiences 	<ul style="list-style-type: none"> • To Fit: <ul style="list-style-type: none"> ◦ Felling of “belonging” in society and access to opportunities ◦ Social sanctions ◦ Cognitive dissonance about ethnic identity • To Resist: <ul style="list-style-type: none"> ◦ Ethnic pride ◦ Feeling of social change trigger ◦ Social marginalization, restriction of opportunities and loss of a socially-constructed “femininity” 	<ul style="list-style-type: none"> • Expertise: <ul style="list-style-type: none"> ◦ Pursuing of new practices and expertise in order to cope with social “reality” ◦ Performing activities traditionally performed commercially ◦ Becoming a real market player • Symbolic shallowness as a strategic discourse • Politicization: Raising black women’s critical awareness with “new aesthetic preferences” • Solidarity with formation of social networks supporting consumption

engendering the appearance of tolerance towards diversity, while all the time a veiled discrimination prevails (DaMatta, 1986). The interviewees’ narratives show power relations in the most varied of spheres: the prevailing aesthetic standard; hiring in the job market; low representativeness of blacks in the media; emotional and partnership relations criteria; and — as concerns our study — the dearth of availability of suitable products and services in the market. Hearing from the interviewees that their hairstyle might be the deciding factor for their hiring is one of the situations that illustrates how hair, and all the attendant consumption, acts as a mechanism of social fit.

These subtle power relations affect directly the socialization process of black consumers. Throughout life, consumers seem to have contact with deconstructive socializing forces, which influence them with messages of the type, “I will teach you to not accept yourself.” Family appear to be relevant vehicle to raise critical awareness about racial issues, although not always does reality proceed in that direction. Family and relatives introduce young blacks to social representations, contributing to reinforcing or superimposing the stigma black people face, as well as aiding in accessing products and services.

If those consumers cannot find suitable products and services for their hair — if they do not see themselves portrayed the media — and if the market seems not to align with their nature and welfare — the pursuit of expertise in a network of racial solidarity is sparked within them. Such networks consist of shared practices and learnings about consumption, oftentimes, addressing gaps in the market. The alternative for such women is to socialize in a “private universe.” This reality contrasts with that of their white counterparts.

Co-creation can be an important marketing tool, promoting a narrowing of the gap between companies and black consumers and the development of products and services tailored to their reality. Solidarity networks developed by those consumers offer relevant clues for reshaping distribution and communication strategies. Blogs and virtual communities appear as enabling environments for fostering learning and practices related to this “private universe.” Additionally, appreciation of the tensions surrounding consumption is essential for crafting authentic advertising that is true to consumers’ reality and provides symbolic repertoire to maximize their welfare.

We suggest that future research investigate different generations issues in order to understand intergenerational cross-influences and the evolution of the consumer universe related to black hair over time. Our findings suggest that a specific study could be conducted

as to the different levels of expertise adopted by black consumers, focusing on their practices, competences and restrictions. Moreover, we would like to emphasize the contextual potential studied in our findings in order to explicate implications of consumption as a revealing element of the complex sociocultural mores embedded in relations of power, discourses and resistances.

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Bringing Together Japanese Organic Food Consumers and Producers After Fukushima

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ABSTRACT

This paper qualitatively analyzed how an organic food delivery company acted to protect producer livelihoods while simultaneously ensuring feelings of safety for consumers after Fukushima. It was found that transparency and provision of choices were used to help create perceptions of safety that went beyond government claims of safety.

FOOD SAFETY CONCERNS AFTER FUKUSHIMA

Fukushima and its surrounding regions are major contributors to Japan's agriculture and fishing industries. Due to its geography, farmland is scarce in Japan, with only 12.1% of total land suitable for cultivation (Statistics of Agriculture, Forestry and Fisheries 2014). Japan has been struggling with a low food self-sufficiency ratio (39% as of 2013 on a calorie supply basis), the rising age of commercial farmers (61.6% aged 65 and over as of 2010), and a lack of young fishers (24.9% aged 44 and under as of 2014) (Statistics Bureau 2015). Despite the aftereffects of the Great East Japan Earthquake, tsunami, and nuclear accident disaster on March 11, 2011 (hereinafter referred to as "3.11"), Japan cannot easily afford to abandon a significant portion of its fertile land or its diminishing number of farmers and fishers (see figure 1).

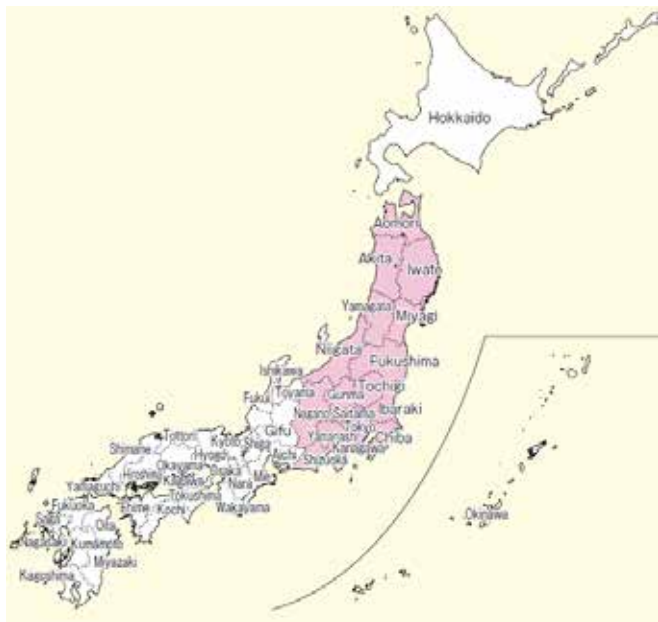


Figure 1: Prefectures Subject to Radiation Monitoring by Regulations (From Consumer Affairs Agency (2013), *Food and Radiation Q&A in English*, 8th Edition, p. 20)

Therefore, instead of banning food from all potentially contaminated areas, the government instead chose to limit consumers' internal radiation exposure by implementing relatively strict provisional limits for radioactive materials in food. This was amended to an even stricter limit a year later (see table 1 for international comparisons of regulatory limits). This has been largely successful in keeping contaminated foods out of the marketplace (see Consumer Affairs Agency 2013 for regulation details and Merz et al. 2015 for food monitoring outcomes).

Consumer reactions to this new reality have been complex. On the one hand, there is an ethical consumption movement to help support reconstruction through actively buying products from affected areas called *ouen* (literally "aid") consumption (Stanislawski et al. 2015). On the other hand, there is fear of potential adverse health risks, resulting in avoidance and so-called "harmful rumor damage." Defined by Sekiya (2011) as "economic damage caused by media coverage of social issues that results in people perceiving 'safe' things as dangerous, and which leads to avoidance of consumption, tourism, and transactions" (p. 12), this term has been used to highlight damage to livelihoods caused by avoidance of products deemed "safe" by regulatory standards. Consumer unwillingness to purchase produce from Eastern Japan, regardless of scientific data backing claims of safety of all products in the marketplace, show that expert claims of safety do not always translate into feelings of safety for consumers.

Similar trends are seen in consumer discomfort with genetically modified (GM) foods, despite expert claims of safety and positive social impacts (Wansink and Kim 2001). Like radiation exposure, the long-term impact of genetic modification is a complex issue with differences of opinion even among experts, which makes it difficult for the average consumer to fully understand. The organic food movement has largely come out against GM foods and has often led campaigns against them. For example, Dreezens et al. (2005) found that consumer attitudes toward genetically modified foods and organically grown foods are negatively related. As such, it is logical to think that organic food consumers would be especially sensitive to radiation concerns and would strongly avoid products from potentially contaminated areas. Yet, research into Japanese ethical consumers, which included organic food consumers, has found that awareness of "harmful rumor damage," trust in marketplace regulations, and feelings of obligation to help support reconstruction have acted to counter such concerns to some extent and have led to support of *ouen* consumption (Stanislawski, et al. 2015).

A factor to consider is Japan's organic food sector's historic focus on building mutual support in a relational, rather than a transactional, approach (Parker 2005). The focus is "not only towards the organic standard of the food but to the quality of the relations between the consumer and producer" (ibid., 8). Within this context of long-term mutually supportive relationships, the thought of abandoning producers in their time of need would lead to hesitancy and guilt. And yet, many consumers who purchase organic food do so precisely because of their reluctance to eat "unsafe" food. Such conflicting feelings have created a conundrum for Japanese ethical consumers to navigate.

Various actors have stepped forward to help resolve this situation by acting as intermediaries between consumers and producers to increase feelings of safety in the marketplace beyond mere adherence to government regulations. A notable example of this is Daichi wo Mamoru Kai Co., Ltd., literally "Association to Preserve the Earth," (hereinafter, Daichi). Founded in 1975, Daichi's organic food delivery business is one of the pioneers of the organic food movement in Japan. Daichi's mission is to: 1. Protect and grow Japan's primary sector, 2. Protect people's lives and health, and 3. Create a sustainable society. However, the aftermath of Fukushima has made it difficult to simultaneously achieve missions 1 and 2. Some may even consider it a paradox for Daichi to sell food that feels "unsafe" to consumers, even if it is to protect organic farming in Japan. This

TABLE 1: Limits on Radioactive Cesium in Food (Unit: Becquerel/kg)

Product	Daichi (limits as of Apr 2012)	Japan (limits as of Apr 2012)	Japan (provisional limits)	Republic of Korea	US	EU
Drinking Water	6	10	200	370	1200	1000
Milk	10	50	200 (including dairy products)	370	1200	1000
General Foodstuffs	6–50 (depending on item)	100 (including dairy products)	500	370	1200	1250
Food Items for Babies	6	50	200 (baby formula)	370	1200	400

Adapted from Prime Minister of Japan and His Cabinet (2012), *Post 3/11: Food Safety in Japan*, p. 2, with EU and Daichi values added by the author. Daichi's lowest limit of 6 bq/kg is based on the detection limit of their equipment (Daichi 2012). See Kimura (2013) for a comparison of the limits set by the Japanese government versus alternative food outlets including Daichi.

paper explores how Daichi has navigated the dilemma of its conflicting desires to protect producer livelihoods and to provide feelings of safety for consumers.

By studying this unique case, this paper helps to broaden the understanding of how marketplace actors can help shape perceptions of safety and guide consumer purchase decisions under situations of complex uncertainties and trade-offs where there are no easy answers. This has implications not only for GM foods, but also for food safety and consumption in general.

METHOD

As there is not much research into how ethical consumers are navigating the post-3.11 realities in Japan, a qualitative study was chosen for its ability to help understand complex social phenomena at the exploratory phases. This paper analyzes Daichi's communications on the impact of 3.11 to its consumer members and the general public by examining information made available through their corporate website including notifications, press releases, and blogs. Over 400 pages of data were analyzed, covering a period from March 2011 to December 2015. Supplemental information was also collected from books published by Daichi's founder (Fujita and Komatsu 1992; Fujita 1995, 2005). Such naturally occurring data, which exists independent of researcher intervention, is useful when recounting of the research phenomenon is not likely to be sufficiently detailed, accurate, or complete (Lewis 2003, 57). Inductive thematic analysis was used to identify patterns across the dataset (Braun and Clarke 2006).

FINDINGS

Framing support as larger issue of sustainability. Along with many other groups, Daichi has been working to help revitalize Japanese agriculture, with a particular emphasis on organic methods of cultivation. They have consistently communicated that producers are equal to consumers and are not merely there to serve consumeristic needs. Consumer members are asked to accept misshapen or imperfect produce (that is rejected by supermarkets), dirt and occasional bugs, and substitute products (when weather conditions prevent expected harvests). When there are natural disasters, both producer and consumer members are solicited to help those impacted (through financial donations and purchase of blemished products). Daichi also hosts seminars, farm visits, and other events to bring producer and consumer members together to build face-to-face relationships. They teach consumers that access to safe organic food requires commitment from all parties, and that there needs to be a mutually beneficial

relationship for organic farming to be sustainable in the long-term. This is placed in the context of food self-sufficiency as an issue of national security—an understandable concern for a nation that suffered from food shortages during and after WWII. Thus, it is no surprise that Daichi refused to abandon affected producers in the immediate aftermath of 3.11 and spoke out against harmful rumor damage.

[Daichi will work to] protect food safety by providing appropriate information to consumers and distributing safe food. At the same time, ... prevent additional hardships for producers in disaster-hit areas from harmful rumor damage. (March 23, 2011)

Daichi emphasized that producers in disaster-hit areas were the biggest victims and that they should not be punished for something that was beyond their control—especially when scientific evidence indicated that their food was within safe limits for consumption. In addition, consumers' responsibility to support these farmers was framed as a larger sustainability issue by expressing that abandoning these farmers would endanger food security for future generations.

If [harmful rumor damage] persists, producers may quit farming ... [with] disappearing farmers and fields. This means a loss of food for future children. (April 4, 2011)

Daichi will fulfill our two missions of providing safe food to members and protecting Japan's primary sector (protecting the production base of food so that our children and grandchildren will never go hungry in the future). (April 6, 2011)

This places a portion of responsibility for the future of food security on consumers' willingness to support affected producers. This is likely a solid argument to use on organic food consumers, who tend to be aware of such sustainability issues. However, there was a backlash from consumers to the use of the term "harmful rumor damage," as there are indeed real concerns about food safety in the post-3.11 world. This is especially true for those with children, since they are considerably more sensitive to radiation than adults.

We fully understand not wanting to let children eat [potentially contaminated food]... [Our intended meaning was] "damage occurring to producers when denied distribution and sales due to unsupported rumors," and was not targeted at consumer behavior of "wanting to refrain [from buying] things that have any measure of contamination"... we regret that our expression may have caused distress. (April 27, 2011)

Although Daichi continued to advocate support for producers from affected areas, they became more sensitive to consumer perceptions of safety. After this, the term “harmful rumor damage” was largely replaced with “reluctance to buy” to indicate consumer avoidance of products from affected areas. This is a more neutral term that does not tie avoidance directly to farmers’ suffering; nor does it judge consumers for acting based on their own feelings of safety.

Enabling informed choices through transparency

Daichi worked to reassure consumers that continuing support for producers would not mean extra health risks for them by stating that foods from evacuated areas and those above government limits were not being distributed, even while openly admitting that this may not seem like enough for some consumers.

It’s an agonizing choice, but we are forced to start by taking responsibility to at least not distribute food above the government’s provisional limits. Currently, we cannot develop our own distribution standards, but it does not mean that we think this is acceptable in the long-term ... we must establish an independent measuring system ... in order to provide food you feel safe eating. (April 27, 2011)

While acknowledging consumers’ lack of trust toward government limits, Daichi stated that they did not want to prematurely launch their own limits without confirming it was reliable (accurate measurement system), doable (achievable for producers), and usable (timely disclosure). To this end, Daichi became one of the first private companies to purchase a germanium semiconductor detector in September 2011, then trained their employees in its correct use, and have continued to publish results online.

Daichi also tried to shape larger public discourse by establishing the “Roundtable for Discussion on Food and Radiation” with other major players in the natural food delivery industry (see Kimura 2013 for details). In February 2012, this roundtable jointly issued a public comment strongly criticizing the government’s lack of transparency, its delay in releasing updated limits, and its methodology for setting these limits. Also, each group set forth their own testing procedures and limits in response to consumer distrust of government practices and its assurances of safety.

Notwithstanding their commitment to producers, Daichi’s limits were set much lower than the government’s when announced in February 2012 (see table 1). Daichi also actively cooperated with their producer members to monitor and decontaminate fields in affected regions ahead of government initiatives. Daichi lent radiation-measuring instruments to enable local producers to monitor levels of contamination, test the effectiveness of various decontamination efforts, and release gathered data.

Daichi is pursuing decontamination initiatives in cooperation with producing regions ... to restore consumers’ feelings of safety ... there is no time to wait for government action ... Daichi has the unique ability to do this because of our strong network with producers that emphasizes “face-to-face relationships” and our traceability system that accurately tracks the cultivation history of each field. [...] If Japanese consumers do not feel safe choosing domestic food, Japan’s primary sector will decline. (August 26, 2011)

Daichi also helped to publicize the results of such initiatives. For example, they reported on a Fukushima rice farmer group’s decontamination efforts, including the use of radiation-absorbing or-

ganic materials and potassium silicate in their fields. In 2011, this group tested 341 unpolished rice specimens with only four specimens above the 10 bq/kg detection limit. These were all under 12.1 bq/kg (see table 1), and no contamination was detected after polishing. By reporting on such producer efforts, Daichi showed that these were the same trustworthy farmers who had always worked to provide safe food. By transparently reporting cultivation methods and results obtained, consumers were given the ability to make informed decisions. It also enabled producers across Japan to learn what practices were effective against radiation contamination.

Daichi will share [this] empirical data and widely disseminate information to other producers in order to pursue ways of production that protect consumers from radioactive contamination. (August 26, 2011)

Providing ways to support and avoid. Due to the immediate need to prevent the collapse of producer member’s livelihoods, Daichi first put priority on their needs. Within a month of the disaster, Daichi had put together multiple ways for consumers and producers from other regions to support them: sending messages of support; giving cash donations; buying surplus products (with shorter expiry dates due to disrupted distribution) and other products with a portion of sales going toward donations; and buying the “Let’s Do It Fukushima and North Kanto Producers Set” (weekly delivered vegetables set). Daichi spoke about the suffering of farmers in affected regions and asked consumers to support reconstruction in whatever ways they could.

Those who can do so, please support by eating produce from Fukushima and [nearby regions]. If this is difficult, please cooperate with the [donations collected by Daichi] or buy ... products from other affected areas to support producing regions. There isn’t only one way ... let’s all work together... to support Japan’s primary sector.” (April 4, 2011)

Yet, Daichi also recognized that scientific appeals of safety cannot fully reassure consumers, and that many wished to protect their loved ones by entirely avoiding anything that felt unsafe. Since May 2011, Daichi has featured items with no radioactive material detected (focusing on foods frequently consumed by children) in a separate section of their weekly catalog for ease of ordering. Three months after the above-mentioned set to support producers, Daichi also launched a set for consumers to conveniently avoid produce from affected areas.

[Daichi] will launch the “Safe Vegetable Set for Children,” a set of vegetables from Western Japan and Hokkaido ... in order to meet the demands of families with small children worried about effects of radiation.” (July 8, 2011)

Though priority was given to producers, Daichi did respond to consumer desires in a relatively timely manner. Yet, Daichi has struggled to maintain a balance between supporting producers and responding to consumer demands to avoid produce from affected regions. Daichi has been open about the difficulty of simultaneously fulfilling these needs.

Since immediately after the nuclear accident, Daichi has worked to support producers ... However, in real terms of vegetable shipments, we were unable to obtain sufficient results. We struggled with the frustration of wanting to support, but being unable to do so. On the other hand, we are painfully aware

of consumers' desperate need to "protect my child from radiation," especially for mothers with small children. This has been a year in which Daichi has struggled with these [conflicting] issues. (February 29, 2012)

Despite Daichi's struggles to meet their somewhat paradoxical goals, many consumers have embraced Daichi's strict limits, transparency, and provision of choices that go beyond what is provided in the general marketplace. The number of Daichi's consumer members increased from 115,994 in 2010 to 241,000 in 2015, reflecting consumer desire for feelings of safety that go beyond governmental regulations based on expert claims.

DISCUSSION

This paper analyzed how an organic food delivery company grappled with its conflicting desires to protect producer livelihoods and to provide feelings of safety for consumers after 3.11. At first, Daichi seemed to be operating on an understanding that they could help reinforce the ideals of mutual support embedded in the Japanese organic farming sector by emphasizing consumer's ethical obligations to help support producers to protect the future of organic farming in Japan. In their communication to consumers, Daichi emphasized that most food from affected areas was "safe" based on government limits, and focused on farmers' suffering and the potential long-term damage to Japanese agriculture. However, this overlooked the emotional aspect of risk perception, wherein scientific information or expert claims do not necessarily lead to trust (Engdahl and Lidskog 2014). Since consumers did not feel that food from affected regions was safe, they pushed back against the use of the term "harmful rumor damage" and its implication that consumers were obliged to support producers or be perpetrators of damage. Similar to GM foods, it was found that consumers who have reservations regarding safety are unlikely to be swayed by expert (especially government) claims of safety or an appeal to larger social benefits (Costa-Font et al. 2008).

Daichi responded by switching the focus of their communications to how they were working to be a trustworthy partner for consumers to navigate the complex realities of the post-3.11 world. To this end, they joined forces with other major industry players and established a roundtable to publicly critique the government and announce their voluntary adherence to more stringent testing procedures and stricter limits. As Kimura (2013) states, "this kind of networking with other similar-minded organizations, as well as engagement with media and the government, is necessary for standard-setting groups to function meaningfully..." (p. 25).

Also, Daichi acted to build trust in their handling of radiation contamination by backing these limits up with accurate measurement systems, timely disclosure, and openly discussing their difficulties and struggles. Such transparency in the food supply chain is an effective means of building trust toward food safety (Beulens et al. 2005). Furthermore, Daichi reported on producer-led decontamination initiatives in order to rebuild trust for producers. This acted to renew the traditional ideals of the Japanese organic food movement that "include the social dimension alongside environmental and health objectives and promoted enhanced relations between consumers and producers as a way of building necessary trust and accountability" (Parker 2005, 16) where "to trust the producer was to trust the food" (ibid., 8).

Daichi's strong desire to help affected producers led them to create multiple ways for consumers to support producers. Yet, they also provided ways for consumers to entirely avoid food from affected areas. Though seemingly in conflict, this allowed Daichi to pur-

sue their goals of protecting Japan's primary sector and protecting people's lives and health, which had become somewhat paradoxical in the aftermath of Fukushima. Through these various means, Daichi has worked to restore the severely damaged trust in food safety in order to rebuild a foundation for mutually supportive relationships between organic food consumers and producers. Daichi's work to restore consumer feelings of safety in choosing domestic produce shows a way forward for Japan's agricultural industry to overcome the lasting damage of 3.11.

Due to its exploratory nature, this study is limited. It only considered how one organic food delivery company responded to producer and consumer needs after 3.11. Future studies can analyze other actors in the organic food marketplace, including other intermediaries, producers, and consumers. For example, interviews can be conducted with Japanese organic food consumers and producers to see how 3.11 impacted their understanding of risk, trust, and mutual support. Such studies can also test whether the findings of this paper can be generalized.

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“I Know what I Like”: Parallel Tastes in Fine Art Consumption

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ABSTRACT

This paper explores taste through practices in online and offline fine art consumption. Through online communities art expertise has become democratized beyond established institutions but online art communities represent distinct and parallel practices tastes and cultural capital. Online expertise does not grant cultural capital offline nor impact established taste regimes.

INTRODUCTION

In pursuits such as fashion, wine, and art it has been argued that the fashionista, oenophile, and aficionado are those who fully appreciate their respective experiences (Clarkson et al, 2013). Such experiences have historically been regarded as high threshold activities with expertise available to few, guarded by gatekeepers and difficult for the lay individual to achieve (Joy and Sherry, 2003a). However the ever-growing spectrum of online mediated platforms where enthusiasts in many fields share their passions, is changing established institutional structures and forging a new understanding of consumption meanings and hierarchies of access. This paper explores how taste is developed and negotiated in online mediated consumption groups in the context of fine art. Drawing upon a qualitative case study within the UK art market, it discusses the practices that lie at the heart of taste in this context and how online consumption differs from traditional offline practices. It argues that, in art, expertise is no longer the preserve of the critic or art seller with vested interests in desirable taste, rather it becomes democratized as novices engaging in online art communities come to represent a distinct form of distributed cultural authority. Thus, it contributes to recent calls for a more complete understanding of the democratizing role of the Internet in shaping the practice of taste and taste-making (Arsel and Bean, 2013; Dolbec and Fischer, 2015) as well as the deinstitutionalisation of taste (McQuarrie et al., 2015) in online-mediated communities.

Art as field for Cultural Capital Display

The high arts have been commonly seen as symbols of cultural capital. High levels of difficulty are associated with an adequate enjoyment and appreciation of these goods and significant knowledge of their aesthetic codes and canons considered necessary to consume them (Üstüner and Holt, 2010). Power to define these generally acceptable standards of taste lies in the hand of few individuals who have acquired a certain amount of knowledge either through education or social experience (Hoyer and Stokburger-Sauer, 2012; Drummond, 2006).

Art as a field of consumption has therefore been conceived among the paramount grounds that see actors claiming a position within the social hierarchy by pursuing status idiosyncratic to the field (Bourdieu, 1984). Following Bourdieu, taste is an essential component of cultural capital and thus good taste is “prescribed by professional experts in a particular cultural field” (Holbrook, 2005; 75). Judgements of taste are thus found to be inherently powerful signs in defining identity as well as compelling markers of group affiliation (Bourdieu, 1984). The arts are thus characterized by a distinctive cultural capital specific to the field where taste has been commonly conceptualized as an instrument that navigates individuals in evaluating, categorizing and drawing connections between ob-

jects and consumption (Hoyer and Stokburger-Sauer, 2012; Coskuner-Balli and Thompson, 2013).

In comparison to this structuralist perspective where taste serves as cultural boundary maker, postmodernism considers the consumer as cultural omnivore, an actor with intrinsic agency (Firat and Venkatesh, 1995). Arguing for a fading of hierarchies in advanced societies, objects become freed from tightly defined consumer practices and a spectrum of styles emerges from a newly conferred semiotic malleability (Baudrillard, 1996). So while cultural capital remains a powerful concept it is demonstrated not through the acquisition of consumption objects but rather through increased focus on the manners of consumption (Holt, 1998). Accordingly, more recent studies have served to form a definition of the forms of field-dependent capital that consumers acquire by participating in distinctive consumption communities (Arsel and Bean, 2013; Arsel and Thompson 2011; Schau, Muniz, and Arnould, 2009).

Taste as Idiosyncrasy of Practice

Cultural capital, an important asset for status display, is enacted in consumption through the portrayal of tastes and consumption practices (Allen, 2002; Üstüner and Holt 2007, 2010; Holt, 1988). Studies have explored the manner in which different levels and forms of cultural capital shape tastes, preferences and consumption patterns (eg. Allen 2002; Arsel and Bean 2013; Holt 1998). As such, recent studies point to the conceptualization of taste as practice (Holt, 1998), performance (Hennion, 2007) and regime (Tonkinwise, 2011; Arsel and Bean, 2013). Holt’s (1998) interpretation of taste focuses on the meaning consumers attach to their product choices and Hennions (2007) definition is centered around the way in which taste materializes through acts of consumption, yet both agree that taste cannot be reduced to mere product choice. Taste regimes emerge as discursively entrenched systems (Arsel and Bean, 2013) which navigate and instruct aesthetic practices, offering a comprehensive understanding of taste by looking both to the symbolic meanings assigned to consumption objects as well as the performative ‘doing’ of taste. This shifts the focus from the object of consumption to the underlying practices involved. Practice theory has therefore become a common means of theorizing acts of consumption and developing our understanding of both enthusiast groups and the objects of their desire (Warde, 2014).

With the increase in a ‘social media savvy society’, not only has the Internet changed the modalities of production, sale and distribution of art, it has also changed the modalities of consumption as “no longer does an individual have to abide by the dictum of a cultural elite – critics and historians” (Joy and Sherry, 2003a; 157). An individual’s ability to discern between the beautiful and dexterous versus the laboured and unpleasant has been thus described as taste in a specific field of consumption (McQuarrie et al., 2015). The advent of new forms of community such as those found within social media have brought with them a range of new ways of demonstrating taste and influencing the individual. Their democratizing power is challenging the traditional institutional dictums of aesthetic judgement making way for new taste makers and taste making. It is increasingly argued that individuals develop their cultural capital in a specific field by exercising taste through investment in these online communities (Arsel and Bean, 2013). Such communities have been

defined as groups formed around a shared passion or interest which mediate the learning and negotiation process through participation among members of the collective in order to achieve a mutual understanding of common practices (Goulding et al., 2013). Hence, a community of practice is described as a "group of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly" (Wenger 1998; 10). Practice Theory is being used to explore contemporary taste because it addresses the collective commitment of participants in a community, emphasizes the way in which objects are meant to be used, the way they are valued and the shared engagement in defining a collective purpose of existence (Warde, 2014).

Nevertheless, despite the online-mediated opportunity to exercise the doing of taste (Arsel and Bean, 2013) detached from institutional structures and axioms in the field of art, Di Maggio's (1987:445) argument that "populations of artworks can be partitioned into groups, or genres, on the basis of the persons who choose them" continues to be relevant through this definition of objectified taste. Indeed Arsel and Bean (2013:899) argue that in these democratized spaces emerges "a discursively constructed normative system that orchestrates practice in an aesthetically oriented culture of consumption" developing what they defined as a taste regime.

METHOD

The data comes from a qualitative case-study of the UK art market (Yin, 2014).

We approach art experiences through the lens of constructed subjective meanings encompassing consumption and embodiment processes of aesthetic appreciation (Joy and Sherry, 2003b). Therefore we sought to gather data encompassing "ideas, emotions and understanding of all who take part in an activity in such a way that a common or shared outlook emerges" (Biesta, 2010; 716), we did this through a series of semi-structured interviews with a range of stakeholder groups in the art world, with the aim of articulating the viewpoint of the actors' experience regarding a socially constructed reality and the situational dependency of the studied phenomena (Maxwell 1996; Denzin and Lincoln 2008). We spoke with 12 art consumers participating in online art communities. We also gathered the perspectives of intermediaries with traditional institutional roles. This set of respondents was constituted by 12 galleries, 2 intermediary companies, 5 artists and a large art-fair director. These informants helped in corroborating, challenging and providing alternative perspectives on the accounts of the key informants and thus aided in achieving a triangulation of viewpoints to sustain a deeper understanding of the phenomena (Schouten, 1991). In total, 25 hours of interviews were transcribed.

Data was analysed adopting the content analysis method, which consists of the identification of themes that have emerged from the collected data (Spiggle 1994). After we determined recurrent themes, new emergent themes have been identified with the aim of broadening and developing the understanding of taste as negotiated within online appreciation communities (McCracken, 1988; Moisander and Valtonen, 2006).

FINDINGS

Findings begin by examining traditional access barriers grounded in cultural capital levels, and proceed to discuss the forms of emergent practices and taste structures in the newly formed online art spaces drawing comparisons with conventional offline tastes.

Cultural Capital as Requisite for Access

Our data shows that consumers find the art market an unfamiliar consumption territory but one which they have often longed to be part of. As C5 discusses:

I have a problem, being a nurse you have to be aware of everything you put on social media. I was once put aside by my manager and asked what I was doing and I think that the girls in my office don't understand why I'm so into art. So I say to them, why you go to the gym? It is the same thing but I don't think they understand (C5)

This reflects the discussions in the literature that art has been often epitomised as consumption heavily marked by cultural capital class based distinction. It is assumed that a formal education (Drummond, 2006) and thus a high level of embodied cultural capital (Holt, 1988) is necessary in order to be granted access to the traditional art practice system. This creates conflict in consumers' who find themselves at odds with these expectations as C3 discusses:

Buying art is always experienced with joy but also a bit of guilt. I do come from a low background family, I am not really educated in a traditional way or manner (C3).

Perpetuating this distinction, gallery owners, also usually collectors and consumers with traditional education in the field of art, commonly classify themselves as part of an exclusive community and recognise that this creates a cultural threshold which is difficult to traverse.

'People are frightened to go into galleries...there is this aura of intimidation' (G1); 'the art world created this mystic world around them so people are afraid to step into it' (G3) and 'they see it with suspicion and doubt' (G4).

The perception that art is an exclusive domain meant for privileged individuals who are accustomed to this type of leisure activity due to their habitus is reflected in the experiences of consumers when they engage with the traditional structures of the market as C3 discusses:

Galleries make me feel uncomfortable. I once walked into a gallery, and I could immediately see the evaluation of me, almost bombastic language came out from the lady, floury language...I felt myself playing into the role and I came out feeling really dirty. It wasn't a nice experience for me at all. (C3)

For many consumers their experiences in the traditional art domains make them reject such places as relevant art access point and seek out alternatives less bound by the taste dictates of the market.

Knowledge as Quintessence of Good Taste

Art is considered a knowledge product with the assumption that "the purchase of art is based on the knowledge of experts" (Joy and Sherry, 2003a; 176). The importance of knowledge about the product category has emerged as a focal point of discussion among traditional galleries, experienced buyers and online consumers. Stakeholders of the art world firmly state the difference between 'good taste' and 'bad taste' using the pool of knowledge or field specific capital. Gallery Owner 6 discusses:

The more experienced is the art buyer he has a better idea about what is good quality, whereas a less experienced person is just

interested in an image for the house and they will go for the safer option...I would say they look for different things. (G6)

Given that the interpretation of good taste is considered an outcome of education and knowledge, the gallery institutions consider that they serve an informational role (McQuarrie et al., 2015). They provide customers with mentoring and advice in order to help them progress from novices to connoisseurs:

We are trying to teach them...we are trying to make them recognize the differences and appreciate the quality of a piece of art. They need to understand what is behind it.(G7)

As such, dealers and galleries feel both ability and obligation to shape and develop taste (Joy and Sherry, 2003a) in the traditional sense. The transfer of knowledge is thus tied into a series of practices which result in a bonding link between institution and customer: *we sort of build relationships with our clients quite strongly because we go and install the work, we advise them...they are loyal to us (G8)*

Conversely, knowledge in online-mediated communities is separated from institutionalized actors in the field. Arsel and Bean (2013) thus argue that consumers develop field-specific capital through participation in these consumption spaces. However, from the accounts of novice consumers it emerges that knowledge is not a dominant component of their experience. They emphasize the affective over the symbolic and do not try to emulate the scholarly practices of the cultural elite.

All I know is what I like and why I like it... It is not an academic exercise...Galleries frame what is considered good art (C1). I am not a dry academic though, I learn what I am interested in. (C3)

Novice consumption preferences and product choices are guided by autotelic pleasure (Holt, 1998; Thompson, 2013) rather than symbolic meaning (Belk, 1988). Online art community participants do not exhibit strategies aimed to resist the hegemonic forces of established market institutions rather they engage in conversations about art based upon their strong enthusiasm and fascination with the field (Dolbec and Fisher, 2015). Accordingly, they show differences in understanding and interpretation of the meaning assigned to objects of art. They define taste purely based on hedonic criteria shaped by community consensus. Shared taste overrules scholarly discussions of artistic worth.

Extending the findings of Arsel and Bean (2013) and Dolbec and Fisher (2015) our findings suggest that a new parallel taste regime is being established in online art appreciation.

Quality in art difficult to judge? It's nonsense and I will tell you why...this is when snobbery comes in and elitism. Somebody is relying on somebody else telling them the worth of something. To be true to yourself, you should be able to judge that worth yourself...(C1)

A regime of aesthetic standards liberated from market institutions, where value is understood through individual judgement rather than set guidelines of taste practice, offers every participant the opportunity to express judgement on what is taste and negotiate acceptance of this within this community.

You don't have to be knowledgeable about art. Either you like it or you don't like it. The technique of what they do and how they do it, I don't have knowledge about that. It looks simple but people tell me it is not simple. (C6)

Scaraboto and Fischer (2013) suggest that parallel taste structures emerge as novice consumers amend institutional practices. Contrary to Arsel and Bean's (2013) account, art taste regimes do not converge through discursive systems, participant interaction and experience exchange because the online art sphere is deprived of the traditional market taste-makers and the knowledge pool is not enriched by these voices. Rather the participants believe that market actors such as gallery owners are undermining the art world due to their disregard of novice tastes: *Because I think it is elitist and they are just serving a specific clientele.(C7)*

A parallel can be drawn also with Schouten and McAlexander's (1995) community of riders who depreciate both richer subgroup and lower milieu consumers. Our online communities label the traditional circle of art buyers pretentious snobs.

Online Space as Negotiator of Taste

Our data suggests that consumers who develop their passion for art using online platforms, do not encounter the traditional codes of consumption (Üstüner and Holt, 2010). Along these lines, the modality of product evaluation and criteria for judgement differ between the group of novice internet consumers and the more experienced buyers. Novice taste becomes tightly linked to personal identity and social affiliation (Richins, 1994; Rindfleisch et al., 2009). Accordingly, participation in one online collective implies the rejection of views and practices associated with the traditional offline art world (Wenger, 1998). As C1 explains:

I find it all a bit pretentious...the art can have a great story behind but the reality is how it leaves you feeling. I don't even understand what these people are saying..."I don't like this piece of art, I've been told a short story about it and now I love it..." So would not that person be better reading a book if they like stories. For me it has to leave a feeling and a story is not going to change that. (C1)

Novice buyers highlight the importance that aesthetic criteria bear over the interpreted meaning and discourse underpinning the product thus emphasising the role of beauty over technique. The engagement of consumers in online art spheres enables them to be assimilated in novice art consumption practices however the cultural capital acquired through these interactions stays specific to the field of online mediated art consumption without a clear evolution of the underpinning practices.

There is so much online people can find that at the end they build a market for it that feeds itself. But I don't know if this market ever becomes educated...I think that all the social media does that... There is so much art out there online and a lot of people do not understand quality even though they are very confident about their knowledge (C4).

Vargo and Lusch (2011) suggest that value is defined and dependent upon both symbols and practices which can be considered as institutions that guide the process of evaluation. Traditional cultural class consumers, by engaging with institutions like galleries and attending events such as vernissages and exhibition openings, have the opportunity to interact with other participants in the field thus securing a sharing of understandings and experiences which will enable them to interiorize such practices (Saaticioglu and Ozanne, 2013). Complex discussions involved with the meanings of the objects being appreciated and the cultural pedigree of the artist (Üstüner and Holt, 2010) become dominant: *I think the narrative of a painting,*

the journey of a painting is very important...it is not just a picture on the wall (Art Fair).

Interaction is a necessary component for successful constitution of a shared identity (Goulding et al., 2013). Shared understanding is achieved through the sharing of experiences, contexts, institutions and language (Akaka, 2014) highlighting the specificity of doing taste (Arsel and Bean, 2013) in the online and offline art worlds. The what (object), the how (doings) are mutually acknowledged with collectively defined understanding, however the why (meaning) (Akaka, 2014) sets the point of departure between expert and novice Internet consumers' art consumption.

CONCLUSIONS

This paper extends understanding of the ways in which taste emerges from practice. It bridges the divide between taste as embodied and taste which is dependent upon individuals' agency (Arsel and Bean, 2013) distinguishing between institutionally governed practices and those founded on the principles of free access and rights of expression championed by the internet (McQuarrie et al., 2015). Online, taste emerges from idiosyncratic practices, consumer preferences and understandings that are characterised by a distinctive normative system applicable only to the online consumption context. The online system has evolved as a consumption alternative to the power laden, cultural capital rich offline art market which retains high access barriers (Holt, 1998). Online art consumption emerges as a hedonic rather than knowledge driven domain (Hoyer and Stokburger-Sauer, 2012) with distinctive practices, taste structures (Sandicki and Ger, 2010) and cultural capital (Scaraboto and Fischer, 2013). So while platforms of online participation may have widened

art's accessibility, rather than evening out tastes and practices, they result in the formation of parallel taste structures (Sandicki and Ger, 2010). This may be attributable to the flexibility and ephemeral nature of relationships among participants within the online art world, which resemble publics rather than communities. Arvidsson and Calliandro (2015; 399) suggest that "public sharing of perspectives and experiences that derive from a plurality of identities and practices, [...] are not elaborated into explicitly recognized common values that can provide a source of identification" explaining the multiplicity of online practices evident in this study. This represents a suitable avenue for future research about the making of taste in a broader range of online spaces.

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Table 1: Findings

Themes	Description	Participant Data
Cultural Capital as Requisite for Access	Fine art is epitomised as consumption heavily marked by cultural capital class based distinction and thus a high level of embodied cultural capital is necessary in order to be granted access to the traditional art practice system. As novice consumers seek out for alternatives less bound by the taste dictates of the market, this capital requisite is not anymore necessary in the online consumption space.	<i>Galleries make me feel uncomfortable. I once walked into a gallery, and I could immediately see the evaluation of me, almost bombastic language came out from the lady, flourey language...I felt myself playing into the role and I came out feeling really dirty. It wasn't a nice experience for me at all. (C3)</i>
Knowledge as Quintessence of Good Taste	Contrarily to experts, knowledge is not a dominant component of the experience in novice consumers as their consumption preferences and product choices are guided by autotelic pleasure rather than symbolic meaning.	<i>The more experienced is the art buyer he has a better idea about what is good quality, whereas a less experienced person is just interested in an image for the house and they will go for the safer option...I would say they look for different things. (G6)</i>
Parallel Taste Regime	Parallel taste structures emerge as novice consumers amend institutional practices in view of a regime of aesthetic standards liberated from market institutions.	<i>You don't have to be knowledgeable about art. Either you like it or you don't like it. The technique of what they do and how they do it, I don't have knowledge about that. It looks simple but people tell me it is not simple. (C6)</i>
Online Space as Negotiator of Taste	The engagement of consumers in online art spheres enables them to be assimilated in novice art consumption practices however the cultural capital acquired through these interactions stays specific to the field of online mediated art consumption without a clear evolution of the underpinning practices.	<i>There is so much online people can find that at the end they build a market for it that feeds itself. But I don't know if this market ever becomes educated...I think that all the social media does that... There is so much art out there online and a lot of people do not understand quality even though they are very confident about their knowledge (C4).</i>

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Consuming “To Have No Self”: Kawaii Consumption in Japanese Women’s Identity Work

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ABSTRACT

This paper explores consumption and identity using data collected in Japan. We find that consumptions are sometimes used to “eliminate” a sense of self contrary to past researches proposing “extended self.” In the society where self-expression has less significance possessions don’t necessarily define individuals or aid in maintaining their identity.

INTRODUCTION

Bagozzi (2013) claims that “consumption begins and ends with the self” (255). This statement represents a premise that underlines much of the existing research on consumption and identity, particularly those conducted in the U.S. In this perspective, consumers are viewed as those attempting to achieve their identities and to self-actualize through consumption. However, in some cultures, a state of having “no self” is accepted (Doi 1971). In such cultures, consumption may be used not to self-actualize but rather to achieve a state of having no self. Using the data gathered from Japanese female consumers on *kawaii* (cute) consumptions, we explore how consumption plays a role in identity formation in a culture where self-actualization is less significant.

Although cultural differences in the conceptions of self have been much researched in anthropology and psychology (e.g., Benedict 1946; Heine et al. 1999; Spencer-Rodgers et al. 2009; Markus and Kitayama 1991; Rosenberger 1992), very little research has been done to examine cultural differences in consumers’ identity project (exceptions are Kimura and Sakashita 2013; Suzuki and Akutsu 2012). Given the growing interest in redefining existing consumer theories that are primarily based on data gathered in the U.S. (e.g., Arnould 1989; Joy 2001), this study on consumption and identity in a non-Western culture is appropriate.

This article is organized as follows. In the first section, we briefly review the existing literature on consumption and identity; we then discuss the Japanese concept of self. This enables us to understand cultural differences in the pursuit of self-actualization and to explore the ways in which consumption is related to the Japanese consumers’ identity formation. In the second section, we describe the methodology used in this study. In the third section, we analyze the data and argue that in Japanese culture, consumptions are sometimes used to create “having no self” (*jibun ga nai*) situations. In the fourth section, we provide suggestions for future research.

CONCEPTUAL FRAMEWORK

Consumption and Identity¹

Past research on consumption and identity has focused on how people use consumption to define themselves and maintain their sense of identity (e.g., Belk 1988; McCracken 1986; see Arnould and Thompson 2005 for a review). For example, Belk (1988) examines how consumers use possessions to extend, expand, and strengthen their sense of self. He concludes that “we are what we have and that this may be the most basic and powerful fact of consumer behavior” (160).

¹ In this paper, following Belk (1988), the terms “self,” “sense of self,” and “identity” are used as synonyms for how a person subjectively perceives who he or she is.

Belk’s concept on self and possessions, the “extended self,” has been very influential and has generated many discussions. Soon after its publication, Cohen (1989) criticizes that the concept is imprecise and not fully articulated. For example, Cohen asks whether the extended self is differentiated from the inner “core self.” Belk (1989) replies that “it is not possible or desirable to draw an absolute distinction between things that comprise the inner self and things that comprise the extended self” (129). He continues that “rather than seeking absolute conceptualizations of extended versus core self, a more satisfactory perspective is to regard extendedness as relative” (130). He explains that we could measure the degree to which possessions are perceived to be a part of an individual’s self. Although Cohen and Belk disagree on the necessity of preciseness toward the extended self concept, they agree that people have a self.

Here, consumption is seen as helping define people’s sense of who they are. In short, consumer identity researchers presume that people are active identity seekers and that they use consumption to express their self. Although recent works acknowledge that developing and maintaining a consistent sense of self is difficult today (Ahuvia 2005; Bahl and Milne 2010), consumers continue to be regarded as striving to actualize their selves. Ahuvia (2005), for example, shows how consumers use loved objects and activities to construct a coherent identity narrative in the face of social forces pushing toward identity fragmentation.

In contrast, this research argues that not all consumers are active identity seekers and that consumption is not always used to achieve self-actualization. In some cultures, people choose to have no self in some occasions. In such cases, consumption can be used to “eliminate” the sense of self. This role of consumption has thus far been overlooked by consumer identity researchers. In the next section, to illuminate cultural differences in the sense of self between East and West, the Japanese conceptions of self will be discussed.

“To Have a Self” versus “To Have No Self”

The expression “to have no self” (*jibun ga nai*) can be found in the Japanese language. Doi (1971) argues that this expression is peculiar to the Japanese, with no equivalent expression in the languages of the West. Furthermore, there is a difference in the use of the first person pronoun between the West and Japan. “In the West, there is a linguistic emphasis on the use of the first person, and the child is awakened to an awareness of the self from a very early age, so that expressions equivalent to *jibun ga nai* have never come into everyday use – the use of expressions similar to it, being confined to clearly abnormal cases, such as schizophrenia” (134). In contrary, in Japan, the first person pronoun is often omitted. In the West, “to have a self” is a norm; however, it is not so in Japan.

According to Doi (1971), “to have no self” symbolizes the type of relationship that one has with others. An individual “has no self” when submersed in a group. For example, when one has no self, he or she agrees with the group even when his or her interests or values do not coincide with those of the group. In other words, “to have no self” is a state in which an individual does not maintain a self in a group. In *zen* philosophy, “no-self” (*muga*) is defined as a loss of oneself in the totality (Johnston 1970; Mathers, Millers and Ando 2009) and is accepted as a positive state.

The idea of integrating group into a sense of self is not new in consumer identity research. Relying on social-identity theory (Tajfel 1978), consumer researchers have assessed how consumptions related to social categories, roles, or groups to which an individual belongs allows individuals to unify their everyday actions and make up a global sense of self (e.g., Kleine, Kleine and Kernan 1993). However, past research has assumed that social identities contribute to the achievement of an individual's sense of self. For example, Belk (1988) acknowledges that individuals have multiple levels of self such as individual, family, community, and group; however, all of these levels are considered to be a part of the individual's self. This study, in contrast, considers cases where the individual's self is non-existent as a result of submersing in the group.

Kawaii Consumption in Japan

Kawaii consumption was selected as the specified domain of experience for this study. *Kawaii* has been a major driver of consumer culture in Japan since 1970s, particularly among young women (Kinsella 1995; Granot, Alejandro, and Russell 2014). *Kawaii* has become a cultural phenomenon that can be seen almost everywhere from fashion to daily necessities (e.g., cartoon toiletries). Japanese companies, and even banks and government have been using animated characters in their marketing communications to attract consumers.

Whereas the term is literally translated as "cute," Kinsella (1995) explains that "*kawaii* essentially means childlike; it celebrates sweet, adorable, innocent, pure, simple, genuine, gentle, vulnerable, weak, and inexperienced social behavior and physical appearances" (220). She continues that *kawaii* style is associated with acting childish in an effort to partake in some of childhood's simplicity, happiness, and emotional warmth. *Kawaii* appears to be transitory, imperfect, or immature; however, it includes emotional intimacy that eliminates psychological distance by creating an illusion of closeness. The esthetic to praise "childlike" or "imperfect" things has always been accepted positively by Japanese culture, as indicated by a description related to *kawaii* in the *Pillow Book (Makura no Sōshi)* which was written by *Sei Shōnagon*, a lady-in-waiting in the 11th century.

Examining the socio-cultural meaning of the concept of cute, Granot et al. (2014) explains that *kawaii* is "embedded in the culture and manifests itself in social and gender roles, particularly those of young Japanese women" (73). It is important to point out that affection for cute things for women means more than reflecting their preference; it is a reflection of a deep longing for the time when they were girlish and young (Granot, Greene and Brashear 2010), or in other words, when they were free and peaceful with no fetters or distress. Hence, we assumed that the *kawaii* consumption would be a good context to study consumption and identity project, particularly among Japanese women.

METHOD

This study employed a hermeneutic approach, a commonly used approach in consumer identity research (e.g., Arnold and Fischer 1994; Thompson 1997; Thompson, Pollio, and Locander 1994). In-depth interviews with 24 Japanese female informants were conducted. Our sample was composed of various age groups and included high-school students, undergraduate students, working single females, and married females having children (see table 1). The informants were recruited using a research agency. They were given 10,000 yen (about \$100) for their participation. The interviews lasted three hours and were audiotaped. The data collection process took place between June 15 and 18, 2006. All the interviews were conducted in the local language (Japanese).

To obtain a first-person description of consumers' experience, the interview aimed to have a conversation with the informants.

Respondents were assured of anonymity (names used here are all pseudonyms). The questions and probes were aimed at obtaining descriptions of experiences and were not intended to confirm theoretical hypotheses. Such attempts were important to capture the true feelings of informants because Japanese people have a tendency not to reveal their true inner feelings (Doi 1971).

We analyzed the text composed from the interviews, moving from a discussion of the part to the whole (Joy 2001; Thompson, Locander, and Pollio 1989). We discussed each theme extensively before reaching a consensus, attempting to be open to the possibilities afforded by the text (Thompson and Tambyah 1999).

FINDINGS

Through the findings section, this article shows that Japanese female consumers sometimes use *kawaii* consumptions to create "having no self" situations. The first section briefly provides the background by introducing the versatility of *kawaii* concept and explains how this contributes to creating a sense of "having no self," particularly by hiding the core self through sympathizing with others' *kawaii*. The article proceeds by detailing two themes related with *kawaii* consumptions and "having no self" situations: eliminating the self to gain acceptance in society and the dependency embedded in *kawaii*.

Versatility of the Kawaii Concept

Many of our participants use the expression *kawaii* because the word does not have any special meaning to them. For example, Mai, a 17-year-old high-school student, describes *kawaii* as an easy to use word to compliment others. When Mai uses the word *kawaii*, she does not need to provide a meaning herself. Instead, the recipient of communication will provide the meaning. In fact, Mai comments that she does not necessarily like the things or activities that she describes as *kawaii*. Thus, when she says "that's *kawaii*" to praise others' possessions, it does not mean that she agrees with their preferences. Here, it is important to note that the recipients believe that Mai also likes things or activities that she refers as "that's *kawaii*." In other words, Mai's true feelings, as well as her core self, remain hidden from others.

Similar to Mai, many Japanese females use *kawaii* consumption to sympathize with others' *kawaii*. Consider the reflections of Lisa, a 28-year-old working single female. She comments: "When others feel 'it's *kawaii*,' I feel 'indeed, it's *kawaii*' just so that we can talk about the same story." When asked to talk about *kawaii* objects, Lisa mentioned the lion magnet that she displays at her office. Lisa explains that she received it from her colleague as a gift. She agrees that the magnet is *kawaii*; however, she does not have a special feeling toward it. In other words, she neither likes or dislikes it. If others feel that the lion magnet is *kawaii*, Lisa is happy to display it at her office even though she does not really like it.

Eliminating the Self to be Accepted by Society

Many Japanese females associate *kawaii* with a girl's image. The examples given as *kawaii* consumption in the Table 1 illustrate this. Many of *kawaii* things are colored pink, a color that symbolizes a girl. *Kawaii* things also represent girlishness. In Japan, *kawaii* is a word that often describes the society's ideal girl. Therefore, Aiko, a 32-year-old working mother, comments: "Every girl wants to be *kawaii*." Japanese females also believe that males expect girls to be *kawaii*. Hana, a 27-year-old working single female says, "Girlish ones benefit more. From the male perspective, girlish ones are more *kawaii*."

Table 1: Informant Profiles

Pseudonym	Age	Example of <i>kawaii</i> consumption	Occupation	Family
Aiko	32	pink-colored goods	Part-time job at building maintenance company	Married, child(ren)
Aki	19	manicures	Undergraduate student	Not married
Anna	20	pink furnitures	Undergraduate student	Not married
Aya	16	<i>Seventeen</i> (teen magazine)	High-school student	Not married
Chie	18	Minnie Mouse keyholder	High-school student	Not married
Emi	18	skirt	Undergraduate student	Not married
Erika	18	comic book by Miku Sakamoto	Undergraduate student	Not married
Hana	27	Hello Kitty goods	Real estate company employee	Not married
Iku	27	photo-taking of her daughter	Full-time housewife	Married, child(ren)
Jun	29	Japanese-taste hair ornament	Administrative staff at highway public corporation	Not married
Kana	31	peach	Administrative staff at tableware sales company	Not married
Kei	19	heart-shaped cushion	Undergraduate student	Not married
Kumi	32	kitten illustrated memo pad	Credit card company employee	Not married
Lisa	28	lion-motif magnet	Administrative staff at construction company	Not married
Mai	17	fashion	High-school student	Not married
Meg	28	hairstyle	Full-time housewife	Married, child(ren)
Misa	16	Alice-in-Wonderland motif hair ornament	High-school student	Not married
Nami	15	bear	High-school student	Not married
Rika	26	photo-taking of her children	Full-time housewife	Married, child(ren)
Rio	22	pink, heart-shaped bracelet watch	Undergraduate student	Not married
Sae	17	Anna Sui fragrance	High-school student	Not married
Saya	35	flower-motif hair ornament	Full-time housewife	Married, child(ren)
Yuko	34	photo-taking of her daughter	Part-time job at apparel mail-order company	Married, child(ren)
Yuri	32	accessory	Administrative staff at apparel company	Not married

For Rio, a 22-year-old undergraduate student, *kawaii* is closely associated with her ideal female image. Rio considers *kawaii* as a compliment and says that she becomes happy when others think of her as *kawaii*. Thus, she desires a pink, heart-shaped bracelet watch and a pink bracelet, hoping that others will see her as *kawaii* when she is wearing them.

When Rio adopts *kawaii*, she is submersing herself in the Japanese society and its values. Rio is attracted to *kawaii* simply because the society highly evaluates it. In fact, she does not have her own opinion about *kawaii*. Nor does she pursue her own uniqueness.

I don’t like doing something that is very unique. I feel *kawaii* when I am wearing things that others consider as *kawaii*. I feel good when others think of them as *kawaii*. Thus, when others feel *kawaii* toward the things that I feel as *kawaii*, I am assured that I was not wrong.

Dependency Embedded in *Kawaii*

When asked about *kawaii* consumption, many Japanese mothers mention consumption for their children. For example, Yuko, a 34-year-old mother of a 3-year-old daughter, narrated about her daughter’s photo being taken dressed up like a princess. She explains

that she feels happy when her daughter is *kawaii*. Yuko felt happy seeing her daughter dressed up.

Yuko emphasizes that she gave birth to her daughter, suggesting that she feels a sense of oneness with her daughter. Her *kawaii* consumption for her daughter suggests that Yuko is consuming things and experiences that she cannot consume herself. Yuko distinguishes adult and children’s worlds, and feels that adults cannot consume *kawaii*. She mentions that “When I see [my daughter] dressed up, I feel *kawaii* [...]. I feel *kawaii* for those things that I cannot do.”

Here, we see that Yuko is dependent on her daughter and has no self. Doi (1971) argues that the sense of “having no self” is closely connected with the concept of *amae* (dependency). An individual who is at the mercy of *amae* has no self or ego. Doi (1971) defines *amae* as “the attempt to deny the fact of separation” (p. 75) and explains that the psychological prototype of *amae* is the emotion felt by the baby towards its mother; *amae* “works to foster a sense of oneness between mother and child” (p. 75). Here, we see *amae* can also be felt by the mother towards her child and that *kawaii* consumption plays a role in reinforcing oneness between the two. Yuko recognizes that *kawaii* belongs to children and not to adults. However, she is consuming *kawaii*-related objects and activities not only for her daughter but also for herself, as she is experiencing *kawaii* consumption through her daughter.

DISCUSSION

Revisiting the Centrality of Identity Issues in Consumption

Post Belk (1988), the assertions that identity issues are central to consumption and that possessions are a part of the self have been supported by consumer identity researchers (e.g., Ahuvia 2005). However, this research illuminates the possible boundary condition to these assertions – in some cultures, consumption may not necessarily reflect the individual’s self. During the three-hour-long in-depth interviews with the 24 Japanese informants, the narratives about their *kawaii* consumption to submerge themselves in a group or society appeared many times. In such cases, the informants possessed *kawaii* objects and engaged in *kawaii* behaviors not because they thought of such objects and behaviors as *kawaii* but because others thought of them as *kawaii*. The informants possessed *kawaii* objects not for expressing their selves but rather to be accepted by the group or society. *Kawaii* objects or behaviors serve not as a means of expressing their selves, but as a socialization tool of blending themselves to achieve the “to have no self” (*jibun ga nai*) state in the community. In Japan, consumptions sometimes do not reflect the self or help to express a sense of self.

Cultural Differences in Self, Individual Motivations, and Social Strategies

In Western cultures, expressing one’s individuality and uniqueness has an important function in society (Markus and Kitayama 1991). In such cultures, self-expression through extending the self through consumption is a part of individuals’ strategies to be successful in the society (Belk 1988; Takemura 2014). However, in East-Asian cultures, individuality and uniqueness are less valued (Markus and Kitayama 1991), and social relationships are generally determined by environmental and social constraints (Yuki and Schug 2012). In such cultures, self-expression has a relatively weak effect in social lives (Takemura and Suzuki in press). Our findings suggest that consumptions to “eliminate” self or create a sense of “having no self” could function as a useful strategy to be accepted in such societies.

Our interviews with the Japanese females showed that *kawaii* consumption is often used as an individual’s social strategies. Lisa’s possessing a lion magnet that she herself does not necessarily think as *kawaii*; Aiko, Hana and Rio’s wearing *kawaii* clothes and accessories to present socially desired girly images; and Yuko’s dressing up her three-year-old daughter like a princess fulfill social needs such as sympathizing with others, seeking socially praised ideals, and fostering a sense of oneness with others, respectively. Through *kawaii* consumption, Japanese consumers are striving to “have no self” as a way to be successful in their own culture. Figure 1 explains the cultural differences between East Asia (Japan) and the West in terms of consumption, self, and society.

“Having No Self” and Collective Identity

“Having no self” at a glance seems to be similar to collective identity. However, as mentioned before, we argue that the two concepts are different. In our study, the Japanese females consuming *kawaii* goods or services did not discuss how family, community, or group play as part of their own selves. Instead, they explained how buying *kawaii* goods and using them helped them eliminate their selves and submerge into the group. Here, a “no self” is created.

Shau and Gilly (2003) have engaged in a similar yet different discussion in which they introduce the concept of affiliative identity. Using the examples of how consumers use brands and hyperlinks to

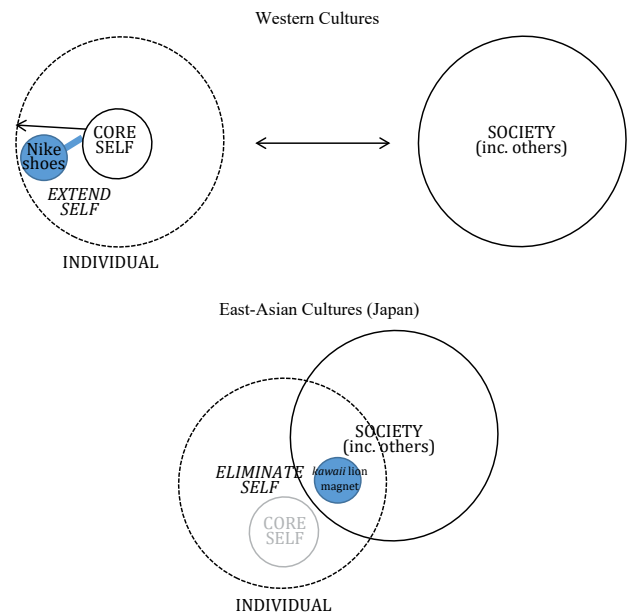


Figure 1: Cultural Differences in Consumption, Self, and Society

create cyber self-representations, Shau and Gilly explain the difference between individual and affiliative identities. Individual identity demonstrate “me,” whereas affiliative identity establishes “we.” However, in affiliative identity, people are not sacrificing the idea of an integrated self. In other words, “me” is a part of “we” and thus, “we” is a collection of many “me”s. In contrast, in “no self” situations, “me” does not exist as part of group identity.

CONCLUSIONS

In general, the objective of the consumer identity project is to actualize a sense of self and answer the “Who am I” question. In this perspective, consumption could be used by individuals to define their identity. However, this research has illuminated cases where consumers are not attempting to actualize their selves. In such cases, individuals may use consumption to submerge in a group and thus to “eliminate” the individual’s self.

This research only assessed female participants, which is its major limitation. We need to further explore consumption and explore the “to have no self” state in male participants, most likely in a different consumption context (i.e., not *kawaii* consumption).

This study also raises the question of the generalizability of our research findings to people in other East-Asian cultures, such as China, Korea, and Taiwan. Since Doi’s (1971) findings of “having no self” are based on Japanese people, we need to further investigate whether “having no self” state, as well as the role of consumption to create such a state, exists in other East-Asian countries.

Furthermore, since the data for this article were collected in 2006, follow-up data collection in the present context may be necessary to supplement data.

Nonetheless, this article extends the past research on consumption and identity by challenging the universal assertions of the centrality of identity in consumption (e.g., Bagozzi 2013; Belk 1988). It also showed the role of consumption to “eliminate” a sense of self, which has thus far been overlooked by the consumer identity researchers.

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When Credibility Truly Matters Online: Investigating the Role of Source Credibility for the Impact of Customer Reviews

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ABSTRACT

This research shows differential effects of source credibility in an online customer review (OCR)-context. Drawing on the heuristic systematic model's notion regarding the co-occurrence of systematic and heuristic processing we show that source credibility exerts a persuasive effect when OCRs are positive (non-diagnostic) but not when they are negative (diagnostic).

INTRODUCTION

The internet provides consumers extensive opportunities to share their positive and negative experiences, opinions and sentiments towards products or brands in the form of online comments. Within recent years, online customer reviews (OCRs), i.e., peer-generated product evaluations posted on company or third-party websites (Mudambi and Schuff 2010), have become increasingly popular among consumers who regularly consult OCRs in all stages of the purchasing process (Filieri 2015). The practical importance of OCRs within the marketing communication mix is well recognized among scholars. A rich body of academic studies supports the notion that OCRs can exert a strong influence on consumer decision-making (Filieri and McLeay 2013; Senecal and Nantel 2004; Smith, Menon, and Sivakumar 2005) and product purchases in different categories (e.g., electronics, hotel rooms) (Cui, Lui, and Guo 2012; Zhu and Zhang 2010).

The direction and strength of the persuasive effect of OCRs are dependent on the valence of the message, i.e. whether it is negative or positive, and on the credibility of its source. Research suggests that the credibility of the message source is particularly important online (e.g., Dou et al. 2012) as a predictor of OCRs' persuasiveness (Cheung et al. 2009). Source credibility of OCRs refers to the extent to which the reviewer is perceived as a knowledgeable source for product information and can be trusted to give an objective opinion on the product (Goldsmith, Lafferty, and Newell 2013). It is widely assumed that in the online context, credibility perceptions act as a key moderator of OCR influence, in that highly credible positive (negative) information is more influential than low-credibility positive (negative) information (e.g., Pan and Chiou 2011). In this research we show that this understanding may be too simplistic. Drawing on an extension of the heuristic systematic model (Chaiken 1980) regarding the co-occurrence of systematic and heuristic processing (Chaiken, Liberman, and Eagly 1989; Chaiken and Maheswaran 1994), we shed light on the differential effects of source credibility in an OCR context. Specifically we show for two different types of products (search and experience goods) that source credibility exerts a persuasive effect only when OCRs are positive, but not when they are of negative valence.

BACKGROUND

According to the dual-process models the 'heuristic-systematic model' (HSM, Chaiken 1980) and the 'elaboration likelihood model' (ELM, Petty and Cacioppo 1986), individuals apply two different modes of information processing to form their judgments. When motivation and ability to process a given piece of information are sufficiently high, people engage in systematic processing (HSM) or

follow a central route (ELM) which means that they use considerable mental effort to scrutinize the content of a message. However, when motivation or cognitive capacity are low, individuals adopt heuristics and simple decision rules (e.g., friends or experts can be trusted) to make their judgments. One of the key assertions of the HSM is that when individuals switch from heuristic to systematic information processing because they are motivated and capable of doing so, this does not rule out the possibility that heuristic processing may still be adopted (Bohner, Chaiken, and Hunyadi 1994). Instead, the model posits that the two modes can occur concurrently. Chaiken et al. (1989) argue that the influence of a heuristic cue is, however, often attenuated when individuals process a message systematically because they draw their judgmental confidence from the message content. Yet, when individuals are motivated to process systematically, either they may be unable to do so or the message content does not provide unequivocal information that enables them to come to a conclusion, so that the persuasive impact of heuristic cues is enhanced. In their seminal study on the co-occurrence of heuristic and systematic processing, Chaiken and Maheswaran (1994) show that source credibility has a persuasive effect under systematic processing when the information provided is ambiguous. When the information is clear, on the other hand, source credibility does not exert an effect when individuals are motivated and able to engage in systematic processing.

In the current research context, we argue that the valence of an OCR determines whether it is perceived as clear or ambiguous. Findings on the negativity bias, i.e. that people value negative information more than positive information (e.g. Baumeister et al. 2001; Rozin and Royzman 2001), suggest that negative information is, in general, less ambiguous than positive or neutral information (Herr, Kardes, and Kim 1991). This is because negative information is more diagnostic of the character of an entity (person, product or firm) (Skowronski and Carlston 1987). Positive information, on the other hand, is open to multiple interpretations (Hoch and Deighton 1989), because even the worst product can have at least some positive attributes (Herr et al. 1991). On the internet, the ambiguity of positive OCRs is aggravated by the anonymous environment that facilitates unethical marketing communication in the form of faked reviews (Mayzlin, Dover and Chevalier 2012) or the removal of unfavorable comments by the marketer or platform owner. Doh and Hwang (2009) contend that it is especially in higher-involvement situations that consumers become suspicious about positive eWOM messages. Furthermore, negative compared to positive peer information is sparse in the online context (Bronner and Hoog 2010), which makes negative OCRs also more notable, attention-grabbing and salient (Willemssen et al. 2011) than positive OCRs.

OCRs are usually read by consumers to learn more about a certain product or service which they are considering purchasing. Thus, it can be assumed that the users of OCRs are at least moderately motivated to process the message and form an accurate judgment of the respective product or service. When the OCR is of negative valence, i.e. unambiguous and diagnostic, message content is scrutinized and used for judgment formation. Information about the message source may be noticed. Its effect is, however, attenuated because sufficient

confidence in the judgment can be drawn just from the message content (Chaiken et al. 1989). When the OCR is positive, on the other hand, message content alone is not sufficient to form a judgment because it is rather non-diagnostic and open to multiple interpretations. Thus, consumers will apply the source-credibility heuristic in addition to the content provided in the OCR (see Chaiken and Maheswaran 1994). High levels of perceived source credibility are likely to trigger the simple decision rule “knowledgeable persons’ product recommendations can be trusted” that influences an individual’s message judgment by influencing his/her thoughts, which ultimately determines message acceptance (Chaiken and Maheswaran 1994).

From the above discussion, we hypothesize an interaction between OCR valence and source credibility on product attitude and purchase intention:

Hypothesis 1: a) When OCR valence is negative, consumers’ product attitudes and purchase intentions are influenced by message content and not by source credibility. However, b) when OCR valence is positive, consumers’ product attitudes and purchase intentions are influenced by message content as well as source credibility.

When consumers process positive OCRs, they take the information on the credibility of the source into account for their judgment formation. When source credibility is high, the arguments given in the OCRs should be perceived to be of higher quality compared to when credibility is low (e.g., Chu and Kamal 2008). Thus, we expect the effect of source credibility on product attitudes and purchase intentions to be mediated by perceived argument quality. We define OCR argument quality as the individuals’ subjective evaluation of the arguments conveyed in the message as strong and cogent on the one hand vs. weak and specious on the other (Petty and Cacioppo 1981). Thus, our second hypothesis reads:

Hypothesis 2: The effect of source credibility on product attitudes and purchase intentions in the case of positive OCR valence is mediated by perceived argument quality.

We expect this effects to be stable across different types of products. Consequently, in order to ensure the external validity of our argument, the hypotheses were tested across two replicative studies which focus either on search goods (study 1) or on experience goods (study 2).

STUDY 1

Study 1 compares the effects of positive (vs. negative) information in OCRs on product attitude and purchase intention in review situations that provide information from high- (vs. low-) credibility sources. Fictitious reviews for a fictitious digital camera were used to manipulate OCR valence and source credibility in an online experiment. eWOM experiments frequently use digital cameras as representatives of products that are of relevance to the target audience and thus allow the construction of a realistic experimental setting. Digital cameras are sound examples of search goods (e.g., Pan and Chiou 2011).

Method

Design, participants, and procedure

A 2 (OCR valence: positive vs. negative) × 2 (source credibility: high vs. low) between-subjects full factorial design was applied

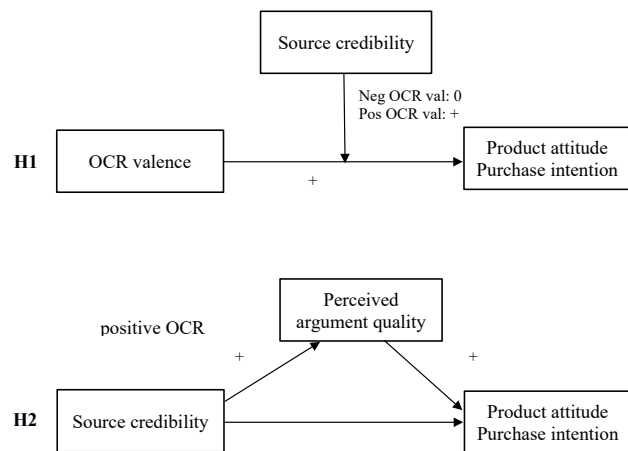


Figure 1: Summary of Research Framework

to test the proposed hypotheses. The participants were 195 (68 % female, $M_{age} = 25$ years) students from several German-speaking universities, randomly assigned to one of the experimental conditions. By participating in the experiment, students got the chance to win an Apple iPod Nano.

Participants were told to imagine that they visited a webpage with a product description and several OCRs in the course of their pre-purchase information search for a digital camera. In the high source-credibility condition, participants received the information that knowledgeable and trustworthy peers had provided product reviews. In the low source-credibility condition, the reviews were supposedly written by dubious and anonymous reviewers. Next, participants were exposed to the product description (including a picture of the digital camera) and the reviews. To ensure external validity, the stimulus material looked like a screenshot from a real webpage. The reviews were placed below the product description. In the positive valence condition, five different reviewers commented the product with five different positive reviews (i.e., description of product advantages, recommendation to buy the product). In the negative valence condition, the product received five different negative reviews (i.e., description of product disadvantages, warning against buying the product) from five different reviewers. Afterwards, participants answered questions that measured the variables of interest.

Measures. Seven-point rating scales (1=“strongly disagree” to 7=“strongly agree”) measured the variables. Three items collected information for argument quality (Luo et al. 2013; $\alpha = .92$), three items assessed product attitude (Kim and Gupta 2012; $\alpha = .96$) and four items measured purchase intention (Pavlou and Gefen 2004; $\alpha = .95$).

Results

Preliminary analyses

The manipulation of OCR valence (three items from Park and Lee 2008, 1=“negative” to 7=“positive”, $\alpha = .99$) was successful. Participants evaluated the positive OCRs significantly more positively than the negative OCRs ($M_{pos}^{val} = 6.45$ vs. $M_{neg}^{val} = 1.23$; $t(193) = 42.08$, $p < .01$). Our manipulation of source credibility (five items from Weitzl 2014, 1=“low credibility” to 7=“high credibility”, $\alpha = .92$) also showed the predicted effect. Source credibility was significantly higher in the high- than in the low-credibility scenario ($M_{high} = 4.58$ vs. $M_{low} = 3.47$; $t(193) = 6.83$, $p < .01$). Furthermore, OCR valence did not influence source credibility ($M_{pos}^{cred} = 3.96$ vs. $M_{neg}^{cred} = 4.13$; $t(193) = .95$, $p = .345$).

Table 1: Summary of Key Findings

Study 1 Search good		Study 2 Experience good	
N = 195; 68 % female, mean age: 25 years		N = 221; 72 % female, mean age: 23 years	
Cronbach's alpha			
Perceived argument quality	$\alpha = .92$	Perceived argument quality	$\alpha = .88$
Product attitude	$\alpha = .96$	Product attitude	$\alpha = .98$
Purchase intention	$\alpha = .95$	Purchase intention	$\alpha = .96$
Manipulation check			
Valence 1.23 vs 6.45	$\alpha = .99$ $p < .01$	Valence 1.73 vs 6.17	$\alpha = .98$ $p < .01$
Credibility 3.47 vs 4.58	$\alpha = .92$ $p < .01$	Credibility 3.93 vs 5.00	$\alpha = .94$ $p < .01$
Product attitude H1a & H1b (Moderation analysis)			
Valence	$p < .01$	Valence	$p < .01$
Credibility	$p > .05$	Credibility	$p > .05$
Valence x credibility	$p < .05$	Valence x credibility	$p < .01$
low high		low high	
neg. 2.79 vs 2.63	$p > .05$	neg. 3.08 vs 2.44	$p < .05$
pos. 3.95 vs 4.71	$p < .05$	pos. 4.97 vs 5.69	$p < .01$
Product attitude H2 (Mediation analysis)			
Total: credibility \rightarrow attitude, $\beta = .75^{**}$		Total: credibility \rightarrow attitude, $\beta = .72^{**}$	
Indirect: credibility \rightarrow argument, $\beta = .85^{**}$		Indirect: credibility \rightarrow argument, $\beta = .76^{**}$	
argument \rightarrow attitude, $\beta = .53^{**}$		argument \rightarrow attitude, $\beta = .53^{**}$	
($\beta = .46^{**}$)		($\beta = .40^{**}$)	
Direct: credibility \rightarrow attitude, $\beta = .30$		Direct: credibility \rightarrow attitude, $\beta = .32$	
Purchase intention H1a & H1b (Moderation analysis)			
Valence	$p < .01$	Valence	$p < .01$
Credibility	$p > .05$	Credibility	$p > .05$
Valence x credibility	$p < .05$	Valence x credibility	$p < .05$
low high		low high	
neg. 2.27 vs 1.95	$p > .05$	neg. 2.64 vs 2.26	$p > .05$
pos. 2.89 vs 3.90	$p < .01$	pos. 4.27 vs 5.09	$p < .01$
Purchase intention H2 (Mediation analysis)			
Total: credibility \rightarrow purchase, $\beta = 1.01^{**}$		Total: credibility \rightarrow purchase, $\beta = .83^{**}$	
Indirect: credibility \rightarrow argument, $\beta = .85^{**}$		Indirect: credibility \rightarrow argument, $\beta = .76^{**}$	
argument \rightarrow purchase, $\beta = .60^{**}$		argument \rightarrow purchase, $\beta = .56^{**}$	
($\beta = .51^{**}$)		($\beta = .42^{**}$)	
Direct: credibility \rightarrow purchase, $\beta = .50^*$		Direct: credibility \rightarrow purchase, $\beta = .41$	

** p < .01, * p < .05

A MANOVA with OCR valence and source credibility as independent variables and product attitude and purchase intention as dependent variables yielded a significant main effect of OCR valence ($V = .31$, $F(2, 190) = 42.22$, $p < .01$), a non-significant main effect of source credibility ($V = .02$, $F(2, 190) = 1.85$, $p = .16$) and a significant interaction between OCR valence and source credibility ($V = .06$, $F(2, 190) = 6.14$, $p < .01$). Follow up ANOVAs and planned comparisons then tested the moderation postulated in H1 for product attitude and purchase intention independently. Additionally, a mediation analysis tested H2.

Main analyses product attitude

A two-way ANOVA of product attitude revealed a significant main effect of OCR valence ($F(1, 191) = 84.34$, $p < .01$) and a non-significant main effect of source credibility ($F(1, 191) = 2.84$, $p = .093$). More importantly, results showed the predicted significant interaction between OCR valence and source credibility ($F(1, 191) = 6.72$, $p < .05$). Planned comparisons showed no significant dif-

ference for sources of high vs. low credibility when valence was negative ($M_{neg,high} = 2.63$ vs. $M_{neg,low} = 2.79$; $t(191) = -.61$, $p = .542$), supporting H1a. In the positive-valence condition, high source credibility led to significantly better product attitude than low source credibility ($M_{pos,high} = 4.71$ vs. $M_{pos,low} = 3.95$; $t(191) = 3.19$, $p < .05$). This finding supports H1b.

H2 postulates that perceived argument quality mediates the effect of source credibility on product attitude when OCR valence is positive. Mediation analysis (Hayes 2013; Model 4, bootstrap sample $n = 5000$) was applied to test this hypothesis. Results revealed a significant indirect effect of source credibility on product attitude through perceived argument quality ($\beta = .46$, $p < .01$, 95% CI = [.18, .78]). Specifically, results showed that source credibility positively influenced perceived argument quality ($\beta = .85$, $p < .01$), which in turn predicted product attitude ($\beta = .53$, $p < .01$). The direct effect of source credibility on product attitude was not significant ($\beta = .30$, $p = .131$). Thus, as predicted in H2, perceived argument quality mediates the effect of source credibility on product attitude in the case of

positive OCR valence. In contrast, for negative OCR valence, results revealed no significant mediation.

Main analyses purchase intention

A two-way ANOVA of purchase intention revealed a significant main effect of OCR valence ($F(1, 191) = 45.33, p < .01$), a non-significant main effect of source credibility ($F(1, 191) = 3.34, p = .069$) and, as predicted, a significant interaction between OCR valence and source credibility ($F(1, 191) = 12.25, p < .05$). Planned comparisons showed no significant difference for high- and low-credibility sources when valence was negative ($M_{neg,high} = 1.95$ vs. $M_{neg,low} = 2.27$; $t(191) = -1.13, p = .261$), supporting H1a. With positive valence, high source credibility led to significantly higher purchase intention than low source credibility ($M_{pos,high} = 3.90$ vs. $M_{pos,low} = 2.89$; $t(191) = 3.97, p < .01$). This result is in favor of H1b.

For H2, the mediation analysis revealed a significant indirect effect of source credibility on purchase intention through perceived argument quality ($\beta = .51, p < .01, 95\% CI = [.22, .88]$). Specifically, results showed that source credibility positively influenced perceived argument quality ($\beta = .85, p < .01$). Perceived argument quality then predicted purchase intention ($\beta = .60, p < .01$). The direct effect of source credibility on purchase intention was also significant ($\beta = .50, p < .05$). Thus, perceived argument quality partially mediates the effect of source credibility on purchase intention in the case of positive OCR valence. In contrast, for negative OCR valence, results revealed no significant mediation.

STUDY 2

The purpose of study 2 was to replicate the observed effects of OCR valence and source credibility for another product type: experience goods. The booking of a hotel room was used as the scenario for the pre-purchase information search for an experience good. All other aspects of the design and the manipulations were identical to those of study 1.

Method

Design, participants, and procedure

The experimental design was identical to study 1. Participants were 221 (72 % female, $M_{age} = 23$ years) students from several German-speaking universities, randomly assigned to one of the experimental conditions. By participating in the experiment, students got the chance to win an Apple iPod Nano.

Participants were told to imagine that they visited a webpage with a description of a hotel and several OCRs in the course of their pre-purchase information search for booking a hotel room. Manipulation of source credibility was identical to study 1; the reviews used in the positive and negative OCR condition were adapted for the context of study 2.

Measures

We assessed all variables with the same measures used in Study 1 (argument quality: $\alpha = .88$, product attitude: $\alpha = .98$, purchase intention: $\alpha = .96$).

Results

Preliminary analyses

Using the same measures, we assessed the manipulation of OCR valence ($\alpha = .98$) and source credibility ($\alpha = .94$). Both manipulations were successful. Participants evaluated the positive OCRs significantly more positively than the negative OCRs ($M_{pos}^{val} = 6.17$ vs. $M_{neg}^{val} = 1.73$; $t(219) = 25.48, p < .01$). Additionally, source credibility was significantly higher in the high than in the low source-

credibility scenario ($M_{high} = 5.00$ vs. $M_{low} = 3.93$; $t(219) = 6.32, p < .01$). Furthermore, OCR valence did not influence source credibility ($M_{pos}^{cred} = 4.48$ vs. $M_{neg}^{cred} = 4.45$; $t(219) = -.15, p = .878$).

A MANOVA with OCR valence and source credibility as independent variables and product attitude and purchase intention as dependent variables yielded a significant main effect of OCR valence ($V = .48, F(2, 216) = 101.25, p < .01$), a non-significant main effect of source credibility ($V = .01, F(2, 216) = 1.22, p = .30$) and a significant interaction between OCR valence and source credibility ($V = .06, F(2, 216) = 7.16, p < .01$). Follow up ANOVAs and planned comparisons then tested the moderation postulated in H1 for product attitude and purchase intention independently. Additionally, a mediation analysis tested H2.

Main analyses product attitude

A two-way ANOVA with product attitude as the dependent variable revealed a significant main effect of OCR valence ($F(1, 217) = 203.00, p < .01$) and a non-significant main effect of source credibility ($F(1, 217) = .052, p = .819$). More importantly, results showed the predicted significant interaction between OCR valence and source credibility ($F(1, 217) = 14.31, p < .01$). Planned comparisons revealed a significant difference for high- and low-credibility sources when valence was negative ($M_{neg,high} = 2.44$ vs. $M_{neg,low} = 3.08$; $t(217) = -2.51, p < .05$). This result is contrary to H1a. In the case of positive OCR valence, high source credibility led to significantly better product attitude than low source credibility ($M_{pos,high} = 5.69$ vs. $M_{pos,low} = 4.97$; $t(217) = 2.84, p < .01$). This result is in favor of H1b.

For H2, the mediation analysis revealed a significant indirect effect of source credibility on product attitude through perceived argument quality ($\beta = .40, p < .01, 95\% CI = [.12, .79]$). Specifically, results showed that source credibility positively influenced perceived argument quality ($\beta = .76, p < .01$). Perceived argument quality then predicted product attitude ($\beta = .53, p < .01$). The direct effect of source credibility on product attitude was not significant ($\beta = .32, p = .079$). Thus, in the case of positive OCR valence, perceived argument quality mediates the effect of source credibility on product attitude, which supports H2. For negative OCR valence, results revealed no significant mediation.

Main analyses purchase intention. A two-way ANOVA of purchase intention revealed a significant main effect of OCR valence ($F(1, 217) = 132.82, p < .01$), a non-significant main effect of source credibility ($F(1, 217) = 1.32, p = .252$) and, as predicted, a significant interaction between OCR valence and source credibility ($F(1, 217) = 9.81, p < .05$). Planned comparisons showed no significant difference for high- and low-credibility sources when valence was negative ($M_{neg,high} = 2.26$ vs. $M_{neg,low} = 2.64$; $t(217) = -1.40, p = .163$), supporting H1a. With positive valence, high source credibility led to significantly higher purchase intention than low source credibility ($M_{pos,high} = 5.09$ vs. $M_{pos,low} = 4.27$; $t(217) = 3.03, p < .01$). This result is in favor of H1b.

For H2, the mediation analysis revealed a significant indirect effect of source credibility on purchase intention through perceived argument quality ($\beta = .42, p < .01, 95\% CI = [.13, .85]$). Specifically, results showed that source credibility positively influenced perceived argument quality ($\beta = .76, p < .01$). Perceived argument quality then predicted purchase intention ($\beta = .56, p < .01$). The direct effect of source credibility on purchase intention was not significant ($\beta = .41, p = .087$). Supporting H2, in the case of positive OCR valence, perceived argument quality mediates the effect of source credibility on purchase intention. In contrast, for negative OCR valence, results revealed no significant mediation.

DISCUSSION

The results of this research shed light on the differential effects of source credibility in an online context, clarifying previous inconclusive findings. Specifically we clarify under which conditions the credibility of the author of an OCR matters. With its notion of the co-occurrence of systematic and heuristic processing, the HSM (Chaiken 1980; Chaiken et al. 1989) provides a highly applicable theoretical basis to explain the effect of source credibility in the case of positive but not negative OCRs. This is because positive OCRs are rather non-diagnostic, especially in the online context, where positive reviews are vast and often perceived as biased. The source credibility effect is mediated by the evaluation of argument quality, indicating that the heuristic information was used systematically. This strengthens the HSM's notion of co-occurring processing modes and extends previous findings on the systematic processing of heuristic information (Darke et al. 1998).

The research has some limitations. The effect of source credibility was only tested in a situation where consumers are rather motivated to process the information. In a situation where low motivation or ability and thus heuristic processing predominate, source credibility should always have an influencing effect because message content is not or cannot be processed. To measure systematic processing more thoroughly, applying a thought listing procedure would help to gain better insights into the processes underlying the effects of OCR valence and source credibility on product attitudes and purchase intentions. Furthermore, future research should validate the findings using non-student samples and additional product settings. This would enable us to provide an in-depth analysis of potential product category differences.

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The Style is the Brand: The Poetic Choreography of Idea Behaviour

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ABSTRACT

This article introduces style as the behavioural determinant to represent order, clarity and the enchainment of ideas as it inscribes itself into a brand. It proposes to conceptualise the relationship between consumer behaviour and idea behaviour, and advances style differentiation as the fundamental poetic function of the brand, in an increasingly fragmented, fluid and chaotic perceptual universe. Brand style offers a refreshing critical perspective on distinctive lyrical expression, as a vehicle for managerial consolidation, and how its core choreography may be poetically communicated.

STYLE AND THE PARADOX OF THE LAST REMAINING CONSTANT

'Le style est l'homme même.'
(Buffon 1894)

The more splintered marketing's meaning particles and atomic artefacts in the consumer's physical, digital, and literally mobile universe become, the more urgent the quest for a theoretical and managerial anchors for the conveyance of brand meaning is. The explosion of possible meaning and communication channels offers an abundance of disjointed richness in which few of the traditional brand models that promise a soothing coherence or constancy survive. Postmodernity has unsecured and unmoored and endless deferral of meaning, managers have embraced the inevitability of relinquishing control over their brand's destiny, and the upmost achievement is to perform the parting ritual with some elegance (Kelly 1994). In response to these shifts in the provenance and influence of idea generation, both consumer behaviour and marketing have suspended the belief in the power of brand-initiated ideas in return for the exclusive and wholesale embrace of the co-creative, participatory, customer-initiated, consumer-led, crowd-sourced ways of world-making. The consumer-brand relationship has become a tennis match in which conceptual models and praxis decrees new rules in which only one player seems to have the initiative, and the brand's newly acquired role is to endlessly practice the return of the consumer's serve, every minute of the day. On the face of it, 2016 very much seems the wrong year to revisit this disequilibrium and make a case for the primacy of an invigorating idea behaviour in the face of consumer's 200 mile per hour bombardment. Brand meaning is less and less managerially determined and the disposal of the influence of idea centric arguments has been accepted as a matter of fact (Iglesias and Bonet 2012; Iglesias, Ind, and Alfaro 2013).

This article makes a humble proposal to revisit *style* as a source for inspiration to support the idea side of the court, in the context, full acceptance and celebration of the fluid interactions pertaining to brand meaning. The style edict proclaims that the content itself is predisposed and ultimately defined by the manner in which it is expressed. We identify style in elements, motives and form relationships, but not least in an all-over quality which we may call expression (Ackerman 1962, 1978). It has been argued that style is easily understood and perceived, and difficult to parse and study. Or to revisit the earlier tennis metaphor: Novak Djokovic's style includes how he hits a tennis ball, plus a range of other expressive qualities that makes his winning performances distinctively characteristic. The performance of style is at once subjectively witnessed with ease

as a directly grasped quality and near unanalysable (Toolan 1996). In everyday life and as a social process, distinguishing styles is empirically unproblematic (Rosenblum 1978). As an aesthetic academic challenge, a phenomenon that in its essence defies to be broken down in elements and features and derives its relevance from a holistic expressive complexity has proven to be precariously enigmatic. Its resistance to deconstruction in combination with its elusive perceptual directness makes the seemingly simple notion of style an under-investigated area in consumer and idea behaviour.

Style in its broadest sense has long been seen as one of the most constant of physiological products (Gourmont 1907). Style has been defined as a strand in a culture or civilization and a coherent, self-consistent way of expressing certain behavior or performing certain kinds of acts (Kroeber 1963). Style provides an internal order in its expressiveness (Schapiro 1994). Style correlates habits of meaning within the credible limits of expressive variability. This basic and foundational reliability as a reference to a way of being, combined with the natural propensity to serve marketing's eternal call for differentiation, make explorations into aspects of style a contemporary attraction. Style definitions live in different guises in many disciplines, but its meaning is captured in a shared simplicity and directness in the common understanding as: an idiosyncratic way of doing something. This idiolect, as the particular variety of codes used, provides an aesthetic propeller shaft towards an inner unity. Style literally sets and defines the tone and provides a driving force back to the core of a being, entity or dynamic cultural artefact. Style concerns itself with precision and conciseness of expression, fluency in its characteristic rhythm and flow, and in a distinctive tone of voice. There are beneficial *paradoxical* aspects to the referential anchoring qualities of the style concept, which make it more attractive for the contemporary concerns in fragmented meaning making universe. Style is a more valuable concept in the currency of studies of markets, marketing and behaviour as the understanding of the dynamic quality of its constancy is unfolded.

First, the constancy of style is relative. As a centripetal force is still gradually variable, in the same way one voice can mellow, become more ironic or philosophical over time. It is subject to an evolving sameness from a recognizable core. While resistant by virtue of its reliance on its past utterances, buffing and corrosion add to the owned differential patina of its voice. Second, style survives in its distinctive deviation from a norm; this can be achieved by situational deviation and individual deviation (Osgood 1960b). Its inclination to remain true to its expressive roots is contingent to the changing situational backdrops against which it resonates. The congruent quality of a recognizable style over time may support of the functioning of perceptual fluency (Fransen, Fennis, and Pruyn 2010). Third, the form *is* the substance, or the content. Style and substance are often so inextricably intertwined, it is does not make sense to distinguish the what and the how (Jacquette 2000). Style theorists would propose that 'a different way of saying is in fact saying a different thing' (Hough 1969). As such, critical stylisticians struggle with the common what-how separations of definitions of content and style. Fourth, style is defined both in any particular moment and in the attributable expression across moments. Style is exemplified in instances, but by nature relational. Stylistic moments must cohere sufficiently to integrate into a series of related patterns (Kroeber 1963). Fifth, while style's fluidity and all-over cloudiness is difficult to capture in discrete ele-

ments, aspects such as the timbre of a tone of voice, the rhythm of flowing utterances require an exactness of expression to maintain its holistic quality. In style as much as in poetry, expression depends on 'le mot juste', and precision gives it power.

STYLE AS POETIC BRAND CHOREOGRAPHY

'No verse is free for a man who wants to do a good job.'
(Eliot 1917)

Style has been proposed as an essentially poetic quality of expression. Style is *the point* of poetry (Widdowson 1992, 1996). Style is a poetic code, with terms that may be expounded or avoided (Jakobsen 1960). The justification for style as a poetic concept is not least supported by its scope: the variety of expression and syntax possible in poetry is far wider than in prose. While content may be narrated, style is embodied in its lyrical quality. What sets poetry apart from prose is what sets style apart from content. Poetic language is extraordinarily precise (Chatman 1960). Style study requires the same thoroughness as the under logical paradigms, and has to find the lyrical balance between a vagueness of sensing and feeling and the precision of expression. Style offers a pervasive, rigorous unity (Holly 1997). The conception of style as an idiolect, requires the same approach as poetics: a sequence of non-banal utterances (Householder 1960), instantly attributable, and high density scapes presented with a decisive brevity. Poetics and stylistics share an analytical elusiveness. We perceive a style or a poem without being able to fully analyze their properties into elements or specify the necessary and sufficient conditions for it (Goodman 1975).

The turbulent introduction and acceptance of poetics in consumer behaviour (Sherry and Schouten 2002; Wijland 2011) is reminiscent of the struggle to discern a role for style in consumer research. The expressive and the cognitive don't make great dinner conversations nor bedfellows, and the observation '*style enters, where facts stops and feelings start*' (Goodman 1975) indicates the mimetic relationship style and poetry have with the dominant logic of research culture.

Much more interesting than the how-what distinction in the style debate is the notion that style in the idea making process *precedes* the conceptual idea as a guiding principle for the genesis of behaviour. In the evolving praxis of creative briefings of agencies, the word style is rarely literally mentioned, but tone of voice has never left the initial strategic parameter of a given behavioural change challenge. The planner's briefings that contain this defining tone of voice description are less a systematic observation of expressive difference, as an intuitive anchor expressed with a lyrical and poetic brevity. The poetics of style offer a pathway to a fluid brand choreography. Poetic brandscapes are nonlinear universes of idea behaviour, not unlike modern dance. The current acceptance that in the last instance prescriptive models prove not to be able to cope with the generative nature of brand meaning, entails we may abide in long-motion sequences within the stylistic spaces the brand affords itself, like a free-versed ballet. A brandscape is a style generating machine, and perpetually in motion, while in constant conversation with its own origins and conventions.

CONSUMER BEHAVIOUR AND IDEA BEHAVIOUR

*There is no purer form of advertising
than writing a poem
that's what the monk told me
if I were a conceptual artist
I would make high-budget trailers
of john updike movies, but no actual movie.*
(Riviere 2012)

Scott's (1994) call for methods in consumer behaviour that study style, without reducing an utterance to its components has remained largely unanswered. Why has style not been fully unfolded as a conceptual approach in idea behaviour or marketing communication? Its closest opening gambits for integration in mainstream discussions eventuated during the adjacent upswing of rhetorics in consumer behaviour, and the development of theoretical models for lifestyles. The commonalities of life style in consumer behaviour and brand styles in idea behaviour includes that both embody observable *patterns* that develop and emerge from the dynamics of living in a society (Lazer 1963; Plummer 1974).

Style fits the schemata of consumer behavior in that it may be primarily designated as a depiction *after the fact* (Ackerman 1978), based on the consumer's perception of traits common to a brand. In contrast, style fits the protagonistic approaches in the conscious development of the idea behavior in the fact that it can be an intentional strategy of influence and persuasion, prior to market interaction. What remains in this argument is that style is not superficially decorative or ornamentally subservient to content, but the brands buttress and articulation of its essence as inalienable lyrical expression.

In the predominantly textual study of rhetoric in consumer behavior (McQuarrie and Mick 2003; McQuarrie and Phillips 2008; Mick 1986), style features in the margins. It may be that at a paradigmatic level a phenomenological concept such as style, defies the application of a semiotic arsenal is inclined to notice the symbolic qualities of content. The common methodological approach in rhetoric, whether textual or visual, has been content analysis. In most cases this concerns itself with the 'what' of content, and a counting of elements. This approach was not least enabled by a highly organised media landscape, in which the limited shape of expression and ingrained schemata (a print advertisement or a TV commercial) allowed structured comparisons and a counting of elements or units, in an academic research environment dominated by positivist expectations. The relative mental distance from aesthetic considerations in the wider behavioural research community easily disposes of style as a redundant decoration. In this environment and in the habit of content analysis excellent researchers have limited the style concept to 'an arrangement of elements' (McQuarrie and Phillips 2008) as a matter of course, based on the formal attributes of an archaic media landscape that no longer exists. The loss of both traditional media and the formal aspects of a particular vehicle consistency disable the known research mechanics as going concerns. The opinion that any differentiation and establishment of a rhetorical system has to start in the tight focus on a magazine ad or banner ad (McQuarrie 2008) precludes the contemporary development of style constructs. Well before these relatively recent investigations, it has been confirmed that the nature of style resists fragmentation into units and an intonation of an utterance that cannot be isolated easily or even pointed to with precision (Scott 1994). Scott calls for methods that study style, without reducing it to its components. In visual rhetoric the sender's intent frames a message with an interested party's attempt to influ-

ence an audience (Scott 1994). The quality of the crafting of content by its producer takes center stage in this living argument under a new firmament that is less served by signal processing, and more based on an exploration of fluid state-space models. How a situated idea behaves in embodied and experiential contexts transcends traditional mediation.

While in the body of work of rhetoric, style has been affirmed to carry a great deal of information (Mick 1986; Phillips and McQuarrie 2002; Stern 1992), the challenging observation of idiosyncratic expression, rhythm, fluency and tone of voice of utterances didn't fit a well-developed and sophisticated programme of schemes, tropes and rhetorical figures (McQuarrie and Mick 1992). Its study requires a programmatic shift from content analysis to style analysis, and as such inevitably includes the bravery of accepting that the flavours of the how are a potentially more unifying force than the functional what components. Interpretive frameworks in consumer behaviour, including ones that find their justification in rhetoric, have usually gravitated to content rather than form. The approach in which rhetoric doesn't rise above a traditional chasm of style versus content, and the acute separation of the two is seen as a defining characteristic of rhetoric (McQuarrie and Philips 2008) doesn't do much to enhance the potential of style to rise above the status of decorative embellishment in consumer behaviour and marketing. The salient differences between content and style analysis beyond the what and how chasm are that content analysis is concerned mainly with making inferences *from* message indicators to either source or receiver states and characteristics, style analysis is more concerned with predicting (or interpreting) *to* message indicators or events from knowledge of source variables (Osgood 1960a).

In contrast with the study and culture of the creation of brand and idea behavior, aesthetic considerations in general struggle to find the main stages of academic consumer behavior and marketing literature. In disciplines other than marketing and consumer behaviour, the burgeoning area of stylistics has enabled a richer evolution of the style concept. The claim of stylistics include that it offers a systematic study of expression, it can within limits increase knowledge, that such knowledge can be consolidated, and can be communicated to others. The critical stylisticians who make creative brand ideas and define how they behave in the market look for expressions that are perceptually and expressively salient. Idea behaviour is the approach to the differential understanding of the performance of existing and newly developed market interventions and assumes the creation of performative ideations are a consequence of a brand's history, and living interactive motivations. Idea behaviour is by nature experiential and embodied and its space for expressive variability is both influenced by a brand's heritage and the urgency of its environmental currency. Ideas in a brand context are stylised concepts for world-making.

THE BEHAVIOURAL QUALITIES OF BRAND STYLE

'What style shall I choose to clear up the immense chaos of diverse, contrary, often vile, and sometimes sublime sentiments which ceaselessly agitate my soul?'

(Rousseau 1955)

The cursory treatment of brand style in both academic and managerial circles may be linked to its elusive character (Person and Snelders 2010). Yet, the dynamic aesthetics of a differentiated style offer managers one of the last serial motives to normative idea behaviour for their brands. It offers a behavioural grounding to chal-

lenges as yet unexplored, with an in-built radar to keep a distance from competing expressions and experiences. The contemporary attraction of the style concept as a stable pattern for behavioural change may be argued on the basis of four organic angles that offer new opportunities for the inner quality of idea behaviour.

Style is a relational concept

Style represents order, clarity and not least the opportunity of an *enchainement* of ideas (Buffon 1894), as a true perception of the relation between objects. In the same way that service dominant logo proposes brand value-in-use (Merz, He, and Vargo 2009), style offers a structure for expressive patterns-in-use (Widdowson 1996). Style both defines form and a relational pattern, and the internal relationships among the individual parts (Ackerman 1962). It is an expressive linking pattern in the dynamic connection of discrete moments, and a relation between the (brand) expression and the world.

Style is an experiential concept

It offers a media-independent and embodied perspective to the potential harmony of the lived and performed patterns of idea behaviour. Style is the characteristic 'signature feature' (Jacquette 2000) of the functioning of a brand. *Style is a contextual concept.* In current mobile segmentation strategies, the intent of behavioural ideation aims less for a resonance with the profile of an individual or group, than relevance in the situations in which we communicate. Style influences the ordonnance of ideas and the arrangement or disposition of parts. *Style is a gravitational concept.* Style has been embraced as an autonomous set of understandings in a social setting (Rosenblum 1978). Style gravitates to its own tone, and may at once resist and promote formational development. Styles may dynamically change over time, within their own pace and rhythm. A change in idea behaviour is in itself set by the parameters of style the expressive artefacts a brand carries within itself. The fluid aesthetic patterning occurs within an internalised behavioural heritage as a confluent conversation with its own history. *Style is a poetic concept.* What makes new explorations in style such a promising trajectory for idea behaviour in part sustained by an internal aesthetic rectitude. Both style and poetics survive by means of an associative under-coding. The adjacency of the aesthetic concepts of poetics and style, may be exemplified in their common dependency on the necessary openness to potential meaning association (Eco 1989; Wijland 2009).

The brand concept has already been prefixed to a plethora of marketing themes and notions: from brand identity to brand design, from brand image to brand personality and brand culture to brand-scape. This article proposes a re-invigorated interest in the potential of brand style in mobile, and digital, experiential and embodied contexts. Based on the earlier style definition, brand style is the idiosyncratic way in which a brand *does* something. Novak Djokovic's style is best expressed in his behaviour. The legitimization of this initial call for a fresh engagement with style as an act may be recaptured as follows. Brand style is a timeless media- and vehicle-independent concept and viable in future contexts. It is a performative concept that is actionable and discernable in any environment. Brand style is a behavioural concept. It shows a longitudinal mentality in aesthetic dimensions, how old and new ideas act, and what they are able to credibly claim and communicate. Brand style offers a rare normative reference in a fluid landscape, both within itself an in relation to other brand styles. Finally: brand style offers the poetic openness for engaging market dances. It is uniquely positioned to accommodate the full complexity of a brand's presence (Wijland and Fell 2009).

CONCLUSION

*Style is the answer to everything.
A fresh way to approach a dull or a
dangerous thing.
To do a dull thing with style
is preferable to doing a dangerous thing
without it.
./.
Not many have style.
Not many can keep style.
I have seen dogs with more style than men.
Although not many dogs have style.
Cats have it with abundance
./.
Style is the difference,
a way of doing,
a way of being done.*

*6 herons standing quietly in a pool of water
or you walking out of the bathroom naked
without seeing
me.*

(Bukowski 1972)

The behavioural study of the interactive style of market dialogues may be intimated from a consumer and idea perspective of the creative continuum. This article challenges the widely accepted shift in the balance of the brand's authorial intent to exclusively consumer-led views and may reclaim the creative space within the subtleties of the internal and relation powers of brand style. This is not to turn back the clock towards a preordained, nostalgic or lost supremacy for makers, but rather an argument for a poetic choreography in which a brand's idea makers can confidently set the tone, rhythm and expression for interaction. In synchronization with the urgent call for a honing of the rhetorical skills of brand managers in the face of a consumer-centric meaning making landscape (Iglesias and Bonet 2012) this article proposes a re-evaluation of style as a future-oriented driver for idea behaviour.

Brand style is not primarily conceived to be reactive; it is the implicit protagonist in the business of the continuous genesis in idea behaviour. Whether in text or visual, in embodied performance or silent experience, style creatively leaves its finger- and foot-prints all over the behaviour of brand ideas.

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The Effect of the Extraordinary: Reliance on Feeling over Reason in Decision Making

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ABSTRACT

In this research another factor that may influence consumers' relative use of feeling-based or reason-based decision making is advanced. Across two online experiments we found that participants who in the extraordinary situation (uncommon and infrequency) were rely more on feelings than in the ordinary situation (common and frequency).

INTRODUCTION

In this study we investigate the impact of temporal focus (ordinary vs. extraordinary) on decision-making events. Past research has suggested that consumer judgments and decisions can be categorized into two modes: reason-based and feeling-based. In the reason-based mode, people carefully consider the target attribute's information in an overall evaluative judgment (Bettman, Luce, and Payne 1998). In the feeling-based mode, people use subjective, affective reactions toward the target or momentary feelings (Pham 1998; Schwarz and Clore 2007). To delineate the characteristics of the two decision-making modes, past studies have explored the conditions under which consumers rely on feelings over reason in making judgments and decisions. Researchers have found that consumers are more likely to rely on their feelings when making a decision given the following conditions: (a) when their processing resources are limited (Shiv and Fedorikhin 1999), (b) when they have an experiential consumption goal (Pham 1998), (c) when the outcome of the decision is set in the near future (Chang and Pham 2013), and (d) when they have an independent self-construal (Hong and Chang 2015).

In this research, another factor that may influence consumers' relative use of feeling-based or reason-based decision making is advanced: affective feelings are relied on more in an extraordinary situation than in an ordinary situation.

EXTRAORDINARY AND AFFECTIVE REACTIONS

In this paper, ordinary experiences are defined as those that are common, frequent, and within the realm of everyday life. In contrast, extraordinary experiences are uncommon, infrequent, and go beyond the realm of everyday life (Sussman and Alter 2012). A number of studies have shown that affect tend to be experienced more intensely when people are in an extraordinary situation. Arnould and Price (1993) revealed that extraordinary consumption experiences have been reported as positive activities with a positive intensity. In neuroscience, the stimuli "infrequency" and "newness" are referred to as "novelty." Novelty can be defined in several ways, and different types of stimuli have been referred to as novel in the literature (Schomaker, Roos, and Meeter 2014): (1) stimulus novelty (Courchesne, Hillyard, and Galambos 1975), referring to stimuli that have never been experienced before; (2) contextual novelty, referring to stimuli that might be familiar but differ substantially from others experienced in the same context; (3) deviance novelty, referring to stimuli that are rare and physically stand out from the others in the experimental context; and (4) expectedness novelty, referring to stimuli that cannot be predicted based on the immediately preceding ones. New, novel stimuli often receive priority in processing: they elicit an orienting response (Sokolov 1963) and automatically attract attention (Escera, Alho, Schroger, and Winkler 2000). "Novelty seeking" refers to the tendency of humans and animals to explore unfamiliar stimuli and environments (Reed, Mitchell, and Nokes 1996). Costa, Tran, Turchi, and Averbeck (2014) reported that novel stimuli excite dopamine neurons and activate brain regions that receive dopami-

nergic input, so the notion that dopamine modulates novelty seeking is supported. In addition, dopamine had been shown to drive exploratory behavior in novel environments. Finally, recent neuroscience studies suggest that the neural populations involved in the processing of stimulus pleasantness are more strongly activated when stimuli are novel, which could result in different or stronger emotional responses (van Peer, Grandjean, and Scherer 2014).

EXTRAORDINARY SITUATIONS AND DECISION MAKING

In past research, ordinary versus extraordinary situations have been found to affect the differential accessibility and intensity of affective responses. We propose that, apart from the differential accessibility of affective responses in decision making in extraordinary or ordinary situations, the affective system also produces a differential reliance on these responses. Past research has reported many characterizations of extraordinary experiences, including an escape from modern society; or unfettered straying from the rules, rationality, and stress of everyday life (Tumbat and Belk 2011). Sussman and Alter (2012) investigated how consumers account for exceptional expenses, and how this process may differ from accounting for ordinary expenses. The authors focused on biases at the planning phase, when people consider making exceptional purchases. They suggested that consumers would underestimate exceptional expenses; in contrast, consumers accurately forecasted ordinary expenses. Further, past research also suggested that a feeling-based manner is relatively qualitative, while a reason-based manner is relatively quantitative (Hsee and Rottenstreich 2004). Thus, a feeling-based manner produces notable sensitivity to weather, a stimulus defined by presence or absence (i.e., a change from 0 to some scope), but little sensitivity to subsequent increments of scope. In contrast, a reason-based manner produces relatively constant sensitivity over the entire range. One interpretation of these findings may be that people in ordinary situations are more likely to rely on reason and are consequently more capable of accurate predictions. In contrast, people in extraordinary situations are more likely to rely on feelings and are consequently more impulsive in their consumption.

Building on such past research, the current study proposes that being involved in ordinary or extraordinary experiences has implications for how consumers rely on feelings over reason in making judgments and decisions. In ordinary situations, people tend to analyze and think about the target problem, thus relying on reason in making judgments. In contrast, in extraordinary situations, people tend to stray from rules and reason under the influence of intense and affective reactions, so they may rely on feelings in making judgments.

STUDY DESIGN

The hypothesis was tested using two online experiments. In experiment 1, participants were asked to choose between an affectively superior option and a functionally superior option in either an ordinary condition or an extraordinary condition. The results showed that consumers' preference for the affectively superior option was greater in an extraordinary situation than in an ordinary one. In experiment 2, a different testing method was used that examined the impact of incidental mood on participants' judgment of a target option. The results showed that incidental moods had a stronger mood-congruent influence on behavioral intentions toward the target in the extraordinary situation than in the ordinary one.

Participants

In this research, all participants came from Japan and were recruited randomly through the online labor market Yahoo Crowd Sourcing. Several control questions were asked after the main manipulates to check if they were attentive in follow instructions. Participants who did not pass the control questions were excluded from the sample.

Pretests for the decision-task stimuli

Two restaurants were used as task stimuli for the choice, with each described based of six attributes. Three of the attributes were designed as functional dimensions: the volume of the dinner course, access to public transportation, and free seconds of vegetables. The remaining three attributes were designed to be affective dimensions: the view from the restaurant, the amount of sunlight, and the soothing ambiance of the restaurant. To ensure the validity of the stimuli among the participants, two pretests were conducted.

The first pretest aimed to verify if the six attributes pertained to the affective and functional dimensions. We asked 98 participants to rate the restaurants' 6 attributes on a seven-point scale (1 = "appeals to my thoughts," 7 = "evokes my feelings") (Hong and Chang 2015). After averaging three functional dimension items and three affective dimension items, we ran a one-way repeated-measure ANOVA on these scores. The results showed that the affective dimensions evoked more feelings ($M = 5.60$) than the functional ones ($M = 4.33$; $F(1, 97) = 65.74, p < .001$). From this result, we used these six attributes to design affective and functional dimensions for the restaurant stimuli.

The second pretest was conducted to further confirm people's tendency to use either a feeling-based or reason-based decision strategy when faced with an affectively superior option or a functionally superior option, respectively. 150 participants were asked to choose between two options using different decision strategies. For the feeling-based condition, the participants were asked to use a feeling-based decision strategy. They were instructed to make decisions based on "emotions and feelings toward each of the options." For the reason-based condition, participants were asked to follow a reason-based decision strategy. They were instructed to make their decisions based on "logical reasoning of the pros and cons of each option" (Pham et al. 2001; Hong and Chang 2015). As predicted, the participants asked to rely on their feelings were more likely to choose the affectively superior option over the functionally superior one than those asked to rely on reasons (75.7% vs. 19.7%, $\chi^2(1) = 47.06, p < .001$). These findings suggest that the relative preference between two restaurants can be seen as indicative of the differential reliance on a feeling- versus reason-based decision strategy.

EXPERIMENT 1

The first experiment tested the basic hypothesis that in making a decision, consumers are more likely to rely on their integral feelings toward their options when they are focus on extraordinary rather than ordinary situation. To test this hypothesis, after the participants were manipulated to place temporal focus on either extraordinary or ordinary situation, they were asked to choose between two restaurants: one that was affectively superior and another that was functionally superior. It was predicted that participants choosing between the two restaurants in an extraordinary situation would exhibit a greater relative preference for the affectively superior restaurant than participants choosing in an ordinary situation.




Method

Design: A total of 131 participants (62.6% women, average age = 33.82) were randomly assigned to one of the two experimental conditions (temporal focus: ordinary vs. extraordinary).

Procedure: In this experiment, participants were manipulated to imagine an ordinary or extraordinary situation. For the ordinary group, participants were asked to envision R City as a beautiful port town. They imagined that they regularly visited the city several times a week. They were told that this week they were going to visit R City again with their friends. The extraordinary group was also asked to imagine R City as a beautiful port town; however, they were told that they never had the opportunity to visit it, and at long last they were finally going to R City with their friends.

Then, participants were given a choice: They were told to imagine that they were going to choose a restaurant when they visit R City this week with their friends. Pictures and descriptions of the two restaurants were presented to them (see Table 1). The two restaurants had the same prices. The first dependent measure was participants' choice between the two restaurants. The second dependent measure was participants' relative preference for the two restaurants, which was assessed on a seven-point scale (1 = "strongly prefer restaurant A," 7 = "strongly prefer restaurant B"). In addition, to check their insight in the process underlying decision making, they were asked to indicate how they made their decision on a seven-point scale (1 = "I made my decision based on the logical balance of pros and cons," 7 = "I made my decision based on how I would feel about having dinner at the restaurant") (Chang and Pham 2013).

Table 1

Restaurant A	
Inside of restaurant	Part of the dinner course
	
Volume of the dinner course: 11 dishes A short walk to the nearest train station Free seconds of vegetables No windows	
Restaurant B	
Inside of restaurant	Part of the dinner course
	
Volume of the dinner course: 7 dishes Four bus stops from the nearest train station No free seconds of vegetables Oversized window with breathtaking view	

As a check of the manipulation of focus to ordinary or extraordinary, participants were asked to rate three nine-point items anchored at "ordinary experience/extraordinary experience," "common experience/uncommon experience," and "frequent experience/infrequent experience" ($\alpha = .93$). To assess potential confounding factors, participants were asked to rate their mood on three nine-point items ("bad/good," "unpleasant/pleasant," "sad/happy"; $\alpha = .86$).

Results

Preliminary analysis

As predicted, participants reported a greater focus on the extraordinary in the extraordinary condition ($M = 7.21$) than in the ordinary condition ($M = 2.40$; $F(1, 130) = 357.58$, $p < .001$). The ordinary or extraordinary focus manipulation did not influence participants' moods ($F < 1$).

Choice and relative preference

As predicted, participants were more likely to choose the affectively superior restaurant in the extraordinary condition than in the ordinary condition (57.5% vs. 22.4%, $\chi^2(1) = 16.37$, $p < .001$). Participants also exhibited a stronger relative preference for the affectively superior restaurant in the extraordinary condition ($M = 4.40$) than in the ordinary condition ($M = 3.02$; $F(1, 130) = 18.34$, $p < .001$). Further, participants displayed higher reliance on feeling in the extraordinary condition ($M = 4.71$) than in the ordinary condition ($M = 3.28$; $F(1, 130) = 12.07$, $p < .01$). These results are consistent with the hypothesis that people are more likely to rely on affective inputs when they focus on the extraordinary than when they focus on the ordinary, even though all information on the target is held constant. The results are summarized in Table 2.

Table 1

Experiment 1: Pretest 1		
Verify that the six attributes pertain to affective and functional dimensions as intended		
	Affective dimensions	Functional dimensions
"Appeals to my thoughts" vs. "evokes my feelings"	5.60	4.33
Experiment 1: Pretest 2		
Verify use of feeling-based and reason-based decision strategies for affectively superior option and functionally superior option		
	Feeling-based strategy	Reason-based strategy
Choice of affectively superior option (%)	75.7%	19.7%
Experiment 1		
Effect of ordinary and extraordinary context on preference between affectively and functionally superior options		
	Ordinary	Extraordinary
Choice of affectively superior restaurant (%)	22.4	57.5
Relative preference for affectively superior restaurant	3.02	4.40
Relative reliance on feeling over logical assessment	3.28	4.71
Experiment 2		
Effect of temporal focus (ordinary vs. extraordinary) and incidental mood on intention		
	Positive mood	Negative mood
Ordinary focus	4.22	4.34
Extraordinary focus	5.20	4.40

EXPERIMENT 2

A limitation of experiment 1 is that we manipulated the participants' integral feeling toward targets by varying the cognitive versus affective information across pictures. Some may wonder: was their decision making due to the cognitive versus affective aspect, or to the verbal versus pictorial aspect? In experiment 2, we used a more

direct manipulation of affect, one that was able to hold information about the target constant.

Past research has shown that incidental feelings from preexisting mood states are often misattributed to the target object (Schwarz and Clore 2007). If a temporal focus on the extraordinary indeed promotes a greater reliance on feelings over reason, then incidental feelings arising from preexisting moods should exert a stronger mood-congruent influence on judgments by consumers focusing on the extraordinary rather than the ordinary. In this experiment, participants' incidental moods were manipulated and the effect of mood on their judgements of the target option were observed. It was predicted that participants' incidental moods would produce a stronger mood-congruent influence in the extraordinary condition than in the ordinary condition.

Method

Design

A total of 253 participants (70% women, average age = 35.38) were randomly assigned to 1 of 4 conditions in a between-subjects experimental design: 2 (extraordinary vs. ordinary) \times 2 (positive mood vs. negative mood).

Procedure

Participants were told that they would take part in two unrelated studies. The "first" study manipulated participants' feelings by varying their mood state. Under the pretense of studying people's ability to comprehend short video clips, participants were asked to watch and rate two video clips. The first clip was designed to elicit neutral affective states that were constant across conditions, and its purpose was to reinforce the cover story and make the mood manipulation (for the second clip) less blatant. The second clip was designed to elicit either a positive or negative affective state. For the positive condition, a five-minute edited scene from a comedy series was used. For the negative condition, a five-minute edited scene from a TV program about a child stricken by cancer was used. After viewing each clip, participants answered a series of comprehension-related questions designed to reinforce the cover story and a control question. Among the various distractor items, participants were asked to rate their mood on three items on a seven-point scale; the purpose here was to check the effectiveness of the incidental mood manipulation ("bad/good," "unpleasant/pleasant," "sad/happy"; $\alpha = .90$).

In the "second" study, participants were manipulated into two conditions (the same used in experiment 1): ordinary condition vs. extraordinary condition. Then, participants were asked to complete a decision task. They were shown descriptions of a restaurant (which was the same as restaurant B in experiment 1). As the main dependent measure, participants were asked to rate their intention to go to the restaurant on a seven-point scale (1 = "definitely will not go," 7 = "definitely will go"). Finally, in order to check the manipulation of temporal focus, participants were asked to rate three items on a nine-point scale anchored on "ordinary experience/extraordinary experience," "common experience/uncommon experience," and "frequent experience/infrequent experience" ($\alpha = .85$).

Results

Manipulation check

Participants reported a greater focus on the extraordinary in the extraordinary condition ($M = 7.05$) than in the ordinary condition ($M = 3.84$; $F(1, 252) = 225.72$, $p < .001$). The analysis revealed a significant main effect on mood: participants' moods were more positive after exposure to the positive-mood version of the stimuli ($M = 4.93$) than after exposure to the negative-mood version ($M = 3.05$; $F(1, 252) = 216.36$, $p < .001$).

Behavioral intention

If a temporal focus on the extraordinary indeed encourages a greater relative reliance on feelings over reason in judgments and decisions, then incidental moods should produce a greater influence on behavioral intentions in the extraordinary condition than in the ordinary condition. Participants' intentions to go to the restaurant were subjected to a 2 (focus on ordinary vs. extraordinary) \times 2 (mood) ANOVA. Consistent with the prediction, the interaction between temporal focus (ordinary vs. extraordinary) and mood was significant ($F(1, 252) = 4.38, p < .04$). As shown in Table 2, participants' mood states exerted a stronger mood-congruent influence on intentions in the extraordinary condition ($M_{\text{pos}} = 5.20$ vs. $M_{\text{neg}} = 4.40$; $F(1, 252) = 6.59, p < .02$) than in the ordinary condition ($M_{\text{pos}} = 4.22$ vs. $M_{\text{neg}} = 4.34$; $F < 1$). The main effect of temporal focus (extraordinary vs. ordinary) was significant ($p < .02$), but the main effect of mood was not significant ($p > .12$).

DISCUSSION

This study advanced a novel hypothesis about a previously unrecognized facet of the affective system, which is a greater reliance on affective feelings when making decisions in extraordinary situations compared to decisions made in ordinary situations. Confirming this hypothesis, it was found in experiment 1 that when participants were given the choice between an affectively superior option and a functionally superior option they exhibited a stronger relative preference for the affectively superior option when in extraordinary situation. Experiment 2 produced additional direct evidence that people in extraordinary situations rely more on feelings. In this experiment, incidental moods were found to have a stronger influence on intentions for participants in the extraordinary condition than in the ordinary condition. This study makes several important contributions to the literature. First, in past research, several factors of people's reliance on feelings have been suggested. For example, the representativeness of the feelings in relation to the target (Strack 1992), the relevance of the feelings to the judgment (Pham 1998), and so on. We extended these previous findings by investigating another important factor: ordinary and extraordinary situations. We also made a contribution to the literature on extraordinary research. Past research has focused on consumers' planning fallacies related to extraordinary purchases when setting budgets or making predictions (e.g., Ulkumen, Thomas, and Morwitz 2008; Stille, Inman, and Wakefield 2010). Further, people are more likely to make biased predictions when forecasting extraordinary purchases rather than ordinary ones (Sussman and Alter 2012). Thus, different reason-based processing manners are associated with ordinary and extraordinary situations. Extending this line of thought, we focused on how ordinary versus extraordinary situations affect both reason- and feeling-based manners of processing in judgments and decisions.

One limitation of this study is that, while we manipulated participants' integral affect (experiment 1) or incidental mood (experiment 2) to test the main hypothesis, we did not use specific emotions such as anger, disgust, or fear. Therefore, a possible avenue for future research would be to extend the discussion to specific emotions. Another limitation is that we tested our hypothesis in only one context (choice of restaurant); future research could test it in other contexts. Further, in the current research, given that the context (ordinary or extraordinary) is an important factor of people's reliance on feelings, an important question is how it operates in combination with other factors. Future research could test the efforts at interaction between ordinary or extraordinary situations and other factors.

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Analyzing Antecedent Factors of Cognitive Dissonance using E-Commerce Data

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ABSTRACT

This paper provides managerial guidance on the factors that might prompt cognitive dissonance using actual e-commerce panel data. This is achieved by translating cognitive and emotional antecedent factors found in previous research into observables through online data and constructing a hierarchical model to control individual heterogeneity and situational differences.

INTRODUCTION

Under fierce competition, e-commerce firms need to aim at increasing the average customer spending through cross-selling and up-selling. To increase the revenue per customer, many EC sites encourage their customers to purchase more products and/or more expensive goods through the use of a recommendation system. However, such purchases are often accompanied by cognitive dissonance in the mind of customers (Holloway, 1967). When this happens, consumers try to resolve the dissonance mainly by two means (Festinger, 1957). One way is to search for information that justifies their purchase decision (Rosenfeld et al., 1986), and the other is to return the purchased product. If the cognitive dissonance is not resolved, it can lead to the customer's dissatisfaction toward the product and the store (Montgomery and Barnes, 1993), generating negative word-of-mouth, or even stop shopping at the store altogether (Hunt, 1991). Therefore, finding a customer's action that might prompt cognitive dissonance is crucial to help companies to address cross-selling and up-selling effectively.

Current research into cognitive dissonance offer little guidance to identify a consumer's action forewarning its occurrence. Most studies are conducted through surveys or experiments in laboratories, providing limited applicability to the field setting of EC. When cross-selling and up-selling, EC sites need to know what kinds of shopping behavior and types of product might lead to the consumer's action forewarning the occurrence of cognitive dissonance, so that sellers can take preventive measures in advance.

In light of these gaps and concerns, we aimed to find the "precursor", the consumer's action that might prompt cognitive dissonance, and provide managerial guidance on capturing the presages and taking preventive actions in a novel way. Unlike most consumer behavior studies, we utilized field data, specifically actual access log and purchase data collected by an EC site, in the following manner. First, by observing a post purchase online behavior, we classified customer purchases into two categories: one with the precursor and one without. Second, we translated latent antecedent factors of cognitive dissonance that have been validated in previous studies, such as the customer's cognition and feelings, into observable shopping behaviors, product attributes, and customer characteristics. We then constructed statistical models to relate these factors to the precursor of cognitive dissonance.

This study contributes to the theoretical and practical knowledge of cognitive dissonance in two ways. First, we confirmed the antecedent factors of cognitive dissonance in a field setting. Previous research has relied mainly on survey studies because many of these factors are unobservable. Furthermore, their theory testing was conducted at the aggregate level by controlling individual differences in a laboratory setting. Such an approach permits the inclusion of few moderating variables that might affect the occurrence of cognitive dissonance. In contrast, we used panel data to analyze each customer

at multiple points in time, accounting for not only situational differences but also individual differences in the occurrence of cognitive dissonance. We incorporated an idea proposed by Festinger (1957), that the occurrence and frequency of cognitive dissonance differ among customers and purchase occasions, into our model to confirm their validity. As far as we know, this is the first empirical study to address this heterogeneity issue. Second, we obtained insight into observable antecedent factors from access log data, which allows EC sites to take preventive actions so that customers do not experience cognitive dissonance.

CONCEPTUAL BACKGROUND

Among numerous empirical studies of cognitive dissonance, our research is related to investigation of its antecedent factors. The factors studied in previous research include choice difficulty (e.g., Menasco and Hawkins, 1978); emotional factors, such as anxiety about the act of the purchase itself (e.g., Hunt, 1970; Keng and Liao, 2013); confidence of the rightness of a purchase decision (e.g., Bell, 1967; Keng and Liao, 2013); and cognitive factors, such as needs for product knowledge (e.g., Sweeny et al., 2000). Some research has proposed methods to measure the strength of these antecedent factors in stimulating cognitive dissonance (e.g., Montgomery and Barnes, 1993; Sweeny et al., 2000).

MODEL SPECIFICATION

We constructed a statistical model that relates the precursor of cognitive dissonance to observable antecedent factors. The dependent variable in our model was a binary indicator of whether a post-purchase action presaging the occurrence of cognitive dissonance is observed or not. The post-purchase action will be explained in detail in the next section. The independent variables were the customer's shopping behaviors before purchase, attributes of the purchased products, and customer characteristics.

First, we applied a standard binary probit model to establish the relationship. Let y_{isp} denote the post-purchase action at p -th purchase in session s by customer i . With a latent variable z_{isp} ,

$$y_{isp} = I(z_{isp} > 0)$$

where $I(c)$ is an indicator function that returns 1 if condition c is satisfied and 0 otherwise. Given customer's shopping behaviors and product attributes x_{isp} , z_{isp} is

$$z_{isp} = x'_{isp} \beta + v_{isp}, \quad v_{isp} \sim N(0, 1)$$

where x_{isp} is a $(K + 1) \times 1$ vector composed of a constant term and K independent variables and β is a $(K + 1) \times 1$ parameter vector.

Next, to accommodate that the impact of customer's shopping behaviors and product attributes on the precursor of cognitive dissonance differs among customers, we relaxes the parameters to be customer-specific as β_i .

Finally, we tried to identify the factors that cause this customer difference with respect to his/her site usage characteristics. Customer-specific β_i is specified by a vector of moderating variables describing his/her site usage, d_p , as

$$\beta_i = Qd_i + n_i, \quad n_i \sim MNV(0, V_p)$$

where d_i is a $(M + 1) \times 1$ vector composed of a constant and M variables, and Q is a $(K + 1) \times (M + 1)$ parameter matrix (Rossi et al., 2005).

The first model, which assumes that all parameters are the same across customers, is referred to as the “base model.” The second model, in which customer-specific parameters are estimated, is referred to as the “individual model.” The third model, in which customer’s site usage characteristics are hierarchically incorporated into their own parameters, is referred to as the “hierarchical model.” The parameters in these three models were estimated using a Markov Chain Monte Carlo method. The model fits were then compared both in estimation and validation periods.

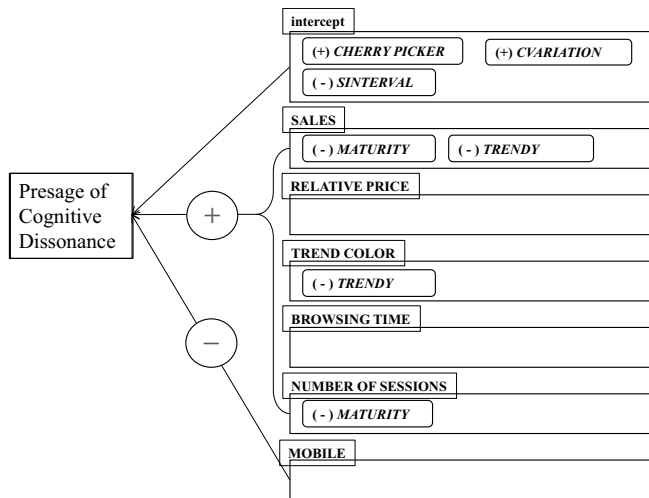


Figure 1: Estimation Result of the hierarchical model

* Moderating variables (in italics) are included only if significant at 90% or above credible level

EMPIRICAL STUDY

Data

We applied our models to actual business transaction data from an anonymous fashion EC portal site in Japan. The data included customer’s access log data and purchase history from September 2011 to April 2013 (JASMAC, 2013). This fashion EC portal site contains over 500 stores on its platform and each store sells one or multiple brands. This category stimulates emotional buying, which is often accompanied by cognitive dissonance (e.g., Clover, 1950; Bellenger et al., 1978; Park et al., 2012). In addition, with numerous variations in color, material, design, style, and brand over a wide price range, choice difficulty may prompt the occurrence of cognitive dissonance (e.g., Menasco and Hawkins, 1978). It appeared that the data from this fashion EC site was ideal for our empirical analysis.

From the database, we selected active customers who had purchased more than 10 times at this EC site during this period and had been a site member for less than 10 years. We further limited the customers to those who had made both types of purchases, with and without the post-purchase action presaging cognitive dissonance, so that customer-specific parameters could be identified. This resulted in 255 customers. The first 90% of the sessions in the data were used for parameter estimation, and the last 10% were used for model validation.

Dependent Variable: Precursor of Cognitive Dissonance

Sweeney et al. (2000, p.374) stated “The concept of dissonance ... best fits the period that immediately follows the purchase decision but precedes use or experience with the result of the purchase decision.” They conducted a survey of customers who were in a “gamma” phase (Oliver, 1997), that is, in the intervening period between

a product purchase and its usage. Likewise, other prior studies that aimed to develop measurements of cognitive dissonance analyzed surveys that were conducted in the gamma phase or immediately following the purchase (e.g., Bell, 1967; Hunt, 1970; Menasco and Hawkins, 1978; Korgaonkar and Moschis, 1982).

Hence, in this study, we distinguished between purchases with the precursor of cognitive dissonance and normal purchases by observing an online behavior in the gamma phase. The EC portal site we analyzed starts a delivery process on the day of order, and customers cannot cancel their orders once the delivery process begins. Based on this business practice, we defined the gamma period for this online data as the duration from an order till the end of the session. When customers feel cognitive dissonance, they tend to explore information that justifies their decision-making after purchase (e.g., Rosenfeld et al., 1986; Hennig-Thurau and Walsh, 2003). In online shopping, this behavior corresponds to revisiting the product page after placing an order, for example, to view pictures of the product and/or read the product descriptions again. Hence, if a customer came back to the ordered product’s webpage after purchase within the same session, we regarded this post-purchase action as the precursor of cognitive dissonance. The proportion of purchases with and without the post-purchase action was similar for the estimation and validation data, thereby providing validity to this criterion as the precursor to some extent.

Independent Variables

The independent variables consisted of shopping behaviors, product attributes, and customer characteristics, and were classified into two types. The first type varied from purchase to purchase, and directly affected the occurrence of cognitive dissonance. The second type was stationary (i.e., it did not vary by purchase occasion) and represented customer characteristics of online browsing and shopping behaviors at the EC site. In our study, the direct influence of the first type of independent variable on the precursor of cognitive dissonance was moderated by the second type of variables through hierarchical modeling.

Direct Variables

Previous studies found that the higher the purchase price, the more likely and serious the cognitive dissonance becomes (e.g., Kaish, 1967; Oshikawa, 1970; Sweeney et al., 2000). Perception of a purchase price is affected by the internal and external reference prices formed through product search and comparison (Kalyanaram and Winer, 1995). Hence, we constructed a variable that was a ratio of the price of a purchased product to the average price of the category to which the purchased product belonged, and we named it “RELATIVE PRICE.” The average price of the category was calculated with regular prices in the product catalog provided by the EC portal site. Another price-related variable included was a dichotomous indicator of whether the purchased product was on sale or not, called “SALES.” Several researchers have pointed out that sales promotions stimulate customers to purchase by providing an excuse to rationalize their decision (Beatty and Ferrell, 1998; Hoch and Loewenstein, 1991). This excuse might fade away once the order is placed, and the customer is unable to substantiate the purchase decision afterward. Consequently, we hypothesized that sales prompts the presage of cognitive dissonance.

The more difficult the purchase decision is, the more likely it is that cognitive dissonance occurs after the decision (Holloway, 1967; Montgomery and Barnes, 1993). Multitudes of alternatives spawn the anxiety of whether one made the right decision and fear of regret, thereby causing cognitive dissonance (Bell, 1967; Menasco and

Hawkins, 1978). As a proxy for the difficulty in choice, we used the “NUMBER OF BRANDS” for the category in the EC store where a customer made his/her purchase.

Consumer’s higher self-confidence about the purchase decision makes the occurrence of cognitive dissonance less likely (Bell, 1967; Montgomery and Barnes, 1993). We posited that the longer the elapsed time of a customer’s product search and comparison in the shopping process, the lower the customer’s self-confidence becomes, and thus the occurrence of cognitive dissonance is more likely. Here, we included two independent variables. One was “BROWSING TIME” that represented how long a customer browsed a product during the session in which the purchase occurred. Another was the “NUMBER OF SESSIONS,” which was a logarithm of the number of sessions in which a customer had viewed the same product before the purchase session. We expected that both browsing time and number of sessions would be positively related to the precursor of cognitive dissonance.

Park et al. (2012) showed that sensory attributes, such as the color, textile, and design of apparel products, trigger emotional buying, which tends to cause cognitive dissonance afterward. We focused on product color as a sensory attribute (Rowley 2001) in our study, and created a binary variable, “TREND COLOR,” representing whether the color of the purchased product is a trend color of the year or not. In order to define trend color, we referred to the “Color

of the Year” presented by Pantone LLC and set it to 1 if the color of the purchased product corresponded to the color of the year and 0 otherwise. We expected trend color to prompt the precursor.

Ozok and Wei (2010) found that, people prefer using PC over mobile devices in online shopping, because PC’s larger physical interfaces make information retrieval and entry easier. Hence, mobile devices are used more for accomplishing specific purchase tasks, whereas PC is used more for casual browsing, which could lead to emotional purchases with cognitive dissonance. Furthermore, the fact that mobile devices are relatively unsuitable for longtime browsing means their users are less likely to exhibit returned visits after purchase. We constructed “MOBILE” variable, using 1 if accessing via a mobile device and 0 if accessing via PC. We expected mobile to exhibit a negative sign.

Columns 2 to 4 of the table summarize our hypotheses and interpretations about the expected signs of the parameters for the seven independent variables.

Moderating Variables

We now describe the independent variables that indirectly affect the presage of cognitive dissonance. These moderating variables depict customer’s site usage characteristics and do not vary from purchase to purchase. The variable “MATURITY” was used to represent the number of days since a customer registered as a member

Table 1

	Sign	Hypotheses	Reference	Base model	Individual model		Maturity	Hierarchical Model			
				estimate	mean	std. dev.		Cherry Picker	Trendy	Cvariation	Sinterval
intercept				-0.834**	-0.999	0.771	0.0658	0.1311*	0.068	0.1809**	-0.218**
SALES	+	If a purchased product is on sale, an excuse to rationalize the purchase tends to prompt the precursor of cognitive dissonance.	Kaish (1967), Oshikawa (1970), Montgomery and Barnes (1993), Sweeney et al. (2000)	0.090**	0.011	0.763	-0.253**	-0.0954	-0.157*	0.1081	-0.041
RELATIVE PRICE	+	If a relative price of a purchased product is expensive, its higher stake tends to prompt the precursor of cognitive dissonance.	Hoch and Loewenstein (1991), Beatty and Ferrell (1998)	0.104**	0.190	0.489	-0.002	-0.016	-0.044	0.0075	-0.006
TREND COLOR	+	A purchase induced by sensory attributes tends to prompt the precursor of cognitive dissonance.	Park et al. (2012), Rowley (2001)	0.269**	0.046	1.086	0.3113	0.1825	-0.412*	-0.054	0.1711
BROWSING TIME	+	For a purchase with longer browsing time, a consumer has lower self-confidence, and the precursor of cognitive dissonance is prompted.	Bell (1967), Kaish (1967), Montgomery and Barnes (1991)	0.302**	0.450	0.510	-0.014	-0.0456	-0.028	0.0161	0.0382
NUMBER OF SESSIONS	+	If a consumer browse a product many times in sessions prior to the purchase, a consumer has lower self- confidence, and the precursor of cognitive dissonance is prompted.	Bell (1967), Kaish (1967), Montgomery and Barnes (1991)	0.271**	0.166	0.491	-0.088*	-0.0334	-0.008	0.0063	-0.056
MOBILE	-	It is more difficult to browse for a long time with mobile devices than with PC, thereby not prompting the precursor of cognitive dissonance.	Ozok and Wei (2010)	-0.198**	-0.301	0.796	-0.081	-0.015	-0.108	-0.114	-0.154
NUMBER OF BRANDS	+	Purchase decision more difficult with more brands, thereby prompting the precursor of cognitive dissonance.	Bell (1967), Holloway (1967), Menasco and Hawkins (1978), Montgomery and Barnes (1991)	0.020							
In Sample Fit											
2*Marginal Loglikelihood				6163.35		4555.56		4545.69			
DIC				6170.00		4697.49		4719.10			
Holdout Sample Fit											
-2*Loglikelihood				613.52		596.72		603.55			

** Significant in 95% credible interval
 * Significant in 90% credible interval

of the EC portal site as of the last day in the data. The variable "SINTERVAL" was used to represent the average store-visit interval for the EC site. The variable "CVARIATION" was a ratio of the number of colors that a customer purchased divided by the total number of purchased products. If the colors of the purchased products were all different, CVARIATION equaled 1.

Next, two variables were related to customer's online shopping behaviors. Arnold and Reynolds (2003) studied hedonic browsing, which is a type of browsing that seeks entertainment, pleasure, and recreational values. They tried to link six motivations to hedonic browsing. We adapted two of the six motivations, which were value shopping and idea shopping, from the access log data. Value shopping is a shopping behavior for the purpose of bargain-hunting. In this EC site, most brands usually conduct a sales promotion in January and July every year. We regarded the two-month periods centering on January and July as sale periods and calculated "CHERRY PICKER" to indicate the fraction of visits during the sales over the entire period. We regarded CHERRY PICKER as a proxy for value shopping tendency.

Idea shopping, on the other hand, is a shopping behavior based on consumer's desire to be familiar with the latest fashion. In this EC site, new products are launched in early March, June, September, and December. We considered the one-month periods centering on these four time points as new product launch periods. We calculated "TRENDY," which indicated the fraction of visits during a new product launch over the entire period. Hence, we regarded TRENDY as a proxy for a customer's idea shopping tendency.

RESULTS

Column 5 of the table shows the estimated parameters in the base model. All estimates had the same signs as hypothesized. The precursor of cognitive dissonance was prompted if the product was on sale, was the trend color, and was expensive. Furthermore, if the browsing time of a product was long (i.e., high browsing time) or a customer browsed the same product many times before purchase (i.e., number of sessions is large), these shopping behaviors tended to cause the presage. The estimate for mobile was negative as expected. The estimate for number of brands was positive, potentially suggesting a positive relationship between choice difficulty and the presage of cognitive dissonance. However, because it was not significant in the 95% credible interval, we excluded number of brands from the subsequent models.

Bottom two rows of the table show the goodness of fit for the three models in this study. First, all indices of the goodness of fit for the individual model were superior to the ones for the base model in both estimation and validation periods. This result indicates that the impact of independent variables on the precursor of cognitive dissonance widely differs among customers, suggesting the importance of accounting for customer heterogeneity. Next, the goodness of fit for the individual and hierarchical models was close to each other in both the estimation and validation periods, which implies that variations in parameters β_i across users are explained well by the site usage characteristics included in the hierarchical model.

We next interpreted the estimates of the individual and hierarchical models in detail. Column 6 shows the basic statistics of the distributions of parameters β_i for each user in the individual model. The signs of the means of β_i were the same as the signs in the base model. The standard deviations differed by variable, suggesting a difference in the extent of the heterogeneity. In particular, the impact of sales, trend color, and mobile on the precursor of cognitive dissonance varied widely by customer. The distributions of relative price, browsing time, and number of sessions had relatively small

variations (i.e., standard deviations), implying moderate homogeneity among customers.

The hierarchical model explains the heterogeneity of the parameters by customer's site usage characteristics. Column 8 reports the estimate of matrix Q, mitigating effect of the moderating variables on the direct impact of product attributes and customer's shopping behaviors.

First, we looked into the relationship between the intercept (i.e., base tendency to prompt the precursor of cognitive dissonance) and the site usage characteristics. Customers who visited this EC site during a sale (CHERRY PICKER), who were likely to choose various colors (high CVARIATION), and who frequently visited this EC site (small SINTERVAL) were likely to presage the cognitive dissonance. In other words, sales promotions and sensory attributes, such as color, were likely to prompt the precursor of cognitive dissonance. The presage was not likely to arise for infrequent visitors because they tended to have specific purposes in mind to buy something and less emotional buying may occur.

Next, we examined the moderating variables (MATURITY and TRENDY), both of which were significant at over a 90% credible level on some variables. Customers may not presage cognitive dissonance if they are more experienced with the EC site (Olson and Dove, 1979; Tse et al., 1990). If customers are relative novices, their insufficient knowledge and uncertain expectations about the store might lead to less self-confidence about the purchase, which subsequently can prompt the precursor after the purchase. Column 7 shows that the MATURITY variable had a negative moderating impact on all direct factors, implying that the more mature customers become, the less the impact of their shopping behaviors and product attributes become. The sole exception was TREND COLOR, but the result was not significant. In particular, the moderating effects of MATURITY on sale purchases (SALES) and multiple viewing of the product prior to purchase (NUMBER OF SESSIONS) were significant at the 90% credible level.

A similar interpretation applies to the TRENDY variable. Customers who visited this EC site frequently during a new product launch period were knowledgeable and experienced so that the direct effects could be moderated. Column 7 shows that TRENDY also had a negative moderating impact on all of the direct factors that cause a customer to presage the occurrence of cognitive dissonance. Specifically, the moderating effects of TRENDY on sale purchases (SALES) and trend color purchases (TREND COLOR) were significant at the 90% credible level.

CONCLUSIONS

This paper aimed to identify the precursor of cognitive dissonance, confirm its relationship with antecedent factors found in the previous studies, and provide managerial guidance on the observable factors that prompt it. Previous studies indicated that the occurrence of cognitive dissonance differed among customers and purchase occasions. However, they have not yet proven it. In order to substantiate the validity, we utilized longitudinal data of customer's purchases at multiple points in time to address customer heterogeneity in the individual model, and incorporated moderating variables in the hierarchical model. In addition to this novelty, we offered some managerial implications that were actionable by EC sites by translating the cognitive and emotional factors used in previous studies into shopping behaviors, product attributes, and customer characteristics, all of which are observable through online data.

The results confirmed many of the findings of previous studies. The precursor of cognitive dissonance is more likely to be prompted (1) if purchase decisions are more difficult to make, (2) for prod-

ucts with higher price, (3) for products that are on sale, and (4) for emotional purchases that are associated with sensory attributes. The impact of the last two factors, as well as the use of mobile devices, on the presage of cognitive dissonance varies widely by customer. This heterogeneity is partly explained by how much experience customers have with the EC site. In particular, the effect of shopping behaviors and product attributes that prompt the precursor of cognitive dissonance can be moderated for experienced customers.

There is a limitation in this research. Customers, under cognitive dissonance, might seek information outside of the EC site to justify their decisions. Thus, one potential extension is to consider customers' behavior on other websites as well as in the offline environment, for example, by combining survey data.

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Competitive Papers—Extended Abstracts

Effects of Meritocratic Beliefs on Consumer Expectations for Unearned Preferential Rewards

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EXTENDED ABSTRACT

These days, companies frequently employ unearned preferential rewards through a variety of ways such as lottery scratch-offs or roulette games to induce customer interest and to attract their attention. The target of earned preferential rewards is determined by customers' efforts or loyalty. On the contrary, in the case of unearned preferential rewards, how the target is determined is uncertain or has not been justified (Jiang, Hoegg, and Dahl 2013). Prior research on preferential rewards has focused mainly on earned preferential rewards; as a result, there exists little research on unearned preferential rewards, despite its common usage. Thus, we concentrate on the effect of unearned preferential rewards and propose that customers' reactions to unearned preferential rewards depend on their meritocratic beliefs.

Meritocracy, which is the prevalent principle in Western culture, is a belief that the hierarchical social status is determined by an individual's merits (Foster, Sloto, and Ruby 2006; Major et al. 2007; McCoy and Major 2007). Individuals who endorse this belief justify inequality in society because they view members of higher status groups as more talented or hardworking than those of lower status groups. Drawing on prior research, we suggest that people who endorse meritocratic beliefs expect to win in unearned preferential reward contexts when they spend more (vs. less) money. In other words, we predict that meritocratic people consider the amount of money they spend as their merit, and that they think they deserve unearned preferential rewards.

Study 1 was designed to test whether meritocratic people were more likely to expect a higher probability of winning an unearned preferential reward when they spent more (vs. less) money. Participants were asked to imagine that they received a lottery scratch-off ticket after purchasing \$120 or \$1.20. They were also told that the average purchase amount per customer was \$20. After reading the scenario, they rated their probability of winning the lottery scratch-off ticket on a seven-point scale (1 = very low; 7 = very high). Finally, we measured participants' meritocratic beliefs (e.g., *I feel that people get what they are entitled to have*; Lipkus 1991). Results showed that the interaction between meritocratic beliefs and the purchase amount was significant. Participants with high meritocratic beliefs were more likely to expect a higher (lower) probability of winning the lottery when they were asked to imagine that they had purchased \$120 (\$1.20). In contrast, in the case of participants with low meritocratic beliefs, the effect of the purchase amount on the expected probabilities disappeared.

In Study 2, we manipulated participants' meritocratic beliefs by using a scrambled sentence task (McCoy and Major 2006). Thus, Study 2 employed a 2 (Prime: Meritocracy vs. Control) \times 2 (Purchase Amount: \$120 vs. \$1.20) between-subjects design. We asked participants to imagine a situation in which they received a lottery scratch-off ticket, the same as that in Study 1. The results replicated those of Study 1. When participants in the meritocracy condition imagined that they had purchased \$120, they expected a higher chance of winning the lottery than when they had purchased only

\$1.20. In contrast, in the control condition, the purchase amount did not influence participants' desired probabilities.

The purpose of Study 3 was to investigate whether meritocratic consumers, who paid a high amount, formed negative attitudes toward a shop when they failed to get unearned preferential rewards. We performed a 2 (Meritocracy Manipulation: Meritocracy vs. Control) \times 2 (Purchase Amount: \$2,500 vs. \$25) ANOVA on intentions to revisit the shop. In the losing ticket context, we found that meritocratic people were unwilling to revisit a store when they spent a high amount, whereas revisit intentions of non-meritocratic people were not affected by the amount they spent.

Finally, Study 4 was conducted at a nail care shop to improve our research's validity. Consumers were invited to fill out a consumer survey, including the amount they paid, the expected probability of winning the lucky event, and their meritocratic beliefs. As expected, the results replicate our previous studies and show that meritocratic people perceive themselves as deserving unearned preferential rewards when they spend high amounts in an actual service purchase context.

Taken together, these results demonstrate that people with meritocratic beliefs tend to apply the merit principle, even when preferential rewards are not based on clear criteria. Our findings contribute to understanding how customers react to unearned preferential rewards.

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Customer Empathetic Responses toward Brands Being Treated Unfairly

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EXTENDED ABSTRACT

The consensus within word-of-mouth (WOM) literature is that negative reviews lead to lower brand ratings and positive reviews lead to higher brand ratings (e.g., Chevalier and Mayzlin 2006; Fornell and Westbrook 1984). Recent research, however, has begun to cast doubt on this general assumption and showed that nuances *within* the reviews themselves moderate the effect of review valence on consumer reactions (Chen and Lurie 2013; Hamilton et al. 2014). The current research extends this literature and postulates that inferences about the perceived unfairness of WOM communication can have ironic positive implications for consumer evaluations of the reviewed brand. Specifically, we show that negative-unfair reviews can lead to more positive consumer responses than even positive WOM because of consumers heightened feelings of empathy toward the brand.

While the rich literature on fairness in consumer behavior has focused on the consumers' own experience of fairness during a service encounter, the current research examines the impact on consumer choices of perceived fairness for a third party. We define perceived fairness as the perception that the review was honest and impartial, free from self-interest or prejudice (Brockner et al. 2003) and hypothesize that perceptions of unfairness activate empathetic concerns for the brand under review.

Empathy is a vicarious response to the assumed emotions of another (Eisenberg 1991; Eisenberg and Miller 1987) which often arises as a response to the suffering of others (e.g., Jackson, Meltzoff, and Decety 2005). Pertinent to the research at hand, empathy activates moral concern for other people (Batson et al. 2007), often under conditions where the target has been perceived to have been wronged in some way (i.e., some standard of fairness or justice has been violated; Hoffman 2001). This concern for others being wronged was shown to motivate the restoration of fairness, either by compensating the victim or by punishing the wrong-doer (e.g., Batson et al. 2007; Carlsmith, Darley, and Robinson 2002; Darley and Pittman 2003). Given that brands can be viewed as people (Aaker 1997; Fournier 1998). We build on work showing that empathy will lead to positive and helpful responses to other *people* who have been wronged in some way, to propose that the same might be true of *brands*.

The current research suggests that when negative WOM about a brand is perceived to be unfair, this enhances empathetic concerns for the brand and results in positive consumer responses, such as higher willingness to pay, likelihood to recommend, and willingness to patronize. We demonstrate this basic effect and explore empathy as its underlying mechanism through the mediation of state empathy (S1) and moderation by trait empathy (S2). In addition, we demonstrate how managerial intervention can increase the likelihood of such empathetic responses (S3).

Study 1 demonstrates the effect of perceived fairness in WOM on positive consumer response and provides mediational evidence that feelings empathy underlie this effect. Participants were asked to read a review for a local restaurant that mentioned the same type of enjoyment over a "tasty full meal breakfast" with coffee for a total of \$12. In the negative review conditions, the reviewer also mentioned being "robbed" by how much was charged for the coffee. In the negative-fair condition, the reviewer complained that the coffee within the \$12 combo was \$4.50. In the negative-unfair condition,

the reviewer complained that the coffee was \$0.50. Thus, in the negative-unfair condition, the manipulation revolved around complaining about a good deal. Participants were asked to rate their level of empathy toward the brand, patronage intentions, and perceptions of review fairness. We found that negative-unfair WOM ($M = 4.80$) leads to higher patronage intentions than both the negative-fair ($M = 3.24$) and, more importantly, the positive WOM ($M = 4.04$) conditions (Overall: ($F(2, 179) = 25.98, p < .001$). Empathy towards the brand mediates the results.

Study 2 explores the mechanism of empathy by measuring trait empathy and showing that only participants who are predisposed to feel empathy (moderate to high on trait empathy; 31th percentile or higher), the difference in patronage intentions was significant between a negative-fair and negative-unfair review (Interaction: $B = -1.33, SE = .46, t(117) = 2.47, p = .01$).

Finally, in Study 3, we demonstrate how brands can enhance empathetic relationships with the consumers by taking steps to make the brand more relatable and person-like. Building off of work on how brands can be perceived as humanlike, we found that for those who were exposed a personlike brand response (vs. generic), willingness to purchase was higher ($F(1,234) = 8.93, p < .01$). Once again, empathy towards the brand mediates the results.

Overall, the results provide converging evidence that when consumers perceive negative WOM about a brand as unfair this leads to positive brand responses (e.g., higher WTP). This effect is due to enhanced empathy for the brand (S1 and S3), moderated by trait empathy (S2), and can be magnified through managerial interventions (S3).

This paper contributes to growing literature examining consumer inferences regarding online WOM (e.g., Moore 2015) by showing that when negative WOM is seen as unfair, this can ironically enhance brand evaluations. Thus, the current research offers two primary theoretical contributions. First, our results build on and extend past research showing that cues within WOM can influence consumer judgments about the brand by bringing to light the role of (un)fairness.

Second, while research has reported numerous instances of consumers being concerned about brands feeling empathy for them (e.g., Parasuraman, Zeithaml, and Berry 1988), we suggest that such relationship may be bi-directional wherein consumers can also experience empathy for brands. The current research suggests an empathy-driven mechanism whereby negative WOM triggers positive brand responses, even in light of negative information about the brand. Thus, we contribute to extant knowledge on empathetic reactions in consumption (e.g., Aaker and Williams 1998; Argo, Zhu, and Dahl 2008). In doing so, we highlight that companies can enhance empathetic relationships with consumers and inoculate themselves against negative WOM.

The consensus within word-of-mouth (WOM) literature is that negative reviews lead to lower brand ratings, and positive reviews lead to higher brand ratings (e.g., Chevalier and Mayzlin 2006; Fornell and Westbrook 1984). The current research highlights conditions under which this commonly observed effect does not emerge and even reverses. Building on research showing that cues within consumer reviews can influence consumers' attributions about the responsibility for the service failure (Chen and Lurie 2013; Hamil-

ton, Vohs, and McGill 2014), we suggest that negative reviews perceived as unfair can trigger feelings of empathy for the brand being wronged which, ironically, result in higher liking and patronage intentions. Importantly, we show that these higher liking and patronage intentions exceed those that result from a positive review. We argue that empathy for the brand acts as the mechanism of this effect.

This research makes several contributions to the existing literature. First, we provide initial evidence that consumer perception of unfairness in WOM can subsequently trigger positive evaluations and behavioral intentions toward the brand. Second, we provide support for an empathy mechanism by showing how these effects are magnified under conditions where the consumer can empathize with the brand. Third, we extend previous literature on consumer-brand relationships (Aaker 1997; Aggarwal 2004; Fournier 1998) by demonstrating that our effects occur because consumers can experience empathy for brands.

THEORETICAL DEVELOPMENT

Due to the inherent trust that consumers place in WOM, reviews have been shown to impact dramatically responses to companies and brands, including increased willingness to pay (Houser and Wooders 2006) and product sales (Chevalier and Mayzlin 2006; Liu 2006). The consensus is that positive reviews lead to higher product sales by enhancing positive attitudes and expectations regarding the brand, while negative reviews lower brand evaluations and intentions (e.g., Chevalier and Mayzlin 2006; Godes and Mayzlin 2004; Liu 2006; Sonnier, McAlister, and Rutz 2011; Zhu and Zhang 2010).

Research has begun to cast doubt on the general assumption that positive and negative reviews always lead respectively to positive and negative outcomes for the brand. Cues in the reviews can change outcomes. For example, Chen and Lurie (2013) found cues within the review—temporal contiguity markers (i.e., cues suggesting that the review was published soon after the service encounter)—increase the persuasiveness of reviews because they lead people to attribute the positive review to the product experience, not the reviewer's personal motives. Moreover, Hamilton et al. (2014) found that using dispreferred markers aimed at softening the negative information featured in reviews (e.g., "I'll be honest,") leads to reviewers being seen as more credible and resulted in higher willingness to pay for the product being reviewed.

All in all, extant research demonstrates that inferences about the reviews can moderate the effect of review valence on consumer reactions. We suggest that one of those factors influencing judgments is perceived fairness. While previous work on fairness in consumer behavior has typically focused on how the consumer's own experience is directly impacted by the service treatment (Brockner et al. 2003), our operationalization is that perceived fairness comes not from the consumer's own service experience, but from the cues that cast doubt on the veracity and self-interested nature of the WOM communication. We postulate that unfair negative reviews signal that the brand is being wronged. Thus, we expect inferences about the unfair nature of negative reviews to lead consumers to experience empathy for the brand, enhancing brand evaluation.

The Role of Empathetic Responding

Empathy is a vicarious response to the assumed emotions of another (Eisenberg 1991; Eisenberg and Miller 1987) which often arises as a response to the suffering of others (e.g., Jackson, Meltzoff, and Decety 2005). Empathetic processing involves viewing another person's situation from their perspective and understanding how a person will react emotionally and cognitively to that situation as if it were affecting them directly (Granzin and Olsen 1991). Empathy has

been shown to be an individual trait difference (Davis 1980) as well as arising from contextual cues.

Within the realms of positive psychology and marketing, empathy has been shown to activate moral concern for other people (Batson et al. 2007), often under conditions where the target has been perceived to have been wronged in some way (i.e., some a standard of fairness or justice has been violated; Hoffman 2001). This sensitivity to moral outcomes for others has been shown to be a powerful source of motivation to restore fairness, either by compensating the victim or by punishing the wrong-doer (e.g., Batson et al. 2007; Carlsmith, Darley, and Robinson 2002; Darley and Pittman 2003).

We build on work showing that empathy will lead to positive and helpful responses to other *people* who have been wronged in some way, to propose that the same might be true of *brands*. Indeed, brands can be seen as having person-like qualities (Aaker 1997; Fournier 1998). While previous work has shown numerous instances of how brands show empathy for consumers (e.g., Keller 1993; Parasuraman et al. 1988), we propose that customers might also feel empathy for brands. We propose the perception that a negative review is unfair will activate empathetic concern toward the brand, which will then trigger consumer responses aimed at compensating that brand (e.g., willingness to pay, likelihood to recommend, patronage intentions). More formally, we predict:

Hypothesis 1: Negative WOM (e.g., reviews) perceived as unfair will lead to positive ratings and behaviors toward the brand.

Also, we anticipate that feelings of empathy toward the brand will mediate these positive consumer responses to unfair WOM.

Hypothesis 2: Feelings of empathy will mediate the relationship between perceptions of unfairness in negative WOM and positive consumer responses toward the brand.

Finally, given that our conceptual framework, we further predict heightened positive responses to unfair negative WOM under conditions that enhance or allow for the ability to empathize with the brand. For instance, under a predisposition for empathy and following managerial interventions aimed at making the brand more personable.

Hypothesis 3: Factors that increase empathic responding will moderate the effect of WOM unfairness on consumer responses. In particular, increases in the ability to empathize with the brand will lead to more positive reactions in the face of an underserved negative WOM.

We test the aforementioned hypotheses in three experimental studies. In Study 1, we show the basic effect that unfair negative WOM lead to positive consumer response as well as the mediational role of empathy. Study 2 provides moderation evidence of empathy. Finally, Study 3 shows how managerial actions can facilitate positive response.

STUDY 1

Study 1 provides an initial test of our framework suggesting that unfair negative WOM can lead to even more positive consumer responses than positive WOM. We employed a one-factor, 3-level (WOM type: positive v. negative – fair v. negative – unfair) between-subjects design. Perceived fairness was manipulated through an on-

line review of a local restaurant. We keep all elements of the review the same but vary coffee price across conditions to highlight perceptions of a good or bad deal for the coffee (e.g., price partitioning; Bertini and Wathieu 2008). Specifically, the negative review contained a complaint about a seemingly bad deal (fair condition) or a good deal (unfair condition).

Method

Participants and Design

One hundred eighty-two participants recruited through Amazon Mechanical Turk took part in this experiment in exchange for money (44% female, $M_{age} = 32.7$). The dependent variable of interest was patronage intentions toward the restaurant covered in the review.

Procedure

Participants experienced one of three conditions where they were asked to imagine reading an online review for a local brunch restaurant. Service delivery was kept constant across conditions by having each review describe enjoyment over a “tasty full meal breakfast” with coffee for a total of \$12 and by showing the same brunch picture. However, in both negative conditions, the review also contained a negative comment about the price of coffee within the \$12 combo. In the negative-fair review, the meal and the coffee were priced at \$7.50 and \$4.50 respectively. In the negative-unfair review, both items were priced at \$11.50 and \$0.50 respectively. For mediation purposes, participants rated the extent to which they experienced feelings of empathy toward the restaurant (sympathy, empathy, compassion; 9-point scale, $\alpha = .97$). Participants rated the extent to which, if they were looking for a brunch in a near future, they would consider the restaurant described in the review using two bi-polar 7-point scales: “unlikely-likely,” “improbable-probable” ($\alpha = .98$). To validate our fairness manipulation, participants also rated the extent to which they perceived the review to be fair (fair, deserved, justified, reasonable; 7-point scale $\alpha = .97$).

Manipulation Check

Results from an ANOVA revealed a significant main effect of review type on perceived fairness ($F(2, 179) = 60.67, p < .001$) validated our fairness manipulation.

Results

For empathy toward the brand, results revealed a significant effect of review type ($F(2, 179) = 25.98, p < .001$). Empathy toward the brand was higher in the negative-unfair ($M = 5.68, SD = 2.37$) compared to the positive ($M = 3.27, SD = 2.05; t(179) = 6.28, p < .001$) and the negative-fair conditions ($M = 3.16, SD = 1.97; t(179) = 6.30, p < .001$). There was also no difference in the extent to which participants experienced empathy toward the brand in the negative-fair compared to the positive WOM condition ($t < 1$).

For patronage intention, results revealed a significant effect of review type on patronage intentions ($F(2, 179) = 10.76, p < .001$). Importantly, patronage intentions were higher in the negative-unfair ($M = 4.80, SD = 1.69$) compared to the positive ($M = 4.04, SD = 1.97; t(179) = 2.33, p < .05$) and the negative-fair conditions ($M = 3.24, SD = 1.67; t(179) = 4.63, p < .001$). As expected, patronage intentions were higher in the positive compared to the negative-fair condition ($t(179) = 2.48, p = .01$).

Next, we tested whether reported feelings of empathy toward the brand could explain patronage intentions using a dummy coding for a multi-categorical mediation analysis (Hayes and Preacher 2013). Results revealed that heightened feelings of empathy toward the brand in the negative-unfair WOM conditions could explain the

difference in patronage intentions between the negative-unfair and the negative-fair condition ($B = 1.02, SE = .22, CI_{95} [.65, 1.54]$) and between the negative-unfair and the positive condition ($B = .97, SE = .21, CI_{95} [.62, 1.43]$). In comparison, empathy for toward brand does not account for the difference in patronage intentions between the positive and negative-fair WOM conditions ($B = .04, SE = .15, CI_{95} [-.25, .32]$).

Discussion

Study 1 provides initial evidence for both the basic effect and mediational role of empathy. Interestingly, Study 1 suggests that such empathetic responses can be even more positive than those following exposure to positive WOM. Study 2 provides additional support for our explanation relying on empathy by showing how individual differences in trait empathy moderate this relationship.

STUDY 2

In study 2, we measure trait empathy and test whether it moderates the positive consumer responses following exposure to unfair negative WOM. We predict that individuals who have a higher predisposition to empathize with others will be more sensitive to the unfairness of the negative review. This is because those high in trait empathy are more sensitive to the negative circumstances of others (Davis 1996; Loggia, Mogil, and Bushnell 2008).

Method

Participants and Design

One twenty-two participants recruited through an undergraduate subject pool took part in this experiment in exchange for course credit (69% female, $M_{age} = 19.9$). The experiment was a 2 (WOM type: negative-fair vs. negative-unfair) X continuous (trait empathy) between-participants design. The dependent variable of interest was patronage intentions toward the restaurant covered in the review.

Procedure

Participants experienced one of two conditions where they read an online review for a local restaurant. In both negative review conditions, the customer complained about having to wait for the replacement of a bowl of soup that was served too cold. In the negative-fair condition, the customer had to wait “30 long minutes” for replacement. In the negative-unfair condition, the customer had to wait “5 long minutes” for replacement. Participants rated the fairness of the WOM ($\alpha = .97$) and their patronage intentions to the restaurant in a near future ($\alpha = .98$) using the same measures as in the previous study. To test for moderation, we measured participants trait empathy using the 7-item Empathetic Concerns scale ($\alpha = .78$) from Davis (1980; e.g., When I see someone being taken advantage of, I feel kind of protective toward them).

Manipulation Check

Participants perceived the negative-unfair ($M = 2.93, SD = 1.43$) as less fair compared to the negative-fair review ($M = 4.53, SD = 1.34; t(119) = 6.39, p < .001$) supporting our WOM fairness manipulation.

Results

Results revealed a significant two-way interaction between WOM type and trait empathy in predicting patronage intentions ($B = -1.33, SE = .46, t(117) = 2.47, p = .01, CI_{95} [.24, 1.85]$). This interaction was qualified by a main effect of WOM type ($B = 3.45, SE = 1.71, t(117) = 2.02, p < .05, CI_{95} [.07, 6.84]$) and of trait empathy ($B = .98, SE = .37, t(117) = 2.66, p = .01, CI_{95} [.25, 1.71]$). Next, we used to the Johnson-Neyman technique to examine where along the

continuum of trait empathy participants started to express empathetic responses toward the brand. Results revealed that for participants who scored at 3.51 or above on the empathy scale (31th percentile), the difference between the negative-fair and negative-unfair review on patronage intentions was significant.

Discussion

Results from Study 2 provide additional support for our key prediction that negative reviews can trigger positive consumer responses when they are perceived as unfair. Importantly, our results suggest that such effect starts to operate even among those low in trait empathy but is magnified among those high on trait empathy.

STUDY 3

Study 3 was designed to show how the type of managerial response to negative WOM can increase empathetic concerns for the brand. Since people are more likely to engage with a person rather than an amorphous logo (Epley, Waytz, and Cacioppo 2007) and brands can be perceived as holding humanlike traits and have intentions (Aaker 1997; Kervyn, Fiske, and Malone 2012), we suggest that brands can evoke greater empathy by responding with a personable (v.generic) type of communication (i.e., by speaking as a firm employee instead of as the brand itself), leading to higher consumer willingness to pay for the brand's product.

Method

Participants and Design

Seventy-seven participants recruited through Amazon Mechanical Turk participated in this experiment in exchange for money (43% female, $M_{\text{age}} = 33.1$). The experiment was a 2 (response type: generic vs. personable) X perceived fairness of the negative review (continuous) between-participants design. The dependent variable of interest was willingness to pay for the brand's product.

Procedure

All participants were first asked to read a negative online review about a failed order from a brand selling reusable water bottles. The negative review was purposefully crafted to appear weakly supported by having the customer voice dissatisfaction with the brand's inability to meet an exceptionally high level of service quality. The review was presented with the brand's response prompting a follow-up with the customer. In the generic (personable) response condition, the response came from the brand's corporate account (an employee) and directed the consumer to a customer service (employee direct) phone number for further inquiries.

Participants answered measures of perceived fairness of the negative review on two seven-point bipolar items "unreasonable-reasonable" and "not deserved at all-very deserved" ($\alpha = .88$) and state empathy toward the brand using the same measures as in previous studies ($\alpha = .97$). Participants were then shown a featured product from the brand (a 24 oz. stainless steel water bottle) and asked to report their willingness to pay for that product—using a slider scale ranging from \$0.00 to \$20.00. Response type did not significantly influence perception of deservingness of the negative review ($r = .14, p > .20$). Finally, as a manipulation check, participants also rated the extent to which they perceived the brand to have positive anthropomorphic qualities between the personable ($M = 6.56, SD = 1.89$) and generic response ($M = 5.58, SD = 1.70; t(75) = 2.40, p < .05$) conditions, using four 9-point items: "personable," "approachable," "amicable," and "friendly;" 1: not at all, 9: very much ($\alpha = .95$).

Results

The results revealed a significant interaction between perceived fairness of the negative review and response type on willingness to pay ($B = -1.40, SE = .53, t(73) = 2.61, p = .01$). For participants who rated the negative review at 1.99 or below on the perceived deservingness scale (14th percentile), willingness to pay for the product was significantly higher in the personable response type compared to the generic response type. In contrast and although not foreshadowed in our predictions, for participants who scored at 5.82 on the perceived fairness scale (87th percentile), willingness to pay for the product was significantly higher in the generic response compared to personable response type.

Conditional Indirect Effect

We further tested for mediation by feelings of empathy toward the brand conditional on how perceived fairness of the negative review. We observed a significant indirect effect between response type and willingness to pay through empathy when participants perceived the negative review as unfair (-1 SD: $B = 1.12, SE = 0.70, CI_{95} [0.11, 2.92]$) but not when perceived as fair (+1 SD: $B = -0.03, SE = 0.28, CI_{95} [-0.85, 0.32]$). In other words, consumers who perceived the negative review as unfair were subsequently willing to pay more for the brand's product when the brand's response was personable compared to a generic-type response due to heightened feelings of empathy toward the brand.

Discussion

Study 3 provides further evidence to support our empathy-driven account for the relationship between unfair negative reviews and positive consumer responses. In particular, when the brand seemed more relatable and person-like, this led to greater empathy toward the brand and more positive responses in response to unfair (vs. fair) negative reviews.

GENERAL DISCUSSION

Taken together, the results across three studies provide converging evidence that consumers perceiving negative WOMC as unfair can subsequently display positive responses toward the firm due to empathetic feelings toward the brand. Across three studies, we show that perceptions of unfairness result in positive brand outcomes. We show that this is due to enhanced empathy for the brand (S1), moderated by trait empathy (S2), and can be achieved through managerial interventions (S3)

This paper contributes to growing literature examining consumer inferences regarding online WOM (e.g., Chen and Lurie 2013; Moore 2015). While previous work has, for the most part, focused on identifying the conditions under which negative WOM leads to negative reactions, we show that consumers' perceptions of fairness of negative reviews can enhance brand evaluations. Thus, the current research offers two primary theoretical contributions. First, our results build on and extend past research showing that cues within WOM can subsequently influence consumer judgments about the brand (e.g., Chen and Lurie 2013; Hamilton et al. 2014; McGraw, Warren, and Kan 2015) by bringing to light the role of (un)fairness.

Second, while research has reported numerous instances of consumers being concerned about brands feeling empathy for them (e.g., Parasuraman et al. 1988), we suggest that such relationship may be bi-directional wherein consumers can also experience empathy for brands. Specifically, the current research suggests an empathy-driven mechanism whereby negative WOM triggers positive brand responses, even in light of negative information about the brand. Thus, we contribute to extant knowledge on empathetic reactions in consumption (e.g., Aaker and Williams 1998; Argo et al. 2008; Escalas and Stern 2003). In doing so, we highlight that companies

can enhance empathetic relationships with consumers and inoculate themselves against negative WOM.

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When 2 + 1 is Less Than 3: Comparative Pricing Strategies for Premium Upgrades

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EXTENDED ABSTRACT

Using both field and laboratory studies we show that consumers selecting between vertically differentiated products (i.e., between a standard and a premium—objectively better, but more expensive—version) are more likely to select premium options when premium prices are quoted as the cost of upgrade rather than the total price of the premium option. Specifically, we show that Comparative Pricing (CP) strategies make premium options appear less expensive than objectively identical All-Inclusive Pricing (AIP) due to the smaller numbers used in the price difference representation.

From fuel surcharges to required printer ink cartridges, managers have long used various approaches separating the total cost of products into various mandatory components, to reduce price sensitivity and increase demand, by making the total purchase price less transparent, increasing reliance on the base price (Morwitz, Greenleaf, and Johnson 1998). The current research builds on and extends the research on price partitioning to the context of voluntary upgrades, by introducing the notion of CP. By highlighting the price difference between vertically differentiated products, CP will lead consumers to anchor their value judgments on the highlighted trade-off between a particular feature improvement and the price of that improvement. As such, because the difference in price will always be a smaller numeral than the total price of the premium option, we expect CP to increase the proportion of consumers selecting a premium option by making such an option appear relatively less expensive. In other words, we expect consumers facing price information using CP to undergo a process akin to saying “it’s not \$120, it’s only \$20 more [than \$100],” lead to more upselling under such conditions.

In Study 1 we partnered with a local food bank, using a between-participants design (CP vs. all-inclusive pricing). We set-up a booth advertising for a food bank donation at the heart of a busy Student Union building. A research assistant spoke the following instructions to passing students (N=81): “Did you know that a bag of nutritious food for a person in need costs about \$10 to fill completely? Thinking about students’ budgets, we have two levels of suggested donation. The Basic food pack is \$4 or, if you want to donate more, the Helper food pack is [\$6/\$2 more].” Depending on the price framing condition, this more generous option was offered for either “\$6” in the all-inclusive-pricing (AIP) condition or for “\$2 more” in the CP condition. A significantly higher proportion of people selected the premium donation tier (i.e., Helper food pack) in the CP condition (P=69%) compared to the AIP condition (P=39%; $\chi^2=5.78$, $p<.05$).

Study 2 provides evidence that CP makes the premium option seem cheaper than AIP, and proposes a moderator to reverse the effect. If quoting the sales price using CP leads to increased choice of the premium option because consumers perceive the premium option as cheaper, we should observe the opposite effect when the participant acts as a seller and receives an offer using a CP frame because the offer price in the CP frame will appear cheaper and thus undesirable to the seller. This experiment uses a 2 (framing: CP vs. AIP) X 2 (transaction domain: buyer vs. seller) between-participants design.

Participants (N=221) read a scenario about a buyer-seller interaction for a used bicycle sold through classified ads. Participants

took either the role of the buyer or the seller. In the buyer [seller] scenario, they had shown interest in purchasing one of two second-hand bicycles a seller had put up for sale [a buyer had shown interest in purchasing one of two second-hand bicycles they had put up for sale]. One bicycle, the premium product, was superior because of better gear options (21-speed vs. 3-speed model) and better parts (brand-name parts vs. generic parts). In the AIP condition, the seller [buyer] was offering to sell [purchase] either the regular bicycle for \$150 or the premium bicycle for \$210. In the CP condition, the price of the premium bicycle was framed as “for \$60 more”. Participants selected which of the two bicycles they would purchase [sell] and rated the expensiveness of the premium option (1-7 item).

In the buyer condition, participants in the CP condition were more likely to purchase the premium bicycle (P=70%) than those in the AIP condition (P=50%). In the seller condition, we observed a significant reversal where participants in the CP condition were less likely to sell the premium bicycle (P=26%) than those in the AIP condition (P=46%; interaction (B=1.69, SE=.57, Z=2.91, $p<.01$). Consistent with our prediction, perceived expensiveness mediated the effect.

In Study 3, we examine how heuristic processing (measured by response time) magnifies the upselling effect following CP (as opposed to heuristic processing for Price Partitioning). Participants (N=219) were instructed to imagine themselves shopping for a plane ticket from New York to Los Angeles and shown two different flight options. One of the two flights was cheaper at \$169.00 but took longer to reach the destination because of a connection through San Francisco. The other flight was direct. Participants could select this premium flight for either “\$219.00” (AIP condition) or “\$50.00 more” (CP condition).

Those who made quicker, and presumably more heuristic, decisions (5.8 seconds: 1SD below the mean), were more likely to choose the premium option in the CP (P=60%) than in the AIP condition (P=31%). In contrast, those who made slower, and presumably more systematic decisions (35.5 seconds: 1SD above the mean), showed no significant difference between the CP (P=62%) and AIP conditions (P=63%); interaction B=-.88, SE=.43, Z=2.06, $p<.05$.

Study 3 supports our account that comparative pricing increases preference for premium options because participants focus their value assessment on the price difference, not the total price. Consistent with this theorizing, the CP framing leads faster, hence more heuristic decision-makers to select more premium choices than the AIP framing. However, this difference between CP and AIP framing disappeared for participants who spend a longer time on their choice, because those in the AIP condition are more likely to extract the price difference, replicating the effect of the CP manipulation.

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Guilt trips: Transportation and the Persuasiveness of Guilt Appeals

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EXTENDED ABSTRACT

In three longitudinal experiments, we test a model proposing narrative transportation as a determinant of guilt appeal effectiveness. Eliciting guilt favors immersion in the communication and this process facilitates compliance. We examine guilt appeals' longitudinal effectiveness (in a recycling promotion context) and show that 1) the persuasiveness of guilt appeals is mediated by narrative transportation, and 2) their effect is stronger when the message is delivered through video rather than text.

Three days after exposure to a guilt appeal, participants were recontacted. In study 1 and study 2, participants were allocated to one of two conditions (high guilt versus low guilt). Study 3 has a 2 (guilt: high versus low) X 2 (medium: video versus text) design and tests the role of media on the longitudinal effects of transportation. A chain of causal links that connects guilt elicited at time one, as a consequence of seeing the campaign, with the individual likelihood to anticipate guilt at time two is proposed. It is further hypothesized that the ability to anticipate guilt at time two will drive compliance. A thorough assessment of guilt messages require the examination of these indirect paths and their effects on persuasion (Antonetti & Baines, 2015; Antonetti, Baines, & Walker, 2015). Narrative transportation in the campaign (Green & Brock, 2000; Phillips & McQuarrie, 2010) is a key mediator linking reactions at time one with the potential outcomes at time two.

In study 1 and 2 participants are asked their intentions to recycle (Knussen and Yuke, 2008). In study 3 we measure self-reported recycling behavior "over the last few days" (Webb, Mohr, and Harris, 2008). We also ask whether participants would be willing to share their personal email address in order to receive "more information on the campaign and other steps you might take to promote recycling in your local community." The dichotomous answer (Yes/No) is treated as a further dependent variable.

At time one the guilt appeal influences 1) guilt felt by participants and 2) narrative transportation. However, the manipulation does not influence directly the other variables. A mediation analysis using PROCESS (Hayes, 2013; Model, 6) allows testing for the indirect effects predicted. We calculate 95% confidence intervals using bias-corrected and accelerated bootstraps and 10,000 resamples (Hayes, 2013). Results are consistent with our expectations. The indirect effect is in line with our theorizing. For study 3, we estimate the model using also the dichotomous dependent variable measuring decisions to share the email. Results show a positive indirect effect through narrative transportation (effect: .06, CI from .02 to .13). The model offers a Nagelkerke R^2 of 11%.

The role of the medium used to communicate the message moderates the impact of narrative transportation on self-reported behavior. At time one, the medium used to deliver the message does not interact with the guilt appeal condition (PROCESS, Model 1) neither in the prediction of experienced feelings of guilt (effect: .003, $p = .97$, CI from -.17 to .17) nor on the level of narrative transportation (effect: -.05, $p = .36$, CI from -.16 to .06). To assess whether the medium used has an effect consistent with our model, we test for a possible interaction on the dependent variable at time two (PROCESS, Model 14). The model yields a positive interaction between medium and narrative transportation (effect: .15, $p < .05$, CI from .03 to .26). While the impact of narrative transportation is very weak when the message is delivered through text (effect: .05, CI from .001 to .08), it

is significantly stronger when the communication is through a video (effect: .12, CI from .07 to .18).

Data from study 3 is used to conduct a path analysis using a PLS-SEM approach (Hair, Ringle, and Sarstedt, 2011; Henseler et al., 2014). Results of model estimation using SmartPLS 3.0 and 5000 re-samples for bootstraps are in line with our predictions. Guilt experienced as an outcome of watching the ad leads to narrative transportation ($\beta = .23$, $t = 3.96$, $p < .001$, $f^2 = .23$) and transportation influences the anticipation of guilt at time two ($\beta = .45$, $t = 8.88$, $p < .001$, $f^2 = .26$). Anticipated guilt contributes to explaining recycling behavior ($\beta = .31$, $t = 5.21$, $p < .001$, $f^2 = .09$). We find that guilt experienced after watching the video at time one has a small negative direct effect on self-reported recycling at time two ($\beta = -.26$, $t = 4.82$, $p < .001$, $f^2 = .03$). Finally, the effect of transportation on behavior is not statistically significant ($\beta = .10$, $t = 1.54$, $p = .11$). The indirect effect of guilt experienced after watching the appeal on the behavior measured at time two is positive ($\beta = .11$, $t = 3.51$, $p < .001$, R^2 for the model 16%) supporting our theoretical expectations.

A multi-group analysis indicates the paths between anticipated guilt and behavior ($p = .04$) and between narrative transportation and anticipated guilt ($p = .06$) are different between the two media (the latter marginally). The group seeing the video shows stronger paths between transportation and anticipated guilt ($\beta_{\text{video}} = .54$ vs. $\beta_{\text{text}} = .39$) and between anticipated guilt and behavior ($\beta_{\text{video}} = .42$ vs. $\beta_{\text{text}} = .21$).

While some are skeptical about guilt appeals (Graton et al., 2016; O'Keefe, 2002) others advocate their use (Agrawal and Duhachek, 2010; Han et al., 2014). The model presented offers an alternative account. Our study indicates guilt appeals have weak effects and can backfire. However, they have a positive indirect effect and facilitate individual tendency to immerse in the message and anticipate feelings of guilt; a powerful source of self-regulation (O'Keefe, 2002). This raises two implications. Firstly, to understand the effectiveness of guilt appeals under different conditions it is necessary to explicitly hypothesize the different paths that might cause persuasion (or resistance) under different circumstances (Hayes, 2009). Secondly, marketers should use guilt cautiously and more research is needed before the explicit use of guilt in marketing messages is implemented.

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“I Couldn’t Help But to Cry!” “I Couldn’t Help But to Yell “Yes!” Dimorphous Expressions Inform Consumers of Users’ Motivational Orientations

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EXTENDED ABSTRACT

Product messaging that provides information about the emotional experience associated with a product is particularly important when the emotional experience is part and parcel to the product’s value (Holbrook & Hirschman, 1982). Therefore, emotional expressions displayed by users in advertising campaigns or reviews might be particularly relevant in communicating the emotional experience associated with products, and subsequently, the value of said products to prospective buyers.

Normatively, expressions of emotion are monomorphous, that is, one expression broadly represents one category of emotion (e.g., smiles represent happiness, Eckman & Friesen, 1971). Sometimes however, expressions are dimorphous (Aragón, 2016; Aragón & Bargh, 2016; Aragón & Clark, 2016; Aragón, Clark, Dyer, & Bargh, 2015), that is, two alternating or scrambled expressions represent and communicate one category of emotion (e.g., “tears of joy,” both smiles and tears represent happiness). For examples of dimorphous expressions, some people smile when sad (Frederickson & Levenson, 1998), smile when embarrassed (Ambadar, Cohn, & Reed, 2009), display aggression when tender (Aragón, et al., 2015), cry when happy (Fernández-Dols & Ruiz-Belda, 1995), and aggress when triumphant or adventurous (Aragón & Bargh, 2016).

In dimorphous expressions, the incongruent emotional expressions (e.g., aggressive shouts or tears when happy) represent and communicate both the expressers’ emotional experiences and motivational orientations. Research by Aragón and Bargh (2016) found that happiness expressed through both smiles and aggression (fist pumping, yelling, showing of teeth, loud vocalizations) represented and communicated appetitive orientations, i.e., “feelings of wanting to go,” “to move,” and “to accelerate.” In contrast happiness expressed with both smiles and sad displays (tears, crumpled body posture), represented and communicated consummatory orientations, i.e., “feelings of wanting to pause,” “to stop,” and “to rest.”

Multiple conceptually overlapping theories converged on these activation-type dimensions to the experience of emotion (e.g., Bradley & Lang, 1994; Feldman Barrett, 1998; Frijda, Kuipers, & Terschure, 1989; Russell, 2003). Cultural and individual differences factor into the expression of, and value given to, emotions based upon these dimensions (Mogilner, Kamvar, & Aaker, 2010; Tsai, Knutson, & Fung, 2006). Moreover, these activation-type dimensions are effective predictors of consumer preferences and consumption (Alba & Williams, 2013; Nenkov & Scott, 2014).

Participants were provided with dimorphous or monomorphous expressions in online reviews for a vacation resort. Hypotheses were as follows:

Hypothesis 1: Shouts versus tears of joy would transmit differential messages about reviewers’ emotional-motivational experiences and subsequent preferences for vacations, over and above what a smile communicates.

Hypothesis 2: The fit between emotional expressions (shouts versus tears of joy), inferences of motivational orientations (appetitive versus consummatory) and inherent product qualities (action or relax-

ation packages) will align for participants’ own desires and this alignment will increase subjective product values.

In Study 1 (N = 200, MTurk) participants read a review of a luxury resort vacation in which the emotion was expressed as: “so happy I smiled”, “so happy I yelled, yes!” and “so happy I cried.” When happiness was expressed through yelling “yes!” participants inferred the reviewer was in an appetitive state and preferred an action package. In contrast, when participants read happiness expressed through crying, participants inferred the reviewer was in a consummatory state and preferred a relaxation package.

Study 2 (N = 284, MTurk) replicated Study 1 with additional questions into participants’ own desires for similar emotional experiences and subsequent value placed on products. This investigation also probed present versus future focus. Here highlighted are findings from present-focus, meaning participants’ desires and judgments in the moment. Cry condition participants inferred consummatory states for the reviewer, subsequently wanted that same consummatory experience in the relaxation package over the action package, and placed a higher value on the relaxation package than the action package. In contrast participants in the yell-yes condition inferred appetitive states for the reviewer, subsequently wanted that same appetitive experience in the action package over the relaxation package, and placed a higher value on the action package than the relaxation package.

When happiness was presented with yelling “yes!” participants inferred that the reviewer was in an appetitive state and preferred an action package. In contrast when happiness was presented with tears of joy, participants inferred that the reviewer was in a consummatory state and would prefer a relaxation package. Participants not only took the expressions provided by the reviewer to infer the reviewer’s emotional-motivational state and preferences, but also participants aligned their own desires for appetitive and consummatory experiences with action and relaxation vacation packages respectively. Products that aligned with these emotional-motivational states were subsequently given higher values.

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Attainment Goals and Maintenance Goals: The Appeal of Approach Versus Avoidance Framed Strategies

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EXTENDED ABSTRACT

Self-regulation research suggests that different strategies become more appealing at different stages of goal pursuit (e.g. Huang and Zhang, 2013). Despite important findings on how strategy selection can improve motivation however, our understanding of this phenomenon thus far is primarily concerned with goal *attainment*. Yet, goal attainers and maintainers approach their self-regulation goals differently, leading to important behavioral outcomes (Jiraporn and Desai 2010). Given the high rates of relapse during maintenance, our research explores how motivation can be improved through appropriate strategy selection during maintenance as well as attainment stages of a savings goal. Additionally, while past research has examined the influence of different goal pursuit strategies, our research investigates the role of framing the same strategies as either approach (e.g. cook your meals at home) or avoidance (e.g. avoid eating out). In doing so, the primary questions that we explore are: Could a reason for relapse in maintenance be that after attaining a goal, the adopted strategies lose their appeal? Can reframing these strategies boost motivation and improve self-regulation? To answer these questions, we focus on the role of different emotions, and particularly pride, in creating a divergence among the appeal of approach and avoidance strategic frames for goal attainers and maintainers. We argue that maintainers, because they experience more pride, will refuse to be restricted through avoidance strategies and find approach-framed strategies more appealing.

Across 5 experiments we manipulate goal type through a scenario telling respondents that their savings were either at (maintenance condition) or below (attainment condition) the recommended level. Strategy framing was manipulated through a recommended list of either approach (e.g. cook your own meals more frequently) or avoidance (e.g. do not eat out frequently) framed strategies.

In Study 1 ($n=65$ MTurk participants), subjects read a scenario prompting them to think about maintaining their savings at 10% of monthly income, followed by the strategy framing manipulation. Results showed that respondents found approach-framed strategies more appealing than avoidance-framed strategies ($F(1, 61) = 6.58, p < .05$), were more likely to adopt them ($F(1, 61) = 6.57, p < .05$), and were willing to use them for a longer time ($F(1, 61) = 3.88, p = .05$).

Study 2 ($n=87$ MTurk participants) explored results from Study 1 at higher savings goals (20% of monthly income) and provided a preliminary analysis of the level of pride among goal maintainers. Following the maintenance scenario, respondents reported their likelihood to adopt the suggested strategies and completed the four-item pride scale ($\alpha = .96$). Maintainers were more likely to adopt approach than avoidance-framed strategies ($F(1, 85) = 3.45, p = .06$) and their level of pride was significantly higher than the midpoint ($t = 7.58, p < .001$).

Study 3 ($n=85$ students), compared the appeal of approach and avoidance-framed strategies among goal maintainers and attainers. Results showed a significant interaction between goal type and strategy framing on the appeal of the strategies ($F(1, 81) = 4.99, p < .05$) and respondents' likelihood to use them for a long time ($F(1, 81) = 8.77, p < .01$). Maintainers found approach framed strategies

more appealing and were more likely to use them for a long time than avoidance framed strategies (all $ps < .01$).

Study 4 ($n=113$ MTurk participants) was conducted to test if the insignificant results in Study 3 were due to the student sample. Similar to Study 3, we found a significant interaction between goal type and strategy framing on likelihood to adopt the suggested strategies ($F(1, 109) = 7.28, p < .01$) and the length of time they would be willing to use them ($F(1, 109) = 6.99, p < .01$). Maintainers were more likely to adopt approach than avoidance ($p = .08$) while attainers were more likely to adopt avoidance than approach framed strategies ($p < .05$). Similarly, maintainers were willing to use approach framed strategies for a longer time than avoidance framed strategies ($p = .05$) whereas attainers were willing to use avoidance framed strategies for a longer time than approach framed strategies ($p = .08$).

Study 5 ($n=117$ MTurk participants) explored whether pride was underlying the effects found in Study 4. Results revealed that maintainers experienced higher pride than attainers ($p < .001$). We also found a significant interaction between goal type and strategy framing on likelihood to adopt the suggested strategies ($p < .05$). Attainers were more likely to adopt avoidance than approach ($p < .01$) framed strategies. While maintainers were directionally more likely to adopt approach than avoidance framed strategies, this effect was not significant. We found support for our hypothesized moderated mediation such that the effect of goal type on one's likelihood to adopt a strategy through pride depends on the framing of the strategy (Hayes, 2013; model 14). Conditional indirect effects showed that for approach strategies, the indirect effect of goal type on likelihood to adopt the strategy is significant (conditional indirect effect = .55, 95% CI = .23 to .96).

Results from five studies show that goal maintainers and attainers differ in their inclinations towards approach and avoidance framed strategies. Results from the moderated mediation analyses suggest that differences in level of pride may explain why attainers and maintainers differ in their inclinations towards approach framed strategies. Our findings contribute to research in self-regulation by investigating how level of pride and strategic inclinations may be different in the attainment and maintenance stages of goal pursuit. They also offer a practical solution on how motivation may be retained during the maintenance stage of goal pursuit.

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On Self-Construal and Lie Acceptability: Culture and Consumer Responses Toward Deceptive Advertising

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EXTENDED ABSTRACT

In March 2016, Volkswagen was sued by the US Federal Trade Commission (FTC) for deceptive advertising. The FTC alleged that Volkswagen deceived consumers by manipulating the emissions test results and falsely claimed that its cars were low-emission and environmentally friendly. Since the scandal first came to light in 2015, sales of Volkswagen automobile have sharply decreased in United States (7%), United Kingdom (14%), and France (3%). Interestingly, however, the fraud does not seem to have affected Volkswagen's sales in many Asian countries. In fact, despite the company's disgrace in other parts of the world, its sales increased in China by 3.6% and chalked up considerable gains in South Korea. Such an ironic turn of events raises an important question: why consumers in some countries reacted very differently to Volkswagen's deceptive advertising from those in other countries?

Consumers expose to deceptive advertising, or "advertising intended to mislead consumers by falsely making claims, by failure to make full disclosure, or by both (AMA)," almost every day. However, research to understand consumers' reactions toward it is still limited (e.g., Gaeth and Heath 1987; Tipton, Bharadwaj and Rortverson 2009). The current research aims to examine how culture, self-construal in particular, influences consumers' acceptance of and responses toward deceptive advertising. Specifically, we propose that consumers with independent (vs. interdependent) self-construal are less likely to accept and respond more negatively to deceptive advertising. Prior research on culture and lie in interpersonal relationship has provided relevant evidence for our theorization. For instance, Aune and Waters (1994) showed that people high in individualism are less likely to accept lies. Similarly, van Hemert et al. (2002) revealed a significant negative correlation between individualism and attitude toward lie across 23 countries. In addition, Mazar and Aggarwal (2011) found that individualistic culture showed more negative attitude immoral behavior than collectivistic culture.

One possible explanation for the cross-cultural difference in lie acceptability is variation in people's attribution tendencies. Prior research has demonstrated that people in independent culture are more likely to attribute human behavior to their dispositions, such as personality, character and capability; whereas people in interdependent culture are more likely to believe that human behavior is regulated by the interaction of dispositional and situational factors (Choi et al. 1999). In other words, compared to interdependents, independents will view deceptive advertising as less acceptable because they tend to believe the falsifying or omitting information in advertisement is triggered solely by the advertisers' personal traits. In contrast, interdependents tend to believe such behavior is influenced not only by advertiser's dispositions, but more importantly the external factors (e.g., social norms). To sum up, we propose:

Hypothesis 1: Compared to interdependents, independents are less likely to accept deceptive advertising.

Hypothesis 2: Internal attribution mediates the impact of self-construal on deceptive advertising acceptability.

Four studies have been conducted to test our theorization. Study 1 aims to test the impact of self-construal on lie acceptability in general. 79 US participants and 80 Indian participants recruited from Mturk attended this study. Participants were invited to answer the lie acceptability scale (Oliveira and Levine 2008) embedded in a personality survey. As expected, results showed that US participants were lower in lie acceptability than Indian ones ($M_{\text{Indian}} = 4.40$, $M_{\text{US}} = 3.59$; $F(1, 157) = 24.75$; $p < .01$). Regression analysis further revealed a negative impact of nationality (dummy coded; 0 = Indian, 1 = US) on lie acceptability ($\beta = -.81$, $t = -4.98$, $p < .01$).

The objective of study 2a is to test H1. A total of 237 Chinese participants were recruited for this study. Participants were either told that one of their friends informed buyers the faulty screen (honest ad condition) or did not mention it (deceptive ad condition) when selling his used notebook online. After reporting their attitude toward and their acceptance of the deceptive ad, participants completed the Singelis' (1994) self-construal scale. Regression analysis revealed a significant interaction between self-construal and ad type ($\beta = .78$, $t = 2.59$, $p = .01$), with independents reported more negative attitude to the deceptive ad ($M_{\text{independents}} = 5.70$, $M_{\text{interdependents}} = 4.74$; $p < .01$), while no difference was found in the honest ad condition ($M_{\text{independents}} = 2.67$, $M_{\text{interdependents}} = 2.71$; $p > .1$). Furthermore, independents reported lower level of deceptive ad acceptability ($M_{\text{independents}} = 2.52$, $M_{\text{interdependents}} = 3.31$; $p < .01$) in the deceptive ad condition but not in the honest ad condition ($M_{\text{independents}} = 4.13$, $M_{\text{interdependents}} = 3.96$; $p > .1$). Study 2b (N = 146) replicated the findings of study 2a by manipulating individual level self-construal based on Brewer and Gardner's (1996) work.

Study 3 aims to provide evidence for H2. A total of 244 participants from a Singaporean university completed this study. Participants first completed the same self-construal priming task used in study 2b. Then, participants read a deceptive ad about a food company that over-reported ingredients of its products. Participants' attitude toward and acceptance of such deceptive advertising were measured. Next, the extent to which participants internally attributed the deceptive advertising to the company's traits was measured. As expected, independents perceived the deceptive ad as more negative ($M_{\text{independents}} = 4.12$, $M_{\text{interdependents}} = 3.76$; $p = .01$) and less acceptable ($M_{\text{independents}} = 2.80$, $M_{\text{interdependents}} = 3.15$; $p = .06$), and were more likely to attribute the deception to the firm ($M_{\text{independents}} = 5.63$, $M_{\text{interdependents}} = 5.40$; $p = .03$). Bootstrapping analysis showed the "self-construal \rightarrow internal attribution \rightarrow deceptive ad acceptability" mediation was significant (Mediated effect = .10, SE = .05, 95% CI = .01 ~ .22). Thus, H2 was supported.

To sum up, the current research provides converging evidence that independents (vs. interdependents) were less likely to accept deceptive advertising, which was mediated by their tendency to make internal attribution. This research contributes to the currently limited research on lie acceptability and deceptive advertising. Further, it expands existing cross-cultural research by showing that culture not only impacts individual engagement in deception but also their attitude toward deception and deceptive marketing practices. In addition, as more product frauds have been disclosed nowadays, findings of our current research will also provide valuable insights for marketers

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By the Grace of Brands: The Role of Brand Leadership in the Process of Restoring Control

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EXTENDED ABSTRACT

The world can sometimes appear chaotic. When it does, individuals try gaining control via two primary pathways. The first, *personal agency*, involves self-reliant goal pursuit, whereas the second, *external agency*, involves relying on powerful others to gain a sense of control (Landau, Kay, and Whitson 2015). This latter path explains why lack of control increases endorsement of dominant gods and governments that seem able to influence personal outcomes (Kay et al. 2008; Kay et al. 2010; Laurin, Kay, and Moscovitch 2008). In the present investigation, we explore whether and how brands can provide external agency to consumers who feel control is lost.

Past research has demonstrated that lack of control increases desire for particular product attributes. This research has focused on the personal agency route to control restoration and found that lack of control increases pursuit of products that serve as useful tools rather than easy solutions (Cutright and Samper 2014; Shepherd et al. 2011). We compliment this research by considering how brand attributes may facilitate control restoration via external agency.

Ostensibly, brands may appear to lack the qualities of known external agents. After all, brands' abilities to influence outcomes in a free economy are considerably limited, and consumers should not attribute specific brands with similar powers to that of a ruling government or controlling god. Or should they? Strikingly, our research finds just that: leading brands are more greatly endorsed by consumers under conditions of low personal control. Evidence from four controlled experiments indicates that despite the inability of brands to directly structure the world or influence personal outcomes, low-control consumers imbue leading brands with a heightened ability to provide order. This motivated belief subsequently leads to more positive evaluations and greater purchase intentions for leading brands when personal control is low. A field study supports these findings. Across counties of the United States, higher crime rates, as proxies for consumers' lowered control (Geis and Ross 1998), predict increased purchase intentions, word of mouth, and use for brands higher in leadership. Notably, this effect is specific to brand leadership and not conceptually similar constructs such as familiarity.

Evidence from five studies supports our theorizing. Study 1 revealed that temporary reductions in personal control significantly increased likelihood of choosing a gift card redeemable for a brand leader (vs. non-leader). Study 2 provided a conceptual replication: low (vs. high control or a baseline condition) increased attitude toward a fictitious brand framed as a leader (vs. non-leader). Studies 3 and 4 provided insight into the underlying mechanism. The effect of low control on brand leader endorsement was mediated by motivated beliefs that brand leaders provision order (study 3). Furthermore, reducing the perceived influence of a brand leader attenuated this mediation (study 4), indicating that order-provisioning beliefs are predicated on the plausibility that brand leaders might wield influence in the world. Finally, study 5 highlighted the real-world implications of our theorizing using a national sample of U.S. consumers. Rather than manipulate personal control, in this study we examined crime as an environmental factor that correlates with lower feelings of personal control (Geis and Ross 1998). We merged data on crime rates of counties across the U.S. with consumers' ratings of actual brands and employed a multilevel random effects model to examine whether consumers in areas with higher crime were more likely to endorse brand leaders. As expected, we found a significant crime \times leadership interaction that, when decomposed, revealed a significant positive

effect of crime level on purchase intentions, brand usage, and word-of-mouth intentions when brand leadership was high (vs. low). An estimation of average purchase intentions for brands across counties illustrated the considerable differences in the extent to which consumers in areas with differing crime rates seek out brand leaders. These findings provide important insights for managers to better allocate their marketing efforts across promising target markets.

Overall, our research contributes to a better understanding of brands and personal control in two important ways. First, we show that a certain type of brands—leaders—can act as external agents of indirect control who are imbued with an ability to provide control to consumers who lack it. Second, we reveal important consequences of industry leadership. Research has documented how and why benefits accrue to brands with industry influence (e.g., Palmatier et al. 2006; Shapiro and Varian 1999). We take a consumer-centric perspective and pinpoint specific circumstances (i.e., low control) under which individuals confer benefits to brand leaders and find them increasingly desirable. We therefore provide fresh insight into ways brand leadership can self-perpetuate.

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Marketing, Get Ready to Rumble: Why Consumers Appreciate Brand Rivalries

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EXTENDED ABSTRACT

Previous research has focused on the dark sides of brand rivalry. It has been labeled as destructive competition (Vogler 1994) with negative consequences such as consumer schadenfreude, outgroup derogation and hostility (Ewing, Wagstaff, and Powell 2013; Hickman and Ward 2007; Phillips-Melancon and Dalakas 2014). Therefore, most brands stay away from public conflict—a missed opportunity, because ingroups need strong outgroups to define themselves against (Fournier and Lee 2009). Sociologists have long maintained that conflict comes along with certain benefits (Simmel 1996), and people develop a positive self-concept by showing who they are and what they consume as well as by showing who they are not and what they do not consume (Bhattacharya and Elsbach 2002; Muniz and Hamer 2001). Yet the extant literature emphasizes the identity-damaging aspects of rivalry. We develop and empirically assess a model that uncovers the positive effects of brand rivalry on consumers' self-concept.

The concept of rivalry has only recently captured researchers' attention. Kilduff, Elfenbein, and Staw (2010) conceptualize rivalry as a special competitive relationship that is subjective and exists primarily in people's minds. Rooted in social identity theory, scholars agree that rivalry includes a certain element of threat. Tyler and Cobbs (2015, 230) define a rival as a "highly salient outgroup that poses an acute threat to the identity of the ingroup." Noting that not all outgroups are equal, White and Dahl (2007) confirm that dissociative reference groups can pose an identity threat to consumers. However, an identity threat is not restricted to negative consequences. We provide theoretical and empirical evidence that brand rivalries boost consumers' identities, as expressed by increases in perceived group distinctiveness, group cohesion and public collective self-esteem. We propose three mediating variables. While identification with the favorite brand and disidentification from the rival brand are derived from the intergroup relations literature, we introduce a mediating variable that is specific to rivalry: the perceived reciprocity of brand rivalry.

To test our model, we conducted three studies in three different consumption settings (team sports [N = 748], smartphones [N = 253], cars [N = 230]). The independent variable assessed the perceived intensity of a rivalry between two brands. It was measured with the single-item "How intense do you think is the rivalry between your favorite [soccer team / smartphone brand / car brand] and its [archrival]" on a 10-point scale (1 = not very intense, 10 = very intense). All other constructs used multi-item 7-point rating scales (1 = do not agree, 7 = strongly agree). Statistical testing ensured convergent and discriminant validity, and common method variance was not deemed a problem.

Across the three studies, the model displayed a very good fit to the data, explaining a significant proportion of the variation in the scores for perceived group distinctiveness, perceived group cohesion, and public collective self-esteem. In all studies, perceptions of brand rivalry intensity exerted a positive and significant total effect on perceived group distinctiveness (study 1: $b = .29, p < .001$; study 2: $b = .52, p < .001$; study 3: $b = .20, p < .01$) and public collective self-esteem ($b = .11, p < .05$; $b = .34, p < .001$; $b = .14, p < .05$). Perceptions of brand rivalry intensity also exerted a positive and significant total effect on perceived ingroup cohesion in studies 1 ($b = .23, p < .001$) and 2 ($b = .45, p < .001$) but not in study 3 ($b = .10, p = .17$).

The results further showed that perceptions of brand rivalry intensity exerted a significant total indirect effect on consumers' self-concept. Via the three mediators, perceptions of brand rivalry intensity exerted a positive and significant total indirect effect on perceived group distinctiveness ($b = .26, p < .001$; $b = .43, p < .001$; $b = .15, p < .05$) and perceived group cohesion ($b = .22, p < .001$; $b = .38, p < .001$; $b = .13, p < .01$) in all three studies. Perceptions of brand rivalry intensity exerted a positive and significant indirect effect on public collective self-esteem in studies 1 ($b = .20, p < .001$) and 2 ($b = .28, p < .001$) but not in study 3 ($b = .05, p = .15$). Across the three studies, seven of the nine indirect relationships were mediated by brand identification and perceived reciprocity of brand rivalry, whereas rival brand disidentification mediated just one out of nine possible relationships. None of the direct effects of perceptions of brand rivalry intensity on the self-concept variables were significant, suggesting indirect-only mediation.

Contrary to previous research, the findings indicate that a brand rivalry is not restricted to negative outcomes. It assists consumers in building a positive self-concept and enhances their identities by increasing their perceived distinctiveness, perceived ingroup cohesion, and public collective self-esteem. Hence, this research contributes to a more balanced view of brand rivalries and provides empirical evidence for the notion that public conflict with competitors can have advantages.

It would be interesting to debate whether the benefits of rivalry, in line with the old saying that competition is good for everyone in the marketplace, could even prompt cooperation between competitors to create a perception that a rivalry is reciprocal, because this mediator is the key underlying mechanism that explains why rivalry enhances the self-concept. In a follow-up experimental study, we manipulated the perceived reciprocity of rivalry and detected a significant main effect on perceived group distinctiveness ($\eta^2 = .02, p < .05$) and group cohesion ($\eta^2 = .03, p < .01$). Rivalry is not a one-way street but seems to require back-and-forth exchanges between consumers.

Additional research is needed to explore the dual outcomes of rivalry, weighing the positive effects against the negative effects to get to the bottom of a construct that is ubiquitous yet has received little attention in either marketing or social psychology. Future research could also explore the effects on important downstream benefits (e.g., willingness to pay or brand preferences).

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Theorising Gender, Theorising Fat: The Material-Semiotics of the Obesogenic Environment For Professional Women Weight-Cyclers

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EXTENDED ABSTRACT

Enduringly, Western cultures in late modernity have inextricably linked fat and the female body (Rail 2012). In her seminal feminist work, “fat is a feminist issue”, Orbach (1978) posits that the cultural climate of pervasive gender inequality makes women fat. Drawing on Freudian theory, Orbach theorised that female obesity can be explained by an unconscious desire to resist gender inequality and sexism in contemporary society. She posits that fat, for women within a culture of sexism, carries benefits *vis a vis* the desexualisation of the body and the commensurate ability to become invisible as a sexual being, allowing women to become more visible to men as equals, colleagues and friends. However, despite this intervention, 35 years later, the prevailing cultural, medical and policy view today remains, located as it is within dominant neo-liberal discourses of choice and responsibility, that being fat is largely due to individual lifestyle and consumption failures. That is, fat remains an individual matter, rather than a cultural or environmental one.

Countering this, recently studies using the concept of the “*obesogenic environment*” (Townshend and Lake, 2009) have emerged, which present a more distributed, material-semiotic explanation of the emergence of fat bodies. The term “obesogenic environment”, has emerged within urban studies and occupation health, and refers to “*an environment that promotes gaining weight and one that is not conducive to weight loss*” within the workplace or community (Swinburn, et al., 1999). In other words, the obesogenic environment refers to a physical environment that helps, or contributes to, obesity (Powell et al 200). Obesity, from this perspective, is not viewed as an individual responsibility, or due to failed individual consumption choices, but is viewed as a normal physiological response to an individual’s interaction with their environment.

In the light of this, this paper seeks to revisit the relationship between fat, gender, consumption and the material environment, challenging this focus on individual responsibility by longitudinally studying the life histories of 2 professional women. Both women are categorised by extreme yo-yo dieting (or weight cycling) involving several life course weight loss/gain cycles of 50+ lb. Yo-Yo dieting or “weight cycling” (Friedman et al 1998) is seen as part of a pathological continuum of purge/binge cycles, with bulimia at the extreme end, characterised by a very short lived purge/binge cycle, with purging taking place on the very day of bingeing (Goncalves 2014). Yo-yo dieting, at the other end of the continuum, extends the time cycle with less extreme bingeing and purging (i.e. not involving vomiting, but dieting), and can encompass several years within one cycle. The specificity of yo-yo dieting allows an understanding of what might be seen, using an individualist framework, as sustained success at weight control and sustained failure at weight management, cycling within one individual over time, and as such, we suggest, can offer an interesting account of both states (i.e. quasi-sustained thinness and fatness), and also, of the associated transitions. This allows exploration of what happens to change states so dramatically and quasi-sustainably, and the commensurate lessons that can be learned by academics interested in consumption, marketing and health.

Professional women were selected due to the literature outlined above, firstly that fat is certainly gendered female, and impacts upon women in very specific ways, and secondly, that professional women work within a context where to be fat runs counter to a suc-

cessful identity project, the role of female executive. Within the well documented, general cultural backdrop of dominant idealised norms of female thinness and self-control (Bordo 1993, Sawicki 1991) it seems that women in professional roles feel the pressure to conform even more keenly, and are especially subject to cultural norms re desirable thinness (Rodgers 2012). Research has shown weight gain affects women’s chances for professional success (Haskins and Ransford 1999, Rothblum 2005), slimness is associated with professional women being in control, being effective, being a high achiever and having the necessary “executive presence” (Goudreau 2012). Growing numbers of high-achieving professional women have been reported to suffer from eating disorders in order to counter pressures to perform authentic professional role identities (Barnett 1986) and an enduring link between subscribing to the superwoman ideal and eating disorders has been made (Messinger et al 2007). Older women, a category into which high achieving, director level executive women are likely to fall, are increasingly becoming subject to intense pressure to conform to beauty norms, and look young for their age through surgery and weight control (Bordo 2003). Exacerbating this, as De Brun *et al* (2013) argue, professional women’s participation in the workforce and higher levels of disposable income, with increased commuting times and often long working hours, creates lifestyles with related impacts on food choices and physical activities. In particular, increased demand for energy dense convenient foods and reduced physical activity are evident (McCarthy & Collins, 2008). Women, in general, have been noted to be more susceptible to comfort eating activities (Woodruffe 1997), and in often stressful professional roles, the consumption of comfort food has been found to be used as a coping mechanism (Tanofsky-Kraff et al., 2008) leading to positive calmness effects and encouraging further overeating of energy-dense foods, which are associated with weight gain (Adam & Epel, 2007). This behavioural response, which induces physiological changes, has been observed more often among high stress females (Tomiyama et al, 2011).

This paper then, seeks to develop a theoretical framework, based on a material-semiotic approach, to fat and femininity within the construction and maintenance of a professional female identity, that counters individualistic accounts of obesity and offers understanding of the consumption practices around the emergence of the body as obese within the obesogenic environment, which has the potential to inform both academic understandings of these processes, and also social and health-related marketing and consumption practitioners.

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More Than Just the Money: Psychological and Behavioral Consequences of Participating in Crowdfunding

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EXTENDED ABSTRACT

Pebble Time is a successful example of “reward-based crowdfunding”. In 2012, the venture received a total of more than \$10 million in funding from thousands of individuals on the crowdfunding platform Kickstarter in return for the promise of delivering the watch once it became available in marketable quality. Since then, the venture has grown into a sizable company with 130 employees. More generally, Kickstarter reports to have helped raise more than \$2 billion for almost 100,000 projects crowdfunded by more than ten million individuals since its launch in 2009 (Kickstarter 2016). Across platforms, the worldwide volume of crowdfunding in 2015 is estimated at more than \$34 billion (<http://reports.crowdsourcing.org/>). Crowdfunding has thus emerged as a potentially effective complement to standard financial intermediaries which seems to have broad appeal for money seekers and providers alike.

Only recently, the phenomenon’s practical significance has also stimulated growing interest among researchers across disciplines. Mollick and Kuppaswamy (2014), for example, studied the longer-term implications of crowdfunding and discovered that more than 90 percent of the successfully funded projects on Kickstarter survived the first year after funding, with a third of them generating sizable revenues of more than \$100,000 per year. At the same time, Agrawal, Catalini, and Goldfarb (2011) find that almost two thirds of the money-seeking ventures do not succeed in raising funds. Research has consequently started to look into antecedent factors of successful crowdfunding, including the dynamics and success factors of the crowdfunding process (Agrawal, et al. 2011; Burtch, Ghose, and Watal 2015; Mollick 2014; Kuppaswamy and Bayus 2015) and the motivations of individual consumers to engage in crowdfunding in the first place (Boudreau et al. 2015; Gerber, Hui, and Kuo 2012; Ordanini et al. 2011).

In this research, we take a different approach and aim to contribute to the emerging crowdfunding literature by offering a first empirical exploration of the potential consequences of crowdfunding participation from a consumer behavior perspective. Specifically, we ask whether participating in a crowdfunding project, as opposed to merely buying the same underlying product in a classic market exchange setting, may bring about some unique psychological consequences among participating consumers.

A longitudinal field-type experiment investigated whether participating in a real crowdfunding project (i.e., an ice cream cabinet at the Library Café) increases the extent to which consumers can personally connect to and identify with the focal venture and if so, whether this may also affect a series of managerially important downstream variables captured up to several months after the initial interaction. Hence, we utilized a one-factor design (participation in crowdfunding vs. couponing). At time 1 participants in the treatment condition ($n = 142$) could use the €3 they had earned earlier to help crowdfund the ice cream cabinet. As a reward, participants would get a voucher worth three scoops of ice cream from the Library Café. In contrast, participants in the control condition ($n = 150$) were allowed to take part in a pre-sale coupon initiative of the Library Café. Specifically, participants could use their €3 to purchase a coupon which would give them three scoops of ice cream at a special price; as in the treatment condition, participants were informed that the regular price for three scoops of ice cream was €3.40. All participants learned that

they could pick up their reward/coupon in the lab at time 2 (i.e., approximately two weeks later), and as an outside option, they were offered the same alternative (Post-its) as in the treatment condition. All participants indicated their choices and personally dropped their €3 into one of two boxes (“Crowdfunding/Coupon – Ice Cream at the Library Café” or “Post-its”). Thus, apart from the focal treatment the two conditions were identical. The money collected was then actually used to acquire the ice cream cabinet. Between two and three weeks later (time 2) those who opted in at time 1 in both conditions received an ice cream loyalty card, which contained their voucher stickers and some additional stickers to buy more ice cream if they wanted to (at the regular price). Unbeknownst to the participants, each sticker had a unique respondent identification number which allowed us to track their behavioral responses. The time 2 session concluded with a short questionnaire intended to capture the participants’ degree of identification with the venture. Time 3 refers to a period of 14 weeks in which we collect participants’ stickers as a measure for consumed ice cream scoops. Two weeks after the end of the time 3 observation period, and approximately eighteen weeks after time 1, we conducted an online survey (time 4) in order to assess some potential longer-term effects of the original crowdfunding participation on customers’ engagement.

This research reveals three important findings: First, it is found that participating in a real crowdfunding project, as opposed to merely buying the underlying product in a classic market exchange setting, increases the extent to which consumers can personally connect to and identify with the underlying venture. Second, we find that in aggregate significantly more scoops of ice cream were actually consumed in the crowdfunding versus coupon condition. Third, it is found that crowdfunding participation, via elevated levels of self-venture connections, is positively related to managerially important downstream variables such as increased subsequent consumption of the venture’s products and more positive word-of-mouth behavior. The findings thus suggest that crowdfunding might indeed trigger more pronounced engagement activities among participating consumers; after the initial “treatment,” they might simply wish to stay closer to “their” project and, in doing so, exhibit greater demand for the direct and indirect fruits of the venture.

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When Perceiving Low Control Fosters Great Expectations: The Case of Financial Decision Making

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EXTENDED ABSTRACT

Mark Twain purportedly once quipped, “Everyone talks about the weather, but no one does anything about it.” Underlying this pithy observation is the idea that we often lack control over the events in our lives. Indeed, everyday life is replete with experiences that threaten personal control by undermining the belief that one can personally predict, affect, and steer events in the present and future (Kay et al. 2009). This raises the question as to whether and how personal control threats influence consumers’ downstream judgments and decisions.

One prediction is that incidental personal control threats will worsen outcome expectancies. This stems from past research showing that people often overestimate their likelihood for positive outcomes because they assume future conditions and behaviors will be ideal (Tanner and Carlson 2009). This suggests that perceiving low control in one context may serve as a generalized reminder that the world is not ideal, which in turn would make salient the fact that factors outside one’s control could preclude positive outcomes in other contexts as well. Thus, incidental threats personal control threats may lower the perceived likelihood for positive outcomes more generally.

In contrast, I argue that incidental threats to personal control are likely to increase the perceived likelihood for positive outcomes. I develop this hypothesis by adopting a motivational framework whereby personal control is construed not only as a situational appraisal but also as a fundamental motivation (Fiske 2014; Heider 1958; Kelly 1955). Building on the notion that control motivation reflects a more fundamental need for competence—that is, the need to use control *effectively* in shaping one’s environment (Burger 1987)—I posit that threats to personal control heighten people’s desire for competence, motivating them to believe they will be effective in producing desired outcomes in unrelated domains. I report three experiments that test this proposition in the context of financial decision making.

Experiment 1 examines whether an incidental personal control threat improves outcome expectancies and, if so, whether this is mediated by greater perceived competence. I manipulated personal control using a writing task where respondents elaborated on either a movie they had recently seen (baseline-control condition) or a fabricated quotation from a philosopher, which was pretested to threaten personal control (low-control condition). Next, respondents completed an ostensibly unrelated task where they constructed a stock portfolio. They reported how likely it was that their portfolios would outperform the average and their perceived competence in constructing the portfolio (Note: because the outcome expectancy DV is a relative measure whereas the perceived competence DV is absolute, one does not necessarily imply the other—thus, a respondent could perceive himself as incompetent in the task but still expect to perform as well or better than the average simply because he perceives others as equally incompetent). Results showed that respondents believed their portfolios were more likely to outperform when they were in the low (vs. baseline) control condition ($p=.04$, $d=.23$), and greater perceived competence mediated this effect (95% CI=.01–.21).

Experiment 2 provides additional evidence for my proposition that this effect is driven by a heightened desire for competence by showing that it is stronger for positive outcomes perceived as more diagnostic of competence. I first measured perceived diagnosticity by asking respondents the extent to which they perceived their

outcomes in the stock market as reflecting their own competence. I then manipulated personal control by asking respondents to elaborate on something in their lives over which they had no control (low) or complete control (high). Finally, I presented respondents with a price chart for a stock they were considering and measured their perceived likelihood of profit. As predicted, the impact of personal control on outcome expectancies varied as a function of perceived diagnosticity ($\beta=.41$, $p=.001$). I explored this interaction using the Johnson-Neyman technique (Johnson and Neyman 1936; Spiller et al. 2013) to identify regions of significance for the simple effect of personal control at varying levels of perceived diagnosticity. Analysis revealed a positive effect of low (vs. high) personal control on outcome expectancies when perceived diagnosticity was relatively high (i.e., 70.42 or higher on 100-point scale) but a negative effect when perceived diagnosticity was relatively low (i.e., 33.38 or lower).

Experiment 3 provides causal evidence for the moderating role of perceived diagnosticity by manipulating rather than measuring it as in E2. I manipulated perceived diagnosticity by varying whether or not personal control was threatened in the same domain as the subsequent judgment. The rationale for this manipulation is that one cannot use control effectively (i.e., be competent) in a domain where one does not have control at all. As such, threatening control in the same domain should make respondents less likely to perceive positive outcomes as reflecting their own competence. To manipulate personal control, I varied perceived predictability, an important antecedent of personal control (Skinner 1996). Respondents first completed an ease-of-retrieval task (Schwarz et al. 1991) where they generated either 12 or 2 ways to predict an event, the rationale being that generating 12 (vs. 2) ways to predict an event is more difficult, thereby lowering perceived predictability. To manipulate threat-domain, I varied whether respondents were asked how to predict the weather (unrelated-domain) or stock price (related-domain). Finally, respondents completed the same financial judgment task as in E2. Analysis revealed the predicted interaction ($F(1, 144)=4.26$, $p=.04$), such that respondents in the low (vs. high) predictability condition believed their investment was more likely to be profitable when the threat was unrelated to investment outcomes ($p=.003$, $d=.66$), but not when it was related ($p=.90$, $d=.03$). This is consistent with the notion that threatened respondents were motivated to exaggerate their likelihood for a positive outcome, but only to the extent that they believed it would reflect positively on their competence.

These experiments suggest that the perception of low control can paradoxically make people more optimistic about their outcomes by motivating them to believe they will be effective in unrelated domains. Accordingly, this effect is more likely to occur for positive outcomes perceived as highly diagnostic of competence.

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Delighted by Deviating Design: The Relation between Construal Level and Surface Mimicry

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EXTENDED ABSTRACT

Previous research demonstrated that people respond more favorably to new product designs that are good representations of their product category (Veryzer and Hutchinson 1998). However, evaluations of atypical products are not per definition negative, but depend on the degree of incongruity between the product and its associated category (Mandler 1982). In current paper, we advance the idea that consumers' processing mode or the degree of abstract versus concrete construal may as well affect ensuing product evaluations. Previous research on construal level theory has demonstrated extensively how mentally constructing objects or events at either abstract, higher-level construals or concrete, lower-level construals can affect several consumer behaviors (Dhar and Kim 2007). Yet, how construal level may affect consumers' attitude towards product designs received little or no research attention. Nevertheless, resolving the incongruity between a product and its general category may be easier when people think more abstractly than concretely.

To answer this question, we focused on products that incorporate visual features of unrelated objects, fauna, or flora into their visual design (Lidwell, Holden, and Butler 2010). This technique called "surface mimicry" transfers some constituting attributes of one category to an unrelated category, and hence introduces some incongruity. To resolve this incongruity, and to appreciate such atypical product designs, people need to recognize that some atypical product attributes refer to another product category. As such, they need to be able to make relevant abstractions to categorize these attributes into a broader, unrelated category. Therefore, we expect that this type of product design will evoke more abstract, higher-level processes.

In Study 1, 99 participants evaluated ten products of everyday use with either a typical design or an atypical design following the principle of surface mimicry. Next, we offered a categorization task adapted from Rosch (1975). This categorization task involves deciding upon the category membership of exemplars that were pretested as good, mediocre, or poor members of their category (9xFurniture, 9xVehicles, and 9xVegetables). Participants indicated how well each exemplar fits within its category (1="very poor", 10="very good"). The results showed a main effect of both type of exemplar ($F(1.61,157.77)=2260.50, p<.001$) and product design ($F(1,98)=20.23, p<.001$). More importantly, the interaction between product design and exemplars yielded significant ($F(1.61,157.77)=4.82, p=.015$). Follow-up analysis demonstrated that evaluating atypical product designs did not alter participants' classification of good exemplars ($M_{\text{atypical*good}}=6.83$ vs. $M_{\text{typical*good}}=6.76$; $F(1,98)=2.36, p=0.13$). However, participants who evaluated atypical designs did find that the mediocre ($M_{\text{atypical*mediocre}}=6.83$ vs. $M_{\text{typical*mediocre}}=6.76$; $F(1,98)=9.48, p<0.001$) and poor exemplars ($M_{\text{atypical*poor}}=2.76$ vs. $M_{\text{typical*poor}}=2.32$; $F(1,98)=6.73, p<0.01$) were better exemplars than participants who evaluated the typical product designs. This difference in degree of category membership was the largest for the poor exemplars. These results demonstrate that evaluating products with atypical designs compared to typical ones evoked a higher level, abstract form of cognitive processing.

In study 2, we aim to replicate these findings and investigate whether this cognitive process is moderated by the personal tendency

to attach great value to the visual aspects of products (CVPA; Bloch et al., 2003). As in the previous study, we presented 78 participants with ten pictures of either typical product designs or atypical ones applying surface mimicry. Next, we administered the BIF-questionnaire (Vallacher and Wegner 1987) that asks how respondents mentally construct 24 different activities: concrete or abstract. Finally, we assessed the CVPA scale. In line with previous results, we found that participants who evaluated the atypical product designs more frequently chose the higher level description of the BIF-items ($M_{\text{atypical}}=13.13$ vs. $M_{\text{typical}}=12.31$; $F(1,77)=4.60, p=.035$), indicating a more abstract way of processing. In general, a higher score on the CVPA-scale was not related to a preference for the higher or lower level descriptions ($F(1,77)=0.01, p=.942$). Interestingly, the interaction between the CVPA-scale and type of product design yielded significant ($F(1,77)=5.25, p=.025$). Johnson-Neyman follow-up analysis of the interaction revealed that participants scoring at least 3.8 (out of 5) on the CVPA-scale construed the activities as more abstract after they evaluated products with atypical designs compared to typical designs. No significant differences arose for people scoring lower than 3.8 on CVPA-scale.

In the final study, we wonder whether people will not only engage in abstract thinking when seeing atypical designs, but will also be more likely to pay a premium price for products with such atypical designs when they are placed in an abstract mindset. Participants were assigned to either an abstract or a concrete mindset condition by answering *why* versus *how* they would engage in an activity (Freitas, Gollwitzer, and Trope 2004). Next participants indicated the amount (in EUR) they wanted to pay for five products that either had a typical or atypical design developed by the principle of surface mimicry. In line with our expectations, we found a significant interaction between mindset and product design ($F(1,118)=5.72, p=.02$). When an abstract mindset is activated, people are willing to pay more for products with an atypical design ($M=7.54$) compared to a typical design ($M=4.72$; $B=2.83, t(118)=3.63, p<.001$). In contrast, when people think more concretely, they want to pay as much for atypical designs ($M=5.99$) as for typical ones ($M=5.82$; $B=.17, t(118)=.22, p=.83$). Another regression analysis with CVPA as additional variable yielded a significant three-way interaction between mindset, product design, and CVPA ($F(1,118)=4.38, p=.04$). When people score low on the CVPA scale they do not differentiate between typical and atypical designs irrespective of their mindset ($B=.39, t(118)=.25, p=.80$). When people score high on the CVPA scale, however, they would pay significantly more for atypical products when they are thinking more abstract ($B=5.00, t(118)=3.25, p=.001$).

Taken together, we found that atypical product designs can instigate abstract processing (1), that bringing people in such a higher-level construal results in more favorable evaluations of products with atypical designs (2), and that this is especially true for people who show a higher than average concern for product design. As such, we contribute both to construal level theory and research on product design and prototypicality in particular. Future research could further investigate how marketers can promote atypical products by activating an abstract mindset. For now, we can conclude that abstract minds are delighted by designs that deviate from prototypicality.

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Impact Bias or Underestimation? Outcome Specifications Determine the Direction of Affective Forecasting Errors

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EXTENDED ABSTRACT

People rely on affective forecasts to anticipate the emotional impact of future events. Consequently, affective forecasts have an integral role in decisions, from everyday choices about what to eat for lunch to those with consequential personal, medical and legal implications (e.g., Blumenthal 2004; Ditto, Hawkins, and Pizarro 2005; Eastwick et al. 2008; Halpern and Arnold 2008; Maroquin, Nolen-Hoeksema, and Miranda 2013; Mellers and McGraw 2001; Miloyan and Suddendorf 2015; Riis et al. 2005; Woodzicka and LaFrance 2001). Affective forecasters are generally accurate when predicting whether an event will be pleasant or unpleasant, but often err in their predictions of *how* pleasant or unpleasant the event will be (Artz 1996; Mathieu and Gosling 2012; Rachman and Artz 1991). Early affective forecasting research demonstrated a widespread *impact bias*, a systematic tendency for forecasters to *overestimate* the hedonic impact of future events, ranging from HIV test results over tenure decisions, to their favorite sports team winning or losing a game (for reviews, see Gilbert and Wilson 2007; Wilson and Gilbert 2003, 2005, 2013). Recently, several countervailing cases have been documented in which forecasters systematically *underestimate* the hedonic impact of future events, such as the emotional pain induced by milder forms of sexism or sad fictional stories, and the pleasure gleaned from highly probable or distant future prizes (Andrade and VanBoven 2010; Bosson, Pintel, and Vandello 2010; Ebert and Meyvis 2014; Dunn et al. 2007; Gilbert et al. 2004a; Nordgren, Banas, and McDonald 2011). We propose a process account that can explain these seemingly incongruous findings and predict the direction of affective forecasting errors.

The hedonic impact of an event is influenced by general outcome specifications of the event such as its magnitude, duration, psychological distance, and probability of occurrence (Ebert and Meyvis 2014; Mellers et al. 1997). Some outcome specifications such as magnitude and duration are positively correlated with the hedonic impact of the event (e.g., presumably, winning more money feels better than winning less money, and a longer commute feels worse than a shorter commute). Other outcome specifications such as probability and psychological distance are negatively correlated with the hedonic impact of the event (e.g., presumably, winning \$100 feels better if one had a 1% chance of winning than a 99% chance, and receiving \$100 today is more exciting than receiving \$100 a year from today; Brandstaetter, Kuehberger, and Schneider 2002; Ebert and Meyvis 2014; Mellers et al. 1997).

Critically, affective forecasters are typically more sensitive to the effects of outcome specifications on the hedonic impact of an event than are experiencers (Aknin, Norton, and Dunn 2009; Buechel et al. 2014; Dunn, Wilson, and Gilbert 2003; Ebert and Meyvis 2014; Gilbert et al. 2004b; Hsee and Zhang 2004). Because experiences are more affect-rich than the simulations upon which affective forecasts rely, experiences usurp more attentional resources necessary to attend to and be impacted by outcome specifications (Buechel et al. 2014; Ebert and Meyvis 2014; Morewedge et al. 2010). We suggest that consequently, the relationship between outcome specifications and hedonic impact is amplified in affective forecasts compared to experiences, resulting in both overestimation (i.e., impact bias) and underestimation (i.e., its inverse) of hedonic reactions.

The direction in which an outcome specification modulates the hedonic impact of an event allows us to predict which affective forecasting error is more likely to occur. In general, we predict that when outcome specifications are positively correlated with the hedonic impact of an event (e.g., magnitude or duration), forecasters should overestimate the extent to which high specification values will intensify its impact and low specification values will diminish its impact. Conversely, when outcome specifications are negatively correlated with the hedonic impact of an event (e.g., probability or psychological distance), forecasters should overestimate the extent to which low specification values will intensify and high specification values will diminish its impact.

To test our theory, we simultaneously manipulated both kinds of outcome specifications in two experiments. We expected that when both specifications were aligned in their modulation of hedonic impact—high magnitude and low probability or low duration and high psychological distance—they would have an additive effect, leading forecasters to systematically overestimate (i.e., impact bias) or underestimate (i.e., its reverse) the hedonic impact of experiences. When the specifications were misaligned, we predicted that their effects would be countervailing, leading to less extreme predictions and forecasting errors.

STUDY 1: PROBABILITY AND MAGNITUDE

We first tested our theory by manipulating the probability and magnitude of a positive experience. Because forecasters should be more sensitive to magnitude and probability specifications than experiencers (e.g., Buechel et al. 2014; Aknin et al. 2009), forecasters should overestimate the hedonic impact of winning a less probable larger prize (i.e., exhibit an impact bias) and underestimate the hedonic impact of winning a more probable smaller prize (i.e., exhibit its inverse).

Method

Participants and Design

Three hundred and ninety undergraduate students and pedestrians (149 females; $M_{\text{age}} = 24.56$ years, $SD = 9.66$) received course credit or \$2 for participating. Each was randomly assigned to one condition in a 2 (role: forecaster, experiencer) \times 2 (magnitude: small, large) \times 2 (probability of winning: 10%, 90%) between-subjects design.

Procedure

Each participant was seated in a private cubicle with a survey and a prize. In the small magnitude condition, the prize was one .5oz packet of M&M's. In the large magnitude condition, it was a bag (~11oz) containing twenty-one .5oz packets of M&M's. All participants played a game of chance. Participants won the prize if they drew a ball marked with an "X" from an opaque bag containing 10 balls. Participants in the 10% (90%) probability of winning condition were told that 1 (9) of the 10 balls was marked with an "X." To minimize suspicion, 7 balls were actually marked with an "X" in all conditions.

Forecasters first predicted how happy they would be if they drew a ball with an "X" and won the prize on a 13-point scale (1 = *Very Unhappy*; 13 = *Very Happy*). They won the prize if they drew a ball with an "X" and did not win the prize if they drew an unmarked ball.

Experiencers first won the prize if they drew a ball with an "X" and did not win the prize if they drew an unmarked ball. They then reported how they felt on the same scale used by forecasters.

As manipulation checks, all participants then assessed their subjective likelihood of winning (1 = *Extremely Low*; 13 = *Extremely High*) and the subjective size of the prize (1 = *Extremely Small*; 13 = *Extremely Large*). As an attention/comprehension check, participants indicated the stated probability of winning in an open-ended format.

Results and Discussion

Only the 329 participants who correctly indicated their probability of winning were included in subsequent analyses. Exclusions did not differ by condition ($\chi^2(1, N = 390) < 2.55, p > .13$). Fifty-seven experiencers who did not win the prize were excluded from the analyses, leaving a final sample of 272 participants. There were no other exclusions; differences in degrees of freedom reflect missing values for the reported variable.

Manipulation Checks

A 2 (role: forecaster, experiencer) x 2 (magnitude: small, large) x 2 (probability of winning: 10%, 90%) between-subjects ANOVA revealed that the subjective likelihood of winning was lower in the 10% conditions ($M = 4.22, SD = 2.27$) than in the 90% conditions ($M = 10.81, SD = 7.41; F(1, 253) = 77.30, p < .001, \eta^2 = .23$). All other effects: $F_s < 2.98, p_s > .09$.

The same ANOVA revealed that the subjective magnitude of the large prize was greater ($M = 8.73, SD = 2.77$) than the small prize ($M = 5.09, SD = 2.47; F(1, 253) = 111.79, p < .001, \eta^2 = .31$). All other effects: $F_s < 3.11, p_s > .08$.

Forecasted and Experienced Emotional Impact

Happiness ratings were submitted to a 2 (role: forecaster, experiencer) x 2 (magnitude: small, large) x 2 (probability of winning: 10%, 90%) between-subjects ANOVA. The analysis revealed a main effect of probability ($F(1, 262) = 6.92, p = .01, \eta^2 = .03$). More important, the analysis revealed the two predicted significant 2x2 interactions between role and outcome specifications: A role x probability interaction indicated that forecasters were more sensitive to probability specifications than were experiencers ($F(1, 262) = 7.87, p = .005, \eta^2 = .03$). A role x magnitude interaction indicated that forecasters were more sensitive to magnitude specifications than were experiencers ($F(1, 262) = 4.02, p = .046, \eta^2 = .02$). All unreported effects: $F_s < 1.80, p_s > .18$.

As predicted, additive differences in sensitivity to outcome specifications between forecasters and experiencers produced two qualitatively different forecasting errors when they were aligned in their modulation of the hedonic impact of the event: Simple effect tests revealed that in the large magnitude/10% chance of winning conditions, forecasters *overestimated* their happiness about winning the prize ($M = 10.53, SD = 1.65$) compared to experiencers ($M = 9.04, SD = 2.61; F(1, 262) = 9.18, p = .003, \eta^2 = .03$). Conversely, in the small-magnitude/90% chance of winning conditions, forecasters *underestimated* their happiness about winning the prize ($M = 8.38, SD = 1.63$) compared to experiencers ($M = 9.25, SD = 1.58; F(1, 262) = 4.03, p = .046, \eta^2 = .02$).

Forecasters were more accurate when the effects of outcome specifications were misaligned. Affective forecasts and experienc-

ers' reports did not differ for the small-magnitude/10% chance of winning conditions or the large-magnitude/90% chance of winning conditions, $F_s < 1$.

STUDY 2: DURATION AND PSYCHOLOGICAL DISTANCE

We next tested our theory by manipulating the duration and psychological distance of a negative experience. Because forecasters should be more sensitive to duration and psychological distance specifications than experiencers (Ebert and Meyvis 2014), forecasters should overestimate the hedonic impact of a longer and psychologically near event, and underestimate the hedonic impact of a shorter and psychologically distant event.

Method

Participants and Design

Four hundred and seventy-eight Mturk workers (234 females; $M_{\text{age}} = 34.00$ years, $SD = 11.46$) received 40¢ for participating. Each was randomly assigned to one condition in a 2 (role: forecaster, experiencer) x 2 (duration: short, long) x 2 (psychological distance: near, distant) between-subjects design.

Procedure

Participants first saw an image of a puppy trapped in a sewer, a preview of the video they would watch. The video duration was ten seconds in the short condition and three minutes in the long condition. To manipulate its psychological distance, participants were either told the event was filmed two days ago (near condition) or eight years ago (distant condition; Trope and Liberman 2010).

Forecasters predicted how sad, distressed, and absorbed they would be after watching the video on 9-point scales (1 = *Not at all*; 9 = *Very Much*; adapted from Ebert and Meyvis 2014). They then watched the video. Experiencers watched the video and then reported their current feelings on the same scales.

As manipulation checks, participants then assessed its subjective duration (1 = *Very Short*; 7 = *Very Long*), and the subjective temporal distance to the event (1 = *Very Close*; 7 = *Very Far*)¹. Finally, we administered an attention check (Oppenheimer, Meyvis, and Davidenko 2009).

Results and Discussion

Only the 403 participants who had a novel IP address and passed the attention check were included in the subsequent analyses. Exclusions did not differ by conditions, $\chi^2(1, N = 478) < .48, p > .26$. There were no other exclusions; differences in degrees of freedom reflect missing values for the reported variable.

Manipulation Checks

A 2 (role: forecaster, experiencer) x 2 (duration: short, long) x 2 (psychological distance: near, distant) between-subjects ANOVA revealed that the subjective duration of the ten-second video was shorter ($M = 1.49, SD = 1.39$) than the three-minute video ($M = 4.29, SD = 2.04; F(1, 385) = 195.24, p < .001, \eta^2 = .33$). All other effects: $F_s < 1$.

The same ANOVA revealed that the event was psychologically closer when it presumably occurred two days ago ($M = 3.16, SD = 2.19$) than eight years ago ($M = 4.14, SD = 2.72; F(1, 384) = 15.00, p < .001, \eta^2 = .04$). All other effects: $F_s < 1.90, p_s > .17$.

¹ There were no significant differences between conditions for an additional rating of whether the video was believable, all $F_s < 1.8, p_s > .18$.

Forecasted and Experienced Emotional Impact

The three dependent measures assessing emotional impact were highly correlated ($\alpha = .75$) and aggregated into an index of negative affect (as in Ebert and Meyvis 2014). This index was submitted to a 2 (role: forecaster, experiencer) \times 2 (duration: short, long) \times 2 (psychological distance: near, distant) between-subjects ANOVA. The analysis revealed a main effect of role ($F(1, 395) = 4.45, p = .036, \eta^2 = .01$). More important, the analysis revealed the two predicted significant interactions between role and outcome specifications: A role \times duration interaction indicated that forecasters were more sensitive to duration specifications than were experiencers ($F(1, 395) = 7.74, p = .006, \eta^2 = .02$). A role \times distance interaction indicated that forecasters were more sensitive to temporal distance specifications than were experiencers ($F(1, 395) = 5.21, p = .023, \eta^2 = .01$). All unreported effects: $F_s < 2.76, p_s > .09$.

As predicted, additive differences in sensitivity to outcome specifications between forecasters and experiencers produced two qualitatively different forecasting errors when they were aligned in their modulation of hedonic impact: Simple effect tests revealed that in the long/near video conditions, forecasters *overestimated* negative affect ($M = 6.89, SD = 1.68$) compared to experiencers ($M = 5.75, SD = 1.66; F(1, 395) = 10.23, p = .001, \eta^2 = .03$). In the short/distant video conditions, however, forecasters marginally *underestimated* negative affect ($M = 5.51, SD = 1.58$) compared to experiencers ($M = 6.13, SD = 1.58; F(1, 395) = 3.45, p = .064 [p = .032, one-tailed], \eta^2 = .01$).

Forecasters were more accurate when the effects of outcome specifications were misaligned. Forecasts and experiencer reports did not differ in the short/near video conditions ($F(1, 395) = 1.5, p > .20$) and forecasters only marginally overestimated negative affect in the long/distant video conditions ($F(1, 395) = 3.03, p = .08, \eta^2 = .004$).

GENERAL DISCUSSION

Because affective forecasters are more sensitive to specifications of outcomes than are experiencers, the direction of affective forecasting errors is contingent on the direction in which outcome specifications modulate the hedonic impact of events. When outcome specifications are positively correlated with hedonic impact (e.g., magnitude, duration), forecasters overestimate the extent to which high specification values will intensify and low specification values will discount its impact. When they are negatively correlated with hedonic impact (e.g., probability, psychological distance), forecasters overestimate the extent to which low specification values will intensify and high specification values will discount its impact.

The results of our two experiments demonstrate these patterns across four kinds of outcome specifications—magnitude, probability, distance, and duration—in both positive and negative domains. Consistent with our theory, when two outcome specifications were aligned in their modulation of hedonic impact, their additive effect led to two predictable and qualitatively different forecasting errors: overestimation and underestimation of hedonic responses. Outcome specifications led to weaker, less consistent forecasting errors when their effects were in opposition. As our theorizing and our studies imply, however, we do not suggest that forecasting errors will be absent in all cases of opposing outcome specifications. If one outcome specification is more heavily weighted in prediction than in experience for integral or incidental reasons, it may eclipse opposing effects of other outcome specifications.

Overall then, reconciling previous demonstrations of both forecasting errors, our theory and evidence suggest that overestimation (i.e., impact bias) is more likely to occur for events that are large,

unlikely, psychologically near and/or long in duration (e.g., Aknin et al. 2009; Dunn and Ashton-James 2008; Gilbert and Wilson 2007), whereas underestimation is more likely to occur for events that are small, likely, psychologically distant, and/or short in duration (e.g., Andrade and Van Boven 2010; Bosson et al. 2010; Ebert and Meyvis 2014; Gilbert et al. 2004a, 2004b).

Deciding in the present and planning for the future requires people to not only accurately assess which experiences will make them feel good or bad, but also assess how good and how bad those experiences will make them feel (e.g., Mellers and McGraw 2001). Our theory and findings reconcile the seemingly incongruous cases in which forecasters overestimate and underestimate the hedonic impact of future events. Moreover, our theory elucidates when, why, and in what directions forecasters will err in their predictions.

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The Fixed Unit Effect: When Size Does Not Matter, But Number of Units Does

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EXTENDED ABSTRACT

We introduce the “fixed unit effect” (FUE), such that in the presence of others, consumers choose and eat a fixed number of food units, regardless of the size of the unit, based on what they perceive to be a socially appropriate quantity for a given food (e.g., eating two slices of pizza is appropriate). Consumers have prior notions of what is appropriate and use internal standards, as opposed to being guided by what others are consuming. The result of this effect is that, while the unit quantity selected is fixed, the total caloric intake varies with unit size (i.e., smaller or larger units), and consumers will eat more calories from larger units.

We contend that the FUE occurs in social, rather than non-social, eating situations. However, the FUE does not merely occur based on matching the behavior of others. It is an internal standard meant to convey personally consistent yet socially acceptable behavior. The FUE is a heuristic that consumers use in social situations to consume a socially appropriate amount of food, particularly for vice foods where consumers may feel more social judgment toward their consumption behavior.

Eight studies demonstrate the FUE. Four of the eight studies involve demonstrating the FUE by asking participants to *consume actual food* including cinnamon rolls, donuts, snack crackers, and pizza. Experiment 1A and 1B demonstrate the basic FUE with pizza and cinnamon rolls. Experiments 2, 3, 4A and 4B uncover the social parameters of the FUE. Studies (Experiments 5A and 5B) demonstrate the moderating role of food type (vice vs. virtue). Taken together, these studies provide robust support for the FUE across multiple food types, and demonstrate the social and product factors that cause the FUE.

In experiment 1A, participants read a scenario about movie night at their apartment with friends and plenty of pizza, and then saw the full pizza, which was either sliced in 16ths or 8ths. Participants then indicated how many slices they would like to eat. Results support the fixed unit effect: there was no difference in the number of pizza units selected, but there was a significant difference in the number of calories selected.

Experiment 1B was a field experiment at a farmer’s market. In this case, participants were offered free cinnamon rolls that were either small or large units, depending on the booth. As in experiment 1A, there was no difference in the number of cinnamon rolls participants ate, but there was a significant difference in the number of calories consumed.

The next studies demonstrate the parameters of the FUE: that this is a social phenomenon, although it is social it is not driven by mimicry of others’ behavior. Experiment 2 employed a 2(consumption: public, private) x 2(small, large) between subjects design. Participants were invited to a pizza taste testing study (with either all small slices or all large slice), where they ate either alone or at a table with 3-4 people. Results showed that when consumers ate with

others, the FUE emerged (i.e., no difference in the number of slices selected, but significant difference in number of calories consumed). When consumers ate alone, they ate a significantly greater number of the smaller slices, but showed no difference in caloric intake. This provides preliminary evidence of the social nature of the FUE.

Experiment 3 replicates the FUE using a different food: actual eating of cheese filled Ritz crackers during a social networking event. It also tests whether consumers eating these foods mimic the behaviors of others or follow an internal standard; in this case, consumption is public, but we removed the ability for participants to see how much others put on their plates. In other words, participants will know they are going into a social context where they will be eating with others, but they must select their food in isolation without seeing what anyone else has selected. We found that the FUE still arises in this context, even though participants are not able to mimic the amount taken by others.

Experiments 4A/4B delve further into the question of social behavior by examining the question of how participants expect others to consume. Both studies employ a 2(donut size: small, large) between subjects design. Experiment 4A replicates the FUE using actual eating of another food: donuts (i.e., participants eating in full view of other people showed no difference in the number of units selected, but a significant difference in the calories consumed). After eating, we asked participants how much they thought others would eat in the same situation; participants thought participants would eat significantly more units of the smaller donuts than the larger ones. In Experiment 4B, using an online format, we showed participants one of the two types of donuts and asked two questions: how much they thought other people would eat, and what would be the appropriate amount for other people to eat. Consistent with experiment 4A, participants expected others to select significantly more donuts from in the small donut condition, however, when asked about what is appropriate, consistent with the FUE, participants showed no difference in the number of donuts they thought would be appropriate for other people to select.

Experiments 5A/5B both employed a 2(food unit size: small, large) x 2(vice, virtue) between subjects design. Consistent with our theorizing about the FUE being a heuristic to help consumers manage social judgments about their consumption, and the idea that consumption of vice foods carries more judgment than consumption of virtuous foods, we find across two studies that the FUE holds for vice foods, and is attenuated for virtue foods.

Taken together, our research findings establish that in social settings, food unit size does not impact the number of units taken, as consumers rely more on internally guided fixed-units to consume; however, it does impact total calories consumed. This suggests that smaller food units can help attenuate consumption of vice foods, while larger units facilitate such eating behavior.

The Many-Faced Consumer: Practices And Consequences of Social Media Government

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EXTENDED ABSTRACT

A recent body of literature started to investigate marketing as a technology of government (Beckett 2012). Several studies looked at what is called the “marketing governmentality” (Cova and Cova 2009) and expose the way marketing discourse create representations, while others investigate the consequences of these representations on consumer subjectivity (Zwick and Dholakia 2004). According to Foucauldian theory (Foucault 1975), these representations are part of the government activity. Beyond consumer subjectivity, we still know little about how marketing practice organizes consumption systems of power (Thompson 2004). Moreover, research about this performative capacity of marketing government is scarce when it comes to online communities, while their management is a core business activity. Communities are often understood as fostering consumer empowerment (Labrecque et al. 2013), while Social Media Management (SMMt) aims at governing online consumers (Zwick and Denegri-Knott 2009). The scope of this activity is wide and includes different marketing activities; as a result, it concerns marketing in a broader sense. We therefore investigate empirically the SMMt practice to answer two questions: how do marketing practices create and reinforce representations of consumers? What are the consequences of these practices?

We conducted a three years long netnography on a community of Social Media Managers (SMMs): The ForumMyCM, with more than 8000 SMMs, 7-8 posts per day and 20-25 comments per day. We conducted 10 interviews with SMMs ($M_{duration} = 50$ min) and collected two types of additional sources: professional literature (13 blogs and 3 books among the most cited by the community and 12 reports about SMMt) and 11 software providers’ blogs and institutional websites (they provide all the analytical tools used daily by SMMs and therefore their metrics participate in creating representations). These providers are Hootsuite, Sentiment, Lithium, Over-Graph, trackur, Agorapulse, Viralheat, Cision, Mention, nukessuite and SA.

We use a framework based of the concept of governmentality (Foucault 2004). We focus on four elements: the ontology (what the entities are), the deontology (what the entities must become), the ascetics (which practices are enacted) and the teleology (what the aim of the practices is). This framework is adapted from foucauldian theory of ethics (Foucault 1984).

We find that the SMMt practice is composed of three fundamental practices: framing, defining categories and their nature; channeling, moving entities from one category to another; optimizing, acting on one category to influence some of its relevant properties. These practices are interrelated: framing defines which relationships exist between categories for the channeling part and the relevant properties for the optimizing part; channeling practices can help optimizing the target category, and optimizing a category can create channeling effects. The framing operation in our case defines three categories: conversation, made of words, community, a collection of individuals acting as a whole, and influencers, specific individuals. Conversation, while its size is unknown, is considered eternally active: whatever the brand does, conversation exists. Community is of finite size and mortal: SMMs have to act on it so it remains active. While composed of individuals, it is always treated and measured at an aggregated level. Influencers are individuals who were extracted from the

aggregated mass because of a remarkable behavior, and are treated individually. This system of practices has two main consequences.

First, SMMs are subject to loyalty tensions. They work for the brand but are also attached to the community. When humanizing their interaction, SMMs take over the brand’s actions, and may pursue their own objectives instead of the brand’s ones. As such, the role of SMM is subject to interpretation: should the SMM be embedded in the organization or in the community? Second, some practices can also result in the creation of new categories of population; we call that the derivation effect. For example, optimizing the size of the community, considering the size as a valuable metric led to the apparition of companies selling fake fans. Fake fans represent a category of their own, distinct from the community. SMMs consider them prejudicial, but their practices contribute in creating them: consumers’ agency can counteract SMMs’ strategies even though this agency fits into the social media governmentality. Derivation effect originates in the difference between the SMM’s mission and the dispositive’s teleology. The derived categories are part of the dispositive but SMMs still consider them “bad behaviors”. The derivation effect illustrates a type of misbehavior which cannot be conceived as resistance in Foucault’s terms (Foucault 1975), as resistance represents behaviors going against the current organization of power relationships.

We contribute to marketing governmentality studies by outlining the fundamental role of representations in SMMt. The circle of practices (framing, channeling, optimizing) has two functions: on one hand, it stabilizes representations and allows marketing actions; on the other hand, the derivation effect allows the evolution of the system of representations. As a result, similarly to organizational path dependence, the circle of practices orientates market evolution while avoiding a deterministic lock-in (Garud, Kumaraswamy, and Karnøe 2010). The derivation effect may be a fundamental mechanism in market evolution, and future research should investigate it more closely.

We extend the study of the figures of the consumer (Cova and Cova 2009). While previous research outlined the discursive aspects of the representational activity, we point at its material aspects: the architecture of software carries representational features (Orlikowski 1992) and therefore influences marketing governmentality. Service providers are therefore important actors in market structuration, as the tools they provide participate in fixing consumer representations. Future research should build on previous market devices studies (Callon, Millo, and Muniesa 2007; Zwick and Cayla 2011) to deepen our understanding of the role of business service providers in consumer markets evolution and to add material features to the discursive aspects of marketplace power structures (Thompson 2004).

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Consumers Rely More on Online Review Scores When They First Form an Independent Opinion

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EXTENDED ABSTRACT

There is evidence indicating that consumers increasingly rely on review score information to help them make purchase decisions (Punj, 2013), and that this reliance impacts upon choice behaviour (e.g., Cheung et al., 2009) and sales (e.g., Chevalier & Mayzlin, 2006). However, existing research has overlooked the important research question considered in this paper: does it matter when a consumer is exposed to review scores? More specifically, do purchase intentions vary depending on whether consumers read review scores before versus after forming their own opinion of a product? On the one hand, the same information is available. On the other hand, a wealth of evidence suggests that preferences can vary as a function of order.

A primacy effect occurs when a person forms a judgment more consistent with the *first* presented argument whereas a recency effect occurs when a person forms a judgment more consistent with the *last* presented argument. The literature associated with order effects in persuasion is quite mixed with some studies finding primacy effects and some finding recency effects (Haugtvedt & Wegener, 1994; Hogarth & Einhorn, 1992). In contrast, the literature associated with order effects in the advice-taking literature tends to find primacy effects (Koehler & Beaugard, 2006; Snizek & Buckley, 1995; Yaniv & Choshen-Hillel, 2012).

Given the variety of differences between typical persuasion tasks, typical advice-taking tasks, and use of review score information to inform product evaluations, we thought it was important to collect new data. We also noted a number of different theories that made different predictions, including Bayes' Rule, support theory, consistency theory, accessibility-based anchoring, adjustment-based anchoring, and Gricean conversational norms

In our first experiment, half the participants were allocated to a Pre-Post group and half to a Post-only group. Participants in the Pre-Post group were exposed to a product description before stating an initial intention to buy the product. Participants were then exposed to a review score distribution before making a second evaluation. In contrast, those in the Post-only group were exposed to both the product description and the review score distribution simultaneously before making a single product evaluation. We found that consumers tended to put more weight on review score information in a Pre-Post condition compared to a Post-Only condition. This effect was robust to average review score: a positive average review score (i.e., 4.6/5) was more likely to increase intention to purchase and a negative average review score (i.e., 3.4/5) was more likely to decrease intention to purchase for those in the Pre-Post group. This effect was also robust to product type in that it held for both an experience good and a search good.

In order to test between competing theories, we carried out a second experiment. Half the participants were presented with the product description and then, on the next page, the review score information whereas the others were presented with this same information in reverse order. In addition, half the participants were asked for two evaluations - one after the first piece of information and another after the second piece of information - whereas the others were only asked for single evaluation after both pieces of information. We found that consumers tended to put more weight on the information that was presented second (i.e., a recency effect).

The main observation we made across our experiments is that the weight accorded to review score information when consumers are making a product evaluation critically depends on *when* that information is encountered. We found that consumers tended to weight review score information more when that information was received after the consumer had formed an initial product evaluation based on the product description. The effect appears to be robust to: whether the average review score is above versus below initial expectations; whether the product is a search or experience good; and whether the initial evaluation was explicitly stated or implicitly formed by the separation of information.

Our explanation for the observed results is an adjustment-based anchoring process (Epley, 2004; Tversky & Kahneman, 1974). According to this account, consumers generate an initial evaluation based on the product description that they assume is close to the true value of the product but are ready to adjust away if given new information. The model provided by Hogarth and Einhorn (1992) describes how this adjustment process occurs. People use new pieces of information to update the existing estimate according to an averaging process as they try to estimate the true value. This averaging process can take place either after each new piece of information (a step-by-step processing strategy) or only after all pieces of information have been presented (an end-of-sequence processing strategy). Following Hogarth and Einhorn, we argue that, where possible, people try to match cognitive strategy with response mode. Therefore, when consumers first form their own evaluation from a product description and then learn about product reviews, a step-by-step processing strategy is adopted. In contrast, when consumers form an evaluation based on both the product description and reviews presented together, then an end-of-sequence processing strategy is adopted. Importantly, the model predicts recency when adopting a step-by-step strategy and primacy when adopting an end-of-sequence strategy. These predictions are borne out by all of the reported experiments.

For managers, the presence of order effects affords possibilities of potentially effective strategies regarding the placement of review score information to favor certain products depending on those product's reviews. First, our data inform on whether review score information should appear in search results, and near the top of product pages. Second, our data inform on whether review score information should appear in printed ad magazines

For consumers, the presence of order effects is likely to lead to lower-quality decision due to bias, lack of consistency, and less efficient decision processes. One basic strategy to give more weight to review scores, which we argue is closer to the optimal approach, is for consumers to adopt a step-by-step processing strategy by first considering the product description, forming an evaluation, and then consciously adjusting that evaluation based on the review scores.

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The Moral, The Team, and The Ends: A Three-Motive Model of Moral Judgment for Politics and Other Team Contexts

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EXTENDED ABSTRACT

What motives underlie moral judgments in team contexts? For judgments in contexts of competing team such as brands, political parties, and universities what motives drive moral judgments? How do moral judgments vary across different aspects of actions and actors? How do moral judgments vary by whether one is on the “team” of the actor whose behavior is in moral question?

Despite the explosion of research in moral judgment (Bhattacharjee, Berman, & Reed, 2013; Graham, Haidt, & Nosek, 2009), these questions remain incompletely understood. Furthermore, these questions have been largely examined in isolation. This project celebrates the advancements of research on particular moral motives, but also recognizes the need for an integrative advancing model and empirically testing that model.

In this paper, we present a basic three-motive model of moral judgment relevant to contexts where team and group based outcomes are involved. Through the illustrative and pertinent context of politics, we show how this model can help us make predictions of people’s moral judgment propensities. Integrating the three motives together provides a clear but nuanced view of moral judgment in team based contexts. It illustrates why sometimes one might fail to find strong evidence for a certain moral motive, because other moral motives might be more active. It provides a view of moral judgment as a series of motives pushing against and constraining with one another. Human moral judgment may be complex, but with this integrative model, we hope to make it more predictable.

The model includes three motives and subsequent predictions.

Moral Motive Prediction: People will generally hold that the same moral standards should be used without bias to judge various politicians, regardless of the individualistic characteristics of any politicians, such as the politician’s party.

Team Motive Prediction: Partisans will condemn an immoral action more when done by a politician from the opposing political party rather than by their own political party.

Ends Motive Prediction

There will be a greater own team member favoring bias, between moral judgments of actors from one’s team versus another team, when the actor takes actions that is beneficial for the actor’s team than only for the actor’s self.

Integrating the three motives provides a clear but nuanced view of moral judgment in team based contexts. Using the pertinent content of politics, we conducted four studies.

Study 1 tests and finds that people overwhelmingly have a conscious moral motive to apply the same moral standards across actors, regardless of the actor’s team. We find that the overwhelming majority people explicitly report that they hold similar standards for the politicians regardless of party. Though there are some differences observed in explicitly stated standards, the differences are small, especially compared to the differences observed in the later studies.

In line with a team motive, Study 2 finds that with individual instances of specific immoral violations, people engaged in strong biased judgments of an actor in a manner that favors a team member. However, the moral motive seems to produce a “boundary” on

this motivated bias such that the team-favoring bias exists but is not unlimitedly strong. These findings were observed during the 2012 United States presidential election. In a between subjects design, partisans indicated that it was more wrong for the candidate from the other party (i.e., Barack Obama or Mitt Romney) to engage in “ethically gray” actions such providing favors to campaign donors, not fully disclosing information to the public, and scheduling votes when politicians are away.

Study 3 showed the strength of motive to be biased, affects the amount of bias. Using a hypothetical versus real action paradigm, Study 3 tested how the strength of bias can be exaggerated when motivational needs are higher and provides insights into how people can generally seem or feel relatively unbiased—because they exhibit a stronger bias only when most needed (i.e., with the action is a real versus a hypothetical moral violation). This study was performed at the local level by asking partisans at the North Carolina State Fair opinions about local politicians.

Finally Study 4 examines the considerations of ends, finding a specific ends motive in addition to a general team motive. This motive builds from the fact that team members can engage immoral actions that can be team-benefiting (e.g., getting oneself elected such that a member from the other party does not get elected) or only actor-benefiting (e.g. cheating on a spouse, personal tax evasion). Here, the ends-motive makes predictions that the other motives do not. It specifically predicts that actions which directly yield team-benefiting ends (e.g., politicians getting elected) will be receive more team member favoring leniency bias than actions that do not directly yield the ends (e.g., transgressions in the politician’s personal life). Results supported these predictions.

Today, popular discourse over immorality in many intergroup contexts tends to place the blame on a selected few. For example, in politics and brand settings, we overwhelmingly point fingers at the politicians and CEOs. However, this research suggests that by compromising our moral standards, ordinary citizens are partly responsible for the current corrupt state of affairs in politics, organizations, and businesses. Collectively, we may allow and forgive unethical behaviors in those that most directly represent and serve our teams. Ultimately, we fail to discerningly police actors with the consistent morality required of ethically functioning democracies and market economies. When it comes to addressing the sorry state of morals in politics, brands, businesses, sports, and even sometimes schools, it may be time to stop pointing fingers at the top, and instead look into the mirror.

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The Visual Acuity of Less: Why People Underestimate Increases but not Decreases in Quantity

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EXTENDED ABSTRACT

We examine whether people perceive the magnitude of physical size increases similarly to how they perceive size decreases. Research in psychophysics and consumer behavior has shown that visual estimates of increases in object size are strongly inelastic, meaning that people strongly underestimate the actual magnitude of the size increase (Chandon and Wansink 2007; Krishna 2007; Stevens 1971). Other studies have indicated that estimates of quantity decreases may be more elastic and thus more accurate (Ordabayeva and Chandon 2013), but no research has directly compared the two types of estimations. Yet, such estimations are common in today's marketplace, where package sizes increase and decrease frequently (Felten 2012; Nestle 2003), and where consumers rely on their visual package impressions to judge product size in the absence, and in the presence, of size information (Lennard et al. 2001).

While existing theories may have some bearing on this issue, little research has studied it directly. The psychophysics literature assumes that estimations of size increases and decreases follow the same process and hence are both inelastic. The anchoring and adjustment literature predicts the same degree of anchoring when the anchor is above or below the true value. Prospect theory predicts an asymmetry in the valuation of size gains and losses, but it assumes that size decreases are construed as psychological losses and size increases are construed as gains, and that the magnitude of the size increase and decrease corresponds to the magnitude of the perceived gain and loss.

Importantly, existing theories have overlooked the fact that the estimation of size decreases in physical quantities is distinct from the estimation of size increases in that physical quantities can never be negative. Thus, the natural lower bound (zero) is salient when estimating size decreases, but the natural upper bound is absent when estimating size increases. This makes estimating size decreases an interpolation task, bounded by the large reference size as well as zero, and estimating size increases an extrapolation task, only bounded by the small reference size.

We build on prior research which showed that interpolation tasks are easier than extrapolation tasks, for object perception and learning of functional relationships between variables (Kellman 2003; McDaniel and Busemeyer 2005). We expect that estimations of decreasing quantities will be less inelastic, and thus more accurate, than estimations of increasing quantities. We expect that the asymmetry between estimations of size increases and decreases will be reduced: (a) when estimations of both size increases and decreases require extrapolation (i.e., when the lower zero bound is removed from estimations of decreasing sizes); and (b) when an upper bound is salient in estimations of size increases.

In Study 1, Mechanical Turk participants saw portions S, M, and L of peanuts containing 52, 182, and 367 peanuts displayed vertically. Given the size of a reference jellybeans portion, they estimated the sizes of peanuts portions. In the supersizing condition, the reference (52 jellybeans) was identical to portion S of peanuts. In the downsizing condition, the reference (367 jellybeans) was identical to portion L of peanuts. Participants also indicated whether portion S at \$.25 or L at \$1.50 provided better value for money (L was better at .23 cents per nut). The results revealed that size estimations were more accurate and people thought that portion L provided better val-

ue for money when sizes decreased vs. increased from the reference (portion L appeared to be 9.7 times bigger than S vs. 6.3 times when portions decreased vs. increased, and 92% vs. 81% of participants thought that portion L was better value when portions decreased vs. increased).

In Study 2, experts (chefs at Paul Bocuse Culinary Institute) saw four portions (S, M, L, XL) of mashed potatoes, soup, and salad displayed horizontally in professional containers. In the control condition, participants estimated the final sizes of portions given the size of the reference. For supersizing, given the size of portion S, participants estimated portions M, L, and XL. For downsizing, given the size of portion XL, participants estimated portions L, M, and S. In the factor of change condition, participants estimated how many times larger one portion was than another. For supersizing, they estimated how many times larger portions M, L and XL were than S. For downsizing, they estimated how many times larger portion XL was than L, M, and S. The factor of change estimation forced the estimates to range between 1 and infinity, which required extrapolation. The results revealed that size estimations were more accurate for downsizing than supersizing when estimating final sizes of portions (L appeared to be 14.10 vs. 10.54 times bigger than S for downsizing vs. supersizing), but not when estimating factors of change between portions (L appeared to be 11.64 vs. 11.71 bigger than S for downsizing vs. supersizing).

Study 3 replicated these results with novices (Mechanical Turk participants) and two factor of change conditions which had people estimate either the larger factor (how many times larger one portion was than another) or the smaller factor (how many times smaller one portion was than another).

In Study 4, participants estimated increasing or decreasing amounts of iced tea and jellybeans displayed in identical glasses. The same size (M) served as a reference across conditions (people estimated L, XL for supersizing; S, XS for downsizing) to rule out reference size effects. We varied the palatability of the iced tea (by adding sugar or salt) and jellybeans (by using regular or disgusting flavors) to rule out prospect theory as an alternative explanation. Participants estimated final sizes, or poured the required quantities of product into or out of the glass, which was naturally bounded by the edges (bottom and top) of the glass and required interpolation. As predicted, the asymmetry emerged when estimating portions, but not when pouring portions – independent of palatability (which ruled out prospect theory).

Study 5 further confirmed the role of estimation bounds and extended their effects beyond food products by showing that the asymmetry is eliminated when an explicit numeric upper bound limits estimations of the size of a file download.

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The Thought Counts: Effect of Surprise on the Consumption Experience of Gifts

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EXTENDED ABSTRACT

Although surprise-and-delight marketing campaigns have received tremendous media attention and positive customer feedback in recent years, such strategies are under-utilized (LoyaltyOne 2015). Marketing research on surprise gifts has also been scarce. Based on findings that sensory consumption experience often assimilates to pre-consumption expectations (Plassmann et al. 2008; Wilson et al. 1989), we propose that surprise prolongs recipients' enjoyment of gifts over time by triggering a cognitive belief that surprise gifts are special and thoughtful (Belk 1996).

In all experiments, we either surprised participants with a gift right before they received it or informed them in advance, a procedure adapted from Valenzuela, Mellers, and Strebel (2010). The novelty of our paradigm was that all participants rated the gift multiple times, allowing us to demonstrate that surprise prolonged consumption enjoyment over time. Experiment 1 tested how surprise interacted with time to influence consumption enjoyment of a gift by employing a 2(surprise)8(time/trials) mixed design with surprise being the between-subjects variable and time/trials as the within-subject variable. A 2(surprise)8(time-trials) mixed repeated-measures ANOVA on enjoyment ratings yielded a significant two-way interaction ($F(2.35, 117.72) = 2.94, p < .05$). Consistent with the principle of hedonic adaptation, enjoyment declined over time in both conditions (average $\beta_{\text{surprise}} = -.42, \beta_{\text{announced}} = -.63$; one-sample t -test against 0: $t_{\text{surprise}}(23) = -4.88, t_{\text{announced}}(27) = -7.76$, both p 's $< .001$). However, it declined at a slower rate in the surprise condition than the announced condition (independent-samples t -test: $t(50) = 1.73, p = .09$).

We employed the same procedure in subsequent experiments. In Experiment 2, we extended the finding to a marketing context by telling participants the gift giver was a company and tested whether beliefs of specialness mediated our effect. We used a 2(gift: announced vs. surprise) \times 6(trial) mixed design with gift as the between-subjects variable and trial as the within-subjects variable. The gift in this experiment was a computer desktop wallpaper. A 2(gift) 6(trials) repeated-measures ANOVA yielded a significant two-way interaction ($F(2.35, 731.76) = 3.31, p < .05$). Enjoyment declined at a slower rate in the surprise condition than the announced condition (average $\beta_{\text{surprise}} = -.22, \beta_{\text{announced}} = -.32$; one-sample t -test against 0: $t_{\text{surprise}}(160) = -7.85, t_{\text{announced}}(152) = -9.43$, both p 's $< .001$; independent-samples t -test: $t(312) = 2.24, p = .026$). Additionally, beliefs about the specialness of the gift and tendency to savor the gift sequentially mediated our effect (indirect effect = .29, CI = [.11, .54]).

Experiment 3 ruled out attention and mood-amplification as alternative explanations by testing the effect of surprise on negative experiences. If surprise caused people to pay more attention (Wilson et al. 1989) and increased the intensity of affective reaction (Mellers 2000), then enjoyment should be lower for an unpleasant gift in the surprise (vs. announced) condition. If the notion about surprise gifts was driving our effect, then surprise should prolong enjoyment regardless of valence of the gift. We employed a 2 (gift: announced vs. surprise) 2(valence: pleasant vs. unpleasant) \times 6(trial) mixed design with gift and valence as the between-subjects variables and trial as the within-subject variable. Participants received an image of a painting as a gift. They received either the pleasant, original version, or the unpleasant, decolorized version. A 2(surprise)2(valence)6(time/trials) mixed repeated-measures ANOVA yielded a significant two-way interaction between time/trials and surprise condition

($F(2.43, 520.86) = 2.91, p < .05$). Participants reported greater enjoyment of the surprise gift over time regardless of valence (pleasant and unpleasant gifts: average $\beta_{\text{surprise}} = -.22, \beta_{\text{announced}} = -.33$; one-sample t -test against 0: $t_{\text{surprise}}(116) = -6.59, t_{\text{announced}}(100) = -9.30$, both p 's $< .001$; independent-samples t -test: $t(216) = 2.12, p = .035$).

In Experiment 4, we further tested our proposed mechanism by manipulating directly the association between surprise gifts and specialness. Participants in the special condition affirmed the notion that surprise gifts are special and thoughtful. Participants in the not-special condition came up with arguments to counter this common belief. We also examined downstream consequences by asking participants to predict their usage of the gift and enjoyment in the future.

The experiment employed a 2(beliefs about surprise gifts: special vs. not special) \times 2 (gift: announced vs. surprise) \times 6(trial) mixed design with beliefs and gift as the between-subjects variable and trial as the within-subject variable. The gift items were the wallpapers from Experiment 2. A 2(gift) \times 6(trials) repeated-measures ANOVA revealed a significant two-way interaction in the special condition ($F(1.84, 224.58) = 3.35, p < .05$) but not in the not-special condition ($p = .65$). Within the special condition, enjoyment levels across trials declined at a slower rate in the surprise condition than the announced condition (average $\beta_{\text{surprise}} = -.20, \beta_{\text{announced}} = -.35$; one-sample t -test against 0: $t_{\text{surprise}}(58) = -4.01, t_{\text{announced}}(57) = -6.30$, both p 's $< .001$; independent-samples t -test: $t(115) = 2.08, p = .04$). We submitted likelihood of using the wallpaper and predicted enjoyment from viewing the wallpaper to two-way ANOVAs. There were significant two-way interactions between beliefs and gift on likelihood of usage ($F(1, 237) = 5.63, p < .05$) and predicted enjoyment ($F(1, 237) = 3.89, p = .05$). Specifically, in the special condition, participants reported being more likely to use the surprise gift than the announced gift ($M_{\text{surprise}} = 5.19$ vs. $M_{\text{announced}} = 2.86$; $F(1, 237) = 13.80, p < .001$) and predicted greater enjoyment from the surprise gift ($M_{\text{surprise}} = 6.48$ vs. $M_{\text{announced}} = 4.31$; $F(1, 237) = 15.65, p < .001$). Predicted usage and enjoyment did not differ by gift in the not-special condition (both p 's $> .21$).

Our research demonstrates that surprise prolongs consumption enjoyment of gifts over time and provides insights into the psychological process driving the effect. Consistent results across various product categories, real-time measures, and downstream variables attest to the robustness of our findings. Data ruled out attention and mood-amplification as alternative explanations. This work complements the literature of gifting and surprise by identifying expectations of surprise gifts as special and showing that surprise can enhance consumption enjoyment even for negative stimuli. It also has important managerial implications for enhancing and managing customer experiences.

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The Found Time

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EXTENDED ABSTRACT

Time is one of the most, if not the most, limiting factors of an individual's life. People struggle to make the best use of the limited resource to attend to various activities in life (e.g., work, family time, house chores, etc.)

With constrained daily schedules, a gain of unexpected time – due to cancelled meetings, shorter than expected queues in stores, early plane arrivals – all help loosen the constraint of busy schedules. Yet, while such gains of extra time are fairly common in our lives, there has not been systematic research on how people utilize this “found time.”

To understand how people treat and use their found time, we compare a windfall gain of time with an analogous resource – windfall money (Camerer 2003). While windfall money shares many aspects with found time, there are also major differences between the two resources. For example, unlike gains of money, time is less fungible and more perishable, holistic and transitive (Okada and Hoch 2004). Further, thinking about money leads people to focus on value maximization while thinking about time leads people to focus on emotional meaning and well-being (Liu and Aaker 2008).

Drawing from research on time versus money (Lee et al. 2015; Liu and Aaker 2008; Okada and Hoch 2004), we propose that consumers are more likely to use windfall gains of time (vs. money) for experience-driven hedonic (vs. utilitarian) purposes. As time is a resource that closely relates with psychological well-being (Liu and Aaker 2008), consumers prefer to use it to enhance their well-being by balancing their lives rather than devoting it to work-related achievement. That is, the mental representation of the norm (Kahneman and Miller 1986) on how time should be spent is different from how people think about spending money; while spending time on hedonic activities (e.g., family time, relaxation) is often desired and perceived as appropriate, spending money for hedonic purchases (e.g., purchase jewelry, dessert) is often viewed as non-virtuous. In fact, our pretest results suggest that consumers regard spending time on hedonic activities as being important in life, and that they are dissatisfied with the amount of time they are currently spending on these activities; by contrast, people are much less likely to consider spending money on hedonic purchases as being important in life, and are generally satisfied with their current level of monetary expenditure.

In eight experiments, we demonstrate that consumers are inclined to spend found time for hedonic (vs. utilitarian) purposes. Experiments 1-3 demonstrate this basic effect. Experiments 4-5 examine the definition of found time while replicating the findings from previous experiments. Experiment 6 provides evidence for a potential explanation of these findings: people tend to spend their found time on hedonic activities so as to regulate their work-life imbalance.

EXPERIMENT 1: MAGAZINE CHOICE STUDY

The primary purpose of Experiment 1 was to test the basic hypothesis that consumers are more willing to spend a windfall gain of time (vs. money) on hedonic (vs. utilitarian) activities.

Method

Participants (N = 123) imagined receiving an unexpected gain of either one hour or \$10 at their workplace. They imagined spend-

ing their gain to read (*time* condition) or purchase (*money* condition) either a hedonic magazine (i.e., TV Guide) or a utilitarian magazine (i.e., Kiplinger's personal finance magazine).

Results and Discussion

Consistent with our hypothesis, Chi-square results revealed that participants in the *time* condition were more willing to spend their gain on the hedonic magazine than those in the *money* condition (Time = 60.5% vs. Money = 41.7%, $p = .039$). The findings from Experiment 1 provide initial evidence that people are more willing to spend their windfall gain of time (vs. money) on hedonic activities. However, one might attribute this effect to potential idiosyncratic differences between the two magazines and the possibility that the hedonic option requires less effort than reading. We tested these alternative accounts in the next experiment.

EXPERIMENT 2. FILM CHOICE

Method

Participants (N = 104) were randomly assigned to one of four conditions in a 2 (resource: time vs. money) \times 2 (effort: none vs. additional) between-subjects design. Depending on the condition, participants either imagined hearing from their boss that they could leave an hour early from work (*Time* condition) or that they had won a \$10 lottery (*Money* condition). In addition, they were either told that they could use their gain to watch a short film at a streaming website (*no effort* condition) or that they could watch a film at a local theater 20 miles away (*additional effort* condition). The dependent variable was their inclination to watch one of two films: a short film (1) for education, or (2) for fun (11-point Likert scale).

Results and Discussion

Again, participants in the *time* (vs. *money*) condition were more willing to watch a fun film, irrespective of whether additional effort was required to engage in the activity ($M_{\text{time}} = 10.34$ vs. $M_{\text{money}} = 8.86$, $p = .052$) or not ($M_{\text{time}} = 9.84$ vs. $M_{\text{money}} = 8.17$, $p = .039$). Experiment 2 replicated the findings in Experiment 1 while controlling for the activity and varying activity goals. Because the above results suggest a ceiling effect, we employ a different DV in the next experiment.

EXPERIMENT 3A. A LARGER ACTIVITY CONSIDERATION SET

There were two main goals for Experiment 3. First, we employed a larger activity consideration set to systematically understand resource allocation. Second, we examined whether our findings are limited to situations where the windfall gain is small (vs. large).

Method

Lab participants (N = 41) were assigned to one of the two conditions in a mixed design: (resource: time vs. money; between-subjects) \times (amount: small, large; within-subject). Participants either imagined leaving work an hour early (*time* condition), or winning a lottery of \$12 (*money* condition). Next, they indicated how they would spend the gain by distributing the gain across eight categories that were composed of four hedonic and four utilitarian activities. Then, they imagined gaining five hours (\$60) instead of one hour

(\$12) and indicated how they would spend the larger gain by repeating the same distribution task.

Results and Discussion

Consistent with the prior findings, participants preferred to spend their windfall gain on hedonic activities both when the gain was small ($M_{\text{time}} = 65.67\%$ vs. $M_{\text{money}} = 42.06\%$, $p = .045$) and when it was large ($M_{\text{time}} = 63.67\%$ vs. $M_{\text{money}} = 37.94\%$, $p < .001$). These results replicated the pattern of results in Experiment 1 and 2 while employing a bigger activity consideration set. Importantly, the pattern emerged for both small and large gains.

EXPERIMENT 3B. REPLICATING THE FINDINGS WITH M-TURK REPLICATION

The goal of Experiment 3B was to replicate the findings from Experiment 3A by (1) using a non-student sample to further enhance the generalizability of our findings while (2) reducing the size of the consideration set to six different activity categories (we removed the “exercising for fun” and “self-improvement” categories as these two goals often overlap with each other).

Method

The experimental design was essentially the same as in Experiment 3A except that we changed the time/money ratio to \$10/1 hour (\$50/5 hour) to match the M-Turk pay rate ($N = 61$).

Results and Discussion

Again, participants preferred to spend their windfall gain on hedonic goals in the *time* (vs. *money*) condition, both when the gain was small ($M_{\text{time}} = 74.48\%$ vs. $M_{\text{money}} = 52.07\%$, $p = .022$) and when it was large ($M_{\text{time}} = 69.53\%$ vs. $M_{\text{money}} = 56.21\%$, $p = .085$).

Experiment 3C. M-Turk Replication (6 categories) – 1 hour vs. 3 days

Experiment 3C was designed to (1) examine whether our findings hold with an even greater amount of gain, and to (2) strengthen the study design by counterbalancing the order of the windfall gain amount (small vs. large).

Method

Participants ($N = 113$) engaged in the same activity-distribution tasks in Experiment 3B with the same mixed design, except that the amount of gain was \$10/1hour (small gain) and \$720/72 hours (large gain). The order in which participants read the small and large gain scenarios was counterbalanced.

Results and Discussion

Participants were more willing to spend their windfall time (vs. money) on hedonic activities both when the gain was small (60 min vs. \$10; $M_{\text{time}} = 68.44\%$ vs. $M_{\text{money}} = 52.45\%$, $p = .047$) and when it was large (72 hours vs. \$720; $M_{\text{time}} = 66.76\%$ vs. $M_{\text{money}} = 47.14\%$, $p < .001$). The order of the tasks did not affect the pattern of results ($p = .764$).

Together, Experiments 1 – 3 confirmed that people are more willing to spend their windfall time than their windfall money on hedonic activities. One may argue, however, that these findings can be attributed to any type of time gain, rather than the *windfall* gain of time. In the next two experiments, we address this issue by examining the definitional properties of “windfall” gain in our focal phenomenon. In particular, Experiment 4 compares the “not-earned (vs. earned)” aspect, and Experiment 5 compares the “unexpected (vs. expected)” aspect of the windfall gain.

EXPERIMENT 4. GAIN: NOT EARNED VS. EARNED

Methods

Participants ($N = 151$) were randomly assigned to one of four conditions in a 2 (resource: time vs. money) \times 2 (source: windfall vs. earned) between-subjects design. Participants either imagined learning that they could take four hours off due to a delay in supplier schedule (*windfall-time* condition) or their employer’s recognition of their own efforts (*earned-time* condition) at their workplace. Alternatively, participants imagined receiving a \$40 cash reward, either because the reward resulted from a change in commodity prices that improved firm profits (*windfall-money* condition) or in recognition of their efforts (*earned-money* condition). After reading one of the four scenarios, all participants allocated the 240 minutes/\$40 across six activity categories.

Results and Discussion

Consistent with prior findings, people were more willing to spend their windfall time versus money ($M_{\text{windfall-time}} = 62.83\%$ vs. $M_{\text{windfall-money}} = 49.56\%$, $p = .049$) on hedonic activities. People were more willing to spend their time on hedonic activities when it was earned (vs. windfall) ($M_{\text{earned-time}} = 87.89\%$; $p < .001$). In comparison, participants were directionally but insignificantly more willing to spend their money on hedonic purchases when it was earned (vs. windfall) ($M_{\text{earned-money}} = 55.74\%$, $p = .357$). These results suggest that time (vs. money) that is earned gives people a stronger justification to spend the gain on hedonic activities.

EXPERIMENT 5. GAIN: UNEXPECTED VS. EXPECTED

Experiment 5 examines another definitional property of “found time”: the unexpected (vs. expected) gain of time. We predicted that people are inclined to use their time (vs. money) for hedonic purposes only when the gain is unexpected (vs. expected). Second, we further examined the generalizability of the findings by demonstrating that our hypothesis holds even when the gain arises from a non-work source.

Procedure

Participants ($N = 183$) were assigned to one of four conditions in a 2 (resource: time vs. money) \times 2 (expectation: unexpected vs. expected) in a between-subjects design. All participants first imagined that they were members of YMCA. Participants in the *time* conditions first read that YMCA was closing that day and that they had one hour to engage in other activities. Half of these participants were told that they just learned about the closure (*time-unexpected* condition) while the other half were told that they had been aware of the closure for a week (*time-expected* condition). Participants in the *money* conditions imagined winning a \$10 cash prize awarded to local YMCA members; they were told either that they just learned about the prize (*money-unexpected* condition) or that they had been aware of the prize since a week ago (*money-expected* condition). After reading one of the four scenarios, all participants responded to the distribution task across six categories.

Results and Discussion

Consistent with prior results, participants were more willing to spend their unexpected gain of time (vs. money) on hedonic activities ($M_{\text{unexpected-time}} = 68.64\%$ vs. $M_{\text{unexpected-money}} = 47.12\%$; $p = .005$). However, people’s inclination to spend the gain of time on hedonic activities attenuated when it was expected (vs. unexpected) ($M_{\text{expected-}}$

$M_{\text{time}} = 53.33\%$; $p = .043$). There was no significant difference between the two money conditions ($M_{\text{expected-money}} = 55.83\%$, $p = .295$).

The results of Experiment 5 demonstrate that it is not simply a gain of time that leads people to spend on hedonic purposes, but rather an *unexpected* gain of time that leads people to indulge. Overall, results from Experiments 4 and 5 tapped into the definitional properties of found time. In Experiment 6, we seek evidence for a potential explanation of the pattern of results.

EXPERIMENT 6. EXPLAINING THE FOCAL PHENOMENON

We predicted that people prefer to spend their windfall time for fun because they generally under-spend their time on hedonic activities in life. If this were true, we would find an amplified effect among individuals who experience greater discrepancy between how much time they *want* to spend on hedonic activities and how much time they are *currently* spending on these activities. Further, these individuals, namely, those who experience “work-life imbalance,” would experience less guilt when deciding to spend their found time on hedonic activities.

Procedure. Participants ($N = 109$) either imagined being given an unexpected four-hour time off from work (*time* condition) or unexpectedly winning a \$40 lottery (*Money* condition) before completing a similar activity-distribution task across six activity categories as in the earlier experiments. Next, we asked participants how much guilt (3 items) they would experience when spending the gained four hour/\$40 on recreational (vs. work-related) activities. Lastly, we asked participants to report how they typically spend their time and money in each of three categories (“work/necessities” vs. “fun/recreational” vs. “others”) by distributing either 24 hours (*time* condition) or 100 points (*money* condition). They repeated the same procedure to indicate how they *ideally* would like to spend their time and money across the three categories.

Results and Discussion

Consistent with the prior findings, participants in the windfall *time* (vs. *money*) condition were more willing to spend their gain on hedonic activities ($M_{\text{time}} = 73.42\%$ vs. $M_{\text{money}} = 51.98\%$, $p < .001$).

Discrepancy in resource expenditure as a moderator. We examined whether the discrepancy between ideal and actual expenditure of the focal resource predicted participants’ spending decision. First, we calculated two discrepancy scores: (1) a time-discrepancy score = (ideal – actual amount of time spent on hedonic activities), and (2) a money-discrepancy score = (ideal – actual amount of money spent on hedonic purchases). Within the *time* condition, people who spent insufficient time on hedonic activities (e.g., greater time-discrepancy score) were more willing to spend their found time on hedonic activities ($p = .005$). Within the *money* condition, people who spent insufficient amount of money on hedonic purchases did not particularly want to spend their windfall money on hedonic purchases ($p = .431$);

Guilt as a mediator. A mediation analysis (Hayes 2012) revealed that people with greater time-discrepancy score experienced less guilt ($\alpha = .83$) in spending the found time on hedonic activities; the unexpected time gain allowed them to allocate more of their time to these activities ($CI = .11, 1.66$).

GENERAL DISCUSSION

Eight experiments revealed that consumers consistently prefer to spend their found time on hedonic activities (1) when they have both small and large activity consideration sets; (2) even when spending the gain requires “additional effort”; and (3) regardless of whether the gain is small or large. Further, the results suggest that people’s tendency to spend the time on hedonic activities (4) is more pronounced when the time is earned (vs. not earned), but (5) declines when the gain is expected (vs. unexpected). Furthermore, these effects are attributed to work-life imbalance, such that greater work-life imbalance leads to less guilt and a greater preference for spending found time on hedonic activities.

This research introduces the notion of “found time,” a resource that we encounter in our every day lives, but which has not been thoroughly investigated in prior research. In addition, we compare found time and windfall money to provide a better understanding of how expenditure decisions differ between these two resources. Furthermore, we find empirical evidence to suggest that people hold different norms regarding how time should be spent as supposed to how money should be spent; they attempt to use their found time to achieve a greater work-life balance.

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The Role of Implicit Theories in Evaluations of ‘Plus-Size’ Advertising

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EXTENDED ABSTRACT

The use of larger-sized models in advertising has become more popular in the wake of a substantial body of research documenting the negative effects of exposure to slim models on women’s self-esteem (Richins 1991; Wan, Chattopadhyay, and Leboe 2013) and body-satisfaction (Grabe, Ward, and Hyde 2008; Groesz, Levine, and Murnen 2002). Recent research has examined the effectiveness of larger-sized models in beauty and fashion advertisements, largely concluding not only that fashion models do not need to comport to current thin standards to be effective (Martin, Veer, and Pervan 2007; D’Allesandro and Chitty 2011; Papiés and Nicolaije 2012; Jansen and Paas 2014) but also that using average- or larger-sized models may be more socially responsible (Alessandro and Chitty 2011). Underlying much of this existing literature is the importance of perceived similarity and self-referencing in driving consumers’ positive responses to larger-sized models. Yu et al. (2011), drawing on research connecting perceived similarity to perceived model attractiveness (Horton 2003), found that perceived similarity to the model mediated female participants’ attitudes toward an advertised apparel brand. In the context of targeting plus-sized consumers, then, these findings suggest that larger-sized models should be especially appealing to plus-sized consumers, to the extent that the consumer is able to see herself in the model.

When evaluating their perceived similarity to the model, consumers may consider not only their objective body size, but also their subjective beliefs about the extent to which their body size may change in the future. Originally studied in the context of beliefs about intelligence, implicit theories about the malleability of one’s attributes have recently been extended to beliefs about body size (Burnette 2010). Entity theorists perceive their body size as relatively fixed and unchanging, while incremental theorists believe their body size to be temporary and malleable. Drawing on the conceptualization of implicit theories, we argue that individuals sharing an objectively similar body size with a model may differ in their subjective mental representation of how similar or dissimilar they are to the model in the advertisement. Specifically, we hypothesize that entity theorists will perceive more similarity with models who are objectively similar in size, while incremental theorists, in line with their overarching self-improvement goals (Nussbaum and Dweck 2008), will perceive greater similarity between themselves and objectively thinner models, as these models represent a desired, and possible, future body size. We further hypothesize that these differences in similarity participations will lead to differences in attitudes towards the advertised product.

A pretest identified a model that was perceived to be overweight, but not very overweight, or obese. In Study 1, participants completed self-report height and weight measures and a body-specific implicit self-theory scale embedded within several unrelated measures. Participants were then presented with a print advertisement featuring this model in a shift dress and were asked to indicate how much they liked the choice of model for the advertisement, as well as their attitude toward the featured dress. Although all respondents reported liking the brand’s choice of model, product evaluations were affected by the respondents’ size and implicit self-theory. Among respondents who believed their body size could be changed (incremental theorists), obese respondents liked the product marginally more than did overweight respondents. However, among respondents who believed

their body size to be fixed (entity theorists), obese respondents liked the product significantly less than did overweight respondents. Study 2 introduced perceived similarity as a mediator of these effects, examined the body-relevance of the advertised product as a potential boundary condition by using a single ad to advertise either a dress (body-relevant) or shampoo (body-irrelevant), and added purchase intentions as a behavioral dependent variable. Replicating the results of Study 1, Study 2 found that product attitudes and purchase intentions varied as a function of both the respondents’ body size and implicit self-theory. This relationship, in turn, was mediated by perceived similarity to the model. Among entity theorists, who believe that their body size is relatively fixed, perceived similarity to the model appears to largely depend on the objective similarity between the model and the consumer. However, incremental theorists, who believe their body size to be relatively malleable, appear to imagine themselves as thinner than they actually are, leading them to perceive similarity with the model when she has an objectively smaller body size. Additionally, the hypothesized effects were observed only when the advertised product was body-relevant. When the model’s body size was not relevant to the product being advertised (e.g., shampoo), the evaluation of perceived similarity to the model was no longer dependent on objective body size and implicit self-theory, and, as a result, these factors did not affect product evaluations.

Our work contributes to the literature on model body size by suggesting that what is considered an obtainable body size will vary among female consumers according to their current size and their beliefs about the malleability of that body size. Future work should examine whether perceived similarity, generally, and the effects of objective body size and implicit self-theory, specifically, similarly affect men’s responses to products advertised by male models of varying body sizes. As with female models, male models have traditionally conformed to a single body type. U.S. retailer Target has recently created a stir by using its first plus-sized male model to advertise products in the Big & Tall section of their website (Olya 2015). Additionally, a central question in the model body-size literature asks when consumers of all body types will be receptive to the use of plus-sized models. Future work should examine whether normal- and overweight consumers have equally positive responses to the use of larger-sized models in advertisements for non-body-relevant products.

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Behavioral Interventions to Reducing the Negative Consequences of Deferrals on Subsequent Blood Donation

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EXTENDED ABSTRACT

The American Red Cross (2014) argues that the number one reason donors give blood is because they “want to help others”. However, not everybody willing to donate blood is allowed to. The blood donation process requires individuals to register and to provide information about their health history and the places visited in a certain period. Only if all health conditions are fulfilled, a willing blood donor may give blood. However, too often not all conditions are fulfilled and individuals are either deferred forever (e.g., due to incurable disease) or *deferred for a temporary period* such as two months (e.g., due to low hemoglobin levels; one of the main reasons).

The number of temporary deferrals is substantial. Data provided by the German Red Cross (GRC) blood donation service shows that on average 11.1% of individuals showing up on any given day to donate blood are temporarily deferred. The likelihood of being deferred is especially high at a very early stage of a blood donor-life cycle, as inexperienced blood donors often do not know all health requirements. Medical research indicates that temporal deferrals reduce individuals’ likelihood to return at a later opportunity to donate blood, and do so significantly for first-time donors (Custer et al., 2007; Halperin, Baetens, and Newman, 1998). In one study, for example, only 21% of first-time donors returned within three years after being temporarily deferred for low haemoglobin levels compared to a 64% return rate among repeat donors (Hillgrove et al., 2011). Thus, the current research studies the life-saving question of how to better manage such temporary deferrals in order to increase individuals’ likelihood to return for blood donation at the next blood drive. Blood donation services worldwide struggle to solve this problem.

The current best practice approach of the GRC and blood services in many other countries is to give to deferred individuals the same thank-you-gift (e.g., a thank you-button or coffee mug with the GRC logo) that they give to individuals that donated their blood. Yet, the deferred individuals’ return rate is lower. Unlike individuals that donate their blood, deferred individuals have invested their time and effort to come to a blood drive and have expected to contribute to the greater good, potentially even feel a warm glow (Andreoni, 1990; Ferguson et al., 2012) without achieving these goals (Laran and Janiszewski, 2009); an experience that is likely to be frustrating and unfulfilling, and may even result in anger (Custer et al. 2007; Halperin, Baetens, and Newman 1998).

Blood donation services need to address these negative effects of deferrals in order to increase individuals’ return rate. The current research tests in an online (study 1) and in a field experiment (study 2) the impact of four different strategies that examine the effectiveness of (1) appreciation, (2) reciprocity, (3) commitment, and (4) warm glow on the intention to return for blood donation and individuals’ actual return rate.

In study 1, we confronted 1,641 participants with a scenario in which a friend wants to donate blood and is deferred by the doctor after 30 minutes wait time due to a low hemoglobin level-test result. We tested between participants potential new deferral strategies of the GRC. We examined the four types of strategies (appreciation, reciprocity, commitment, and warm glow) across 12 conditions. For example, appreciation was tested in form of the current best practice

of handing out a thank you-button (control) versus a verbal “Thank you” from the medical doctor. Reciprocity was tested among others in the form of providing the friend with medicine that will increase the iron level in the blood versus a leaflet containing information about iron deficiency. Commitment was tested in the form of handing out a new appointment card. Finally, for the warm glow strategy, we tested the effectiveness of various alternative good deeds offered to the friend, such as a monetary donation or painting a part of a picture for children in a cancer hospital.

Focusing on participants with blood donation experience (N = 1,002), regression results indicated that at least one instantiation of each of the four strategies was expected to significantly increase the likelihood of the deferred friend to return for blood donation (in comparison to one of the current best practice approaches of the GRC).

In study 2 we were able to test three strategies in the field. Based on the results from study 1 and practical limitations (the GRC does not plan to hand out donor cards to first-time visitors that got deferred), we decided on observing actual donation behavior of deferred individuals across the following two strategies in addition to control-appreciation (a coffee mug gift; one of the current best practice approaches of the GRC): commitment (new appointment card) and warm glow (offering to paint a small square within a big picture for a children’s hospital). The GRC provided the data about returned and non-returned donors after a period of four months when another donation was theoretically possible. The final sample consisted of 85 deferred donors who received either an appointment card or could paint a picture, and 865 deferred donors who received a coffee mug. We ran logistic regressions to estimate the propensity scores for our subsequent matching procedures. Our findings consistently indicate that providing the donor with a new appointment or an opportunity to do an alternative good deed results in significantly higher rates of return (71% and 73%, respectively) after a deferral compared to the current practice of handing out a thank you gift (52% and 53%, respectively).

The current research addresses a major social problem in blood donations and tests strategies to re-motivate deferred individuals to return. Together, in two studies we find that recognizing the effort of the deferred individual by handing the individual a thank you gift leads to inferior results compared to simply setting a new appointment or offering to spend some more time to paint a picture for a children’s hospital. Our results provided clear managerial guidelines that are now being executed by the GRC blood donation service.

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Do I Get Stronger When I Stop to Eat My Spinach? The Impact of Planned Breaks on Self-Regulation

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EXTENDED ABSTRACT

Past research has outlined the importance of planned deviations on goal-pursuit (Coelho do Vale, Pieters, and Zeelenberg 2016). However, no specific research has focused specifically in understanding the impact of planned breaks on consumers' self-regulatory ability. That is the aim of the present research.

Previous research has highlighted that although individuals acknowledge the importance of engaging in virtuous behavior, they often find it difficult to do so (Ein-Gar 2015). The reason for this is typically related with people's inability to self-regulate themselves, with individuals being more likely to succumb to various flawed decision strategies when lacking self-regulatory resources (Baumeister, Sparks, Stillman, and Vohs, 2008). In the dieting domain, for example, it has been shown that although dieters can resist temptations in the short term, they tend to fail on subsequent tasks of resisting to temptations, because of the reduced resources that are available for self-regulation (Vohs and Heatherton 2000). In line with this, Wansink and Chandon (2014) highlighted the need to help consumers develop strategies to persist in their dieting quests. Moreover, it has also been shown that several factors can influence consumers' ability to be able or not to self-regulate behavior. For example, recent work from Job and colleagues (2015) suggests that individuals who believe that willpower is an abundant resource tend to exhibit better self-control after demanding tasks. Other work from Salerno and colleagues (2015) indicated that for consumers with self-regulatory goals the feeling of pride experienced after self-regulatory accomplishment can discourage their engagement in further self-regulatory tasks, licensing them to indulge. Also Walsh (2014) showed a boundary effect of self-control, but this time with findings suggesting that goal priming can attenuate the depletion effect on a subsequent self-control task.

Despite all these previous studies, more research needs to be conducted to offer consumers strategies they can implement to better exert self-regulation and attain their goals. For example, findings from Campbell and Warren (2015) stress the importance of goal monitoring, since consumers tend to exhibit a progress bias in goal-pursuit, with expectations of goal attainment moderating the progress bias.

The present research builds on the idea that when consumers exert effort in engaging in virtuous behavior, self-regulatory resources become depleted, decreasing the ability to proceed with further self-regulatory activities (Baumeister 2002; Muraven and Baumeister, 2000; Schmeichel and Baumeister 2004). Relaxation or deviation from virtuous activities may then be needed in order to allow the replenishment of self-regulatory resources and to allow individuals to proceed with self-regulatory activities. For example, Gailliot and colleagues (2007) findings revealed that the exertion of self-control in tasks of varied nature reduced blood glucose levels and that restoring the level of glucose to a sufficient level typically improves self-control (Gailliot and Baumeister, 2007). We propose then that deviations from virtuous or goal-consistent behaviors, because of the potential hedonic valence of these activities, may help consumers' regain self-regulatory resources, allowing them to persist in further self-regulatory tasks.

We claim however that it is crucial that these deviations are planned because unplanned deviations might easily be interpreted as failures and might lead to a "what-the-hell" effect (Cochran and Tesser, 1996) with self-regulatory behaviors being interrupted. There-

fore, in a similar vein to Popeye, we propose that to plan in advance to stop once in a while to "eat my spinach" may be helpful, making consumers stronger to continue with their self-regulatory quests. Findings from two experimental studies support this idea revealing that breaks can be a powerful strategy to increase consumers' ability to proceed with further self-regulatory tasks.

In study 1, we tested our predictions using an objective behavioral measure of self-control to assess self-regulatory ability effects of planned goal deviations. We used the maximum amount of time that participants can squeeze a handgrip, building on prior depletion research (Muraven et al., 1998). In study 2, using a similar procedure to the previous study in which participants were asked to list their thoughts while avoiding to think on a white bear, we assessed consumers' reported self-regulatory resources. Both studies were computer-based (Authorware 6.0, Macromedia Inc. 2001).

Importantly, the fact that self-regulatory tasks were performed just for a few minutes in both experiments and that even so we found significant effects rules out the possibility that our findings could have been explained by simple fatigue. It is striking that mental thought control task exerted for a just brief period of time interferes with participants' ability to perform a physical task--the self-regulation measure. The consistency of findings across the experiments indicates that indeed the inclusion of self-regulatory breaks leads to less strain on self-regulatory resources than no-break processes, thus contributing to higher likelihood of proceeding with self-regulatory tasks. The two experiments underline the importance that self-regulatory misaligned activities are planned and incorporated *a priori* in the self-regulatory process.

This finding supports our prediction that prior knowledge of the possibility of engaging in self-regulatory breaks increases the ability to proceed with further self-regulatory tasks. Participants in the planned break group showed higher self-regulatory ability than participants that performed exactly the same task sequence but did not know in advance the possibility of engaging in the self-regulatory break during which they could engage in tasks of different nature.

Our results demonstrate that when consumers incorporate in their self-regulatory pursuits the possibility of engaging in planned-misaligned activities this enhances their self-regulatory ability, which may also enhance their likelihood of long-term goal attainment. This is new, and it points to the importance of flexibility in tasks that involve the continuous exertion of self-regulation. Unplanned misaligned activities (the "breaks") may feel as failures and thus set a "failure cascade" in motion, with a "what the hell" effect as result, such that self-regulatory tasks are completely abandoned. Our results suggest that quite the contrary happens when breaks are planned, strengthening self-regulation and showing that indeed it may be a good strategy to stop and eat spinaches along the self-regulatory quest.

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Consumer Endorsements: When and How Do Consumers Remember Their Own Misleading Recommendations?

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EXTENDED ABSTRACT

Consumers are often encouraged to recommend brands (i.e. “like us” on Facebook). On some occasions, particularly when incentivized, consumers may endorse brands that they don’t really like very much. An interesting question is when and how do consumers remember their own misleading recommendations? Remembering previous endorsements, and the veracity of the endorsements, is important as the remembered endorsements may affect future decisions and word-of-mouth. The research reported here contributes to the growing interest in consumers lying to other consumers and to marketing/service professionals (Anthony and Cowley, 2012; Argo and Shiv, 2010; Argo, White, and Dahl, 2006; Sengupta, Dahl, and Gorn 2002) and the ensuing consequences. We discuss deception, arousal, and autobiographical memory research to support our hypothesis that heightened arousal, caused by the act of lying, improves memory for the misleading information communicated.

DECEPTION AND AROUSAL

Most people consider themselves to be moral (Mazar, Amir, and Ariely, 2008) and are motivated to behave in a manner consistent with their moral identity (Stets and Carter, 2011). However, the pursuit of social or personal goals often requires the communication of deceptive information (Mazar and Ariely 2006; Mazar and Hawkins, 2015). Given that communicating deceptive information in the form of telling a lie is believed to be immoral (Spranca, Minsk, and Baron, 1991), a conflict emerges for the liar (Mazar and Ariely, 2006). Moral conflict has been shown to increase the activation of the autonomic nervous system, or arousal, in the liar (Karim et al. 2010).

It is important to note, that not all lies are alike with respect to the conflict created and the resulting arousal felt by the liar. Previous research has made a distinction between lies of commission where details, known to be false, are communicated as true and lies of omission where details are purposefully concealed with the intent to mislead (Bok, 1978). Importantly, people consider lies of commission to be more immoral (Spranca, Minsk, and Baron, 1991) and as such, commission lies are associated with a greater discrepancy between moral self and the act of lying. Given the increased conflict between what the liar believes to be a moral action and how the liar is behaving (Mazar, Amir, and Ariely, 2008), arousal should be greater for commission lies compared to omission lies.

AROUSAL AND MEMORY

Autobiographical memory research has shown that emotionally-arousing events are better remembered than non-emotional events (Conway et al. 1994). One explanation for improved memory of emotional event information is that arousal narrows attention and favors processing of the emotion-eliciting information, which results in better memory for details central to the emotional aspects of an event compared to details peripheral to the emotional component of an event (Burke, Heuer, and Reisberg 1992; Easterbrook 1959). Based on this reasoning, we hypothesize that when lies involve heightened arousal due to a moral conflict, memory for the lie should be more accurate because the lie is central to the communication.

Another theoretical explanation for improved memory of emotional events is priority binding (Hadley and MacKay, 2006). According to priority binding, emotional arousal during encoding

encourages stronger binding of the information central to the emotional event to the episodic context (peripheral, non-lie information) because it facilitates retrieval. Therefore in contrast to an attention-narrowing account, a priority-binding explanation would predict that arousal felt when lying should enhance memory for both central and peripheral information. We include tests and measures to reveal whether attention narrowing or priority binding better explains the data.

PRESENT RESEARCH

In four studies we provide evidence that consumers who offer misleading endorsements (to gain financially or because they are under social pressure) have significantly more accurate memory for the content of their false recommendation when the consequences of their lie are greater. In each study participants record a false recommendation for a marketer (study 1) or a friend (studies 2-4). We manipulate (or measure) the consequences of the lie and measure memory for the recorded message one day later. In studies 1 and 2, lies of commission (pre-tested to be more consequential than omission lies in terms of moral conflict, $n = 51$) result in more accurate memory for the content of the lie than lies of omission. In studies 3 and 4, we manipulate the consequences directly via a stakes manipulation adapted from DePaulo, Lanier, and Davis (1983) and find the same result. Results from all studies show that liars in high consequence conditions remember the content of their false recommendation more accurately and that the effect is mediated by heightened arousal. We also show that that memory for peripheral details is less accurate for liars in high consequence conditions. In other words, we find a trade-off between memory for central and peripheral details which supports the attention narrowing explanation. The results essentially eliminate the priority binding explanation. We also eliminate the alternative explanation that any type of arousal improves deception memory.

CONCLUSION

The results reported here offer insight into when and why consumers remember – or forget – the misleading endorsements they provide. Given that arousal heightens and attention narrows at the point of communicating the misleading endorsement, particularly for liars by commission, it is possible that from a moral balancing perspective (Nisan, 1991), the consumer may attempt to ‘compensate’ or ‘correct’ for their inflated memory for the deceptive endorsement, by communicating less positive recommendations or word-of-mouth about the brand in the future. It is also possible that liars by omission actually become more positive about the brand and behave more like an advocate. Our findings provide the first step towards understanding how deceptive endorsements affect consumer behavior by focusing on consumers’ memory biases for the misleading information they have communicated. In addition to examining the consequences for WOM communication, future research will determine how memory for false endorsements affects consumers’ satisfaction for the brand/service provider, repeat patronage and loyalty.

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Fields of Transcultural Practices: The Role of Religion in Multicultural Marketplaces

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EXTENDED ABSTRACT

While previous studies of the intersections between religion and consumer behavior have largely conceptualized religion as a source of marketplace differences (Delener 1994; Engelland 2014; Hirschman 1983; Minton et al. 2015; Wilkes et al. 1986), based on a view of religion as stable belief systems within homogenous, ordered, and bounded consumer cultures, what is less developed is an account of the role of religious practices in light of increasing cultural complexity. In particular, there is further scope to consider the role of religion in relation to the dynamics and complexities of multicultural marketplaces (Demangeot et al. 2015; Jamal 2003; Kipnis et al. 2014). Specifically, what role does religion play in shaping multicultural marketplaces?

To redress this theoretical gap, this paper draws on the concept of transculturality (Welsch 1999), shifting our attention beyond religion as a stable belief system toward religion as a field of transcultural practices. The concept of transculturality can be understood both as a distinct theoretical perspective of cultures and as a unique approach for exploring cultural dynamics (Flüchter and Schöttli 2014). Transculturality contests the traditional Herderian perspective of cultures, where cultures are conceived as self-contained and homogenous entities delimited from external influences (Herder 1966). Instead, transculturality posits that cultures are inherently dynamic, hybridized, and deeply entangled. Whereas other approaches would be either concerned with comparing and contrasting one culture to another (i.e., a cross-cultural approach) or exploring ways in which the ‘clashes’ between separate cultures can be mitigated (i.e., an intercultural approach), a transcultural approach involves understanding the beliefs and practices that transcend borders (Brink 1994) and fostering cultural interconnections at a more abstract level than the content and meaning of individual cultures.

Our conceptualization of religion as a field of transcultural practices is empirically grounded in a hermeneutic analysis (Thompson 1997) of depth interviews with 24 Southeast Asian immigrant consumers living in Auckland, New Zealand. To enrich and deepen the consumer narratives, visual and reflexive methods were deployed. First, each participant was asked to select objects and photographs which represent their experiences of migration (Zaltman and Coulter 1995) and use drawings to represent their social networks and social identities (Bagnoli 2009). Second, each participant was interviewed twice in line with open narrative reflexivity (Thompson et al. 1998). In their second interview, participants were presented with the researchers’ emerging interpretations and provided an opportunity to correct, qualify, or further deepen their initial responses.

Our analysis identified two interrelated sets of transcultural practices through which religion shapes multicultural marketplaces. The first set of practices facilitates entry into multicultural marketplaces, by easing the process of border crossing and enabling social capital development. While transnational migration is a challenging process requiring adaptation and socialization on multiple fronts (Peñaloza 1994), religious fields offer a modicum of stability through the stresses of transition. In doing so, religious fields ease the process of border crossing for consumers entering into a new marketplace. An additional mechanism through which religions can facilitate an entry into multicultural marketplaces is by enabling the development

of social capital, which has been shown to be a crucial ingredient in fueling integration into a new society (Luedicke 2011; Üstüner and Holt 2007).

The second set of practices facilitates mutual entanglement within multicultural marketplaces, by fostering intercultural competency development, sharing of cultural consumption rituals, and enabling the flows of material resources. First, through the development of skills and experience in communicating with people from other cultural backgrounds, religious practices enable participants to observe, learn, and practice intercultural competency (Demangeot et al. 2013). Second, mutual entanglement is further facilitated through the sharing of cultural consumption rituals across cultural boundaries. Finally, religious practices facilitate transcultural entanglement through the diffusion of material resources, reflecting the local- and global-scale “travel of material things in everyday life” (Brembeck et al. 2015, 1).

This paper helps to advance the growing literature on religion and marketing in two ways. First, beyond the dominant treatment of religion as a ‘micro-culture’ (Cleveland et al. 2013; Hirschman et al. 2011; Lindridge 2005; Minton et al. 2015; Steenkamp 2001), a transcultural approach moves religion beyond a view of each religious tradition as a bounded system. Instead, religion emerges as an open and dynamic system which is deeply contextualized and whose function morphs to meet the character of the cultural context in which it is embedded. Second, in addition to the present focus on how religion produces differences in marketplace behaviors (Delener 1994; Engelland 2014; Hirschman 1983; Minton et al. 2015; Wilkes et al. 1986), this paper also sheds light on the transcultural properties of religion which are held in common across diverse religious traditions. Rather than becoming a dividing force in contemporary multicultural marketplaces, religious fields are also revealed to be hybridized and hybridizing fields of transcultural flows. Overall, in the context of multicultural marketplaces, religion emerges as a key site for the performance of practices which fuel transcultural dynamics.

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Boundary Crossing and the Diffusion of Cultural Innovations

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EXTENDED ABSTRACT

This research examines the development of a musical scene in Croydon, UK in the late 90ies and early 2000s (the FWD>> scene), which later developed into the dubstep music genre (in the early-to-mid 2000s), and was integrated into the popular music category of Electronic Dance Music (EDM) (in the early 2010s). I concentrate on the transference, translation, and transformation of the knowledge associated with this innovative new sound between a local scene, a trans-local niche, and a mainstream market.

The emergence of electronic music in the popular music market offers an ideal field site to inquire about the role of consumers in the creation of objects that foster the preservation of cultural innovations and their transformation to fit existing mainstream market conventions.

Electronic music, an umbrella category that regroups a number of different genres, started in the late 70s and early 80s in the U.S. Since then, more than 300 genre names have been alluded to in this category (McLeod 2001). Some of these genres were started in local clubs, such as the Warehouse for house music (Reynolds 2012), the Blue Note for drum 'n' bass (Burns 2013), and the Happy Days club nights for UK garage (Titmus 2014), before moving to the niche of electronic music, and then to the popular music market. A number of these genres are still being enjoyed by consumers and produced by musicians. Some of the more popular genres are now the anchoring elements of the US\$6B market constructed around EDM.

I answer the two following research questions: first, what actions do niche consumers and prosumers perform to foster the creation of a boundary infrastructure and second, how does a boundary infrastructure facilitates the crossing of the boundaries between each market level. Previous research has seldom examined the market processes underlying the accumulation of cultural innovations and ensuring their continuation over time, instead concentrating on the intentional efforts of market actors in enacting changes (see Dolbec and Fischer 2015). Moreover, the diffusion of cultural innovations is often perceived as the result of the active work of market actors (Crane 1999; Lena and Peterson 2008), which relegates to the background the role of the knowledge-based infrastructure necessary for the discussion of such innovations across a number of social worlds

This research project aims at contributing to the extant literature by showcasing the role of consumers and to producers in the construction of a boundary infrastructure and fleshing out dynamics happening at the boundaries between three different market levels: local, niche, and mainstream. Such an approach provides a new conceptual lens to the study of the diffusion of innovation and the evolution of market systems (e.g., Giesler 2008; 2012; Martin and Schouten 2014).

My findings emerge from the analysis of an extensive qualitative data set comprised on 14 long and 32 short interviews as well as a 14 months netnography, and archival data from newspaper articles (369), secondary interviews (101), and conference panels (32). I iterated back-and-forth between the data collection and the analysis and triangulated my findings between sources and time periods. My findings were devised both from a theoretically-grounded approach and an emergent one. This approach follows existing recommendations in the literature (Belk, Fischer and Kozinets 2013; Langley 1999; Spiggle 1994).

I adapt Carlile's (2002, 2004) framework on boundary crossing to explain how actors construct and use a boundary infrastructure,

effectively creating a memory for a market, to bridge all three market levels. I explain how the interactions between consumers and producers lead to the creation of a boundary infrastructure, a "stable regime of boundary objects" (Bowker and Star 2000: 313) that facilitates the bridging of the boundary separating two "worlds" (such as in this case a local market and a transnational niche market). First, knowledge crosses an information-based syntactic boundary through knowledge transfer through the use, for example, of taxonomies, storage, and retrieval technologies. For example, as dubstep was emerging as a local innovation from the city of Croydon, a consumer created an important library of pirate radio shows that became a go-to destination for consumers interested in learning about dubstep. I show how actors' efforts to archive and catalog the productions and evolution of the FWD>> sound facilitated the knowledge crossing from Croydon to the greater niche of electronic music. Second, knowledge crosses a meaning-based semantic boundary through knowledge translation through the use, for example, of cross-functional teams (or in this case niche consumption communities) and boundary spanners. A key point here is the generation of a shared understanding for consumers and producers located on each side of the boundary. I show how the creation of niche consumption communities was an important step in the creation of shared understanding. Third, knowledge crosses a politically based pragmatic boundary through knowledge transformation through the use, for example, of objects and models that demonstrate possible form, fit, and function (Carlile 2004). Boundary objects such as prototypes and exemplars contribute to the crossing of the pragmatic boundary. I identify the creation of a compilation by London superclub Fabric as a key moment in the transformation of dubstep which moved the center of the community away from Croydon and allowed for an influx of producers interested in developing the new sound highlighted on this compilation. It had as a consequence the reinterpretation of the power dynamics and the transformation of the sound into what is now known as dubstep.

This paper repositions the work of the online conversations and initiatives of consumers by highlighting their crucial role in creating a boundary infrastructure that participates in the diffusion of innovation. This represents a departure of the role of consumers' online work, which previously has been conceptualized as being individualistic and centered on the self (e.g., Belk 2013), or centered on the creation of innovations (e.g., Kozinets, Hemetsberger and Schau 2008). This work is of interest for a variety of scholars studying market system dynamics, the diffusion of innovations, digital marketing and the work of consumers.

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Consumer Co-Creations: Understanding Disappointment with Co-Created Products

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EXTENDED ABSTRACT

Close brand relationships and consumer co-creation opportunities are usually positive for consumers and companies. However, not all co-creation experiences are successful and positive. We explore the 'dark' side of consumer co-creation and the negative reactions, such as embarrassment and failure attribution, felt by consumers and how they can impact self-esteem.

Consumer participation in the co-creation of products is at an all-time high and has yielded a wide range of positive outcomes attributed to product customization (e.g. Franke, Schreier, and Kaiser 2010; Moreau and Herd 2010; Mochon, Norton, and Ariely 2012). While the positive effects of successful co-creation have been explored, attempts at co-creation and designing products are not infallible. We investigate how consumers react to disappointing co-created products by exploring consumer reactions following disappointing (or satisfying) co-created items as moderated by prior brand relationship and whether this can be attenuated.

The branding literature has established that consumers often form self-brand connections and that these brands are then incorporated into one's self-concept (e.g. Escalas and Bettman 2003). Researchers have begun investigating how consumers with strong self-brand connections react to failures (Donovan et al. 2012; Cheng, White, and Chaplin 2011). Donovan et al. (2012) found consumers are more likely to forgive a brand when they have a strong self-brand connection prior to the failure. Cheng et al. (2011) explored how self-brand connections influence consumer reactions to negative information about brands they are close to, demonstrating that consumers do not want to accept this information because this would hurt the self as well as the product. Through two studies we examine how consumers react to co-created failures based upon prior self-brand connection.

Weiner, Russell, and Lerman (1978) proposed two types of emotional reactions following a critical incident. First, people experience general, undifferentiated responses of positivity versus negativity. Second, a more complex emotional reaction is experienced not only to the event, but also to the self-relevant implications of a positive or negative event. Thus, one is not just responding to the valence of the event, but to what that event is thought to imply about the self (Brown and Dutton 1995). Individuals' responses to these emotions are more likely to be experienced along with internal attributions rather than external attributions (Weiner, Russell, and Lerman 1979). Thus, we predicted that those with close self-brand connections feel more self-relevant emotions when a co-created product disappoints (Study 1) and that the relationship between self-relevant emotions and self-brand connection are mediated by attributions (Study 2). As previous research has shown, when a consumer has a close relationship with a brand and this brand is portrayed negatively, the consumer's self-esteem can be damaged (Cheng et al. 2011). We predict that consumers with a close self-brand connection will show decreased self-esteem when they make internal attributions following the failure.

Study 1 was designed to test the emotional reactions to a co-created product design (successful/unsuccessful) and the prior relationship with the brand (close/distant). We operationalized this by having participants respond to a scenario that involved either a successful or an unsuccessful customized design of Nike shoes (N=90). A significant interaction of outcome and self-brand connection was observed

on negative emotional reactions: shame ($\beta = .25$, $SE = .11$; $t(86) = 2.31$, $p = .02$) and embarrassment ($\beta = .24$, $SE = .13$; $t(86) = 1.93$, $p = .05$). Spotlight analysis of the continuous measures confirmed that those with prior close self-brand connections were more ashamed ($M_{close} = 3.80$ and $M_{distant} = 2.90$) and more embarrassed ($M_{close} = 4.24$ and $M_{distant} = 3.32$) by their customized failure in the unsuccessful scenario ($p < .05$) for both emotions. Study 1 demonstrates that close self-brand connections increase the negative emotions such as embarrassment and shame following a failed customization.

Study 2 examined the relationship between emotions and attributions in response to a failed co-created product. We wanted to understand how internal and external attributions would influence reactions to a failure based upon prior brand relationship and explore the impact of an inoculation condition. We focused on the negative aspect of an online customization consumption experience, and participants were randomly assigned to the normal or inoculation condition. In the inoculation condition, participants were informed that items may appear differently on their screen, due to color differences, brightness, etc. We measured self-brand connections, using the Inclusion of the Other in the Self (IOS) measure (Reimann and Aron 2011), attributions of locus and control, emotional responses of shame, embarrassment, self-consciousness, and state self-esteem.

We found that attributions of control mediated the relationship between IOS and shame with a 95% confidence interval excluding zero (-.15 to -.001) and the interaction of IOS x locus of control demonstrated how attributions and brand relationship interact on feelings of shame ($\beta = -.17$, $SE = .08$; $t(48) = -2.1$, $p = .04$). If the failure was attributed to the self and there was a close brand-self connection, shame was highest ($M_{close} = 4.60$ versus $M_{distant} = 2.62$). However, when the failure was attributed to the brand, no significant effect was observed for shame ($M_{close} = 2.09$ versus $M_{distant} = 2.35$). Thus, attributions were influencing negative self-referencing emotions. However, when the inoculation was introduced, this effect completely disappeared ($p = .70$) and the mediation was also insignificant (95% confidence interval was -.03, .24). Next, we examined whether attributions and self-brand connections affected state self-esteem. We found a significant interaction of attribution x self-brand connection on state self-esteem ($\beta = .07$, $SE = .04$; $t(48) = 2.02$, $p < .05$). Again, when the inoculation was introduced the interaction was not significant ($p = .48$).

Next, two sequential mediations using PROCESS Model 6 (Hayes 2012) were performed to examine whether close relationships, internal attributions and emotions affected felt state self-esteem. We found significant mediation from IOS → attributions → emotions → self-esteem, with a 95% confidence interval excluding zero (.001 to .056) (all other paths insignificant). Next, using multiple self-critical emotions estimated the mediation IOS → attributions → Shame → Self-consciousness → State self-esteem. We found a significant three mediator sequential mediation with a significant 95% confidence interval (.0005, .0358) and all other paths insignificant. Thus, the mediation analyses provided clear evidence of how disappointing co-created products can affect state self-esteem. Neither sequential mediation was significant when the inoculation was introduced.

Overall, our results provide novel and significant insights into a growing form of consumer-brand interactions. We documented new findings relating to self-brand connections, brand co-creations and

how attributions can influence self-esteem. Additionally, a managerial actionable inoculation was introduced that successfully attenuated the effects of attributions and self-brand connections. When the inoculation was introduced, all interactions and mediations disappeared, as expected. Those with close self-brand connections no longer attributed the failure to the self and, thus, did not experience a dip in self-esteem. They were able to attribute the failure to a technology failure instead.

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Reducing Uncertainty by Increasing It: How Inducing Uncertainty in Uncertainty Appraisals of Reviewer Trustworthiness Attenuates Bias Correction and Product Devaluation

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EXTENDED ABSTRACT

We investigate how consumers process product reviews written by other consumers (i.e., “user-generated content” or UGC reviews). Though some consumer behavior research investigates the impact of review content on readers (e.g., Villanueva, Yoo, and Hanssens, 2008) the research does not examine how information that accompanies reviews influence processing.

Reviews are often accompanied by additional auxiliary-information such as information about the reviewer (e.g., if the reviewer is a novice or expert) or review generation process (e.g., if the reviewer was paid to write the review). In this research, we investigate when and why uncertainty induced by auxiliary-information will and will *not* carry over to adversely impact consumers’ evaluations of reviewed products. This is important because UGC reviews can be useful to consumers when evaluating products. However, concerns regarding reviewer trustworthiness often undermine the utility of UGC reviews. Thus, this research investigates the processing of UGC reviews under uncertainty, and when and why its adverse effect on judgments is mitigated.

Despite extensive research on source credibility in the context of persuasive communications (e.g., Sternthal, Dholakia, and Leavitt, 1978; Kang and Herr 2006) and WOM (e.g., Herr, Kardes, and Kim, 1991), little is known about the role of uncertainty in consumers’ processing of UGC reviews. Though it is obvious that uncertainty regarding source trustworthiness should result in information discounting, it is unclear when and why this will *not* occur. This is important because source-related uncertainty undermines review usefulness. We theorize that metacognitive processing of source-related uncertainty can determine when it will adversely impact judgments. Such processing entails thinking about or elaborating on uncertainty (i.e., doubting one’s doubts). We propose that merely thinking about uncertainty, can mitigate its adverse effect on product evaluation. This occurs without having to establish or defend reviewer credibility or trustworthiness. Instead, we show that “mere thought” can lead to uncertainty about source-related uncertainty, which undermines its impact on judgments. Of course, elaborating on source-related uncertainty could also solidify doubts, thus enhancing its adverse effects on judgments. As such, it is shown that the mere thought effect depends on whether source-related uncertainty is integral (enhance) or incidental (attenuate) to judgment formation.

In **study 1**, we use field data collected from Amazon.com and exploit a natural experiment across a diverse set of products. For each product we collected both uncertainty-inducing reviews (where it is disclosed that reviewers were incentivized) and reviews that do not induce uncertainty (without any uncertainty-inducing auxiliary-information). For uncertainty inducing reviews, reviews of products that are associated with high elaboration (because consumers are highly involved in the purchasing decision) were perceived as more helpful than reviews of products that are associated with low elaboration ($b=1.35$, $t=2.69$, $p<.02$). There was no difference in the perceived helpfulness, due to elaboration, for reviews that do not induce uncertainty ($b=.01$, $t=.02$, $p=.98$).

In **study 2** we consider when elaborating on source-related uncertainty will *not* adversely affect judgments. We predicted that participants told that incentivizing reviews is common practice would be *more* inclined to doubt their uncertainty in the trustworthiness of the reviewer when they spend time elaborating on their uncertainty. This occurs because it is unclear whether the reviewer was incentivized because he/she expected payment or because the company wanted to bias the review. In contrast we predicted that participants who are told that incentivizing reviews is uncommon practice would be *less* inclined to doubt the validity of their uncertainty, regardless of how much time they spend elaborating on it.

We tested whether the effect of incentive disclosure (paid=1, not paid=-1) on product evaluation through uncertainty appraisals was moderated by payment norm (payment-uncommon=-1, pooled payment-common=1) and evaluation time. As predicted, in the payment-common condition there was a significant negative indirect effect of disclosure on product evaluation through uncertainty when evaluation time was lower (-1 SD; indirect effect=-.31, 95% C.I.=[-.44, -.17]), but not when evaluation time was higher (+1 SD; indirect effect=.02, 95% C.I.=[-.10, .19]). In the payment-uncommon condition the negative indirect effect of incentive disclosure on product evaluation through uncertainty was significant when evaluation time was lower (-1 SD; indirect effect=-.21, 95% C.I.=[-.40, -.02]) and when it was higher (+1 SD; indirect effect=-.30, 95% C.I.=[-.57, -.08]).

In **study 3** we consider when elaborating on source-related uncertainty will adversely affect judgments. We show that uncertainty only influences judgments when elaboration renders it integral (i.e., when uncertainty is deemed to be credible and useful in judgment formation). Building on study 1, this effect is explored using auxiliary-information about whether or not a reviewer was paid. Consistent with our hypothesis that uncertainty should not be credible in order for it to become incidental when elaborated upon, some participants were told the payment source is a nonprofit organization that does not stand to benefit from a favorable review. We expected to *not* find an uncertainty-mediated effect of this incentive disclosure on product evaluations when the review is positive and when the uncertainty is thought through (high elaboration), because the uncertainty will not be credible. This was also predicted for participants who were not told that the reviewer was paid to write the review. Conversely, some participants were told the payment source was the product developer or seller. Since these sources stand to benefit from a positive review, elaboration on source-related uncertainty was expected to render uncertainty integral to judgment formation. The silent and paid by nonprofit conditions were pooled in the analysis (-1) as were the developer and seller conditions (1). We find a significant negative indirect effect of disclosure, through uncertainty, on product evaluations when elaboration was high (95% C.I.= [-.14, -.03]), but not when elaboration was low (95% C.I.= [-.10, .01]). In other words, when elaborating on uncertainty renders it integral in judgment formation merely thinking about source-related uncertainty makes it important.

This research contributes to the UGC reviews and WOM literatures by examining how consumers process UGC reviews under

uncertainty and, when and why source-related uncertainty distorts the influence of reviews on consumer product evaluations.

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Reminders of the Sun Influence Men's Attitude towards Luxury Products

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EXTENDED ABSTRACT

Consumers purchase luxury products for various reasons including expressing personal values (Richins, 1994) and mimicking successful others (Mandel, Petrova, & Cialdina, 2006). An evolutionary perspective suggests different motives; females seek mates who have resources that help provide for their offspring (Buss & Schmitt, 1993). Thus, males use luxury products to signal their resources and attract females (Schmitt & Buss, 1996). When motivated with mating goals, males prefer luxury products (Griskevicius et al., 2007; Saad, 2007). In this research, we investigate how a nature related variable associated with human mating can influence men's preference for luxury products.

The different seasons and human conception are correlated (Roenneberg & Aschoff, 1990a). Conception peaks during the summer months (Lam & Miron, 1994). Photoperiod- length of daylight- has been found to be the strongest predictor of seasonality of conception (Roenneberg & Aschoff, 1990b). Given that daylight influences human mating, then it is plausible that reminders of the sun may trigger this motivation and increase males' preference for luxury products. We investigate how reminders of the sun affect male consumers' preference for luxury products.

EXPLORATORY STUDY

We conducted an exploratory search on Google Trends related to variation of searches for the term luxury throughout the year. We conducted a search for the weekly popularity of the term "luxury" worldwide and for a few specific countries for a period of seven years 2008-2014. Results showed that searches for the term luxury peak in the weeks following June 21st (the longest day of the year in the Northern Hemisphere). For northern hemisphere countries, searches peaked following June 21st while for southern hemisphere countries, searches peaked following December 21st.

STUDY 1

This study was a 2 (sun reminders: no vs. yes) x 2 (gender: male vs. female) designed to examine how reminders of the sun affect preference for high-end brands. Undergraduate students (N=210, 52.4% female; M_{Age} =20.12) at a northern city participated in this study. Sun reminders were manipulated by asking participants to arrange scrambled words that contained (did not contain) words related to the sun into complete sentences. Participants reported their positive mood (PANAS scale; Watson, Clark, & Tellegen 1988), and preference for high-end brand names (rating the importance of having high-end brands) for publicly (e.g. glasses) and privately (e.g. towel) used products (1=not important at all; 7=very important).

Results of planned comparisons showed that men reported significantly higher preferences of high-end brand names for publicly used products when reminded of the sun than when not (M_{No} =4.25 vs. M_{Yes} =4.80; $F(1,206)=4.07$, $p<.05$). Reminders of the sun had no effect on men's preference of high-end brand names for privately used products or women's preference of either product category.

Mediation analysis using Process Model 7 (Hayes, 2013), indicated the interaction of sunlight reminder and gender did not predict positive mood ($\beta=.40$; $t(206)=1.26$, $p>.1$). However, positive mood predicted preference of high-end brand names of publicly ($\beta=.27$; $t(207)=3.40$, $p<.01$) and privately used products ($\beta=.23$; $t(207)=3.01$, $p<.01$). For men, results revealed a significant conditional indirect ef-

fects of sun reminders on preferences for high-end brand names of publicly ($\beta=.11$; 95% CI =0.0070 to 0.3019) and privately used products ($\beta=.10$; 95% CI =0.0099 to 0.2798). For women, the indirect effect was insignificant for publicly ($\beta=.00$; 95% CI =-0.1270 to 0.1277) and privately used products ($\beta=.00$; 95% CI =-0.0997 to 0.1366).

STUDY 2

In this study we further examined whether sexual motivation contributes to men's preference for luxury products when reminded of the sun. We also examined whether the geographical location of participants (northern vs. southern states) influences the expected effects. The effect of sunlight seasonality on humans should be more prominent for those living far away from the equator (Northern USA) than those living near the equator (Southern USA) since seasonal variation of lengths of daylight is larger in areas further away from the equator. This study was a 2(Sun reminder: no vs. yes) x 2(Location: north vs. south). Participants viewed an advertisement for Hugo Boss with a background that either featured a sunny sky (Sun reminder: yes) or a dark sky (Sun reminder: No). Male participants from Mturk completed this experiment online (N=125, M_{Age} =33.84). The final sample included 121 participants as few participants were excluded for not reporting their state of residence or for reporting extreme values on the dependent variables ($z>2.5$). Participants indicated their attitude towards the brand (4 items on a 7-point bipolar scale- good: bad, etc. ($\alpha=.91$)). Later, participants viewed five sexualized images of heterosexual couples and rated them (7-point bipolar scale – unattractive: attractive, etc. ($\alpha=.89$)).

Results of planned comparisons showed that residents of northern states reported significantly higher attitude towards the brand (M_{No} =4.78 vs. M_{Yes} =5.39; $F(1,115)=4.63$, $p<.05$) and sexual motivation (M_{No} =5.82 vs. M_{Yes} =6.37; $F(1,115)=4.85$, $p<.05$) when reminded of the sun than when not. Residents of southern states did not show such a difference for attitude or sexual motivation ($p>.1$). Mediation analysis (Process Model 7, Hayes 2013) indicated that the interaction of sun reminder and location significantly predicted sexual motivation ($\beta=-.82$, $t(115)=-2.46$, $P=.01$). Sexual motivation significantly predicted attitude towards the brand ($\beta=.48$, $t(116)=5.05$, $P<.001$). Finally, results revealed a significant conditional indirect effects of sun reminder on attitude towards the brand for residents of northern states ($\beta=.26$; 95% CI =0.0615 to 0.5674). There was no significant conditional indirect effect of sun condition on attitude towards the brand for residents of southern states ($\beta=-.13$; 95% CI =-0.3798 to 0.0674).

CONCLUSION

Our studies provide evidence that sun reminders positively affect males (but not females) attitude towards publicly used luxury products. This effect is mediated by sexual motivation. Men who live further away from the equator (northern US. States) are more affected by the effect of sun reminders.

This research contributes to the evolutionary psychology literature as it establishes that sun reminders trigger sexual motivation. Second, findings of this research add to our understanding on how the environment affects consumer behavior. Since our findings indicate that reminders of sunlight can activate sexual motivation, we suggest that such reminders may successfully replace sexual images in advertising that are usually used to increase sales of luxury products.

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Comparison Focus:

The Asymmetric Impact of Context Effects on Advantaged versus Disadvantaged Options

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EXTENDED ABSTRACT

When considering the introduction of a new product, a product manager needs to assess the effect of the new product on sales of the existing product line. For instance, what would be the effect of adding an expensive hard drive that offers more capacity than cheaper competitors on the shares of the existing hard drives in the market? A product manager who consults academic research in search of an answer to this question is unlikely to find a consistent guideline. First, the normative principle of “independence of irrelevant alternatives” (IIA) asserts that adding new options should have no effect on the relative preference for the original options (Ray 1973). Second, the “similarity hypothesis” (Tversky 1972) asserts that a new option can influence relative preference for the original options in the set by drawing share from the more similar option. Third, in contrast to the similarity hypothesis and the IIA principle, consumer research on “context effects” demonstrates that a new option can influence relative preference by increasing the choice share of the more similar option. For instance, an alternative is chosen more often when an inferior decoy is added next to it (Huber et al. 1982). Similarly, an option is chosen more frequently when it becomes an intermediate option by the addition of a new extreme option to the set (Simonson 1989; Simonson and Tversky 1992).

In this paper we advance a new hypothesis, comparison focus, which attempts to explain when each of these three predictions will be observed. Comparison focus invokes the relative advantage of one option over another in the baseline set to predict how changes in choice set configuration influence choice shares. Comparison focus predicts that a given change in choice set configuration is more likely to benefit a target option that is disadvantaged (i.e., has a low choice share) compared to a target option that is advantaged (i.e., has a high choice share) in the baseline set. Comparison focus predicts both replications and reversals of established context effects. Our research is prompted, in part, by the recent debate that has called into the question the very existence of context. Here we take the position that even though context effects are a real phenomenon, they are not necessarily observed in every situation in which a new option is added to a set. Thus, the key question—which also serves as the focus of this paper—is when context effects are more likely to be observed or, by extension, when normative hypotheses are more likely to be satisfied or violated.

We find support for comparison focus in fifteen studies and in a series of meta-analyses using both real and fictitious products with a wide range of attributes. In our first six studies (Studies 1a-1f), we test comparison focus in the case of extremeness aversion. These studies show that the addition of a new extreme option increases the

share of the more similar intermediate option when that option is disadvantaged rather than advantaged in the baseline set. In our next five studies (Studies 2a-2e), we test comparison focus in the case of the attraction effect. We find that the addition of an asymmetrically dominated option increases the share of the target when that option is disadvantaged rather than advantaged in the baseline set. In our final four studies we directly (Studies 3a-3b) and indirectly (Studies 4a-4b) test and find supporting evidence for our proposition that changes in choice set configuration drive decision-making by drawing attention away from the focal comparison (between the target and the competitor), therefore reducing the chances of that comparison taking place. Thus, disadvantaged alternatives tend to benefit relative to their advantaged counterparts because the new choice set configuration dilutes the weight of the original advantage on choice.

We should note that, although a majority of our stimuli are adapted from prior research that reports evidence of context effects, we observe both replications and reversals of prior findings depending on the relative advantage of the target in the baseline set. Our findings suggest that context effects are not necessarily predicated on stylized product representations with numerical attributes. Our research also challenges the common assumption that context effects occur where consumers have relatively high preference uncertainty, and shows that context-dependent preferences can be observed even under low preference uncertainty. In this regard, comparison focus offers a new perspective on context effects: rather than operating as heuristic solutions when making trade-offs under high uncertainty, context effects arise as a result of the comparisons consumers make between alternatives in a set, even when preference uncertainty is low.

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Hedonic Editing Revisited

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EXTENDED ABSTRACT

In daily life, we generally experience a lot of negative and positive events and outcomes. How do we evaluate situations consisting of multiple experiences? One could expect that the way we experience a set of experiences is merely the sum of these experiences; the pleasure of winning \$30.- plus the pleasure of winning \$20.- is equal to the pleasure of winning \$50.-, and the pain of losing \$5.- ten times in a row is equal to the pain of losing \$50.- at once. But research suggests that the way we evaluate series of experiences is not always just the sum of the evaluation of the individual experiences (Fredrickson & Kahneman, 1993).

Based on prospect theory, we would assume that people try to mentally combine negative experiences. After all, due to prospect-theory consisting of a convex loss-function, the sum of the experience of two painful outcomes is bigger than the experience of the combination of the two outcomes. On the other hand, we should like to separate positive experiences, since it is more pleasurable to have two smaller good things than it is to have one larger good thing happening. This intuition has been expressed by Thaler (1985) as part of this work on mental accounting calling this process of selectively integrating and segregating outcomes "hedonic editing". Even though these predictions (integration of losses and segregation of gains) appear fairly straightforward, research on the integration of experiences and outcomes has failed to find any conclusive evidence that people indeed group negative events differently from positive ones. For example Thaler & Johnson (1990, Experiment 2) presented participants with two negative outcomes and asked them whether a person experiencing both negative events at the same time, or a person experiencing the events a week apart would be more upset. Contrary to expectations, no systematic effect was found that participants expected those experiencing the events on the same day would be less upset. Linville & Fisher (1991) also tested whether people were more likely to integrate losses as compared to gains, but did so using a slightly different method. Similar to Thaler & Johnson (1990) they also presented people with two events, but they asked participants to indicate whether, if the first event happened today, they would prefer the second event to take place today as well, or rather one week later. Overall, they found that participants wanted to both gains, as well as losses to happen one week apart. Thus, their results did *not* support the idea that people are more likely to integrate losses as compared to gains. Taken together, it appears that people do *not* group positive events and outcomes differently from negative ones. This lack of support for hedonic editing has even led Thaler (1999) to proclaim a "failure of the hedonic editing hypothesis."

Then what determines when and how people aggregate outcomes? As mentioned by Kahneman and Tversky (1984) it seems likely that two events that are encoded in the same mental account are aggregated before evaluation while those that are not part of the same account are evaluated separately. If that is the case, we would *only* expect hedonic editing effects to emerge whenever there is reasonable flexibility in the degree to which two outcomes can be part of the same mental account or not. If two bad outcomes cannot plausibly be part of the same mental account, they cannot be integrated even if it would make those events feel less bad. For example, even though it may feel less bad to first aggregate a painful visit to the dentist with one's favorite vase breaking before evaluating those events, it seems impossible to come up with a mental account that could encapsulate both. Just like some

outcomes cannot share the same mental category, other outcomes may be extremely difficult to segregate because they obviously belong to the same category. For example, it may feel more pleasurable to win four times \$50.- in the lottery rather than \$200.- at once, but one has to be quite skilled at self-deception to convince oneself that a single lottery-win of \$200.- is actually four separate instances of a \$50.- gain. The ability to hedonically edit ones outcomes thus appears to be constrained by the degree to which the relationship between outcomes is ambiguous enough for these outcomes to plausibly share a mental account or not. If the outcomes are clearly part of one category, segregation is unreasonable and both gains and losses will be integrated. If the outcomes are clearly members of different mental accounts, integration is implausible and both losses and gains will be evaluated as segregated outcomes. However, when there is flexibility in the degree to which the outcomes belong to the same mental category, we would expect to find evidence for hedonic editing. In these cases, people will be more likely to integrate losses and segregate gains.

In five experiments we test whether the degree of category/membership is an important moderator of hedonic editing effects. More specifically, in Experiment 1 we investigate and find that people are more likely to integrate losses when these losses occur in the same domain rather than in different domains. Then, in Experiment 2 we replicate and extend Experiment 1 both by testing similar, dissimilar and moderately similar outcomes, as well as including both losses and gains. For losses we find that increased similarity leads to an increase in preference for them occurring the same day, while for gains this pattern does not emerge. In Experiment 3 we do not manipulate the (dis)similarity of the outcomes, but instead manipulate the width of the category. When the category is perceived to be broader, participants were more likely to integrate the negative outcomes. Finally, in Experiment 4a and 4b we test the underlying process and find that these differences in preference for outcomes occurring on the same vs. different days can be explained by the degree to which participants place these outcomes in the same category.

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Moving Forward, Falling Back: How Perceptions of Motion Mask the Dangers of Unhealthy Consumption

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EXTENDED ABSTRACT

Logos (whether visual or verbal) can be designed to suggest motion (Luca, Krishna, and Elder 2014). In general, motion generates a sense of aesthetic excitement and interest (Freyd 1993). In line with this, logos comprised of dynamic images typically increase consumer engagement. They may also lead to more favorable brand evaluations if there is a perception of fit between the associations of motion and brand characteristics. Specifically, Luca, Krishna, and Elder (2014) demonstrate that dynamic logos lead to more favorable brand attitudes than static logos when paired with modern (as opposed to traditional) brands, and this effect is driven by a perception of fit between motion and modernization.

Beyond this, little is known about the downstream consequences of utilizing dynamic logos. In this research, we examine the effect of logo dynamism in the context of self-control dilemmas. We propose that the perception of motion in a logo triggers thoughts of the future. Consumers generally exhibit an optimism bias, such that they associate the future with an increase in their well-being. We hypothesize that this perceived increase in their future well-being will lead consumers to indulge more in the present. This suggests that dynamic logos will increase the consumption of vices. We tested this hypothesis across four studies.

We first examined whether perceptions of logo motion could influence actual consumption. In Study 1A, we demonstrated that participants' likelihood of selecting an unhealthy snack (e.g., chocolate chip cookies) over a healthier alternative (e.g., raisins) was significantly increased when the snacks were associated with a dynamic logo (i.e., a swinging pendulum vs. a still pendulum). In Study 1B, we demonstrated that participants would consume more of an unhealthy snack (e.g., chocolate) when it was paired with a dynamic logo rather than a static logo (i.e., a leaping horse vs. a still horse). Logo type, however, had no influence on how much of a healthy snack (e.g., granola) participants would consume. Having demonstrated that dynamic logos increase vice consumption, in the next studies we examined the mechanism underlining this effect.

According to our conceptualization, dynamic logos create the perception of motion. The perception of motion leads to an expected increase in future well-being. Consumers use this expected increase in future well-being to justify potentially harmful consumption in the present, leading to an increase in vice consumption. Whether motion leads to an expected increase in future well-being should depend on the direction in which the motion is perceived to be traveling (Chae and Hoegg 2013; Topolinski and Sparenberg 2012). In Study 2, we employed two types of dynamic logos, one with motion towards the right (i.e., a horse leaping towards the right) and one with motion towards the left (i.e., a horse leaping towards the left). The expectation being that a dynamic logo with motion towards the left would not influence vice consumption because it would not lead to an expected increase in future well-being that could be used to justify vice consumption in the present.

The results of Study 2 supported this theorization. When the dynamic logo featured the perception of forward motion (i.e., motion towards the right) purchase likelihood for a vice product significantly increased. However, when the logo featured the perception of backward motion (i.e., motion towards the left) purchase intent for

the vice product (marginally) decreased. Logo type and direction of perceived motion had no effect on purchase intent when consumers considered a relatively virtuous product. Importantly, these results rule out several alternative explanations which would attribute our effect to an increase in arousal or a perception of fit between vice products and motion.

In Study 3, we extended these results by directly manipulating participants' time orientation. Under control conditions, we saw a replication of earlier results. A dynamic logo significantly increased purchase intent when a product was presented as a relative vice; logo type did not influence purchase intent when a product was presented as a relative virtue. When participants were primed to think about their future, there was only a significant main effect of product type. Regardless of whether the ad featured a dynamic logo or a static logo, purchase likelihood increased when the product was presented as a vice. Any effect of logo type and/or product type was eliminated when participants were primed to think about their past.

Our theorization suggests that if consumers did not perceive the future optimistically or were unwilling to use an expected increase in future well-being to justify unhealthy consumption in the present, dynamic logos would not benefit vice products. We tested this idea in Study 4. In Study 4, we measured participants' concern of future consequences (CFC). CFC is a personality trait defined as the extent to which an individual considers the future outcomes of their current behavior and the extent to which they are influenced by these imagined outcomes. Consumers high in CFC are less likely to use an expected increase in future well-being to justify unhealthy consumption in the present (Adams and Nettle 2009; Kovac and Rise 2007). Among participants low in CFC (below the mean CFC index rating), there was a significant product type by logo motion interaction, the pattern of which replicated earlier results. Furthermore, as we expected, the positive effect of a dynamic logo on vice consumption was mediated by perceptions of how justifiable consumption of the product would be. Among participants high in CFC (above the mean CFC index rating), the product type by logo motion interaction was not significant. Purchase intent among these participants was not influenced by logo type, regardless of whether the product was presented as a vice or a virtue.

A substantial body of literature has focused on these strategies consumers use to control their short-term consumption impulses in order to secure long-term interests. In other words, this literature has focused on how consumers consciously or unconsciously limit their choice of vices. In this research, we examine how an external marketing cue, the brand's logo, may threaten consumers' ability to control their consumption of vices.

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In Good Shape: The Influence of Container Curvature on Consumers' Perceptions and Consumption

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EXTENDED ABSTRACT

Whether we do our grocery shopping at a supermarket, eat at our favourite restaurant or have a drink in a bar, our foods and drinks most often come in a container. This means that the contact we have with food is almost always mediated by a package. Packages themselves come in all shapes and sizes, even for products belonging to the same product category. Take, for example, the different shapes found in the soda and juice categories - from the hour-glass shape of Coca Cola bottle to the rounded shape of Tropicana. Or, for example, the differently shaped glasses used in various specialties of beers. But does package shape influence our perceptions about a product and our consumption behaviour?

Research has tackled this issue from many angles. The shape of packages and containers has been shown to influence the inferences consumers make about the content of food such as taste and caloric estimation (Becker et al. 2011; Koo and Suk 2016), or to even influence choice and consumption (Raghubir and Krishna 1999; Yang and Raghubir 2005). For example, Raghubir and Krishna (1999) showed that rectangular packages that are more elongated are perceived to be larger than same-size packages that are less elongated. Such a distorted perception further influences how much consumers eat (Raghubir and Krishna 1999; Wansink and Van Ittersum 2003). On the other hand, Koo and Suk (2016) provided evidence that, at the same time, consumers perceive a food product in elongated packages to be less caloric than an identical food in a wider packages of equal capacity. The above-mentioned research accounts for rectangular shapes. In the case of more organic and irregular shapes Folkes and Matta (2004) unveiled a different mechanism, such that package shapes that attract more attention are perceived to be larger than same size packages that attract less attention. Our undertaking in the present research is to build upon and extend this literature by investigating whether the actual curvature of the container can influence consumers' inferences and consumption behaviour.

In particular, in Study 1 we propose and demonstrate that the curvature of the container is likely to act as a cue for evaluating a food item's healthfulness, due to the different conceptual associations activated by the shape. Previous research has shown that consumers are prone to use certain implicit cues to make inferences about a product's healthfulness and caloric content. For example, the colours used on the package (Schuldt 2013), the typeface depicting the brand (Karnal et al. 2016) and even the shape of the package (Koo and Suk 2016) carry certain symbolic meanings that are used by consumers to make inferences about a food item's healthfulness. Although they are explicitly unrelated to health, these cues activate certain associations that will spill over to judgements about a food item's healthfulness and caloric content. Similarly, our premise is that the curvature of the container triggers associations with the human body (Epley, Waytz, and Cacioppo 2007) and that consumers use these associations to make inferences about caloric content and food product healthfulness. When a food product is presented in a concave container (where the mid-point is more narrow than the upper and bottom parts), it will be perceived to be lower in calories and more healthy than when the same food product is presented in a convex container (where the mid-point is wider than the upper and bottom parts). Our account for this is that a concave container resembles a healthy body, whereas a convex container resembles an unhealthy

body. In Study 1 (between-subjects) respondents ($N=226$) were exposed to a bottle of juice that was manipulated to be either concave or convex and asked to estimate the caloric content (on a scale from 0 to 300 calories) and report perceived healthfulness of the product (on a 9-point scale). Respondents who saw the juice in the convex container estimated the juice to have more calories ($M=198.19$) than those that saw the juice in the concave container ($M=170.43$), $t(224)=3.46, p=.001, d=0.46$. Additionally, the juice presented in the convex package was perceived to be significantly less healthy ($M=6.61$) than the juice presented in the concave package ($M=7.13$), $t(224)=2.58, p=.010, d=0.35$.

In Study 2 we also find that container shape can moderate how consumers' eating control discourse influences their anticipated consumption guilt. Using the same stimuli and design as in Study 1, this time respondents ($N=339$) were asked to report how guilty they would feel if they consumed the juice. Additionally, we also assessed consumers' eating control with a three-item 7-point scale ($M=3.49; \alpha=.72$) (Chrysochou et al. 2010). Following a regression analysis, the marginally significant interaction between eating control and container shape ($\beta=-.32, t(335)=-1.96, p=.051$) suggests that individuals high in eating control feel more anticipated consumption guilt than individuals low in eating control when the food product is presented in a convex package, but not when the product is presented in a concave package. This is in line with previous findings which show that restrained consumers are more susceptible to nutrition information and derive more guilt when eating foods they believe to be unhealthy or high in calories (Wansink and Chandon 2006).

In Study 3 we show that consumers also eat more when the food is displayed in a convex container compared to when the food is displayed in a concave container. Participants ($N=61$) were instructed to serve themselves with M&Ms that were presented in either a convex or concave glass (between-subjects). Our results suggest that participants that served M&Ms from the convex glass had a significantly higher caloric intake ($M=42.91$) than participants that served M&Ms from the concave glass ($M=26.36$), $t(59)=3.29, p=.002, d=0.85$. This means that participants that served M&Ms from the convex glass had on average 63% more caloric intake than those that served the M&Ms from the concave glass. This is contrary to one's first intuition that people will try to eat less from a food they consider to be high in calories or unhealthy. Our explanation for this effect is that there is another mechanism that takes over in a consumption situation, where the package becomes a visual measurement tool to monitor consumption (Wansink 2004). In this sense, it is more difficult for consumers to monitor the food displaced from a convex container because the level remaining in the container appears to decrease at a slower pace (due to a wider middle). The opposite would hold true for a concave container.

Overall, our findings indicate that the curvature of a package can influence what consumers infer about that product (the number of calories and perception of healthfulness), how they feel about consuming that product (anticipated consumption guilt) and ultimately their consumption behaviour (how much they eat), extending previous research carried out in this area (Wansink 2004). This could inform both food-marketing practitioners and public policy that aims to assist consumers in making optimal food-related decisions. For example, if the aim is to enhance perceptions of healthfulness mar-

keters might want to use a concave shaped package. On the other hand, consumers might also be benefited from being served from a concave container, as this will enable them to downsize their consumption.

However, our research is not free of limitations. We still need to acquire a more-in-depth understanding of the mechanism behind these effects and the generalizability of our current results should be accounted for through further replication studies. Additionally, certain contextual or individual factors might moderate these relations. For example, in the first two studies the food stimuli used was relatively virtue (orange juice) while in the third study the food stimuli was relatively vice (M&Ms). This has also been shown to impact consumers' perceptions and consumption behaviour (Chernev and Gal 2010).

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To Me or Not to Me: Personal Body as Contested Ownership

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EXTENDED ABSTRACT

This paper advances extant knowledge in the field of consumer studies dealing with alternative forms of ownership (access-based consumption, Bardhi and Eckhardt 2012; hybrid economies, Scaraboto 2015; liquid ownership, Bardhi, Eckhardt, and Arnould 2012; and sharing, Belk 2010). In particular, we are interested in examining contested ownership, a subject position that has so far received scant attention in consumer studies. Contested ownership is defined as the market condition consumers experience whenever their entitlement to a given possession is jeopardized and they are faced with some form of economic, emotional, psychological, and/or social cost. Contested ownership extends the stream of research that has investigated the processes by which individual possessions are translated into shared possessions (Giesler 2008), and vice versa (Bradford and Sherry 2015; Epp and Price 2010; Visconti et al. 2010).

We explore contested ownership in the context of contemporary body modification practices (Bjerrisgaard, Kjeldgaard, and Bengtsson 2013; Featherstone 1999; Patterson and Schroeder 2010). We give particular attention to non-mainstream forms of body modification (e.g., branding, scarification, sub-dermal implants) and body performance (e.g., body suspension), where contested ownership is particularly prominent. Nonetheless, we also include practices such as tattooing and piercing, not only for their widespread diffusion—in the US 21% of the population has at least one tattoo, with 20,000 tattoo studios and an annual revenue of the tattoo industry of about \$ 2.3 billion (TAM 2015)—, but also because of the evidence that even a single tattoo or piercing can unleash vivid tensions around body ownership. The modified person uses his/her own body—an individual possession *par excellence*—to pursue some personal benefit, including artistic desires, augmented physical functionalities, beautification, identity expression, physical pleasure, psychological well-being, and social affiliation. Yet, several body-modified people report having been blamed, discriminated against or offended, both within their inner circle of family members and friends as well as in wider professional and social circles. We document a variety of affective, cultural, economic, legal, and social tensions characterizing the daily life of body-modified people. Our empirical study explores: (1) the lived experience of people whose legitimate entitlement to their body is contested; (2) the resources they mobilize in order to resist disentanglement; and, (3) the forces at play favoring disentanglement.

We adopt a longitudinal approach, with data being collected over eight years (2009-2016). Consistent with the market-oriented ethnographic tradition (Arnould and Wallendorf 1994), we combined ethnographic interviews with observations in modifiers' studios and during specific events (e.g., body suspension conventions), and observations of online forums (Kozinets 2002). We conducted 16 in-depth interviews (McCracken 1988) with 14 different informants (lasting from 90 minutes to several hours). 93 additional short interviews (lasting from 30 to 90 minutes), all semi-structured and obtained from different informants, complement our interview dataset. Internet observation was also multi-sited, yet focused on the Body Modification Engine (BME.com), which has become the global gathering platform of the body modification community. In order to check for the cultural embeddedness of body modification meanings, practices, and ownership contestation, we collected data from more than 20 different countries. Overall, our dataset includes 1,218 pages

of interview transcriptions, 32 pages of field notes, and 6,989 pages of netnographic data, all in Times New Roman 12, double-spaced. Besides our primary data, we also gathered a large amount of secondary data (articles, books, films), which served to explore the history of body modification as well as to triangulate our interpretations with those of other researchers. Secondary sources totaled approximately 1,215 pages of text and 330 minutes of video. We analyzed primary and secondary sources individually and then through open and axial coding (Spiggle 1994). QRS Nvivo assisted data analysis. Codes, categories, and themes resulted from an iterative process.

Our findings are centered on (inter)personal tensions arising from body modification and resulting in states of contested body ownership. By means of a semiotic square, we first document four types of subjective positions that body-modified people may experience with reference to their body: (1) the practical body, (2) the utopian body, (3) the experiential body, and, (4) the mundane body. The semiotic square provides a rich and varied representation of the motivations leading people to modify their bodies. Such motivations can be organized along two main criteria: (1) the nature of motivations (expressive versus hedonic); and, (2) the main recipient of the modifications (others/outer-directed versus oneself/inner-directed). Regardless of the nature and recipient of motivations, our data shows that most body-modified people do not undertake modifications for subversive or provocative reasons. Still, many are faced with an environment that reacts to their modifications with mixed feelings ranging from tolerance to incomprehension, from fear to disgust, and from rejection to discrimination. Our data reveals that critical reactions to body modifications are not only emotional and cultural, but are also meant to limit body-modified people's freedom to alter their own body. Consequently, they disclose tensions about whom ultimately owns the body: the body-modified person, his relatives or society at large.

Notably, contested ownership is not limited to tensions arising between the body-modified person and people outside this subculture. First, our research has unveiled tensions arising at the personal level. Typically, modifications with which a body-modified person does no longer identify may create severe states of psychological tensions. Second, contested ownership can also emerge within the body modification subculture, both with other body-modified people, as well as with one's modifier (e.g., when a modifier rejects practicing a modification requested for motives considered futile or unworthy, or when the modification is deemed too risky or illegal). Our analysis furthermore reveals how contested body ownership is affected by facilitating and hindering factors on the individual, micro-social and institutional level. While local factors (e.g., cultural, legal, social) may account for variation in the findings, body modification appears as a largely transcultural market phenomenon (Berry et al. 2002), engendering states of ownership contestation at a global sphere.

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“Will We Hate Google One Day?” A Convention Theory Perspective on Public Brand Evaluations

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EXTENDED ABSTRACT

With ubiquitous access to online social media and the democratization of consumer voice, everything and everyone potentially becomes subject to public evaluation. For many years now, researchers have observed how consumers engage publicly in rating, commenting, and contesting brands online, and how these evaluations cumulate to a more networked, better informed, and potentially more powerful public opinion (Arvidsson 2008; Benner, Reinicke, and Witte 2004). A rich body of research has studied brand evaluations and their commercial relevance for brands in the context of brand communities (Schau, Muñiz, and Arnould 2009), innovative consumer communities (Kozinets, Hemetsberger, and Schau 2008), and brand publics (Arvidsson and Caliandro 2016). Fournier and Avery (2011, 200) link critical consumer evaluations in social media with the assessment of brand value, when stating that—in an age of criticism—the accumulations of consumers’ “authoritative judgment and critique” determine the interpretations of brand messages and the value brands afford. Arvidsson (2010) identifies an increasing tendency of consumers in an information society to objectify the ethical value of brands in general sentiments rather than in formal ethical standards.

Although these observations suggest that public brand evaluations build on a plurality of opinions about a global brand’s value, consumer researchers thus far neither account for the multiplicities of values engaged in public brand evaluations in global audiences, nor do consumer researchers account for the strategies that apply in public brand evaluations. To address these gaps, this netnographic study sets out to investigate public brand evaluations directed at the Google brand, one of the most debated brands in public for its continual reinterpretation and violation of existing social arrangements (Giesler 2015).

Drawing on convention theory’s notion of *test* (e.g., Boltanski and Thévenot 2006 [1991]; Dansou and Langley 2012), this study identifies, analyzes, and interprets public brand evaluation directed at the Google brand over an eleven year time frame (2004–2014) on one of the largest, global online tech platforms—Slashdot.org. For data selection, we followed the netnographic criteria on traffic and data richness defined by Kozinets (2010) and ended up with seven threads (with, typically, between 400 to 600 and 1,000 comments) per year. Convention theory provides a conceptualization that aids the uncovering of evaluative principles at work in public critique and justification. It argues that in moments of *test*, in which current understandings are under critique, actors do not only argue from their individual perspectives, but also underline and justify their arguments by showing their relevance to a limited set of higher-order principles or *orders of worth* (e.g., Boltanski and Thévenot 2006 [1991]; Thévenot, Moody, and Lafaye 2000) and “engage discursively, and even strategically, with [these multiple orders] to justify their position and achieve legitimacy” (Ramirez 2013, 848).

Findings reveal a plurality of orders of worth mobilized in discussions and illustrate how tests of the Google brand predominantly raise civic, market, and industrial orders of worth. We find two major evaluative strategies that coordinate public brand evaluation: *negotiating a leeway of acceptable brand conduct* and *allocating responsibilities*. Contributors to Slashdot continually *negotiate the leeway*

of acceptable brand conduct by comparing Google’s conduct with what they regard to be worthy or to be *common goods*—best for the general public (Moody and Thévenot 2000). Overall, tests are either directly based on orders of worth or they refer to other entities and perform benchmarking procedures. For example, actors repeatedly mobilized the civic world when they argued that Google’s actions were compliant with the law—a common good according to the civic order of worth. Benchmarking procedures often involved comparisons to industry players (e.g., Microsoft) or similar cases. For example, actors relativized Google’s business practices by mobilizing market orders of worth and comparing them to business practices of competitors. Actors situated brand actions either within or outside the negotiated leeway, continually reset the boundaries of acceptable brand conduct, and allowed acceptable actions to balance unacceptable ones.

Allocating responsibilities is an evaluative strategy through which actors want to make sure that the right party is scrutinized. The allocation of responsibilities can either be based on an established leeway or can involve the recognition that the brand under scrutiny is moving in a grey area, as there are no precedents or clear leeways of acceptable conduct to draw on. In discussions of privacy issues (situated mostly within the domestic or the civic order of worth), for example, justifications of the Google brand aimed to shift responsibilities to the government or even the individual. Actors argued that the government should not ask for user data and that individuals are responsible for their online footprints. Shifting responsibilities to other entities is most important for a brand when it allegedly operates outside of its leeway of acceptable brand conduct.

The contribution of this study is threefold: Firstly, we discuss public brand evaluations as a form of ethical engagement in a globalized economy. We suggest that when the lack of global governance systems makes it difficult to assign collective moral duties on brands and to monitor compliance with collectively defined rules (Giesler and Veresiu 2014; Holt 2002), public brand evaluations provide a dynamic and potentially powerful tool for auditing a global brand’s conduct and for charging or deflating a brand with “ethical capital” (Arvidsson and Peitersen 2013, 92). Secondly, we introduce a convention theory perspective on public brand evaluations. Convention theory offers a huge potential by emphasizing “systemic and structuring influences” (Askegaard and Linnet 2011, 381) and allowing researchers to “escape from the alternative between formal universalism and unlimited pluralism” (Boltanski and Thévenot 1999, 365). Thirdly, we offer a nuanced interpretation of how public brand evaluations can direct brand conduct in global arenas—similar to a brand monitoring tool (cf. Giesler 2012; Thompson, Rindfleisch, and Arsel 2006)—and influence public understandings of brands against a macro-context. By observing brand critique and justification in test situations, brand managers can learn about the evaluative criteria applied and entities involved in benchmarking processes.

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Softness in the Ear: How Musical Sophistication Influences the Interaction Between Music and Expected Haptic Softness

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EXTENDED ABSTRACT

Auditory atmospherics such as background music in the shopping environment are one of the most investigated elements of the store atmosphere. However, also in the online context, the frequently demanded strategic implementation of sensory stimulating marketing strategies (Krishna 2010, 2012) represents a promising approach to respond to the challenge of selling products for which sensory information is diagnostic. Consequently, retailers and other service providers are constantly interested in utilizing new findings in order to create a distinctive brand experience (Hultén, Broweus, and van Dijk 2009). Although existing research has widely investigated crossmodal interactions involving the auditory modality, it still leaves many important questions unanswered; for instance, can musical sophistication influence the interaction between music and haptics? Prior work rarely looked specifically at the underlying mechanisms of individual differences in multisensory perceptions. In view of the fact that the capability to decode musical meaning is assumed to be a function of musical background (Knöferle et al. 2015), how would musically sophisticated consumers respond to soft (vs. hard) music when shopping for textiles compared to consumers with low levels of musical sophistication?

In this research, we contribute to furthering such understanding by providing three experiments demonstrating how musical sophistication affects audio-tactile interactions. In particular, we show how higher musical sophistication enhances consumers' expectations about the haptic softness of products after listening to soft (vs. hard) music. Musical sophistication is defined here as "psychometric construct that can refer to musical skills, expertise, achievements, and related behaviours" (Müllensiefen et al. 2014, p. 2).

Extant research has established that perceptual information in different sensory modalities can be recoded into abstract formats whose semantic dimensions partly overlap (Martino and Marks 1999; Melara and Marks 1990). In addition, marketing research on the crossmodal effect between music and haptics indicated that music is, in fact, translated into semantic associations related to musical as well as haptic softness (Imschloß 2014). Integrating the findings from these research streams, there are three main ways as to how musical sophistication can affect audio-tactile interactions: (1) impact on strength of semantic associations related to musical softness, (2) impact on strength of semantic associations related to haptic softness, or (3) both. We predict that musically sophisticated consumers are better at decoding soft (vs. hard) music into semantic associations related to musical softness. In comparison to consumers with low levels of musical sophistication, these associations may be recoded and lead to stronger semantic associations related to haptic softness, which result in an increased expected haptic softness (EHS). Based on previous findings on the influence of tactile information on evaluations (Grohmann, Spangenberg, and Sprött 2007), especially for products for which haptic information is diagnostic, we also expect increased levels of EHS to affect product evaluations. Thus, musical sophistication may also have an indirect positive impact on product evaluations.

Three studies tested our predictions: Study 1 employed a 3 (music: soft vs. hard vs. no) \times 4 (product category: scarf vs. tablet vs. chair vs. book) mixed factorial design with music as between-subjects factor. Participants evaluated the EHS of four unbranded

pictured products after listening to two pretested song excerpts that were either perceived as soft or hard; whereas, participants in the control condition listened to no music. We further tested the moderating effect of musical sophistication on audio-tactile interactions. The results showed that after listening to the soft (vs. hard) song version, participants only expected products for which softness is diagnostic to be softer, in our case a scarf. Moreover, musical sophistication significantly moderated this effect of soft (vs. hard) music on consumers' EHS.

Study 2 was designed to examine the underlying mechanism of the positive influence of musical sophistication on audio-tactile interactions. Similar to Study 1, after participants were presented with a picture of the scarf from Study 1 and listened to either soft or hard music, we asked them to evaluate the strength of their associations related to musical as well as haptic softness (Imschloß 2014). A moderated serial multiple mediation (Hayes 2015) with strength of associations related to musical softness (M_1) and strength of associations related to haptic softness (M_2) as mediators, and musical sophistication as the moderator, revealed that musical sophistication significantly moderated the indirect effect of soft (vs. hard) music on EHS through M_1 and M_2 in serial (95% CI: .008, .193). This suggests that musically sophisticated people are better at recoding auditory cues (e.g., soft music) into semantic associations related to haptic dimensions. However, results of Study 2 also generally revealed that music is not translated into semantic associations related to haptic softness without being previously decoded into semantic associations related to musical softness.

As our theory assumes that musical cues of haptic softness can influence product evaluations since they may serve as quality indicator for products for which haptic information is diagnostic (Grohmann et al. 2007), in Study 3, we tested a moderated mediation model. Results supported previous findings that EHS fully mediates the effect of soft (vs. hard) music on product evaluations (intention to purchase, attitude towards the product, willingness to pay) (Imschloß 2014). Consistent with our prediction, this mediation was stronger among participants with higher levels of musical sophistication.

The current research is the first that provides insights about the conditions for crossmodal interactions involving the auditory and haptic modalities. In particular, products for which haptic softness is diagnostic are most likely to be subject to audio-tactile interactions. In addition, we contribute to sensory marketing literature by considering the potential impact of individual differences on the ability to match auditory and haptic dimensions with respect to the interactive nature of music and personality (Rentfrow and Gosling 2003).

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Advance Gratitude Expressions as a Prosocial Appeal

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EXTENDED ABSTRACT

Each day, millions of people worldwide rely on the kindness of others for their basic well-being, and charities are experiencing growing difficulty attracting sufficient support. The current debate thus revolves around how best to appeal to potential donors for help (YouGov, 2012). We introduce the novel concept of an advance gratitude expression as a prosocial appeal and we demonstrate how a simple: “*Thank you in advance for your support*” embedded in marketing materials can increase prosocial behaviour, by awakening the donor’s “sleepy moral self” (studies 1 and 3). We further elucidate upon the mechanism by demonstrating that perceived connectedness to the recipient of the cause moderates the effect, by showing that under conditions of low connectedness, advanced expressions of gratitude can backfire (study 2).

Gratitude is expressed when altruistic benefits are received. By expressing gratitude one recognises that the benefactor has acted with fairness and justice, in considering and responding to the welfare needs of others, and so gratitude goes hand in hand with an increased moral awareness (Emmons and McCullough, 2004). Past research has examined the consequences of expressing gratitude after some prosocial act had already been conducted (Raggio & Folse, 2011, Grant & Gino, 2010). What remains unexplored is whether (and if so, why), “*an advance expression of gratitude*”, a term we coin to denote instances in which gratitude is conveyed to prospective benefactors prior to them providing or agreeing to provide assistance, can persuade these to act benevolently. While donating may be generally regarded as a moral act, this is not always the case, people can refuse others help when it is not apparent that is it the right thing to do (Lee et al., 2014). We propose that advance expressions of gratitude can signal something about the request itself, by rendering potential benefactors more aware of its moral significance. This proposition is based on the growing evidence showing that ethical judgements can be malleable when individuals face subtle cues that non-consciously activate the moral self. (Leavitt et al., 2015 Reynolds, Leavitt & Decelles, 2010). Because of the moral nature of gratitude (Haidt, 2003) we posit that an advance gratitude expression will trigger one’s moral identity. In turn, this will increase moral awareness, defined as a person’s determination that a situation contains moral content (Reynolds, 2006), and translate into greater prosocial behaviour. More formally:

Hypothesis 1: Advance gratitude expressions result in increased prosocial behaviour.

Hypothesis 2: The effect of advance gratitude expressions on prosocial behaviour is mediated by moral awareness.

Gratitude is also an other-focused emotion (Tangney et al., 2007) and prior research has found that people are more receptive to other-focused emotional appeals when connectedness to others is high (Aaker & Williams, 1998). Connectedness to others can be conceptualised through the lens of self-construal theory. Self-construal (independent vs. interdependent) represents an individual’s general predisposition to identify with others. Interdependents view them-

selves as fundamentally connected to others, whereas, independents are concerned with keeping their distance and not being influenced (Singelis, 1994). We postulate that when connectedness to others is high (i.e. interdependent) individuals will be more receptive and responsive to advance gratitude expressions resulting in increased prosocial behaviour (H3a). However, when connectedness is low (i.e. independents), we expect an advance expression of gratitude to backfire (H3b) because independent self-construal individuals wish to keep their distance, and would therefore likely view the expression as manipulative.

Study 1 (N=50) was a main effect field study, with a real behavioural outcome. Passers-by were invited to partake in a marketing research study conducted on behalf of The British Columbia Society for the Prevention of Cruelty to Animals. Participants were randomly assigned to evaluate either an “advance gratitude expression” or a control poster advertisement. The advance gratitude poster condition additionally included the following: “*Thank you in advance for your support.*” In the advance gratitude condition average donations were higher ($F(1, 49) = 8.323, p=0.006, M=\2.83 vs. $M=\$2.08$). Moral awareness was also measured with two items ($\alpha=0.764$)¹. Increased moral awareness fully mediated the relationship between advance gratitude on donation amount, 95% CI, ($b=0.2739, C_{95}: 0.0368, 0.6946$). We measured “norms of reciprocity”² as a competing mechanism, but no mediation was found ($b=0.0312, C_{95}: -0.0331, 0.2910$). Therefore, Study 1 supports H1 and H2.

Study 2 sought to exclude competing explanations, by examining a theoretically relevant moderator- the ethical or moral nature of the request. It is plausible that an advance gratitude expression arouses emphatic concern or as already noted, taps into implicit norms of reciprocity. If these alternative explanations hold, then advance gratitude should increase compliance also under morally dubious circumstances (albeit perhaps to a lesser extent). Yet, if the moral awareness explanation is valid, one would predict a backfiring effect when the request made is morally dubious. We manipulated the ethical credibility of the charity making the request by assigning high vs. low scores on three ethically relevant criteria. N=408 (recruited online), partook in the 2 (advance gratitude: yes vs no) x 2 (ethical credibility of the charity: high vs low) between subjects randomised factorial design. The advance gratitude condition charity advert additionally included: “*Thank you in advance for supporting a puppy in training.*” The ethical credibility x advance gratitude interaction on donation intention was significant ($F(1,407) = 7.3, p=0.007$), such that, when the request for support came from the “unethical” charity, expressing advance gratitude reduced donation intentions $M_{\text{Nogratitude}}=4.4$ vs. $M_{\text{Gratitude}}=3.8$ $F(1,407)=3.5, p=0.06$. Whereas, the opposite applied when the expression came from a charity with morally sound credentials, $M_{\text{Nogratitude}}=4.6$ vs. $M_{\text{Gratitude}}=5.1$ $F(1,407)=3.7, p=0.05$, providing further support that moral awareness is the underlying mechanism (H2).

Study 3 tested the effect of connectedness to others by manipulating participants’ self-construal. 206 M-Turkers, partook in the 2 (self-construal: independent vs. interdependent) x 2 (advance grati-

¹ “Contributing to the BC SPCA cause has moral implications”, “Contributing to the BC SPCA is the “right” thing to do”.

² “Others expect me to donate”

tude expression: yes vs. no), between subjects factorial design study. Self-construal was manipulated via a short story exercise (Garner et al, 1999). Participants were subsequently exposed to an advertisement of a food bank charity requesting donations on behalf of the Roberts family (pictured). The advance gratitude condition also included "Thank you in advance for your support from the Roberts Family". An interaction of self-construal*advance gratitude on volunteering intention reached significance $F(1,202) = 11.04, p=0.001$. For interdependently primed individuals receiving the advance gratitude expression increased volunteering intention, $F(1,202) = 7.5, p=0.007$ ($M_{\text{no gratitude}}=3.9$ vs $M_{\text{gratitude}}=5.1$). Whereas, in the independent condition, advance gratitude backfired $F(1,202) = 3.9, p=0.051$ ($M_{\text{no gratitude}}=5.6$ vs. $M_{\text{gratitude}}=4.7$). Thus H3a and H3b are both supported.

Our results suggest that a simple expression of advance gratitude can help charities gain important scarce resources, without additional costs. Yet, advance gratitude expressions are not a blunt tool and attention must be paid to ensuring the target audience perceives a connection with the cause, or the effect can be counterproductive. From a theoretical perspective, we introduce the novel concept of advance gratitude expressions and show that these can give rise to a process of moralisation, thus making contributions to both the gratitude and morality literatures.

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Do Consumers Learn New Currencies as They Learn New Languages? The Impact of Price Syntax and Synonyms on Learners' Proficiency

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EXTENDED ABSTRACT

Consumers are frequently placed in a situation where they are exposed to prices in a foreign currency (FC) but relatively little research has investigated how consumers learn another currency. Previous studies in the context of the Euro changeover focused on long-term adjustment strategies (Marques and Dehaene 2004) or on individual rules of thumb (Raghubir, Morwitz and Santana 2012). Our research extends previous findings and helps us develop new theory on how currencies are learned. To understand that process, we compare learning a new currency to learning a new language.

Consistent with our language-learning analogy (Kroll and De Groot 2005, Luna and Peracchio 2001), we consider three factors that influence foreign price processing and learning: *lexical* (i.e., regarding the prices themselves), *syntax* (i.e., the way foreign currency and home currency are combined together in an exchange rate table), and *synonym* (i.e., consumers' exposure to reference prices in the foreign currency). Three experiments investigate the interaction between those three factors and their impact on learners' proficiency (accuracy in estimating, recalling and ranking prices in foreign currency).

Study 1 tests the interaction effect between price lexical (difficulty of the exchange rate) and price syntax (mode of presentation of the exchange rate) on learners' proficiency (accuracy in price estimation, recall and ranking). In particular, we designed a 2 (difficulty of exchange rate: easy (1FC = 2\$), difficult (1FC = 0.8\$) x 2 (mode of presentation of exchange rate: home-centric (1\$ = xFC), foreign-centric (1 FC= x\$)) between-subjects experiment.

Studies 2 and 3 test whether price lexical (difficulty of the exchange rate) and price synonyms (foreign reference prices) interfere in foreign price learners' proficiency (accuracy in price estimation, recall and ranking). In Studies 2 and 3, the context of presentation of the prices is manipulated through the presence or absence of prices of competing retailers (External Reference Prices, or ERPs) for the same products (study 2) and for different products (study 3). Study 2 was a 2 (difficulty of exchange rate: easy (1FC = 2\$), difficult (1FC=3.2\$) x 2 (context of presentation: ERPs present or absent)) between-subjects experiment. Study 3 was a 2 (difficulty of exchange rate: easy (1FC= 2\$), difficult (1FC= 0.8\$) x 2 (context of presentation: ERPs for the same products vs. for different products within the same category)) between-subjects experiment.

Stimuli, sample and measures were similar in the three experiments. An average of one hundred undergraduate students at a large New York University participated in the studies. Respondents were asked to imagine a shopping situation in a foreign country. They were exposed randomly to 14 common grocery goods they needed to buy varying in terms of expensiveness (products with lower or bigger tickets in study 1) or in terms of purchase frequency (infrequently or frequently purchased products in studies 2 and 3). The prices of the products were presented in the foreign currency with the currency conversion rate to US\$ they were assigned to. Then, they answered self-reported measures of the extent to which they had used direct-access and/or conversion strategies to process foreign currency prices. Subsequently, respondents had to estimate the price of the total basket, recall the exact price of each product and rank the products according to their expensiveness.

Accuracy in estimating shopping basket, recalling exact price and relative price rank were measured as the Absolute Price Devia-

tion from the correct total basket, the correct individual prices and the correct ranking of the prices of the products, or APDs (Estelami and Lehmann 2001). If the APD's indicators are high, the accuracy in estimating and recalling FC prices are low and vice-versa.

On overall, our findings underline that the conversion strategy (exact or approximate) has a primacy over the direct-access strategy (intuition-based or anchor-based). However, this strategy does not lead systematically to a superiority in foreign price learning. Regarding APD in estimating total basket, there are no direct effects but significant cross-over interactions between the difficulty of the exchange rate and i) the mode of presentation of the exchange rate ($F(1, 96) = 7.4; p = .008$); ii) the exposure to ERPs ($F(1, 73) = 4.05; p = .048$); iii) the exposure to similar or different ERPs ($F(1, 81) = 2.9, p = .09$). Regarding APD in recalling prices, there is a significant interaction of the difficulty of the exchange rate and its mode of presentation on exact price recall ($F(1, 96) = 3.3; p = .07$) and correct ranking of the prices of the products ($F(1, 86) = 5.04; p = .027$). The interaction between difficulty of the exchange rate and presence of ERPs is not significant with respect to accurately recalling the prices in FC of the 14 items but with respect to accurately ranking them ($F(1, 73) = 4.05; p = .048$).

When the easiness of an exchange rate or the task to perform lead consumers to process prices in their home currency, the syntax of the exchange rate (the way it is presented) must be home currency centric (and vice versa) and the price synonyms (exposure to ERPs) should be consistent with the strategy used and task to perform. Our findings underline that foreign price processing is not influenced only by the difficulty of the exchange rate (lexical factor). The mode of presentation of the exchange rate (syntactic factor) and the exposure to previous price information (synonym factor) also influence foreign price learning. Although a conversion does not directly allow respondents to perform better on price memory tasks, the manner in which the exchange rate and reference prices are presented will influence learning strategy process and performance.

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How the Norm of Reciprocity Influences Sharing in Direct and Generalized Exchanges

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EXTENDED ABSTRACT

Even though sharing is universal and by no means a new concept, it was neglected in consumer research until Belk's seminal work in 2010. Research on sharing has been growing rapidly since then. One stream of this research follows an ethnographic approach and offers valuable insights into particular phenomena within the sharing economy (Gollnhofer, Hellwig, and Morhart 2016; Scaraboto 2015). Others expand knowledge with survey data (Habibi, Kim, and Laroche 2016; Hellwig et al. 2015). Despite the growing interest in this phenomenon, there is surprisingly little experimental research (Lamberton and Rose 2012) on the mechanisms behind the sharing of physical objects. Therefore, the aim of our research is to shed more light on the underlying processes, by looking at the interplay between sharing and reciprocity norms.

Prior research has found that reciprocity is involved in peer-to-peer sharing (Albinsson and Perera 2012; Corciolani and Dalli 2014; Habibi et al. 2016; Hellwig et al. 2015), but that it lacks clear reciprocity rules (Gollnhofer et al. 2016). Therefore, we want to investigate how an explicitly stated reciprocity norm influences sharing, compared to the absence of such an explicit norm. In addition, we consider exchange structure, since reciprocity differs in direct exchanges compared to generalized exchanges (Ekeh 1974). In direct exchange, an individual B will reciprocate directly to individual A in exchange for that what A has given to B (Willer, Flynn, and Zak 2012). In generalized exchange (Ekeh 1974) with "collective reciprocity" (Corciolani and Dalli 2014, 769), recipients are not obliged to reciprocate directly to their giver, but only indirectly through someone else.

Social exchange theory states that individuals provide each other with resources, because they expect to receive something in return (Blau 1964; Homans 1958). In social exchanges, the norm of reciprocity can function as a "starting mechanism" and as a "stabilizing mechanism" (Gouldner 1960, 176), because receiving implies an obligation to reciprocate (Blau 1964). Furthermore, according to Cialdini and Goldstein (2004), norms can induce norm-congruent behavior only when they are salient. Consequently, we expect an explicitly stated norm to affect the appeal of sharing platforms. We also propose that in the absence of an explicit norm, the expectation of balance of reciprocity affects sharing intentions.

The objective of our first study was to examine the appeal of different platform designs prior to the decision to join the platform. Therefore, we asked our participants to evaluate the front page of a new sharing website for booksharing. We used a 3 x 2 between-subject design, crossing reciprocity principle (explicit norm vs. two control conditions: gratitude or absence of an explicit norm) and exchange structure (direct vs. generalized), and randomly assigned 232 participants to one of the conditions.

As expected, without a clearly stated norm, potential giving did not influence the intention to participate directly, but was mediated by an expected balance of reciprocity. In the case of an explicit norm, intentions to participate were higher, but not significant in the direct exchange condition, and lower but not significant in the generalized condition. However, moderation analysis revealed a significant interaction between explicit norm and exchange structure. In the case of an explicit norm, intentions to participate were significantly lower in generalized exchange, compared to balanced exchange. Activating

gratitude, and mentioning no norm at all, did not yield significant effects.

The norm of reciprocity implies both rights and duties (Gouldner 1960). In this vein, receiving does imply an obligation to reciprocate, but giving also justifies receiving. Furthermore, while giving is important for reaching a critical mass (Botsman and Rogers 2010), peer-to-peer sharing depends on both the giving and taking of resources (Schade, Nitschke, and Sattler 2005). Without anyone taking, there is no circulation of resources. For this reason, we do not focus solely on giving, but giving *and* taking as an indicator of sharing intensity in our second study. Building on our results from study 1, we expect an explicit norm to decrease sharing intensity in generalized exchange. In this context, one might give more cautiously, because generalized exchange requires more trust (Ekeh 1974) that one will indeed receive appropriate reciprocation (Takahashi 2000). Additionally, taking might be more reserved, because the explicit norm underlines the obligation to reciprocate and it is not specified to whom one should give in the future, in order to comply sufficiently with the explicit norm.

In study 2, we randomly assigned 162 participants to a 2 (explicit norm vs. no norm mentioned) x 2 (direct vs. generalized exchange) between-subject design. This time, additionally to the front page, they saw how it would look when logging in on the website as a registered member. All participants saw an unbalanced status quo where prior giving exceeded prior receiving.

The results confirm Gouldner's (1960) assertion that prior giving justifies subsequent taking. As expected, significantly more participants chose to look at other's books first, after they had seen the stimulus material. Their decision was independent of the experimental condition. Furthermore, sharing intensity was lower in generalized exchange in cases of an explicit norm. Moderation analysis revealed a significant negative effect in the generalized condition; while there was no effect in the direct exchange condition.

Our findings extend Gouldner's (1960) view on the norm of reciprocity as an initiator and stabilization of social exchange, since we could also show that explicit norms can restrain sharing within generalized exchange in our context (i.e., sharing of physical objects without strong connection between members). However, in order to fully understand the influence of explicit norms in direct and generalized exchange, future research should take into account trust (Ekeh 1974), identification and levels of benefit (Willer et al. 2012).

In conclusion, our findings contribute to the ongoing discussion on the role of reciprocity in sharing (Arnould and Rose 2016; Belk 2010, 2016). Furthermore, we provide additional evidence that generalized exchange is not *per se* more effective than direct exchange, in contrast to what is argued by Lévi-Strauss (1949/1969) and Ekeh (1974). This evidence has implications for sharing platforms regarding platform design and communication.

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Congruence and Incongruence in Advertising-Medium Combinations: More Than Just Two Sides of the Same Coin

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EXTENDED ABSTRACT

Congruence/incongruence has been a key influencing factor in the marketing and advertising literature. We focus on perceived congruence/incongruence between an advertised product category and thematic media content of the vehicle in which it appears (e.g., type of magazine). Existing advertising research suggests that increased congruence generally has positive effects on consumer evaluations, although incongruence can also lead to positive evaluations under specific circumstances. Congruent (as opposed to incongruent) combinations have been described as easier to understand and to memorize (Dahlén 2005, 90; Maille and Fleck 2011, 71). Positive effects of incongruence are often explained by more extensive processing by consumers when they face moderately schema-incongruent information (Mandler 1982) because they want to resolve the incongruence (Dahlén et al. 2008).

The majority of existing studies rely on forced exposure and on explicit ratings of ad-media congruence. Conscious attention to congruence may be less evident when consumers are incidentally exposed to advertised products (e.g., while flipping through a magazine), or when congruence is assessed via less obvious open-ended measures. Under such circumstance, any evaluative effects of congruence are more likely to operate on evaluations through automatic processing.

Conversely, we expected incongruent combinations to garner more attention than congruent combinations under incidental exposure. We base this prediction on Maheswaran and Chaiken (1991) who found that incongruent elements of an advertisement increased the level of elaboration applied to the ad. Study 1 experimentally examines the degree to which consumers consciously focus on congruence or incongruence between an ad and the thematic media content under conditions of forced versus incidental exposure. Our predictions were that consumers would be aware of the congruence between advertising and media primarily under forced exposure conditions, while they would be more aware of incongruence between the ad and medium under the more naturalistic conditions of incidental exposure.

Our theorizing further suggests that congruence and incongruence may evoke different forms of information processing that respectively have positive *and* negative effects on consumer evaluations, albeit by very different means. This possibility is addressed in Study 2, where we include a control condition in order to split the effects of congruence and incongruence, and isolate the effects of each on consumer evaluations and the underlying information processing involved.

EXPERIMENTAL STUDY 1

We manipulated congruence versus incongruence of the ad/medium combination, as well as the method of exposure (incidental vs. forced). Sixty non-marketing male students were exposed to an ad (EPSON ad, Printer) that was either congruent (COMPUTER BILD) or incongruent (AUTO BILD) with the magazine in which the ad appeared. Participants were exposed to the ad either in a forced exposure condition (magazine cover and target ad visible together), or in an incidental exposure condition (magazine cover, followed by a

series of individual ads including the target and filler ads displayed for 3 sec/page).

A logistic regression showed a significant congruence/incongruence X incidental/forced exposure interaction on spontaneous mentions of congruence/incongruence ($p=.003$). Consumers rarely mentioned thematic congruence spontaneously under incidental exposure (6.67%), but were significantly more likely to mention congruence when exposure was forced (73.33%, $p<.001$). The interaction between exposure and incongruence further implied that when consumers were incidentally exposed to the ad they were more likely to spontaneously focus on thematic incongruence than congruence (46.67% vs. 6.67%, $p=.01$), whereas this difference was not significant under forced exposure (46.67 vs. 73.33%, $p=.13$).

Thus, positive effects of congruence observed under incidental naturalistic exposure conditions are likely to be the result of a relatively automatic process, whereas any negative evaluations of ad-magazine incongruence seemed more likely to involve conscious, deliberative information processing, possibly focused on the intended purpose or meaning of the incongruity. These predictions are examined in Study 2 by including an additional control condition that allowed us to tease apart the different forms of information processing that were likely to apply to the effects of congruence and incongruence.

EXPERIMENTAL STUDY 2

107 non-marketing students were randomly assigned to one of the three experimental groups (congruent, incongruent, or control). We used the same magazines as in study 1, but now combined with the fictitious brand name NANOX in order to avoid biases caused by preexisting brand attitudes. In the new control condition, participants only saw the NANOX ad. The incidental exposure procedure from study 1 was used, as this was the more realistic condition.

Since both the traditional fluency and persuasion knowledge explanations for the effect of ad-medium (in)congruence could work at the same time, both paths were first modeled and tested simultaneously using SEM (congruent=1, control=0, incongruent=-1; GFI .903; RMSEA .061). Supporting the fluency explanation, congruence had positive effects via the consistency—fluency—Aad—Aproduct—PI path. In addition, the novel pk predictions for incongruent ad-medium combinations were also supported. In this case, incongruence led to negative effects via the consistency—pk—Aproduct—PI path. When isolated in separate models that compared either ad-medium congruence or incongruence to controls, only the negative incongruence effects via perceived manipulative intent (pk) remained significant. Thus, results from the second study were consistent with the traditional view that increased congruence generally has positive effects on consumer evaluations, but importantly this was due to a combination of positive fluency effects associated with congruence, and negative pk effects associated with incongruence. Furthermore, when the effects of congruence and incongruence were better isolated, the negative effects of incongruence on consumers' evaluations via the pk mechanism proved to be more robust than the traditional congruence—fluency model.

GENERAL DISCUSSION

We find that consumers seem to focus on congruence only when forced exposure is applied. Under incidental exposure, we find almost no attention on congruence. However, consumers are relatively aware of incongruence even under incidental exposure. Study 2 suggests that incongruence can evoke a negative process of its own, which operates through persuasion knowledge. It can be argued that past results that show positive congruence effects involving fluency by comparing congruent vs. incongruent conditions under forced exposure may have: 1) inflated attention to congruence per se, and 2) inadvertently confounded two very different congruence and incongruence processes.

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“The Review is Sponsored by”: The Effect of Sponsorship Disclosure on Blog Loyalty

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EXTENDED ABSTRACT

Consumers often consult online reviews before making a purchase decision. These reviews have become a dominant source for product-related information (Senecal and Nantel, 2004). Thus, many firms have begun to partner with online review sources, such as blogs, as a new form of marketing communication (Dellarocas, 2003).

Past literature suggests that firm sponsorship could be detrimental to blog loyalty. This is due to the notion that blogs act as an independent source of information. Therefore, when sponsoring an online review, blogs risk backlash that could damage trust and credibility (Kozinets, et al., 2010), and may lead to reduced blog loyalty. However, it is posited that hiding firm sponsorship could further damage loyalty towards the blog. Thus, it is advised that blogs disclose firm sponsorship to their readers. This is supported by past literature, which has shown the positive impact of disclosure in a variety of contexts.

Review balance is introduced as a moderator, whereby a product evaluation can either be one or two sided. A two-sided review could increase the credibility of the author, as the presentation of negative information may be seen as working against the self-interest of the sponsoring firm. A one-sided review, however, may be viewed as advertising (Schlosser, 2011), and thus, decrease blog loyalty. Next, based on attribution theory, it is posited that readers have the ability to either attribute the sponsored online review to an internal or external motive. External motives are likely to be ascribed to an outside actor (i.e. the firm), whereby internal motives may be attributed to the author's internal interests. Thus, it is expected that an intrinsic disclosure statement will enhance the positive effect of disclosure on blog loyalty, regardless of review balance. However, a one-sided review is likely to be attributed to the firm (author) when it is one (two) sided.

In four experiments, we examine the negative effect of firm sponsorship of an online review on blog loyalty. Furthermore, review balance is tested as a method by which the negative impact of sponsorship may be reduced. Next, we examined whether involuntary disclosure can further enhance the negative effect of firm sponsorship. Finally, we test whether an internal (vs. external) motivated disclosure statement can enhance (reduce) the effect of disclosure on blog loyalty. All four studies had participants examine an online review for a product.

In Study 1, 600 YouTube video blogs were examined to uncover the effect of sponsorship on blog attitude, measured by the percentage of dislikes per total likes on the video. A significant result was found ($p < .01$), whereby the dislike ratio for a sponsored post ($M = 8.87\%$) was high than a non-sponsored post ($M = 3.30\%$).

Therefore, Study 2 was designed to test whether this result held in an experimental setting with a written online review on blog loyalty. In the sponsored condition, respondents were informed that the review was sponsored by a brand, while no information was provided in the non-sponsored condition. As predicted, it was shown that the sponsored condition significantly ($p < .01$) reduced blog loyalty. In addition, a two-way interaction for sponsorship and review

balance was found ($p < .05$), whereby blog loyalty suffered from sponsorship, particularly if it was one-sided review. However, this was negated with a two-sided review.

In Study 3, the role of disclosure voluntariness was examined as well as the moderating condition of review balance. In the disclosure condition, respondents were informed that a firm had sponsored the online review. In the involuntary disclosure condition, respondents were informed from a third party that the review had been sponsored. As hypothesized, voluntary disclosure had a significantly ($p < .01$) positive effect on blog loyalty. Furthermore, an interaction was found ($p < .05$), whereby both sides were attributed to have influenced the review in the involuntary disclosure condition, while the firm (author) was attributed in the one (two) sided condition.

Finally, in Study 4, a 2 (internal vs. external disclosure statement) x (one vs. two-sided review) experiment was examined on blog loyalty and attribution was examined. Results demonstrated that internal disclosure had a significantly positive effect on blog loyalty ($p < .01$) and attribution ($p < .01$), which indicated that respondents attribute the review to the author. An interaction found whereby a one-sided review was only seen as negative on blog loyalty when an external disclosure statement was given ($p < .05$). However, this was reduced when a two-sided review was presented. A similar interaction was found on attribution ($p < .05$). When external and one-sided, the review was attributed to the firm, compared to two-sided, when was attributed to the author. For both one and two sided, when internally motivated, there was a positive effect on blog loyalty and the review bias was attributed to the author.

Taken together, these studies contribute to existing online review literature by discovering that firm sponsorship has a negative effect on blog loyalty. In addition, this negative effect is enhanced when the sponsorship was involuntarily disclosed. When a disclosure was provided, a two-sided review was able to reduce the negative effect of firm sponsorship on blog loyalty. Furthermore, an internal disclosure statement was able to enhance blog loyalty, regardless of review balance. Thus, the findings provide practical insights for bloggers and firms when seeking sponsorship agreements.

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When Money Doesn't Talk: Corporations Receive Less Credit for Monetary Donations

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EXTENDED ABSTRACT

Recent literature about charitable giving and corporate social responsibility finds that donating is complex, both in terms of doing good and gaining credit (Newman and Cain 2014). Previous scholarly work has debated the best way for donors to receive charitable credit for giving. While monetary donations are arguably the most useful for nonprofits to receive, we predict that corporate donations of goods appear to be more authentic. Authentic motives are important for receiving charitable credit and might be key for corporate giving in particular due to firms' association with profit and susceptibility to suspicion regarding prosocial behavior (Vlachos et al. 2009). Although charities typically prefer monetary donations, this research documents that corporations that donate money are judged less favorably than corporations that donate tangible goods. This "money doesn't talk" effect hinges on consumers' assessments of authentic prosocial motivation: corporate monetary donations are perceived as strategic and less authentically motivated than equivalent donations of goods.

We test our hypotheses across 5 studies. Study 1 documents the basic effect that corporations receive less charitable credit for donating money than for donating equivalent goods. Experimental stimuli described a fictional company, Spades Hardware store, as donating either 1) "\$50" 2) "\$50 worth of canned food" 3) or "a box of canned food" to their local food bank. The second and third conditions were both included to test whether merely mentioning money was sufficient to induce a "money doesn't talk" effect for corporate donations. Participants then rated the company on seven qualities: generous, altruistic, helpful, charitable, kind, beneficial, and "the extent to which they make the world a better place". These qualities loaded onto a single factor, which we call "charitable credit". Consistent with the "money doesn't talk" hypothesis, we observe a significant decrease in the amount of charitable credit that a company receives when donating money versus goods. We observe that this difference in charitable credit due to donation type persists whether or not the monetary value of a goods donation is specified.

Study 2 tested the hypothesis that authenticity mediates this preference for goods donations. We asked participants to rate Spades Hardware on how authentically motivated their donation was. We also tested two plausible alternative mediators: effort and sacrifice. While we believed that authentic motivation was mediating this effect, it was important to rule out the possibility that people were rewarding companies because they perceived goods-donations to be more effortful than, say, writing a check. As predicted, donations of goods garnered more charitable credit than donations of money and this effect was mediated by the perceived authenticity of these donations. Neither effort nor sacrifice mediated this effect.

Study 3 explored a potential moderator of this effect. We propose that low perceptions of authentic prosocial motivation may apply to corporations in particular. Corporations generally are viewed as low in warmth, and thus less likely to be viewed as having authentically good intentions (Fiske et al. 2002). Corporate donors therefore may be particularly vulnerable to the market-exchange signals that are communicated when donating money. By contrast, individuals are viewed as fundamentally social and warm (Aaker, Garbinsky, and Vohs 2012), and thus more likely to be perceived as having genuine interest in helping others regardless of donation type.

We therefore predict that individual donors will be less susceptible to image concerns when donating money, and will not be subject to the "money doesn't talk" effect. Participants in study 2 were assigned to read a brief vignette describing either Spades Hardware or a family (the Jones) that donated \$50 (a box of canned food) to a food bank. As hypothesized, firms received less charitable credit for giving money than for giving goods, whereas the opposite pattern was found for individuals. In other words, participants rated the company more favorably when they donated goods, but rated the family more favorably when they donated money.

Study 4 continued to investigate donor warmth as a moderator of this effect. In order to test this moderating factor we manipulated company warmth. For the high-warmth conditions, Spades Hardware is described as "a friendly, community-based hardware chain which focuses on serving the community and customer satisfaction." For the low-warmth conditions, Spades Hardware is described as "a small corporate hardware chain which focuses on profit and business success." Participants were then told that the company donated either \$1,000 or canned food worth \$1000 to their local food bank. Consistent with our predictions, we found a significant interaction between donation type and brand image. When the company was described as having a low-warmth image, people rated the company more favorably for donations of goods (vs. money), consistent with the "money doesn't talk" effect. When the company was described as high in warmth there was no difference in charitable credit rating based on donation type. Purchase intentions followed the same pattern as charitable credit scores.

In Study 5, we tested warm brand image as a moderator using two real world companies: Pepsi and Bolthouse Farms. A pre-test confirmed that Pepsi is perceived as having a low-warmth image while Bolthouse Farms is viewed as high-warmth. Consistent with our previous moderator study, Pepsi, the low-warmth brand, showed the "money doesn't talk" effect, with people rating the company as significantly more charitable when they make a donation of goods. Bolthouse Farms, however, showed no difference in charitable credit score based on donation type. Once again, purchase intentions followed the same pattern as charitable credit scores. This further demonstrates that warm brand image attenuates the preference for corporate donations of goods.

Despite the fact that monetary donations are the most frequent donation type and the donation type that charities prefer, these studies find that companies who donate money receive less credit for their charitable behavior – and benefit less in terms of purchase intent – than companies who donate equivalent tangible goods. Therefore, companies aiming to maximize charitable credit may benefit from spending their philanthropic funds on thoughtful donations of goods, because at least in some cases, when it comes to corporate giving, money doesn't talk.

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When Goal-Derived Assortments Lead to Goal-Inconsistent Choices

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EXTENDED ABSTRACT

In this research we suggest that goal-derived assortment organizations reduce the likelihood that consumers choose the option that offers maximum goal attainment. To illustrate, we predict that consumers who are looking for an eco-friendly car are less likely to choose the most eco-friendly car when the assortment is organized by goals (e.g., ‘green’, ‘adventure’, ‘sports’ categories) compared to other ways of assortment organization. We argue this occurs because goal-derived organizations are likely to make the items grouped together appear equivalent in terms of their instrumentality for goal achievement, a phenomenon we term *goal-based similarity*. As a result, goal-relevant attributes become less diagnostic for making a choice and consumers turn to other goal irrelevant, and possibly even goal competing, benefits to make their final choice. The data from four empirical studies support our predictions.

In study 1, respondents (N = 117) were randomly assigned to one of two conditions: randomly organized versus goal-derived assortments (with the same items). The assortments consisted of six items, described on five attributes: three common attributes, one focal-goal attribute and one competing goal attribute. In the choice sets there was one option offering maximum goal attainment: the goal-maximizing item. Respondents were given a specific consumption goal before making their choice. Results showed that the relative choice share of the goal-maximizing item was significantly lower in the goal-derived compared to the randomly organized assortment. Furthermore, choice shares of the second item in the goal-derived subset was significantly higher in the goal-derived versus the randomly organized assortment, showing that a goal-derived organization can shift preferences away from the goal-maximizing item.

In study 2, respondents (N = 165) were randomly assigned to the conditions of a 2 (task: choose vs. reject) x 2 (assortment organization: random vs. goal-derived) between-subjects design. In the choice task, respondents were asked to select their most preferred option, in the rejection task they had to reject unwanted items until their most preferred option remained. Next, participants were told that their chosen item was not available anymore and they had to select their second most preferred item. After each choice we asked to indicate to which extent the chosen item was instrumental for attaining the prompted goal. This allowed us to compute a goal-based similarity measure by subtracting the perceived instrumentality of respondents’ second choice from that of their first choice. Results showed that goal-derived organizations decrease the likelihood that individuals choose the item that is most instrumental to fulfill their active goal and that respondents perceive their first and second choice as being more equally instrumental for goal fulfillment in a goal-derived versus randomly organized assortment, but only when the choice task encouraged respondents to view grouped items as similar.

In study 3, respondents (N = 121) were randomly assigned to one of two experimental conditions, a goal-derived versus a brand-organized assortment. The same items were grouped together, only

the label of each group differed between conditions. Respondents were given a specific consumption goal before making their choice. Results showed that the choice share of the goal-maximizing item was significantly lower in the goal-derived organization compared to the organization by brand. Similarly, the choice share of the runner-up option was significantly higher in the goal-derived organization versus the assortment by brand, meaning that goal-derived organizations drive choice shares away from the goal-maximizing item towards the runner-up item.

In study 4, participants (N = 144) were randomly assigned to the conditions of a 2 (assortment organization: random vs. goal-derived) x 2 (choice dimension: goal-relevant vs. goal-irrelevant) between-subjects factorial design. After being primed with a “green consumption” goal, respondents were asked to imagine they were renting a car and were given an assortment, organized either randomly or by goals. Before making their choice, we informed respondents that the car rental company suggested one specific car as the default choice: the car that scored second highest on the goal-relevant dimension (eco-friendliness), and second lowest on the goal-irrelevant dimension (power). Respondents were then offered the opportunity to ‘trade-up’ to a better option: either superior on the goal-relevant dimension or on the goal-irrelevant dimension. We measured respondents’ likelihood of switching and their willingness to pay for the trade-up option on top of the rental price for the default option. Results revealed that in a goal-derived assortment, respondents were more likely to trade-up and pay more for superiority on the goal-irrelevant dimension than on the goal-relevant dimension. The opposite holds for the randomly organized assortment.

With four empirical studies we document the impact of goal-derived assortment organizations on consumer choice across a variety of product categories and consumption goals. In particular, we demonstrate that compared to randomly organized assortments (experiments 1, 2 and 4) or assortments organized by brand (experiment 3), consumers choosing from goal-derived organizations are less likely to choose the goal-maximizing item. In addition to demonstrating that the choice of a particular option is contingent on the type of assortment organization, we show that a similarity effect drives these results. In particular, we show that grouping items by the underlying consumption goal they serve increases their goal-based similarity or in other words, their instrumentality for fulfilling that goal (experiment 2). When the choice task was designed such that similarity effects were less likely to occur (rejection task), perceived goal-based similarities were reduced and the effect of goal-derived organizations on choice was mitigated. We further theorized that the increase in goal-based similarity in goal-derived organizations makes goal-related attributes less diagnostic for choice. Since the items in a goal-derived subset are no longer perceived as being different on the goal-relevant dimensions, other, goal-irrelevant dimensions are used as a choice criterion. As a result, consumers shift their preference to those items that score higher on goal-irrelevant attributes, even if they have to give up performance on goal-relevant attributes (experiment 4).

Shared Happiness and Relational Identities among French Grandmothers and Grandchildren

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EXTENDED ABSTRACT

There has been a growing interest in happiness among scholars and intergovernmental organizations over the last decade. We generally agree that being happy is about feeling good (e.g. Costley et al. 2007). Most of the research on happiness belongs to the psychological and economic realms (Gilbert 2015). In consumer research, happiness has been extensively studied in its relations to materialism (Belk 1985; Richins 1994) and, more recently, in its impact on consumer choice (Mogilner, Aaker and Kamvar 2012). But a gap remains in our knowledge on consumer happiness and its relations to consumers' life projects. While consumer happiness is largely conceived as private matters (e.g. Lee and Chakravarti 2006), insight from recent studies indicates that people may be happy when they feel connected to others (Costley et al. 2007) and to their family (Nelson et al. 2013), in particular.

In this research, we aim to extend our knowledge on consumer happiness. In particular, we seek to understand the dynamics between happiness and consumers' identity projects. We raise the following questions. First, how does happiness manifest in consumption experiences? Second, how does happiness relate to consumers' identity projects? Third, what are the underlying interpersonal dynamics?

In the pursuit of understanding identity building, we located our research among French grandmothers and grandchildren. Family appears indeed as a remarkable context to study the wide range of consumer identities (Epp and Price 2008). Family members build diverse individual, relational and collective identities. Relational identity is conceived as the qualities and attributes of a sub-group that make it particular. It can be enacted, among others, from inter-generational transfers or everyday interactions (Epp and Price 2008). Data collection consisted of interviews with 23 French grandmothers and grandchildren dyads. Informants were selected according to established principles of variety and contrast.

Our analysis of grandmothers and grandchildren discourses advocates three stages that characterize happiness and relational identity. First, we observed that happiness may permeate the genesis of a grandmother identity at a grandchild birth. Happiness is manifest in our elderly informants' discourses when telling about their grandchildren's birth. They often experience an unequaled experience of their first meeting with a newborn grandchild. Moreover, grandmothers may find in particular spaces (e.g. the newborn care department) a set of resources that facilitate the genesis of a specific grandmother identity that is directed to the newborn. In short, each grandmother identity appears as a unique identity that is crafted after the birth of a particular grandchild and that is pervaded with particular emotions.

Second, we suggest that happiness may pervade the building of a relational identity between a grandmother and a particular grandchild. During the first years of a grandchild, many grandmothers expressed an intense happiness that is enacted through the presence of the grandchild. While the grandchild grows up, he-she may also express forms of happiness while sharing consumption activities with his-her grandmother (e.g. shopping, playing games, or watching cartoons together). Research has shown that sharing the same traits, temperaments, common tastes or common values characterize relational identities (Epp and Price 2008). We suggest that sharing the same happiness is also a core element that facilitates the building of a unique relational identity.

Third, our findings show happiness and relational identity may fade when the grandchild enters adolescence. Many informants report sharp changes when the grandchild turns into adolescence, as visits become scarce, and friends are taking more importance in the teenager's life. In such case, grandmothers fear the fade of their relational identity. Though nostalgia and anxiety pervade their discourses, grandmothers still express a sense of shy happiness. They often keep tangible souvenirs (e.g. grandchildren drawings, presents), as reminiscence of their fading relational identity with their grandchildren. These treasures from the past have the potential to revive a sense of happiness. Authors advocate that the marketplace structure impacts on consumer emotions (Beruchashvili and Moisiso 2014). Here, we find that grandmothers use consumption to balance their emotions.

While most research has depicted consumer happiness as an intrapersonal emotion (e.g. Costley et al. 2007), we suggest that happiness may (1) be situated at the (sub)group level and (2) be shared among the (sub)group members. Further, we show how happiness may evolve among a grandmother-grandchild sub-group. Happiness may first manifest at the grandmother level, than it may be shared between the grandmother and the grandchild, and finally, happiness may fade and leave room for individual nostalgia. In short, our findings suggest that happiness may harmonize a set of consumer identity projects and consumption activities.

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The Impact of 'Known Value Item' (KVI) Prices on Product Price Perceptions and Expectations

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EXTENDED ABSTRACT

We propose and test an integrative framework of Known Value Item (KVI) price effects on (1) perceptions of assortment expensiveness, as well as (2) expected prices for products that are to be introduced in the assortment, and (3) perceived expensiveness of specific target products with a known price. Central to our framework is the proposition that KVI prices affect other price perceptions through two routes. First, KVI prices serve as a signal of assortment expensiveness, and assortment expensiveness is used to predict the future prices of upcoming products through assimilation. Since KVI price as such is not informative for predicting prices of newly to-be-introduced products, we expect that assortment expensiveness fully mediates this effect. Second, we posit a similar assimilation process for target products that are already part of the assortment (and for which prices are known): KVI price acts as an indicator of assortment expensiveness, which in turn acts as a cue for target product expensiveness (i.e., assimilation). But at the same time, the price of the target product is evaluated relative to the KVI price, with higher KVI prices making the target product price appear relatively less expensive (i.e., contrast). The effect of KVI price on assortment expensiveness is moderated by KVI user status (with a stronger effect for users vs. non-users). Assortment size is hypothesized to attenuate the impact of KVI price on assortment and target product expensiveness, but to strengthen the effect of assortment expensiveness on target product expensiveness. The model is put to the test in four empirical studies (that also include intentional outcome variables). Study 1 and 2 focus on upcoming, but as yet unpriced products; Study 3 and 4 focus on priced products already available in the assortment.

In Study 1, respondents ($N = 82$) were randomly assigned to one of two experimental versions of a bar price list (Low KVI price, with lager on tap at €1.50 vs. high KVI price, €2.50), and rated assortment expensiveness, the expected price of a new product the bar would introduce (a mojito cocktail), and their intention to visit the bar. Results showed a significant positive effect of the KVI price manipulation on perceived assortment expensiveness and of assortment expensiveness on expected target product price and visiting intention. Assortment expensiveness fully mediated the experimental effect on the outcomes.

In Study 2, respondents ($N = 582$) were shown a fictitious bar price list with three experimental conditions: Lager on tap 25cl priced €1.80, 25cl priced €2.40, or 33cl priced €2.40. Respondents rated assortment expensiveness, price expectation for a non-existing product (a mojito cocktail), and intention to visit this bar. Finally, respondents selected the beverage they most commonly order when visiting a bar. We tested whether KVI user status (user vs. non-user) moderates the impact of KVI unit price and volume. The findings support the direct effect of KVI unit price on perceived assortment expensiveness, and the indirect effect on expected target product expensiveness also observed in Study 1 (with full mediation). KVI

users show a stronger effect of KVI price but are also more likely to (correctly) discount the effect of package size increases on price. Nevertheless, for both KVI users and non-users, a change in package size (leading to a decrease or increase of the absolute price of the KVI) can trigger similar effects as lowering or increasing the actual price of the KVI.

In Study 3, respondents ($N = 447$) saw a fictitious online Neuhaus chocolates store, including two priced products: the Neuhaus Ballotin as the KVI, and the Neuhaus Collection Mild box as the target product. KVI price was manipulated by varying package size at a constant unit price: a 250g box priced at €15 vs. a 1kg box priced at €60. Participants rated target product expensiveness, assortment expensiveness, and target product purchase intention. As hypothesized, presenting consumers with the larger KVI (with a correspondingly higher price) led to an increase in perceived assortment expensiveness, which in turn positively influenced perceived target product expensiveness and led to a decrease in target product purchase intentions. Simultaneously, however, the larger KVI also negatively influenced the perceived target price expensiveness (when controlling for the effect of assortment expensiveness).

Study 4 ($N = 476$) uses the same KVI and target product as Study 3, but additionally manipulates assortment size (extended vs. limited assortment). Results show that in the limited assortment, KVI price increases lead to a stronger contrast effect while the net assimilation effect stays approximately the same.

To sum up, in four studies we provide evidence that KVI prices affect price expectations of (unpriced) upcoming target products via one route (assimilation), and price perceptions of target products already offered in the assortment via two routes (assimilation and contrast) that act in opposite directions – i.e. competitive mediation. On the one hand, KVI prices affect the perception of assortment expensiveness, which in turn spills over to price expectations of non-existing target products that are announced to be added to the assortment and perceptions of existing target products already offered in the assortment - this is an assimilation effect. But on the other hand, only for existing target products, KVI prices also serve as a benchmark against which the price of an existing target product will be evaluated. Thus, lower KVI prices can strengthen the perception that the new item is expensive - this is a contrast effect.

Whereas previous research has typically addressed this as an either/or question, we add to the literature by showing that both processes occur simultaneously. Which process has the dominant effect depends among others on the size of the assortment that is shown (more extended assortments primarily weaken the direct contrast effect). Finally, the contrast and assimilation effects can be obtained not only by actually changing the price of a reference product, but also by changing the package size. KVI users turn out to be less prone to this size/price bias (i.e., they more accurately distinguish between higher unit price and larger package size).

Aesthetic Contrast Motivates Prosocial Behavior

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EXTENDED ABSTRACT

Society is facing and increasingly addressing environmental and social problems such as pollution, malnutrition, and poverty. However, research and practice reveal that motivating people to behave in a socially responsible manner can be challenging and prosocial marketing campaigns are often ineffective (Duclos and Barasch 2014; Evans 2006; Kristofferson, White, and Peloza 2014). This highlights the need to examine motivations of prosocial behavior and communication approaches that are effective in encouraging such behavior. The focus of the current research is on visual images, which are typical in prosocial marketing communication. Specifically, we focus on the aesthetic nature of the visuals and its influence on prosocial behavior.

In a consumption context, aesthetic appeal (the degree to which an object is pleasing to the eye) has a favorable influence on consumer evaluations of ads, products, and brands (Bloch, Brunel, and Arnold 2003; Hoegg, Alba, and Dahl 2010). It is therefore unsurprising that marketers often incorporate aesthetic elements into commercial marketing communications. But what is the role of aesthetics in non-commercial contexts, such as communication designed to encourage prosocial behavior? The main goal of prosocial marketing is not to enhance evaluations or engender product desire but to persuade people to help others. An important notion is that pleasure is not the inevitable or only outcome of aesthetic experience; notably, a long tradition of aesthetics theory highlights empathy as a central component of aesthetic experience (Dissanayake 1992). Empathy is a central mechanism that drives helping behavior (Bagozzi and Moore 1994), so visuals that evoke empathy may be effective in prosocial communication. In light of this, is it beneficial to use aesthetic appeals as a means of elevating empathy and encouraging prosocial behavior?

There is mixed evidence for the persuasiveness of aesthetics in prosocial contexts (Eagly et al. 1991; Fisher and Ma 2014). On the one hand, people often afford attractive individuals more attention and better treatment, which in our view suggests that aesthetics can motivate prosocial behavior via a physical attractiveness stereotype, in line with the beauty-is-good effect (Langlois et al. 2000; Middlewood and Gasper 2014). On the other hand, Fisher and Ma (2014) find that favorable characteristics associated with aesthetic appeal (e.g., attractive children in need) may sometimes *reduce* empathy because the positive attributions make aesthetic individuals and objects appear less needy. Further, depiction of poverty, which is not aesthetically pleasing, may enhance empathy (Nickols and Nielsen 2011), and disfigured faces can evoke both disgust and empathy (Stone and Potton 2014). Thus, aesthetically displeasing appeals may also prompt helping behavior.

What, then, is the optimal use of aesthetics to motivate prosocial behavior? Prior literature indicates that both pleasing and displeasing visuals can evoke empathy and motivate helping behavior, and we therefore suggest that the optimal visual draws on both these elements, in what we term *aesthetic contrast*. Aesthetic contrast refers to a visual in which the aesthetically pleasing is juxtaposed with the aesthetically displeasing. In the following sections, we will argue that a particularly favorable response in terms of empathy and resulting mobilization for prosocial action arises from a visual with an aesthetically pleasing individual among a displeasing group. We further

argue that empathy is driven by two antecedents: (1) identification with the target of the prosocial cause (encouraged by the pleasing individual object) and (2) a sense of the need of that target (encouraged by the displeasing group of objects).

Specifically, we put forth the following set of hypotheses:

Hypothesis 1: A visual image featuring an aesthetically pleasing individual among an aesthetically displeasing group has a more favorable influence on prosocial behavior than does a visual featuring an aesthetically displeasing individual among an aesthetically pleasing group, an aesthetically pleasing individual among an aesthetically displeasing group, or an aesthetically displeasing individual among an aesthetically displeasing group.

Hypothesis 2: The favorable influence of the visual on prosocial behavior is mediated by empathy toward the target of the prosocial cause.

Hypothesis 3: The influence of the visual on empathy is mediated by identification with and perceived need of the target of the prosocial cause.

We test our hypotheses through 5 experiments (in the field, lab, and online) that focus on different prosocial contexts. Study 1a is a field experiment designed to investigate the influence of a visual with aesthetic contrast on donation behavior in a retail setting. Study 1b provides further evidence that the effect relies on aesthetic contrast; color contrast or an attractive object alone do not produce the same effect. Study 2 demonstrates the mediating role of empathy. Study 3 provides evidence for the full underlying process, including the antecedents of empathy: identification and perceived need. It also rules out an alternative explanation, namely, that our findings are not driven by aesthetic contrast but by perceived functionality. Finally, study 4 tests a boundary condition by investigating the moderating role of category similarity.

Overall, this research offers multiple key contributions. First, it is one of very few investigations focused on aesthetics in a prosocial marketing context. We shed light on prior findings regarding the impact of aesthetic appeal in prosocial marketing communication and to some extent also resolve apparent conflicts between these findings. Second, we introduce and demonstrate the role of aesthetic contrast in promoting prosocial behavior. Third, we implicate empathy as the mechanism underlying the influence of aesthetic contrast on prosocial behavior, while also demonstrating the roles of identification and perceived need in encouraging empathy. Fourth, whereas previous research has focused on human attractiveness as the source of aesthetic pleasure, we demonstrate our hypothesized effects with both human and non-human aesthetic appeals. Finally, the reported findings are not only relevant from psychological and consumer research points of view, but they are also of practical importance, considering the challenges involved in motivating prosocial behavior.

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The Effect of Smileys as Motivational Incentives on Children's Food Choices: A Field Experiment in European Primary Schools

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EXTENDED ABSTRACT

This study investigates the efficacy of a simple, motivational incentive—a smiley stamp—in promoting vegetable and salad consumption among primary school children.

Incentives are given to induce a behavioral change in the short term and potentially form habits in the long term (e.g., Becker and Murphy 1988). Whereas their short term effect is as predicted by behavior modification theories—an increased probability of the behavior on which it is contingent—an incentive may actually generate one of three possible outcomes (List and Samek 2014). The incentive may initially modify behavior, which then bounces back to baseline after incentive removal (standard economic theory); the incentive effect may remain even after the incentive is removed (habit formation theory), the observed behavior may fall below baseline after incentive removal because of a crowding-out of intrinsic motivation (self-determination theory; Deci, Koestner, and Ryan 1999). Whether an incentive is successful depends on how much an individual enjoys the activity, values the incentive, or cares about his/her image vis-à-vis self or others (Benabou and Tirole 2006). Incentives must also be awarded for a concrete, easily understandable task that is simple to measure (Angrist, Bettinger, and Kremer 2006).

We conducted a field experiment in 10 primary schools in five European countries using one control and one treatment school per country. The six-week experiment was split into three two-week periods before, during, and after the experimental treatment. Treatment was a smiley stamp for choosing a portion of vegetables or salad. Data was measured on individual level. In the control group, there was no treatment and no stamp card; we measured choice, consumption and waste on aggregate level.

Pretreatment, we measured no differences in vegetable and salad choice and consumption or in waste between the treatment

and control schools. However, during the treatment period, in all five countries, we observed a significant increase in both choice and consumption, but also in waste. Postintervention, the differences between the treatment and control schools decreased but nevertheless remained significant. Country differences were observed. No significant age or gender differences were found.

This study thus demonstrates that low-cost motivational incentives such as a smiley stamp can be used across different countries to motivate school children to increase their vegetable and salad consumption and make healthier eating choices. It also underscores the high relevance of context for behavioral change.

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Children on Sale: The Interactive Roles of Fundraising Promotion and Prosocial Identity on Charitable Intent

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EXTENDED ABSTRACT

In the United States, individuals donated over \$220 billion in 2006 (Giving USA 2007). As an effort to increase charitable giving, prosocial acts have been extrinsically incentivized by offering monetary or physical incentives such as tax breaks and thank-you gifts, or by making a targeted prosocial act less costly (e.g., offering a discounted rate for joining a child sponsorship program as a sponsor). Such practices introduced by both a government and charitable organizations have spurred considerable research on the roles of extrinsic incentives in charitable giving, and researchers reported converging evidence for the detrimental effects of extrinsic incentives on prosocial behavior (e.g., Ariely, Bracha, and Meier 2009; Uri Gneezy and Aldo Rustichini 2000). For example, offering thank-you gifts decreased donations across a wide variety of charities and gift types (Newman and Shen 2012). Monetary incentives were found to decrease blood donation (Mellström and Johannesson 2008). Ariely et al. (2009) also suggested that offering monetary incentives decreases individuals' motivation to help. This finding was found to be more pronounced in a public (vs. private) setting.

Although prior work has made a substantial contribution to the literature, we found three important gaps in the extant. First, researchers have been mostly focused on the effects of offering monetary incentives such as thank-you gifts. Second, researchers have not tested the psychological mechanism that dampens people's charitable intent in a controlled lab setting (Ariely et al. 2009). The third important gap is on the limited understanding of potential moderators in the relationship between extrinsic incentives and charitable intent.

The present research aims to reduce the gaps in three important ways. First, we investigate a different type of external incentives: A fundraising promotion that makes a targeted prosocial act less costly. To this end, we focus on the context in which a charity offers a discounted rate for a targeted prosocial behavior. Specifically, since 2014, Save the Children runs a fundraising promotion targeting existing donors in its child sponsorship program. The promotion offers a discounted rate for being a sponsor of another child. All donors are required to donate \$27 a month if they desire to join the child sponsorship program; but for those who join the program during the promotion period, a discounted rate of \$17 a month is applied. This practice is relatively new, but seems to be quickly adopted by other organizations since it may cost less in soliciting donations than offering monetary incentives. Thus, the present research discusses a practically relevant issue in charitable giving. This setting of research also enhances a theoretical contribution since offering an incentive that makes a targeted prosocial act less costly is not identical to offering monetary or physical incentives. In the former context, donors do not receive any reward such as a thank-you gift, but they simply give less amount of resources compared to other donors who join the prosocial act or program during a non-promotional period. To the best of our knowledge, the present research is the first that investigates the role of a non-reward-based, extrinsic incentive in charitable giving. In line with prior work, we propose that a fundraising promotion that offers a discounted rate for a targeted prosocial act will decrease charitable intent.

Second, we unravel the underlying mechanism that drives charitable intent, with a focus on trust toward a charity. Trust toward a charity is an important antecedent of donation behavior (Bur-

nett 1992; Melendez 2001; Sargeant 1999). For example, Melendez (2001) found that donors only contribute to organizations that they trust and are confident about. Evidence also shows that trust affects people's willingness to become a donor and the amount of money they give (Burnett 1992; Sargeant 1999). Although trust is an important antecedent of donation behavior, prior work has overlooked its role in the relationship between extrinsic incentives and prosocial behaviors. In our research, we posit that a fundraising promotion that offers an extrinsic incentive (i.e., a discounted rate for a targeted prosocial act) will decrease trust toward a charity by giving unethical impressions such that the charity has not properly utilized the funds appropriately, thereby decreasing donation behavior.

Third, we suggest an important moderator that could influence the relationship between a fundraising promotion (i.e., offering a discounted rate for a targeted prosocial act) and charitable intent: One's prosocial identity. In particular, we posit that the detrimental effects of the extrinsic incentive will be more pronounced in the donation context because it will hamper trust toward a charity among individuals who consistently engage in costly prosocial behaviors (i.e., those high on prosocial identity). Donation behaviors are considered highly involved, producing a socially recognizable prosocial self (Michelletti 2003). Therefore, individuals high on prosocial identity will be reluctant to donate if a charity offers a discounted rate for a targeted prosocial act since helping involves high responsibility and self-actualization for them. However, the extrinsic incentive will not influence charitable intent for those who are low on prosocial identity. Prior work has shown that individuals who are not engaged in costly prosocial behaviors will subsequently behave in consistent with the self-perception (Gneezy et al. 2012). Taken together, these findings suggest that offering an extrinsic incentive that makes prosocial acts less costly will cause reactance to individuals who are high on prosocial identity.

In the remainder of this paper, three studies will be reported. Study 1 provides initial evidence for the hypotheses. Study 2 demonstrates the mediating role of trust toward a charity. Study 3 provides a confirming evidence for the mediating role of trust by directly manipulating the level of trust toward a charity. If the proposed effect is indeed mediated by trust toward a charity, offering a discounted rate for a targeted prosocial act should diminish the negative effect of the promotion on charitable intent when a charity puts effort for transparency (e.g., disclosing how donation funds are spent and an actual impact that the donation funds have on the cause or beneficiary group) (Bennett and Gabriel 2000; Hyndman 1990; Palmer and Randall 2000).

STUDY 1

Study 1 aimed to provide initial evidence for the hypotheses. We predicted that among individuals high on prosocial identity, offering a discounted rate on the suggested, or required, donation amount would lead to a decreased willingness to help. By contrast, such a promotion in a donation drive was not expected to influence individuals' charitable intent among those who are low on their prosocial identity.

The study adopted a context similar to Save the Children's child sponsorship program. Save the Children runs a fundraising promotion that offers a discounted rate for new child sponsors. All donors

are required to donate \$27 a month if they desire to join the program; but for those who join the program during the promotion period, a discounted rate of \$17 a month is applied. By adopting a recent business practice of charitable giving in a controlled lab setting, we aimed to enhance ecological validity of the study as well as its internal validity.

Method and Procedure

Ninety people recruited from Amazon Mechanical Turk participated in the study in return for monetary rewards. This study was a single factor (Fundraising promotion: Promotion vs. Control) between-subjects design. In the beginning of the survey, we measured participants' prosocial identity by observing how much they were willing to donate in response to an actual opportunity to give to a local charity. Gneezy et al. (2012) suggest that costly prosocial behaviors serve as a signal of prosocial identity and that people behave in consistent with their self-perception. Thus, those who are high (vs. low) on prosocial identity would help others more in general, and therefore, be more likely to give to a good cause when there is an opportunity to help. To measure participants' prosocial identity, we first instructed them that more than 50% of participants would get a \$10 bonus reward and that the system would randomly select the winners. Participants were then asked if they would donate their bonus reward to a local charity if they were selected as a winner, and if so, how much they would donate. We informed that the amount of money they submitted in this question would be automatically deducted from the \$10 bonus reward and would be donated to a charity.

Next, participants were engaged in a set of five spatial intelligence questions for 3 minutes as a filler task. We included the filler task to make sure that participants' decision on donating their bonus reward does not influence their charitable intent in the main task.

Subsequently, participants viewed an advertisement of an international charity's child sponsorship program. In all conditions, the ad described the potential beneficiary as a 4 year old girl, named Modedalene, from Haiti. From the advertisement, participants learned that child sponsorship is the most effective way to powerfully transform the futures of vulnerable children growing up in poverty and that Modedalene is waiting for someone to become her sponsor. The last sentence in the ad contained the promotion manipulation. In the promotion-control (i.e., no promotion) condition, the sentence read "Please sponsor Modedalene for \$5 a month." In the promotion condition, it read "The minimum donation for the child sponsorship program is \$10 a month; however, if you respond to this mail today, you will be able to sponsor her at a discounted rate – just \$5 a month."

After the promotion manipulation, participants were asked to report how willing they were to donate \$5 a month to help Modedalene based on a 7-point scale. For the manipulation check, we also asked to what extent participants believed that the advertisement utilized marketing techniques based on a 7-point scale.

Results and Discussion

We first observed whether the fundraising promotion manipulation worked as intended. As expected, those who were exposed to a discounted donation rate reported that the given ad utilized marketing techniques more ($M = 5.86$, $SD = 1.60$) than those who were not exposed to the promotional message ($M = 4.02$, $SD = 2.12$; $t(87) = 4.47$, $p < .001$).

Next, we examined the interactive effect of prosocial identity and fundraising promotion on individuals' charitable intent. To this end, we regressed a dependent variable—participant's charitable intent—on fundraising promotion, prosocial identity (measured), and an interaction term. The analysis revealed a main effect of prosocial

identity ($\beta = .26$, $SE = .08$, $t(85) = 3.24$, $p < .01$) and of fundraising promotion ($\beta = -.83$, $SE = .39$, $t(85) = 2.13$, $p < .05$). More importantly, there was a significant interaction between prosocial identity and fundraising promotion on participants' charitable intent ($\beta = -.47$, $SE = .15$, $t(85) = 2.97$, $p < .01$). To explicate the observed interaction, simple slope analysis was conducted. Following Aiken and West (1991), we plotted regression lines at one standard deviation above and below the mean for prosocial identity. When we examined people who were high on the prosocial identity, we found that offering a discounted rate for the prosocial act decreased people's willingness to help ($\beta = -4.51$, $SE = 1.30$, $t = 3.47$, $p < .01$). Observing people who were low on the prosocial identity, we found that offering a discounted rate for the prosocial act did not influence individuals' willingness to help ($\beta = .17$, $SE = .52$, $t = .32$, $p = .74$).

This study provided the initial evidence for our hypotheses. In the next study we more closely look at the mediating role of individuals' perceived trust toward a charity in the proposed relationship.

STUDY 2

In study 2, we explored the mechanism underlying the proposed relationship between an extrinsic incentive and prosocial identity on charitable intent. We predicted that for those who are high in prosocial identity, offering an extrinsic incentive that makes a targeted prosocial behavior less costly would decrease trust toward a charity, thereby reducing one's willingness to give to a good cause. We predict that those who are low in prosocial identity will not be affected in terms of their perceived trust to the charity, and thus, their willingness to help.

Method and Procedure

One hundred and twenty-four people recruited from Amazon Mechanical Turk participated in the study in return for monetary rewards. This study was a single factor (Fundraising promotion: Promotion vs. Control) between-subjects design. We followed the identical procedure to Study 1. But after having participants indicate their willingness to help the beneficiary in the ad (a dependent variable), we assessed participants' trust toward the charity in the ad by having them respond to 7 questions ($\alpha = .98$). Sample items were (1) I trust this charity to spend donated funds to improve Modedalene's life and (2) I trust this charity to always act in the best interest of the cause. In addition, to rule out motivational accounts suggested by prior work (e.g., Ariely et al. 2009; Uri et al. 2000), we assessed participants' intrinsic motivation using 4 items ($\alpha = .94$). Sample items were (1) This charity's fundraising approach dampens an inner drive to help Modedalene and (2) I would feel pleasure by expending an effort to help Modedalene. All responses were submitted based on a 7-point scale.

Results and Discussion

An ANOVA demonstrated that participants in the fundraising promotion condition were more likely to think that the advertisement utilized a marketing technique ($M_{\text{price}} = 5.71$, $SD_{\text{price}} = 1.23$, $M_{\text{control}} = 5.02$, $SD_{\text{control}} = 1.23$; $F(1, 122) = 8.88$, $p < .01$), confirming that our manipulation worked as intended. Next, we conducted a mediation analysis to find the mediating role of trust toward a charity in the proposed relationship. Following Preacher, Rucker, and Hayes (2007), we tested the moderated mediation hypothesis using the bootstrapping analysis in the SPSS moderated mediation macro (MODMED; model 2). Specifically, we entered fundraising promotion as an independent variable, trust toward a charity as a mediator, prosocial identity as a moderator and one's willingness to donate as a dependent variable. As predicted, the analysis (based on 5,000

bootstrap samples) confirmed that trust toward the charity in the ad mediated the proposed relationship for participants who were high in prosocial identity ($\beta = -.53$; $p < .05$), but not for those who were low in prosocial identity ($\beta = -.14$; $p = .43$). To test whether change in intrinsic motivation mediated the relationship between a fundraising promotion and prosocial identity on charitable intent, we conducted the same analysis with intrinsic motivation as a mediator. Supporting our hypothesis, intrinsic motivation did not mediate the proposed relationship for both participants who were high in prosocial identity ($\beta = -.27$; $p = .35$) and for those who were low in prosocial identity ($\beta = .26$; $p = .35$).

Study 2 successfully replicated the findings in Study 1. Also, Study 2 provided the evidence for the mediating role of trust toward a charity in the proposed relationship. In the next study, we aimed to provide confirming evidence for the mediating role of trust by directly manipulating it.

STUDY 3

The goal of Study 3 was twofold. First, we aimed to corroborate the argument for the mediating role of trust toward a charity. To this end, we manipulated the level of trust toward a charity by providing how the donation fund would be spent for a year.

Second, for robustness, the study examines the proposed relationship in a different context: Donation to a local food bank. If there is a global consensus formed with respect to helping children in poverty, those who are high on prosocial identity might have been more affected by social influences than those who are low on prosocial identity. So, in Study 3 we aimed to replicate previous findings in the context of charitable giving to a local food bank. Also, the study adopted a situation where a donor is expected to make a one-time contribution instead of monthly basis, long-term contributions.

Method and Procedure

One hundred sixty-three undergraduate students at a large US university participated in this study in return for partial extra course credit. The study was a 2 (Fundraising promotion: Promotion vs. Control) X 2 (Trust: Maintained high vs. Control) between-subjects design. As in Studies 1 and 2, we measured participants' prosocial identity by having participants indicate how much money they would donate if they were selected as a winner of a \$10 bonus reward. Then participants were engaged in the filler task identical to Studies 1 and 2 for three minutes.

Subsequently, participants viewed an advertisement soliciting a donation to a local food bank. In the promotion-control conditions, the advertisement informed participants that their \$5 donation would help the food bank stretch its food buying power and better address various local needs. In the promotion condition, participants learned that the food bank generally expects a \$10 contribution from each donor to improve its capability to buy food and to fulfill various local needs and that it temporarily runs promotion for fundraising by offering a discounted rate — a \$5 one time donation—for donors who make a contribution in response to the ad. In the high trust conditions, participants learned that 97% of their donation directly goes to help the homeless in the local area and the ad displayed the itemized budget for the money spent in 2015. In the trust-control condition, participants were not informed about how the donation money was spent for the previous year.

After the trust and promotion manipulations, participants were asked to indicate their willingness to donate to the food bank on a 7-point scale.

Results and Discussion

We regressed a dependent variable— participants' charitable intent— on fundraising promotion, prosocial identity, trust toward a charity, and interaction terms. We found a main effect of prosocial identity ($\beta = .10$, $SE = .02$, $t(155) = 4.13$, $p < .001$) and a marginally significant main effect of trust ($\beta = .20$, $SE = .11$, $t(155) = 1.81$, $p = .07$). More importantly, the analysis revealed a significant three way interaction between prosocial identity, fundraising promotion, and trust on participants' charitable intent ($\beta = .05$, $SE = .02$, $t(155) = 2.11$, $p < .05$). To explicate the observed interaction, simple slope analysis was conducted based on regression lines at one standard deviation above and below the mean for prosocial identity (Aiken and West 1991). In the trust-control condition, we replicated previous findings. Observing people high on the prosocial identity, we found that offering a discount rate for the potential prosocial act decreased people's willingness to donate ($\beta = -.91$, $SE = .33$, $t = 2.76$, $p < .01$). Observing people who were low on prosocial identity, offering a promotional rate did not influence individuals' charitable intent ($\beta = -.15$, $SE = .14$, $t = 1.14$, $p = .26$). In the high trust condition, the negative effect of fundraising promotion for charitable intent diminished. Examining those who were high on prosocial identity, offering a discount rate for the one-time contribution did not decrease participants' willingness to donate ($\beta = .30$, $SE = .40$, $t = .74$, $p = .46$). Similarly, individuals who were low on prosocial identity were not influenced by fundraising promotion either ($\beta = .06$, $SE = .16$, $t = .35$, $p = .73$).

This study provided confirming evidence for the mediating role of the perceived trust toward a charity. We successfully replicated findings of Studies 1 and 2 when trust was not manipulated to be high. However, the negative effect of an extrinsic incentive, or a fundraising promotion, on charitable intent diminished when the advertisement contained an effort to raise the trust toward a charity: Those who were high on prosocial identity did not show a decreased willingness to help even when they were exposed to a promotional fundraising message as long as they were informed about how the donation fund would be spent by the charity. This finding is consistent with prior work discussing how important it is for charities to foster trust is (Burnett 1992; Melendez 2001; Sargeant 1999). This finding also corroborates our argument that individuals' trust toward a charity mediates the proposed relationship between prosocial identity and fundraising promotion on charitable intent.

Our research contributes to the literature on the effect of extrinsic incentives in charitable giving by looking into the roles of non-reward-based, extrinsic incentives on prosocial behavior. The current findings also enhance practical relevance by pointing out what is wrong with the current practice of Save the Children in its fundraisi

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Exploring the Antecedents and Consumer Behavioral Consequences of “Feeling of Missing Out (FOMO)”

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EXTENDED ABSTRACT

Today, we are more aware of the numerous alternative activities happening around us than ever before. Notifications about events, conversations, and gatherings taking place swamp our newsfeeds, yet, we often lack the resources to participate in all. Consequently, we are likely to experience an aversive feeling of missing out on the known but unattended experiences.

Despite the extensive press on FOMO (e.g., JWT 2012), scarce empirical work exists on this ubiquitous phenomenon (Przybylski et al., 2013). Entered the Oxford English Dictionary in 2013, FOMO stands for “fear of missing out”. Due to its conceptual distinction from fear, we conceptualize FOMO as “feeling of missing out”. In our work, we examine the immediate feeling of missing out triggered by social cues at a particular moment, indicating a present time orientation about one’s current situation. We elaborate on FOMO in a nomological web of constructs, explore its antecedents (i.e., when and how it occurs), and link FOMO to consumer behavior. Based on a series of online, laboratory and field studies, we define FOMO as “the negative affective state that individuals encounter as a result of becoming aware of the fleeting favorable and self-relevant experiences that are taking place in the environment, from which they are absent.” Importantly, we depict several real-life contexts where FOMO is experienced.

Study 1 explored three possible antecedents of FOMO in a 2 (self-relevance: low, high) X 2 (perceived favorability: low, high) X 2 (popularity: low, high) between-subjects design. Participants (n=340) read about dining at a newly opened restaurant and were asked to imagine checking social media notifications and coming across information about alternative activities. We manipulated self-relevance by indicating that the participant could (vs. not) easily picture herself attending alternative activities; perceived favorability of alternatives by telling that the participant found alternatives more (vs. less) favorable than the dining experience. Participants wrote about the imagined alternatives, and were presented with other respondents’ ratings of these alternatives as highly (vs. not) favorable. Then, participants’ revisit intentions to the restaurant (1=not at all/7=very much) was measured. Adapted from Przybylski et al. (2013), situational FOMO was measured with three statements: “It bothers me that I am in the know about but out of touch with the activities and experiences that are going on around”, “I am worried that I can’t take part in the activities that are going on in my surroundings”, “On this Friday evening, to what extent do you feel like you are missing out on alternative activities and experiences taking place in your environment?” (1=not at all/7=very much), averaged into a single FOMO index ($\alpha=.93$). Set of personality variables and affective measures were used as covariates throughout the studies to rule out alternative explanations. Surprisingly, popularity of alternatives didn’t have an effect on FOMO or on revisit intentions (p ’s>.05). There was a significant interaction between the effects of self-relevance and perceived favorability of alternatives on FOMO. When favorability was high, high (vs. low) self-relevance group experienced higher FOMO (5.03 vs. 3.15; $F(1, 332)=76.14, p<.01$); when favorability was low, low (vs. high) self-relevance group experienced lower FOMO (2.01 vs. 3.17; $F(1, 332)=27.71, p<.01$). A three-way ANOVA also revealed a significant interaction between

the effects of self-relevance and perceived favorability of alternatives on revisit intention. When favorability was high, high (vs. low) self-relevance group had lower revisit intentions (3.97 vs. 4.74; $F(1, 332)=13.74, p<.01$); when favorability was low, there was no effect of self-relevance on revisit intentions ($p>.05$). Macro’s mediated moderation model with 5,000 bootstrapped samples revealed that FOMO mediated the effect of favorability X self-relevance interaction on revisit intention ($b=-.19, 95\% \text{ CI } [-.406, -.042]$).

Study 2 replicated study 1 findings by adopting a more realistic manipulation of popularity of alternatives; Facebook “Like” button images (“0” vs. “over 100” Likes). Results supported that both perceiving alternatives as favourable and self-relevant, but not necessarily as popular, were preconditions of FOMO.

Study 3 explored FOMO among undergraduate students who were taking courses at summer school. Students (n=83) were assigned to FOMO vs. control groups. FOMO group read about students’ summer vacation preferences, which were found to be highly favorable and self-relevant in a pretest. Control group read neutral information. Manipulation check confirmed that FOMO group experienced stronger feelings of missing out. Controlling for other affects, students in the FOMO group indicated lower willingness to attend summer school the following year (4.05 vs. 5.17, $p<.05$), and were less willing to recommend it to their friends (5.22 vs. 5.83, $p=.07$).

Study 4 examined FOMO in a real office environment. 74 individuals from 6 companies completed our survey during overtime work after 17.00 pm. FOMO group read information about six (pre-tested) events that were concurrently taking place in town; control group was provided with neutral information. Manipulation was successful. FOMO group indicated a lower momentary job satisfaction (3.65 vs 4.32, $p<.05$) and lower willingness to stay for overtime work again the following week (3.54 vs. 4.49, $p<.05$).

Lastly, study 5 investigated FOMO during an enjoyable experience. Participants at a museum event (n=67), with a high baseline enjoyment level ($M=6.37, 7$ -point scale) were assigned to FOMO vs. control groups. FOMO group read information about six (pre-tested) events concurrently taking place in town; control group read neutral information. Participants’ variety-seeking tendency and their guess about how many events could be going on in the area that evening were measured as covariates. Manipulation check was confirmed, but there were no differences in other negative feelings (relative deprivation, constraint or regret; p ’s>.05). In addition to revisit intentions, participants’ willingness to accept a monetary amount (measured on a \$0-40 sliding scale) to quit their current activity to attend an alternative activity was measured. FOMO group’s revisit intentions were lower (5.48 vs. 6.12, $p<.05$), and they were willing to accept a lower dollar amount to leave the museum event (\$22 vs. \$28.29, $p<.05$) suggesting that FOMO might lead to lower valuation of one’s current experience.

Our research contributes to the limited existing work on the emerging FOMO construct by exploring its antecedents and consequences for consumer behavior. We demonstrate that FOMO is driven by the awareness of favorable and self-relevant experiences taking place in one’s surroundings. While the popularity of unattended experiences (e.g., Facebook likes) is frequently featured as

an important antecedent of FOMO in the media, our findings reveal that it doesn't influence the extent of FOMO unless the missed out experiences are found personally relevant and favorable. From a managerial perspective, FOMO decreases intentions to repeat a current experience (i.e., redo/revisit intentions) and may decrease the valuation of and recommendation intentions for the current experience. Importantly, we show that FOMO may even be experienced during enjoyable experiences (e.g., fun social event), in the absence of negative feelings like regret.

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Blink and You'll Miss It: The Consequences of Ephemeral Messaging

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EXTENDED ABSTRACT

Media scholars and web commentators call it the *internet paradox* (Kraut et al. 1998; Marche 2012; Weinberg 2014): while social media has expanded the size of consumers' social network, consumers feel less intimately connected with the friends they communicate with online. Despite gaining more access into the lives of others, people feel less interpersonal closeness -- often failing to find the level of intimacy, presence, and immersion experienced in face-to-face interactions (McPherson, Smith-Lovin, and Brashears 2006; Turckle 2011). The internet paradox is one reason why both social media platforms (e.g., Facebook; Zuckerberg 2014) and communications researchers (Baym 2010; McKenna and Bargh 1998; O'Sullivan, Hunt, and Lipper 2004) have pursued methods for creating more immersive virtual settings, with the goal of reproducing the richness of face-to-face interactions felt in the real world.

Typically, social media firms have attempted to make the virtual more real by employing technological innovations that enable transmitting *more and richer* content (Baym 2010; Daft and Lengel 1984; Short, Williams, and Christie 1976). For example, in the case of Facebook, the relatively impoverished means of sharing personal content through status updates has been and continues to be augmented over time. The process started with the addition of photo sharing capabilities, and then with video sharing capabilities, and in the near future with virtual reality capabilities (Rubin 2014). By implementing the ability to transmit visual and auditory information, Facebook has created a user experience that is more immersive than its original solely text-based interface.

Beyond these technological improvements, we propose that immersion and realism in a virtual setting can also be experienced by incorporating ephemerality, which is the quality of transience and disappearance, into the exchange of digital content. The extant literature suggests that ephemerality may create a more immersive experience, in which consumers are more in the ("present") moment. First, research on memory and photo taking indicates that an ephemeral experience, such as viewing artworks in a museum through one's own eyes, results in better memory of the artworks than taking photographs of the art (Henkel 2013). This research suggests that engaging with reality ephemerally rather than through a camera's lens enables individuals to be more immersed in the experience.

Second, unlike permanent messages, which can be saved and read at another time, ephemeral messages vanish after they are viewed, which grounds the interaction to the present. Focusing on a target that is in the present can create an immersive experience, as evidenced by the literature on mindfulness (Brown and Ryan 2003; Hanh 1976; Kabat-Zinn 1990). For example, mindfulness research shows that focusing on breathing -- which is an action that occurs from moment to moment -- anchors attention in the present and creates an immersive experience in which thoughts, feelings, and sensations pass from one second to the next (Bishop et al. 2004). By making digital content fleeting, ephemeral messaging anchors interactions in the present, which creates a more immersive experience when communicating on social media.

Third, the literature on *flow* demonstrates that when attention is directed towards an activity in the present that is reasonably challenging, people enter a state of flow, which entails an immersive experience of flowing from one moment to the next (Csikszentmihalyi 1977; Fortin and Dholakia 2005; Nakamura and Csikszentmihalyi

2014). In this state, consumers are completely absorbed in the task at hand, and their attention must be sustained on the activity occurring in the moment in order to stay in flow. By drawing attention to messages that are transitory, ephemeral messaging encourages consumers to attend to the correspondence and become immersed in the interaction.

Together, the aforementioned research suggests that communicating ephemerally increases immersion, which produces four inter-related consequences of being ("present") in the moment. In Study 1, we demonstrate the basic phenomenon by showing that when the same photo messages are transmitted ephemerally rather than permanently, receivers of the message are more immersed in the experience and develop more interest in joining the activity portrayed by the message. Study 2 shows that when messages convey a mix of both positive experiences (e.g., images from the Super Bowl) and negative information (e.g., reminder that the consumer's favorite team lost), ephemeral, as opposed to permanent messaging, increases consumers' preference to participate in the event; this result supports our conceptualization that ephemerality allows consumers to be more immersed in an experience. Study 3 manipulates the level of immersion and indicates that when immersion in a unifying, coherent experience is made more difficult by transmitting photo messages from multiple, distinct locations (as opposed to from a single location), ephemeral messaging can more effectively restore the level of immersion compared to permanent messaging. Study 4 investigates interactions between pairs of participants who communicated through a chatting app with either ephemeral or permanent messaging; the results indicate that ephemeral messaging led to more interpersonal closeness and immersion than permanent messaging in interactions that would lead to anxiety arising from rumination. In a social interaction that induced less anxiety, ephemeral messaging did not result in more interpersonal closeness than permanent messaging. Study 5 shows that when presented with a sunk cost dilemma for a plan that consumers had just arranged, those who made their plans using an ephemeral messenger rather than a permanent messenger were more resistant to the sunk cost bias. Finally, Study 6 demonstrates that by being in the moment, consumers become more creative when they solve anagram puzzles ephemerally than permanently.

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A Goal Dependent Model of Certainty and Information Seeking

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EXTENDED ABSTRACT

Information seeking and processing represents a central domain of inquiry within consumer behavior. A core tenant of many theories and models is that consumers' desire for information is driven by a need to reduce uncertainty (e.g., Chaiken, Liberman and Eagly 1989; Driscoll and Lanzetta 1965; Maheswaran and Chaiken 1991; Weary and Jacobson 1997). Consumers can often be relatively certain or uncertain about brands they encounter. Based on the principle of uncertainty reduction, consumers should be more likely to search for information about more uncertain brands.

The present research proposes that the uncertainty reduction principle is far less invariant than captured in current models. In particular, we explore the idea that the opposite can often be true: consumers may engage in *less* information search about options accompanied by uncertainty. Specifically, we introduce and test a goal-dependent model that proposes individuals interpret uncertainty in the context of their overarching goals. Although uncertainty increases information processing when a knowledge goal is focal, uncertainty decreases information processing when an efficiency goal is focal.

In prior paradigms demonstrating the classic effect (i.e., uncertainty increasing information seeking and processing), the active goal pertained to *knowledge acquisition* (Lanzetta and Driscoll 1968; Weary and Jacobson 1997). Under a knowledge goal, greater uncertainty signals larger deficiency in knowledge, thus acquiring information about an uncertain (vs. certain) brand enables more progress towards the knowledge goal. This is consistent with existing explanations of the classic effect. However, consumers might often have *efficiency* goals, such as making a purchase decision under time constraint (Duncan and Olshavsky 1982; Punj and Staelin 1983). In this situation, information is a means to an end and consumers need to allocate their time and energy to reach a decision. We propose that, under an efficiency goal, greater certainty signals a higher likelihood of goal attainment. Consequently, seeking information about a relatively certain (vs. uncertain) brand enables more progress towards the goal.

We test our goal-dependent account in five experiments with different manipulations of uncertainty. Manipulation checks assessing uncertainty were included in each experiment and showed that the manipulations had the intended effect. Although we replicate the classic effect when a knowledge goal is present, we consistently show a reversal when an efficiency goal is present, such that consumers engage in greater information seeking for more certain as opposed to more uncertain options.

Experiment 1

Participants (N = 119) were assigned to conditions in a mixed 2 (brand: low- vs. high-uncertainty) x 2 (goal focus: knowledge vs. efficiency) design with brand as the within-participant factor. We presented participants with two fictitious brands that were rated equivalently by consumers; they were told a friend had tried and recommended one (low-uncertainty). Goal focus was manipulated by informing participants that they want to increase knowledge (*knowledge*) or are shopping under time constraint (*efficiency*). The dependent measures were rated likelihood of seeking information for each brand and choice of which brand's website link to click on.

A significant uncertainty x goal interaction for information seeking emerged, $p < .001$. Under a knowledge goal, participants

were more likely to seek information about the high-uncertainty ($M = 5.80$, $SD = 1.21$) than the low-uncertainty brand ($M = 5.32$, $SD = 1.46$), $p = .075$. In contrast, under an efficiency goal, participants were more likely to seek information about the low-uncertainty ($M = 5.12$, $SD = 1.72$) than the high-uncertainty brand ($M = 4.47$, $SD = 1.55$), $p = .015$. Furthermore, participants in the efficiency condition chose the link for the low-uncertainty brand (82.8%) more often than those in the knowledge condition (59.3%), $p = .006$.

Experiment 2

Participants (N = 201) were assigned to conditions in a 2 (uncertainty: high vs. low) x 2 (goal focus: knowledge vs. efficiency) between-participants design. Participants were provided with a goal and read some information about a brand. Those in the low uncertainty condition then listed three things they knew about the brand, while those in the high uncertainty condition listed three things they didn't know. Dependent measures were amount of additional information desired and amount of time they wanted to spend learning about the brand ($r = 0.56$).

A significant uncertainty x goal focus interaction on information seeking was present, $p = .017$. In the knowledge focus condition, those in the high-uncertainty condition ($M = 5.10$, $SD = 1.00$) wanted more information than those in the low-uncertainty condition ($M = 4.65$, $SD = 1.27$), $p = .086$. In the efficiency focus condition, a reversal occurred: less uncertain individuals ($M = 4.71$, $SD = 1.28$) wanted more information than those feeling more uncertain ($M = 4.28$, $SD = 1.23$), $p = .092$.

Experiment 3

Experiment 3 (N = 154) used a similar design and procedure as Experiment 1 to examine information acquisition behavior. Participants were presented with two real brands, pretested to differ in uncertainty but be equivalent in attitude. They were presented with a knowledge or efficiency goal and allowed to read three pieces of information in total before selecting a brand.

To measure information seeking, the percentage of information selected about the uncertain brand and the percentage of time spent reading about the uncertain brand were combined ($r = 0.85$). A one-way ANOVA with goal focus as the factor revealed that participants in the efficiency condition engaged in less information seeking for the uncertain brand ($M = 66.44\%$, $SD = 16.05\%$) compared to participants in the knowledge condition ($M = 72.62\%$, $SD = 19.96\%$), $p < .05$.

Experiment 4

Experiment 4 examined the mechanism for why an efficiency goal produces more information seeking when people are relatively certain versus uncertain. Participants (N = 140) were all given an efficiency goal and assigned to a high- or low-uncertainty condition using the manipulation from Experiment 2. Participants completed measures assessing desire for information, uncertainty, and expectations of goal attainment.

People sought more information when relatively certain versus uncertain, replicating the efficiency goal findings of previous experiments, $p < .001$. Serial mediation analysis examined the hypothesis that uncertainty reduces expectations of goal attainment under an efficiency goal. The indirect effect was significant, $\beta = 0.27$, $z = 3.49$, $p < .001$, supporting our model.

A fifth experiment replicated the efficiency goal findings in a paradigm with multiple real brands. The present research makes an important theoretical contribution by demonstrating a reversal of the classic effect as well as by introducing a theoretical model specifying when and why each effect occurs.

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Consuming *Bondieuserie*: Raising the Profile of Religious Kitsch Consumption

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EXTENDED ABSTRACT

Consumer research discussions of pilgrimage have centred on three predominant conversations; new-age pilgrimage (O’Guinn and Belk, 1989), secular/brand pilgrimage (Kozinets, 2001; Borghini et al., 2009), and religious/spiritual pilgrimage (Scott and Maclaren, 2013, Kedzior, 2013; Turley, 2013; Moufahim, 2013; Higgins and Hamilton, 2014; 2016). However, emphasis has been placed upon the intangible experience, with few investigating the symbolic value of the physical goods associated with the pilgrimage. Furthermore, currently consumer research has neglected the popularly consumed kitsch object. Within religious settings, kitsch has been discussed briefly and negatively, with researchers to date believing such items to be “offensive” (Belk et al, 1989; Turley, 2013), in bad taste (Maclaren et al. 2012) and an “inappropriate mixing of the Sacred and the Profane” (Belk et al, 1989, 25). Yet if so, why do religious marketplaces offer such goods, and why do their consumers – most often religious followers - consume these goods? Drawing on the emergent findings of a three-ethnographic study at the Catholic pilgrimage site of Lourdes, this paper aims to raise the profile of religious kitsch objects, offering insight into the symbolic and functional value consumers gain from such “material manifestations of religion” (McDannell, 1995, 4).

RELIGIOUS CONSUMPTION, KITSCH AND *BONDIEUSERIE*

Consumer research discussions of religious consumption have focussed upon the consumption of religious clothing and objects as a means of communicating sense of self or religiosity (Zwick and Chelariu, 2006; Wong, 2007; Jafari and Goulding, 2008; Sandikci and Ger, 2010; Rinallo et al., 2013). With Rinallo et al. (2013) finding consumption of the fashion rosary bead (traditionally used by Catholics to keep track of structured prayer) to be “both sacred and secular at the same time” (2013, 36), enabling religious consumers simultaneously to be in fashion and faith. Further research uncovered the consumption of religious objects to enable communication with Deity (Higgins and Hamilton, 2012) or with loved ones (Moufahim, 2013). Indeed Moufahim (2013, 2) asserts that material consumption is “necessary for a pilgrimage experience to be successful”. However, consumer research overlooks the role and significance of the religious kitsch good.

Within Christianity, the French word “*Bondieuserie*” (McDannell, 1995, 165), refers to both “religious knickknacks” and the “notion of the conformingly banal”. However English has no translation for *Bondieuserie*, subsequently alliterative, derogative terms such as “Catholic/ Christian kitsch”, “Holy hardware” and “Jesus Junk” (McDannell, 1995, 222) have become popular. Turley (2013, 169) describes Catholic Kitsch as “anachronistic, clichéd, derivative, mass-produced, populist and in poor taste”, resonating with Belk et al.’s (1989, 25) belief that religious kitsch decontextualizes, is “offensive” and an “inappropriate mixing of the Sacred and the Profane”. This study critiques this derogative viewpoint, uncovering the religious kitsch object to encase symbolic and functional value.

CONTEXT & METHODOLOGY

Lourdes, a beacon of hope and renewal for sick and healthy pilgrims, hosts over six million consumers annually, making it, after Paris, the second biggest tourist destination in France. Lourdes is an

example of a “place-directed market created by the crowds drawn to a sacred place” (Scott and Maclaren, 2013, 196). For outside the Sanctuary gates of Lourdes, exists a consumption-scape of 220 souvenir shops, equaling one shop for every 30,000 pilgrims, offering all types of products from the religious prayer card and rosary bead, to the kitsch sparkly religious statues and the popularly consumed luminous religious goods.

In keeping with standard ethnographic practice, multiple methods of data collection were employed. Fieldwork data resulted in over 200 pages of double spaced field-notes, approximately 3000 visuals (photographs and videos), and many informal and serendipitous interviews with pilgrims on site at Lourdes, which were audio-recorded when possible. Depth interviews were conducted with twenty-three respondents lasting from thirty minutes to four hours in length enabling the understanding of personal life histories. All interviews were transcribed verbatim, tallying over 1000 double spaced pages of transcription. Data was analyzed thematically with the religious kitsch good emerging as important to pilgrimage consumption.

“*BIG BEADS FOR BIG PRAYERS*”: THE FUNCTIONAL AND SYMBOLIC NATURE OF KITSCH OBJECTS

“...I was gifted a set of Rosary beads that you could hang at the top of the door and they could reach the ground and the beads were the size of my fists, and Melanie [friend] said to me I think maybe last year, I don’t know what was happening in her family, but she said “we need big prayers”. So I packaged them off and said to her “here’s big beads”...And they had a family rosary [prayer session] downstairs with Melanie’s mother and father – well her dad is mostly in bed all of the time – and they were laughing because he kept losing his rosary beads so she brought them in and said “well you won’t lose this one” and her little grandkids now they all use these big ones...” (Phillip, 63).

Patrick outlines the trajectory of what he initially viewed as a “tawdry” set of rosary beads, as becoming gifted, re-gifted and finally moving from symbolic to being functionally used within a family prayer setting. The functional value of the rosary beads departs from Belk et al.’s (1989, 9) belief that to maintain sacredness within an object, the Sacred object must remain “beyond mundane utility”. However, this study uncovers sacred and religious goods can be both functional and symbolic. For although the above beads were initially viewed as “tacky” and “laughter provoking” (McDannell, 1995), at their core they remain known as a prayer tool aiding a Catholic to say the rosary. Consequently, with time and through sacralisation via gift giving (Belk et al., 1989), the big beads regain both sacred and functional value.

To end, we raise the profile of religious kitsch goods and draw on the notion of *Bondieuserie* to demonstrate that religious goods, which have been negatively perceived in previous research, can in fact be symbolically and functionally valued. Thus, we believe and agree with McDannell (1995) that the material dimension may be one way that religion can be better understood and the meanings of religious life better “deciphered” (McDannell, 1995, 2).

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When Exploding Deals Create Competitive Customers: Understanding the Psychological Consequences of Scarcity Marketing Tactics

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EXTENDED ABSTRACT

Scarcity marketing tactics are a time-honored mainstay in promotional advertising. It is common for television, online, and in-store advertisements to emphasize the limited nature of promotional offers, often referencing either the limited quantity (e.g., “while supplies last!”) or limited time (e.g., “one day only!”) associated with a promotional offer (Cialdini 2009). The pervasive use of both tactics is not surprising, given that the practical value of such promotions has been supported by academic findings, which reveal that perceptions of scarcity often positively correlate with perceptions of desirability, value, and purchase intentions (e.g., Brock 1968; Inman, Peter, and Raghubir 1997; Sevilla and Redden 2014).

However, in the current research, we highlight an important caveat to these prior findings. In a series of studies, we evidence that time-based scarcity promotions can produce the ironic effects of motivating consumers to (1) devalue the promoted product and (2) look for better deals elsewhere. This shift in consumer behavior occurs because consumers exposed to time-based scarcity marketing promotions are more likely to be aware that they are being manipulated by the retailer. This activation of persuasion knowledge subsequently engenders a sense of competition with the retailer, which produces these negative results.

By testing this, we provide a novel and important demonstration of the negative consequences of time-based scarcity marketing. Further, we highlight an important and heretofore unrecognized distinction between the psychological consequences instantiated by time-based scarcity marketing tactics versus quantity-based scarcity marketing tactics. Whereas quantity-based scarcity marketing tactics have been shown to increase competition among consumers (Aggarwal, Jun, and Huh 2011), we provide evidence that time-based scarcity marketing promotions can have the negative effect of increasing a sense of competition with the retailer, which has negative consequences for how retailers’ products are valued.

Recent research in this domain has demonstrated that consumers exposed to reminders of resource scarcity adopt a competitive orientation (Roux, Goldsmith, and Bonezzi 2015). We suggest that scarcity marketing tactics may provoke a competitive orientation in certain contexts. Indeed, Aggarwal et al. (2011) found that print advertisements highlighting limited quantity increased perceptions of competition with other consumers, thereby increasing participants’ purchase intentions.

However, whereas quantity-based scarcity marketing tactics engender competition among consumers, we suggest that time-based marketing tactics will engender a competitive orientation toward the retailer. We draw from the literature on persuasion knowledge (e.g., Friestad and Wright 1994) to argue that consumers perceive time-based scarcity marketing tactics as evidence that the retailer is trying to manipulate them (e.g., Campbell and Kirmani 2000). Consequently, consumers will become suspicious of the retailer (Campbell and Kirmani 2000), and will be more inclined to regard the retailer as an adversary (trying to maximize his own financial gain). For this reason, consumers will be motivated to (1) devalue the promoted product and (2) engage in search elsewhere for the same product when they are exposed to time-based scarcity marketing tactics, as

compared to other conditions. To date, we have conducted three studies to investigate this idea.

In Study 1, MTurk participants ($n = 383$) imagined shopping online for a tablet for their significant other, viewing a fictional retailer’s website advertising the discount. Participants saw a timer counting down until the deal expires (time-scarcity condition), a timer counting down until the retailer’s two-year anniversary (time-control condition), or no timer (control condition). Participants in the time-scarcity condition reported significantly lower WTP for the promoted product than both control conditions, despite recognizing that significantly less time remained to purchase the product. There was no difference, however, for product quality perceptions or website quality perceptions. Thus, contrary to prior literature, these results indicate that time-based scarcity marketing can cause consumers to devalue the promoted product.

Study 2 replicates this effect in a laboratory setting and examines whether consumers exposed to time-scarcity promotions engage in greater product search behavior as a result of a competitive orientation towards the retailer. Participants ($n = 131$) first read the same study 1 scenario (conditions: time-scarcity; time-control; control) and then had the opportunity to search competitors’ websites for a better deal, subsequently rating their felt competition with the retailer. Those in the time-scarcity condition reported a significantly greater desire to “beat” the retailer. Additionally, the time-scarcity condition spent marginally more time than those in the control conditions searching competitors’ websites for a better deal. Importantly, the effect of time scarcity promotions had a positive, indirect effect on search time through participants’ competitive orientation towards the retailer. Thus, consistent with our theorizing, consumers exposed to time scarcity promotions experienced greater competition with the retailer, subsequently motivating them to search for the promoted product elsewhere.

In study 3, we directly demonstrate the mediating role of persuasion knowledge activation. Using a 2 (Scarcity: time-scarcity, control) \times 2 (Recipient: self, other) between-subjects design, we exposed MTurk participants ($n = 371$) to an online shopping scenario similar to previous studies. In addition to manipulating product recipient, we randomized the countdown start time (time-scarcity condition). Participants estimated the time they’d be willing to spend searching for a better deal and then rated their competitive orientation (towards retailer and other consumers), persuasion knowledge, affect, and psychological reactance. Those exposed to the time-scarcity promotion indicated more persuasion knowledge and greater felt competition with the retailer, but did not differ from the control condition in consumer competition, affect, or psychological reactance. Critically, time-scarcity promotion exposure had a positive, indirect effect on search time, through the effect of persuasion knowledge on experienced competition with the retailer. Thus, in line with our predictions, we find that time-scarcity promotions activate consumers’ persuasion knowledge, which increases consumers’ competitive orientation toward the retailer and, consequently, increases consumers’ willingness to search for a better deal.

In sum, the current research evidences that time-based scarcity promotions can produce the ironic effects of motivating consumers to (1) devalue the promoted product and (2) look for better deals elsewhere. As such, this investigation not only offers practical impli-

cations, but theoretical advancements both for the literature on scarcity promotions and for understanding the psychological processes instantiated by exposure to scarcity marketing promotions.

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More than Words: a Psycholinguistic Perspective on the Properties of Effective Brand Slogans

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EXTENDED ABSTRACT

Slogans help define a brand's identity and strengthen its positioning. Firms across the world spend millions of dollars each year creating and communicating slogans, such as "The Ultimate Driving Machine," "What's in your Wallet?," and "Like a Good Neighbor..." (Edwards 2011). Surprisingly, despite the ubiquity of slogans in today's marketplace, there is little consensus on what makes for a "good" slogan. (Bradley and Meeds 2002; Dass, Kohli, Kumar, and Thomas 2014; Kohli, Leuthesser, and Suri 2007; Kohli, Thomas, and Suri 2013; Lagerwerf 2002).

We attempt to improve understanding of what makes slogans effective by drawing on the rich literature in cognitive psychology and psycholinguistics. Specifically, we draw on evidence that the lexical, semantic, and emotional properties of individual words influence both memory and perceptions (Cortese, Khanna, and Hacker 2010; Kensinger and Corkin 2003). Whereas previous studies have focused largely on exploring the effectiveness of slogans at the composite level, we investigate what constitutes an effective slogan by examining the linguistic characteristics of each of the discrete words in the slogan. This approach has the unique potential to advance the literature by unearthing key insights into the distinctive word properties of the most effective slogans, offer practical advice into optimal word-choice strategies, and deliver some actionable tools for a manager's slogan design toolbox.

Effective slogans should increase brand awareness and strengthen brand attitude (Keller 1993). Because memory for marketing communications influences brand awareness, we investigate how the linguistic properties of a slogan's words influence slogan recognition. Additionally, because the extent to which consumers like a marketing communication directly and indirectly influences brand attitudes (MacKenzie, Lutz, and Belch 1986; Mitchell and Olson 1991), we further investigate how consumers' liking of slogans is influenced by the linguistic properties of a slogan's words. These constitute our dependent variables in the analysis (i.e., slogan recognition and slogan liking) for which we postulate and test seven hypotheses concerning the influence of eight distinct psycholinguistic variables.

Citing dual process theory (Evans 2003), we hypothesize that the psycholinguistic properties of slogans that serve to increase processing fluency will increase liking, but simultaneously reduce recognition, and vice versa. This would have significant managerial implications for slogan design. More specifically, slogans employing words that require more effortful system 2 processing should be more easily recognized, but at the expense of reduced liking. The reverse should be true for slogans dense in words that facilitate a more fluent system 1 processing. The underlying nature of this dual-process account serves as the key theoretical basis for each of the following hypotheses.

Hypothesis 1_{a,b}: (a) Slogans with a greater number of words will be recognized more, (b) but liked less.

Hypothesis 2_{a,b}: (a) Slogans dense in high-frequency words will be recognized less, (b) but liked more.

Hypothesis 3_{a,b}: (a) Slogans dense in orthographically dissimilar words will be recognized less, (b) but liked more.

Hypothesis 4_{a,b}: (a) Slogans dense in concrete words will be recognized more, (b) but liked less.

Hypothesis 5_{a,b}: (a) Slogans dense in words acquired at a young age will be recognized less, (b) but liked more.

Hypothesis 6_{a,b}: (a) Slogans with the brand name included will be recognized more, (b) but liked less.

Hypothesis 7_{a,b}: (a) Slogans dense in positively valenced and arousing words will be recognized more, (b) and liked more.

EMPIRICAL ANALYSIS

We test our hypotheses on a sample of 845 real slogans for brands spanning multiple industries, product classes, and geographic locations. We measured the psycholinguistic properties of each of the 845 brand slogans by breaking each slogan into its individual words, and then used established psycholinguistic databases (e.g., the English Lexicon Project; Balota et al. 2007) to obtain values for each of the eight psycholinguistic variables. We then computed slogan-level averages by taking the average score across all of the words in each slogan for each independent variable (e.g., slogan concreteness = the average concreteness across all the words in the slogan).

We assessed slogan recognition and liking by surveying 594 undergraduate students at a large U.S. university. Participants indicated the extent to which they liked 50 randomly selected slogans and then were presented with a surprise recognition test for the 50 slogans they evaluated with 50 distractor slogans included (see Cortese et al. 2010 for a similar example). Consistent with the hypotheses, brand slogans using words that facilitate faster, less effortful processing were more liked but were less likely to be correctly remembered. Conversely, slogans with psycholinguistic properties that stimulate a more effortful, conscious processing were associated with higher levels of recognition but less favorable liking ratings. Specifically, the results indicate that, on average, slogans employing more common, less orthographically-confusable, and less concrete words are more liked. Keeping the brand name out of the slogan likewise increases slogan appeal. On the other hand, longer slogans that are comprised of less common and more concrete words exhibit higher levels of recognition. Including the brand name in the slogan is also associated with enhanced memorability.

LAB EXPERIMENT

Next we conducted a confirmatory laboratory experiment ($N = 252$) to test the results of the empirical analysis and improve the liking or recognition of real brand slogans by altering the psycholinguistic properties. More specifically, to improve slogan liking, synonyms that were more common, less orthographically similar, and

less concrete were sought to replace a slogan's existing core words. For example, Club Med's slogan "the antidote for civilization" was revised to "the cure for mankind." Similarly, to improve recognition, synonyms that were less common, more orthographically confusable, and more concrete were pursued. For example, Toyota's slogan "get the feeling" was changed to "snag the sensation." Slogan liking and recognition were assessed on a sample of 252 undergraduate students at a large U.S. university. Results corroborated the findings of the previous empirical analysis. For each of the unique slogan sets the revised slogans outperformed the original slogans in the expected manner.

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Visualizing Emergent Identity of Assemblages in the Consumer Internet of Things: A Topological Data Analysis Approach

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EXTENDED ABSTRACT

The Internet of Things (IoT) represents a new phase of the Internet where consumers can not only interact with smart devices, but devices can interact with each other. Consumers can interact with smart devices like wearables, thermostats, lights and more, devices can interact with other devices, and devices can even interact with content on the Internet. We propose that interactions in the IoT create assemblages of consumers, digital information, and physical devices. IoT assemblages have emergent capacities (things they can do or have done to them) that are not present in the consumers, digital information or physical devices by themselves. Such capacities come from the ongoing interactions among the various components of the assemblage, rather than from the components themselves (e.g. DeLanda 2006, Hoffman and Novak 2015). For example, a smart networked toaster can learn from other toasters that it is being used less than average, it can flip its lever angrily to get our attention and encourage us to use it more, and it can complain about us on Twitter when we don't use it enough and ask someone to come and take it to a better home (Rebaudengo, Aprile and Hekkert 2012). The toaster's identity emerges from its capacities exercised in these interactions.

Using assemblage theory to anchor our conceptualizing and motivate our methodological approach, our objective in this paper is to understand the identity of a particular IoT assemblage and examine how its identity has evolved over time. The identity of an assemblage - "what it is" - is defined as the properties, capacities and tendencies that emerge through processes that initiate and sustain the ongoing interactions between the parts of the assemblage (DeLanda 2011). The identity of an assemblage is important because consumer experience emerges from a person's interactions with an assemblage, and consumer experience is influenced by the identity of that assemblage (Hoffman and Novak 2015).

One example of an IoT assemblage is the online service IFTTT.com, launched in 2011. IFTTT is a Web and app-based platform that allows consumers to connect nearly 300 different channels through user-created If-This-Then-That rules called "recipes." IFTTT channels include physical connected home and car devices, wearables, social media, mobile apps, news sources, photo and video sites, and more. IFTTT users collectively run 20 million recipes each day for making various things happen (Lunden 2015). For example, one recipe might change one's smart bulbs pastel blue when it is raining, and another recipe might turn on mood music to play along with the lights as it rains. IFTTT does not stipulate how consumers create recipes for interaction, and thus the way that people choose to use IFTTT determines IFTTT's very identity. Each IFTTT recipe is a consumer-created interaction among components, with IFTTT an assemblage that has emerged from these interactions over time.

The paper is organized as followed. First we briefly consider aspects of assemblage theory relevant for understanding IoT assemblages. Then we describe empirical data we collected from IFTTT.com describing 120,253 consumer-created IFTTT recipes, and introduce Topological Data Analysis (TDA) (e.g. Carlsson 2009, 2014; Lum et al. 2013), a methodology ideally suited to analyze the emergent capacities and identities of assemblages. We conclude with a brief discussion of the contribution.

ASSEMBLAGE THEORY AND TDA

In recent years, assemblage theory has been applied to a range of consumer behavior and marketing problems, including dissipation of a brand's audience (Parmentier and Fischer 2015), consumption experiences (Canniford and Shankar 2013), outsourced family caregiving (Epp and Velageleti 2014), long-distance family practices (Epp, Schau and Price 2014), heterogeneous consumption communities (Thomas, Price and Schau 2013), consumption-driven market emergence (Martin and Shouten 2014), and Doppelganger brand images (Geisler 2012). In our use of assemblage theory, we focus on several key ideas from the interpretation and reformulation of assemblage theory (Deleuze and Guattari 1987) by DeLanda (2002, 2006, 2011) and the subsequent interpretation of DeLanda's framework within the IoT context by Hoffman and Novak (2015).

The concept of interaction is crucial to understanding assemblages, with the interaction event serving as the fundamental unit of analysis. However, an assemblage is not merely a collection of heterogeneous interacting components, but a connected whole with emergent capacities that is more than the sum of its parts. As described by DeLanda (2002, 2006, 2011), entities (i.e. assemblages and their components) are characterized by capacities, which specify what an entity can do and what can be done to it. An interaction event involves paired capacities of entities, where the capacity of one component to affect is paired with the capacity of another component to be affected. An IFTTT recipe is thus an interaction of components (corresponding to the two channels involved in the recipe), where the capacity of one channel to affect (the "trigger channel") is paired with the capacity of another channel to be affected (the "action channel"). Through on-going interaction of these and many other components, new capacities of the larger assemblage can emerge.

In considering how the capacities of an assemblage emerge, DeLanda (2002, 2006, 2011) introduces the concept of the underlying *possibility space* as a mathematical topological structure that defines the potential emergent capacities of an assemblage. Within the possibility space, any given assemblage is a *singular realization* of the many potential assemblages that can emerge, and is thus one of a population of assemblages. We view an individual IFTTT recipe as a singular realization that has actually been created and used by a consumer. In addition, the possibility space contains *optimal locations* that are topological invariants that define "extreme forms" (DeLanda 2006 p30) and serve as attractors that influence long term trajectories of an assemblage through the possibility space, shaping the form of assemblages as they emerge. These optimal locations structure the possibility space and influence the population of the singular realizations (i.e. actual assemblages) that emerge. From a consumer behavior perspective, we can view these optimal locations as underlying needs or consumer segments that drive the formation of individual IFTTT recipes. This is an important point since we are concerned not just with the IFTTT recipes that a single consumer creates, but with the larger population of all IFTTT recipes that have emerged.

DeLanda's concept of the possibility space is particularly helpful, in that it allows us to translate the concepts of assemblage theory into mathematical form, meaning that it is possible to analyze actual interaction data to produce visualizations of the identity of an assemblage. Recent computational advances have led to the development of a hypothesis-free approach based on topology that allows for the quantitative analysis of functions of very high-dimensional data and

the visualization of the data structure in low-dimensional topological spaces (e.g. Carlsson 2009, 2014; Lum et al. 2013). The approach, termed topological data analysis (TDA), is an especially compelling approach to inferring the identity of an assemblage as revealed by the interactions among its components.

DATA

Our data were collected in June 2014 by scraping all Web pages on IFTTT.com that contained publicly viewable user-generated IFTTT recipes created over a three year period from mid-2011 to mid-2014. Altogether, we obtained 120,253 IFTTT recipes that were created by 60,230 unique IFTTT users. For each recipe, five key variables characterizing the recipe were obtained: 1) trigger channel, e.g. "iPhone IOS Location," 2) specific trigger expression for the trigger channel, e.g. "You enter an area," 3) action channel, e.g., "Philips Hue Lights," 4) action expression for the action channel, e.g., "You enter an area," and 5) title the IFTTT user gave to the recipe that they created, e.g. "Turn on my lights when I get close to my home."

The data matrix was very sparse due to the very large number of levels of categorical variables - 86 unique trigger channels, 354 unique trigger expressions, 69 unique actions channels, and 124 unique action expressions. To be able to determine the degree to which two IFTTT recipes are similar to each other, we created binary variables for each word in the trigger expression, action expression, and title using WordStat 7. An exclusion dictionary was used to eliminate stop words (e.g. a, an, the, etc.) and lemmatization was applied to collapse different inflectional forms of a word into its base, dictionary form (i.e. the lemma). This resulted in a total of 1101 binary variables: 86 binary variables from the actual trigger channels, 280 binary variables from words in the trigger expressions, 69 binary variables from the actual action channels, 103 binary variables from words in the action expressions, and 563 binary variables from the text of the recipe titles.

The resulting matrix of 120,253 recipes and 1101 variables coded the IFTTT recipes at a very fine level of granularity, producing 132 million data points. Such complex "big data" representing consumer behavior present challenges for conventional data reduction and visualization approaches. Principal components analysis (PCA) of the data revealed 401 eigenvalues greater than one accounting for 73% percent of the variance, while a scree plot showed an elbow at five components which accounted for only 3% of the variance. A plot of the first two principal components was uninformative, accounting for only 1.5% of the variance, and with each component characterized by only a few of the over 1101 variables. Multiple correspondence analysis (MCA) performed on the Burt matrix created from the 1101 binary variables again extracted 401 dimensions, and took six hours to compute using Stata on a modern desktop computer. The first two dimensions of the MCA accounted for 8.17% of the variation in the data, but the plot was no easier to interpret than the PCA with only a few variables characterizing each dimension. Additionally, K-Means and hierarchical clustering solutions were not clearly interpretable due to the large number of variables. Thus, conventional dimensional reduction and visualization approaches have considerable difficulty revealing clear patterns in the complex dataset of IFTTT recipes created over a three year period.

METHOD

TDA (Carlsson 2009; Lum, et.al. 2013) uses computational topology techniques on complex high-dimensional data to produce a three-dimensional topology of simplicial complexes (discrete, combinatorial objects) in which groups of data are represented as nodes that contain rows that are similar to each other in the high-dimensional variable space and the edges connect nodes that share rows. The simplicial

complexes capture the topological and geometric structure at a specified resolution and the resulting topological network can be examined to discern patterns in the data. Compared to techniques like PCA and MCA where interpretation may vary depending upon one's choice of rotation and coordinate scaling, TDA also possesses the property of coordinate freeness, so the shape of the data can be represented independent of a coordinate system. TDA networks are also invariant under deformation. Additionally, TDA provides a compressed representation in that if we are willing to sacrifice a little detail, we can obtain a simpler structure that still has the same interpretation (note that the same is not true in going from a three- to two-dimensional PCA solution). While a detailed description of TDA is beyond the scope of this paper and is well-explained elsewhere (e.g. Carlsson 2009; Singh Memoli and Carlsson 2007), we outline the basic approach taken by TDA software such as Ayasdi (Ayasdi.com) and Python Mapper (Singh, Memoli and Carlsson 2007), as follows.

Any rectangular data matrix can be analyzed by TDA, such as our data where the rows are 120,253 IFTTT recipes and the columns are 1101 binary variables. A metric is selected to represent the distance or similarity among the rows, and one or more real-valued functions, or lenses, are applied to the column variables to calculate the image of the data. For example, we might use a Euclidean or City Block distance metric (many other metrics are possible), and as lenses use coordinates from the first two dimensions of a multidimensional scaling solution (many other functions are possible). Given the image of the data (i.e. the function mapping), we cover the image. To do so, we first place the rows into overlapping groups according to the values of each function, creating a set of overlapping groups for each function. A resolution parameter for each function controls the number of groups, and a gain parameter controls the degree of overlap of groups. We then create overlapping bins as the Cartesian product of the groups created for each function. So, if we created 20 groups for two functions, we would have 400 bins. Row within bins have similar values across both functions, and because of overlap, rows can fall into multiple bins. Once the rows have been placed in overlapping bins according to the function values, rows that fall within each bin are independently clustered on the original data, typically with single-linkage clustering, using a measure of similarity based on the chosen metric. Each within-bin cluster becomes a node of the network, representing a set of rows that are similar with respect to the metric. Edges connect nodes that have rows in common. The resulting network of nodes can be readily visualized in low dimensional space. Different choices of metrics and lenses can reveal different aspects of the data, and a robust solution will provide similar interpretations across different values of resolution and gain parameters.

RESULTS

We used Ayasdi 3.0 software to perform a TDA of the IFTTT recipe data described earlier. Since all 1101 variables are binary, we used the City Block metric to calculate the distance between two recipes as the count of the number of binary variables on which two recipes differ. The lenses we used to put the recipes in overlapping bins were the coordinates of each row from a two-dimensional MDS solution. The resulting TDA network shown in figure 1 contains over 98% of the IFTTT recipes, with 2790 interconnected nodes containing 118,226 IFTTT recipes. The network is shown as a heatmap, with nodes containing 500 or more recipes colored in red. Nodes containing few recipes are colored in blue. (A small set of discrete networks set of 1305 nodes containing the remaining 1.7% of IFTTT recipes were outliers and not included in figure 1).

We can view IFTTT at two levels. At the highest level of IFTTT as a whole, the shape of the network in figure 1 reveals the structure

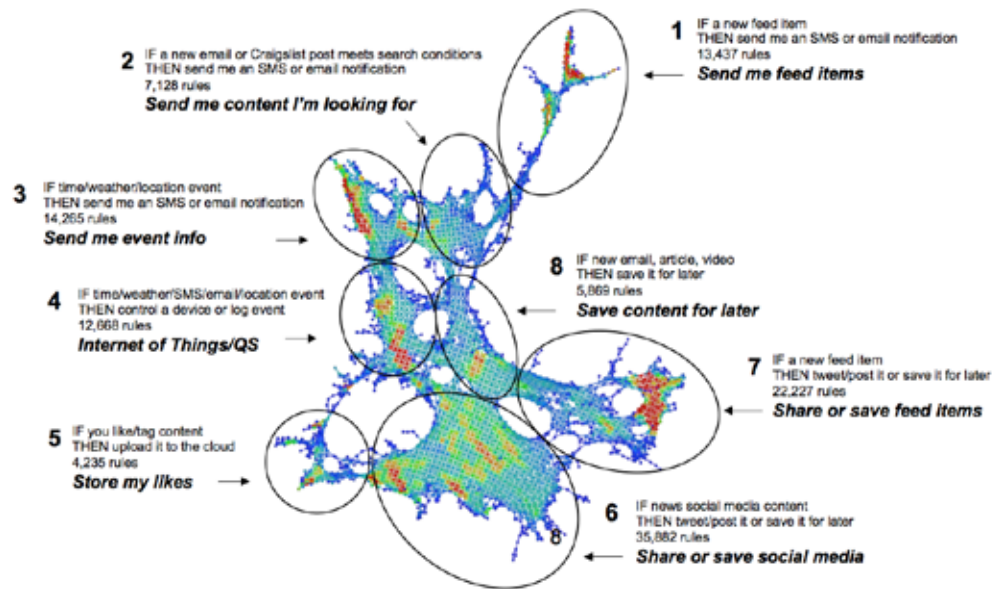


Figure 1

and identity of the entire assemblage of all IFTTT recipes. However, we find it more useful to think of IFTTT at the lower level of an individual IFTTT recipe, in which case we can view figure 1 as representing the possibility space from which the thousands of individual IFTTT recipe assemblages emerged as singular realizations. Certain distinct and high-density areas in the network correspond to optimal locations in the possibility space, representing underlying consumer needs that influence the creation of certain types of recipes. The eight groups of nodes are circled in figure 1 corresponding to “flares” or other distinct groups of nodes in the network with high density. We can interpret these eight groups of nodes based on which of the 1101 binary variables most differentiate those groups from the remainder of the data, based upon statistical significance of hypergeometric p -values. The resulting interpretations and number of recipes in each group are summarized in figure 1.

We interpret several groups to illustrate how the method reveals emergent capacities of the assemblage. We can see that group 1 at the top corresponds to IFTTT recipes where users are sent an SMS or email if there is a new RSS feed item. In contrast, group 7 at the bottom right corresponds to IFTTT recipes where users share or save RSS feed items. The red color indicates there are large numbers of recipes in both groups, and the different locations in the network indicate that RSS feeds are being used in IFTTT recipes in two very distinct ways. Group 4 at the left center of the network contains IFTTT recipes involving IoT and quantified self (QS) interactions, while Group 5 at the lower left of the network contains IFTTT recipes which people developed to archive content that they liked to the cloud. Additional groups are identified in figure 1. We note that while it might look as if TDA is uncovering clusters, conventional cluster analysis fares just as poorly as the PCA and MDS approaches, as we discussed above. Further, the TDA does far more than simply uncover clusters in the data because clusters are only one aspect of the topological structure.

We were also interested in how IFTTT recipes may have evolved over the three year time period, and how recipes that included a social media channel differ from those that did not. The TDA was repeated, adding two additional lenses, or functions. Since these additional lenses simply used known values of explanatory variables, they are referred to as “data lenses.” The first data lens was a two-level categorical variable specifying whether a recipe did or did not include a social media channel, and the second data lens

was a three-level categorical variable specifying whether the recipe was created in the first, second, or third year. These lenses were used to partition the data into six groups, within which the earlier TDA was replicated, with results shown in figure 2. The top of figure 2 shows networks for IFTTT recipes that do not contain social media channels, for each of the three years; the bottom shows networks for IFTTT recipes containing social media channels.

First, circled in orange, are groups of nodes that correspond to recipes in which either nonsocial (top) or social (bottom) information is collected and saved. While this collecting and saving function is present for both nonsocial and social recipes, it is more developed for nonsocial recipes which have a complex pattern of flares representing multiple sub-types of recipes for collecting and saving. Second, circled in blue, are recipes which notify the user (through SMS, email or smartphone notification) of nonsocial or social information. These recipes have a clear flare structure indicating they are distinct from other types of recipes. Third, circled in green are recipes that deal with automation. There are both nonsocial (smart home) as well as social (scheduling tweets) types of automation. This section of the network does not have a clear structure, indicating that clearly distinct ways of automating have not yet emerged. Fourth, in purple we see a group of IFTTT recipes that are used to broadcast and share information. Since social media is used for broadcasting and sharing, this group only appears in the social media networks.

Looking over the three years, this sequence of networks shows that for both nonsocial and social IFTTT recipes, the basic structure emerged in year 1 in a fragmented form, becoming more organized and interconnected in years 2 and 3. Over its first three years, IFTTT introduced large numbers of new trigger and action channels, new triggers and actions within channels, and new ways of combining triggers and actions. This is reflected in the increasing interconnectivity of IFTTT recipes over time. But despite the influx of new channels, this sequence shows that the same basic motivations for using IFTTT persist over the first three years.

DISCUSSION

The topological networks we produced from the IFTTT interaction events provide insight into the nature of the singular realizations that may structure the possibility space. This, this approach specifies not just the “what is” IFTTT experience for any given user, but also the

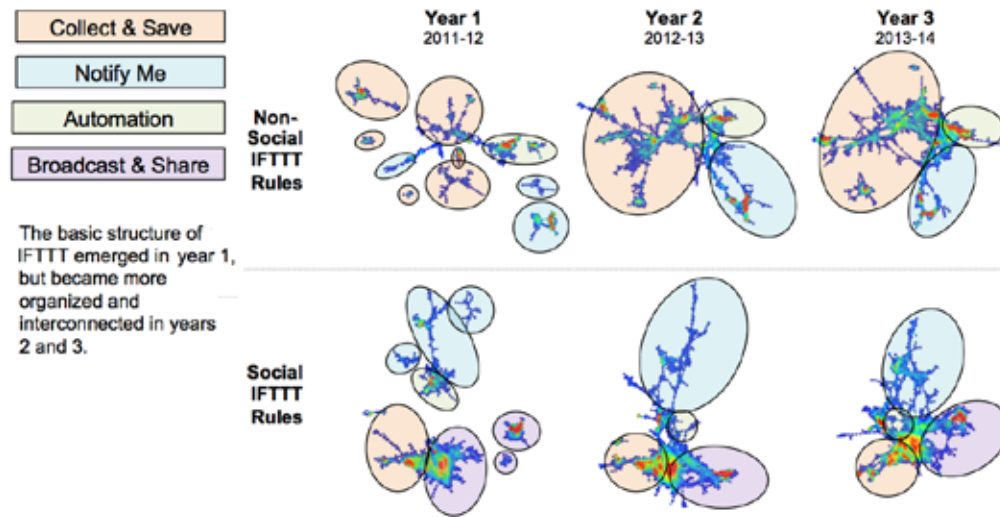


Figure 2

emergent themes underlying the “what could be” IFTTT experience for all consumers. TDA lets us visualize the identity that emerges from the Internet of Things, using interaction events as the unit of analysis.

From an assemblage theory perspective, IFTTT is an assemblage that emerges from the capacities of trigger and action components that are exercised through sets of interaction events over time. The topologies we have constructed represent the possibility space underlying the IFTTT recipes. The possibility space contains points of attraction – for example “collect and save content” – that influence the creation of many different variations of recipes that accomplish this objective. Last, beyond this descriptive role, TDA supports productive hypothesis generation and can play an important role in subsequent predictive modeling by clearly indicating ways that predictive models do not fit the data.

TDA helps visualize the “possibility space” in the consumer IoT and provides fundamental insight into the nature of interaction by emphasizing the identity that emerges from interaction. The contribution of this methodological approach is three-fold. First, it supports qualitative research seeking in-depth insights as to how experience in the consumer IoT evolves over time. Second, the shapes

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The Heat Up / Cool Down-Model of Boycotting

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EXTENDED ABSTRACT

In the last decades, consumers have joined boycotts with increasing frequency to exert economic pressure on corporations they deemed to act irresponsibly. Over the last years, the marketing literature has provided valuable insights into consumers' boycott motivation (e.g., Klein, Smith, and John 2004; Sen, Gurhan-Canli, and Morwitz 2001), mainly drawing from theories of social psychology and economic models (e.g., theories of fairness and reciprocity). Scholars have identified promoters that drive consumers to join boycotts, such as self-enhancement, as well as inhibitors that prevent consumers from boycotting, such as a lack of substitutes, inconvenience, disbelieve in boycott efficacy (Hoffmann 2011; Sen, Gurhan-Canli, and Morwitz 2001). Notwithstanding, to date only few studies analyzed the temporal dimension and the longitudinal dynamics of boycott participation. None of these studies examined possible changes in motivational determinants or perceived egregiousness leading to changes in boycott participation over time.

To fill this gap, the present paper reports three mixed-methods studies that jointly explore the intrapersonal processes thought to be responsible for a decrease in boycott participation. We suggest that in a "heat up"-phase, the agenda setting of the media firstly raises broad awareness of the boycott trigger which increases egregiousness. However, during a "cool down"-phase many consumer fall back to their consumption habits and stop boycotting due to high subjective costs. Yet, it is necessary to distinguish different consumer segments that follow different dynamics of egregiousness and boycotting behavior. The paper makes at least three contributions to the literature on unethical firm behavior and consumer boycotts.

First, this paper tackles the triggers, promoters and inhibitors of boycott participation in the heat up-phase. We content analyzed internet postings related to the documentary on the commentary site of an online newspaper. The article in the news-website was published on February 13th 2013 and describes the documentary which was released on the same day. A total of 612 readers published postings related to the article in the commentary-section. Our results suggest that participation costs play a pivotal role when it comes to a decision for or against a boycott. In some cases consumers' decision to boycott the company was justified by the low costs which are associated with alternatives. On the other side, the majority of expressed inhibitors were expected participation costs as well, such as the distance to the next electronic retailer and the narrow assortment of alternative retailers.

Second, the paper explores the reactions and dynamics of media and society after the egregiousness act. According to the agenda setting theory (McCombs et al. 1977), the media influences the direct proportion to the emphasis placed on news, e.g. about the egregious behavior of a company. Therefore, when the proportion of this case in the media changes through other news, consumers shift their perception on other topics. Initial and often massive reporting about an irresponsible corporate act raises egregiousness fast and intensively. However, consumers' frustration cool down during the course of time as media coverage decreases. Hence, we expect that the perceived egregiousness corrodes over time. Therefore, we investigated the dynamic effects of the media coverage over time through com-

paring the media coverage of an irresponsible corporate act to the brand index over time as indicators for the dynamics of perceived egregiousness. We used google news to find and analyze 134 news articles which were related to the triggering TV documentary, starting with the publishing date, February 13th, till June 1st by means of a con-tent analysis. We applied a frequency analysis to examine the valence of the articles (positive/neutral or negative). Our results provide evidence that the media coverage of this topic de-creases and thus drives a shift of consumers' perception towards other news. Perceived egregiousness is considered as the main driver for boycott intention corrodes over time.

Third, we identified groups of consumers who differ in their perceived egregiousness and boycott behavior over time. While we expect that a decrease in perceived egregiousness will foster a lower boycott participation, we posit that this decrease may not apply uniformly to all consumers. Despite media coverage and the irresponsible act of the company, some consumers may not change their consumption pattern over time. We name this type of consumer the ignoramus. We further consider two types of consumers who both quit boycotting over time but vary in their underlying levels of egregiousness. First, forgetters display changing level of egregiousness and also alter their boycott participation over time, while forsakers remain on a stable level of high egregiousness, but change their boycott participation. In the following, we discuss how inhibitors (esp. subjective costs of boycotting) affect these three groups of consumers differently. Five months after the triggering TV documentary was broadcasted, we conducted a study in which we asked 305 participants to indicate their current egregiousness and participation and to retrospectively evaluate both constructs five months before. Our results suggest that the impacts of promoters and of inhibitors vary across different boycotter groups. Ignoramus are more likely to rely on the reputation of the boycotted company. Forgetters emphasize their boycott-related subjective costs and hence differ from Forsakers. They wish to join the boycott but recognize that subjective costs (e.g., greater mental effort for seeking new alternatives) are higher than personal rewards (e.g., boosting or maintaining self-esteem by responding to social pressure). Thus, they revert to purchase products of the initially boycotted company even though they still have a high level of perceived egregiousness.

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The Language Backfire Effect: When Language Switch Threatens Consumer's Identity and Affects Satisfaction Toward the Service

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EXTENDED ABSTRACT

The vast majority of both the service and sociolinguistic literatures argues that serving customers in their first language yields positive effects (Holmqvist and Grönroos 2012; Van Vaerenbergh and Holmqvist 2013). This is echoed by research in the field of sociolinguistics, which shows that employees tend to switch to the language in which a customer feels more comfortable (Callahan 2006), and that people hold more favorable attitudes towards persons who show efforts to speak their first language, or a language in which they feel more comfortable (Genesee and Bourhis 1982). However, relying on self-determination literature and the need for consumers to feel in autonomy and competent (Deci and Ryan 2000), we propose that the positive effect of the use of first language does not hold in service settings where international consumers might prefer to speak the local language.

In study 1A, 89 adults from Sweden and Finland (57.3% female, $M_{Age} = 28.9$) participated in a two-group scenario-based experiment. Participants read a scenario where they had to imagine themselves visiting Paris, and going to a café. The waiter addresses the consumer in French, and the Scandinavian consumer responds in French, the local language. The waiter either responds in French (condition 1) or in English (condition 2). A short conversation follows and exactly the same phrases are said in both scenarios. After reading the scenario, participants evaluated filler items, and their satisfaction on a scale from Maxham and Netemeyer (2002). A check was made that respondents reported at least some knowledge of French, as a basic knowledge of both languages was required for the study. Results reveal that consumers who are served in French, the local language, exhibit higher satisfaction ($M=6.14$) than consumers who are served by a waiter who switches language and serves customers in English ($M=4.21$; $F(1,87)=40.60$, $p < .001$).

Study 1B aims to replicate findings from Study 1 using another context. Respondents ($n=120$ French adults, $M=31.68$, 45.8% female) were randomly assigned to one of two conditions. Before participating in the experiment, a check was made that the respondents had at least a basic knowledge of English, as a basic knowledge of this language was required for the study. Participants were then asked to imagine they are tourists visiting London. After some sightseeing, they visit a restaurant where the waiter addresses them in English, the local language, and the consumers respond in the same language. In scenario 1 the waiter continues in English and a short and rather basic conversation takes place in English. In second 2, the waiter switches language after the respondent's first phrase in English, and the waiter then continues the conversation in French. Exactly the same things are said in both scenarios, the language in which it is said is the only difference. After reading the scenario, respondents reported their satisfaction ($\alpha=.81$). Results replicate those from Study 1 and reveal that participants who are served in their second language feel more satisfied ($M=5.60$) than participants who are served in their first language ($M=5.19$, $F(1, 118)=6.24$, $p < .05$). These results, however, stem from a social context where consumers are alone, leading to the question whether the effect of language switch on satisfaction would be replicated in a different social context.

Study 2 employs the same method as in Study 1B but uses the social context of being accompanied by a partner. Respondents

($n=118$ French adults, $M=31.00$, 50.8% female) were exposed to the same scenario as in Study 1B, except for the respondents now reading that they are in London with their partner for a romantic weekend. The respondents then reported their satisfaction ($\alpha=.73$) as well as their perceived identity threat (Aquino and Douglas 2003; $\alpha=.90$). In contrast to the results in the previous studies, results reveals that in this specific context where consumers are not alone, respondents feel more satisfied when served in their first language ($M_{First} = 5.51$, $M_{Sec-ond} = 5.14$, $F(1, 116)=3.98$, $p < .05$). Results also reveal mediating effect of identity threat (confidence interval: $-.46$; $-.11$). Specifically, in the social context when consumers are not alone, a language switch leads to higher identity threat ($\beta=.92$, $p < .01$), which subsequently leads to a decrease in satisfaction ($\beta=-.28$, $p < .001$). These results indicate that when consumers are not alone and served in their second language, feeling that their identity is threatened leads to lower satisfaction with the service.

Overall, these results indicate that there are situations in which consumers prefer to use their second language and may react negatively to a language switch. This effect, here identified as a language backfire effect, occurs when the consumer is alone, and does not hold when the consumer is in the company of others. In this specific case, consumers prefer being served in their first language and may perceive the language switch as a threat to their identity, leading to lower satisfaction.

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Health Messages: The Roles of Emotions and Type of Healthcare Advocacies

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EXTENDED ABSTRACT

Emotions can influence how individuals process health information such as anti-drinking messages (Agrawal and Duhachek 2010) and self-focused or family-focused health appeals (Agrawal, Menon, and Aaker 2007). Healthcare messages can promote health behaviors to detect disease, such as doing breast self-examinations to detect breast cancer (Meyerowitz and Chaiken 1987). Alternatively, healthcare messages can encourage behaviors to prevent disease, such as using sunscreen to prevent skin cancer (Detweiler et al. 1999). Despite this abundance of literature on how emotions can influence the persuasiveness of health messages, there is a lack of studies that investigate how incidental emotions enhance or hinder the effectiveness of prevention or detection advocacies. This research is designed to close this gap.

Research has shown that individuals perceive detection behaviors as more risky than prevention behaviors because detection behaviors involve the risk of finding out whether they are ill. In contrast, prevention behaviors can maintain one's current health state and have little, if any, shortcomings (Rothman et al. 1999). Risk perceptions associated with prevention and detection behaviors influence the persuasiveness of framed appeals. Studies have clearly established the links between emotions and health risk perceptions (Keller, Lipkus, and Rimer 2003). However, individuals experience different emotions, so incidental emotions may lead individuals to differently evaluate prevention and detection advocacies, which differ in risk level. Emotional certainty is related to risk-seeking propensity and optimism; therefore, it can influence how consumers evaluate prevention and detection advocacies.

Some emotions are associated with certainty, while others are associated with uncertainty (Smith and Ellsworth 1985). Emotion shapes how individuals process information through appraisals related to certainty. Previous research has also examined the effects of emotional certainty on consumer judgment and decision making. Sad individuals prefer high-risk, high-reward choices while anxious individuals prefer low-risk, low-reward choices, because sadness is associated with high certainty appraisal tendencies while anxiety is associated with high uncertainty appraisal tendencies (Raghunathan and Pham 1999). Both positive and negative emotional states can influence judgment and information processing. Positive affect helps process health-threatening messages for individuals vulnerable to health risks but not for those with low vulnerability, while negative affect has no impact on health message processing regardless of vulnerability (Das and Fennis 2008).

Despite a lot of recent work on emotions, we have little understanding of how emotional certainty interacts with emotional valence to jointly influence persuasiveness of health messages. Whether the effects differ by the nature of health advocacy is unknown. We expect that for certainty emotions, negative emotions lead to greater persuasiveness of detection advocacies than positive emotions. Conversely, for feelings of uncertainty, positive emotions compared with negative emotions aid the effectiveness of detection advocacies. However, certainty and valence do not exert an influence on the effectiveness of prevention advocacies.

Two studies using different health contexts tested these expectations. In study 1, we selected four emotions differing on the dimensions of pleasant/unpleasant and certain/uncertain (Smith and Ellsworth 1985). Participants were asked to think of a life event that

they had experienced that made them feel *proud* (positive emotion associated with certainty), *angry* (negative emotion associated with certainty), *surprised* (positive emotion associated with uncertainty), or *anxious* (negative emotion associated with uncertainty). Next, participants read information about either (1) a mouth rinse that could help prevent plaque accumulation or (2) a disclosing rinse that could help detect areas of plaque accumulation (Rothman et al. 1999).

Participants rated their intention of using the advocated oral rinse. The results indicated that after viewing a detection advocacy, participants who felt angry were more persuaded by the advocacy than those who felt proud. In contrast, for a detection advocacy, participants who felt surprised were more persuaded by the advocacy than those who felt anxious. After participants viewed a prevention advocacy, they were equally persuaded regardless of whether they experienced positive or negative emotion or whether they experienced emotions associated with high certainty or high uncertainty.

To test the robustness of the findings of Study 1, in Study 2 we use a different product and different emotions to manipulate emotional valence and emotional certainty. Participants were asked to think of a life event that they had experienced that made them feel *happy* (positive emotion associated with certainty), *hopeful* (positive emotion associated with uncertainty), *disgusted* (negative emotion associated with certainty), or *anxious* (negative emotion associated with uncertainty). Participants read information about either a skin lotion that helps prevent skin cancer or a skin lotion that helps detect skin cancer for the detection advocacy. All participants read the same basic information about skin cancer. Participants were asked to answer true/false questions based on the pamphlet they read about facts on skin cancer (Menon, Block, and Ramanathan 2002). The results revealed that after viewing a detection advocacy, participants who felt disgusted had higher quiz scores than those who felt happy. In contrast, after viewing a detection advocacy, participants who felt hopeful scored higher than those who felt anxious. For the prevention advocacy, participants were equally persuaded regardless of whether they experienced a positive emotion or negative emotion or whether the emotion was associated with high certainty or high uncertainty.

Taken together, this investigation identifies a relationship between emotion and the effectiveness of prevention and detection advocacy. To our knowledge, our research is the first to demonstrate the role of specific emotions in persuasiveness of prevention and detection advocacy. We extend the literature on emotions by focusing on the role of emotional certainty. Our research has implications for direct-to-consumer advertising and public policy.

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Consumer Brand Knowledge: A Multiple Memory Systems Model

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EXTENDED ABSTRACT

Consumer research studies focusing on memory processes have traditionally conceptualized consumer memory in terms of a single unitary process (Alba, Hutchinson, and Lynch, Jr. 1991). Based on connectionist models of associative memory, consumer knowledge is typically thought of as a network of nodes and connecting links, where nodes represent stored information or concepts and links represent the strength of association between nodes.

These models, derived from cognitive psychology, have proven extremely useful for consumer researchers by providing a powerful way to explain a variety of experimental and observational data. Associative memory, for example, has been used to explain and relate a diverse set of marketing phenomena, including how consumers use brand names and product attributes as retrieval cues for information about product performance, why brands can extend to some categories but not others, and conditions under which brand alliances can benefit or hurt firms (van Osselaer and Janiszewski 2001) each feature-benefit association will develop independently. During adaptive learning, features will compete to predict benefits and, thus, feature-benefit associations will develop interdependently. We find adaptive learning of feature-benefit associations when consumers are motivated to learn to predict a benefit (e.g., because it is perceived to have hedonic relevance).

Despite the influential and parsimonious nature of a single process account of memory, it has been appreciated for some time in cognitive psychology that, far from a unitary entity, human memory is comprised of multiple systems with distinct neural substrates that have evolved to serve different cognitive functions. That is, memory is not a monolithic faculty but rather a collection of relatively independent systems, which are characterized by different patterns of learning, unlearning, and biases.

Episodic memory, for example, is fast forming and organized around context, but is relatively easy to bias and distort, whereas semantic memory is organized around concept, and is more resilient to distortions. In contrast to both episodic and semantic systems, Pavlovian habit systems, likely underpinned by reinforcement mechanisms, are largely implicit, and slow in acquisition as well as extinction. Finally, these systems are known to interact, alternatively compensating and competing under different conditions. For example, habit memory is known to be triggered by context rather than goals, which in turn depends on the integrity of episodic systems.

Although prominent in psychology and cognitive neuroscience, the idea of multiple memory systems is rarely explicitly incorporated into conceptualization of consumer memory. Consequently, existing work invoking the idea of different forms of memory (typically between implicit and explicit processes, or goals and habits) have largely evolved independently without reference to each other. In this study, we describe a new approach to understanding dimensions of consumer memory by drawing on recent advances in cognitive neuroscience of learning and memory. Because memory processes relate to internal mental representations that are not directly observable, one must simultaneously consider both the memory representation and the processes that act upon it to draw inferences about memory structure from behavioral data (Alba et al. 1991). For this reason, neuroscientific methods that are capable of probing these representations at the neural level have been instrumental in testing and refining psychological theories of memory (Schacter 1999).

Specifically, we tested the hypothesis that consumer memory for brands is comprised of distinct forms of memory traces that relies on different memory systems. A total of 18 participants underwent functional magnetic resonance imaging (fMRI) while being shown a set of 45 of logos of well-known brands in a passive viewing task. Next, we sought to relate brain activity to three distinct dimensions of brand knowledge. Participants were asked to complete (i) the brand personality scale (Aaker 1997) identify the “Big Five” dimensions, and explore the meaning of each dimension, no parallel research has been conducted in consumer behavior on brand personality. Consequently, an understanding of the symbolic use of brands has been limited in the consumer behavior literature. In this research, the author develops a theoretical framework of the brand personality construct by determining the number and nature of dimensions of brand personality (Sincerity, Excitement, Competence, Sophistication, and Ruggedness to capture brand knowledge of a set of traits that consumers project onto brands, (ii) the brand experience scale (Brakus, Schmitt, and Zarantonello 2009) to capture the experiences, feelings, and sensations that result from interactions with brands, and (iii) brand preference scale to capture consumer value for the brands.

To address how these components of brand knowledge are stored in the brain, we applied newly developed machine learning tools to functional neuroimaging data that allows us to ask whether a brain regions contains the different forms of memory as captured by our scales. This is different from traditional approaches that focus on how brain activity in a single region differs across two or more conditions, our approach, referred to as model-based decoding, focuses on whether brain activity across multiple regions or networks contains information about a particular cognitive construct (Poldrack 2011).

First, we found that information about brand personality was contained in areas of the medial and lateral prefrontal cortex (permutation test $p < 0.01$). This is consistent with known roles of these regions in semantic memory retrieval and the notion that the brand personality construct largely consists of semantic associations that consumers associate with brands (e.g., whether a brand is down to earth). In contrast, we found that brand experience was contained in the insular cortex as well as the hippocampal formation (permutation $p < 0.01$). This is striking given the known role of the insula in affective processing and the hippocampal formation in episodic retrieval and vivid recall of past experiences, and is consistent with the notion that, unlike brand personality, brand experience captures episodic and affective experiences consumers have with the brand. Finally, we found that brand preference is represented in the striatal regions (permutation $p < 0.01$), which is consistent with substantial neuroeconomic literature implicating this habit system in value representation.

Taken together, our results provide strong support for the notion that distinct types of memory traces are activated simultaneously and in parallel during brand evaluation, and that they relate to notions of semantic, episodic, and habit memory systems that are among the most well studied divisions in human memory. More broadly, a multiple memory systems view can change how managers design brand strategy efforts aimed to increase recognition and recall rates by targeting each system and maximizing complementarities between these systems.

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The Impact of Power on Reliance on Feelings versus Reasons in Decision Making

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EXTENDED ABSTRACT

Power refers to the asymmetric control over other individuals or over valued resources in social relations (Magee and Galinsky 2008). Recent research suggests that power can translate directly into a psychological state that influences individuals' attitudes and behaviors. For example, possessing power liberates people to express their true attitudes and pursue their personal goals (e.g., Anderson and Berdahl 2002; Galinsky, Gruenfeld, and Magee 2003) and decreases attention paid to others (Goodwin et al. 2000; Lammers et al. 2013). Relatively less research, however, has investigated the impact of power on consumer decision making. In this research, we propose that consumers who feel powerful (vs. powerless) would exhibit a greater relative reliance on feelings versus reasons in decision making.

We suggest that this occurs because when consumers feel powerful, they are more likely to feel confident in their decision making, increasing the tendency to rely more on affective feelings in their decisions. In contrast, when consumers feel powerless, they are more likely to feel doubtful in their decision making, increasing the tendency to rely more on cognitive reasoning in their decisions. First, consistent with the notion that power increases a sense of confidence, research has demonstrated that high-power individuals are more likely to exhibit overconfidence in decision making (Fast et al. 2011), express (vs. inhibit) their attitudes (Anderson and Berdahl 2002), and take actions rather than stay put (Galinsky, Gruenfeld, and Magee 2003) compared to low-power individuals. Experiencing power also leads to confidence-related states such as optimism (Anderson and Galinsky 2006), risk taking (Anderson and Galinsky 2006), and illusionary control (Fast et al. 2009). Second, on the other hand, extant research has provided preliminary evidence that an elevated sense of confidence associated with high (vs. low) power states might influence consumers' relative reliance on feelings and phenomenal experiences. For example, people are more likely to rely on their cognitive feelings (e.g., the ease-of-retrieval heuristic) under conditions of high (vs. low) personal certainty (Greifeneder et al. 2010; Müller et al. 2010) and rely on their emotional reactions if they have high (vs. low) chronic self-esteem (Harber 2005). To the extent that cognitive feelings and emotional reactions are more likely to enter consumer decisions under conditions of high certainty (Greifeneder et al. 2010) and self-esteem (Harber 2005) and that certainty and self-esteem are closely related with confidence (Fischhoff, Slovic, and Lichtenstein 1977; Pelham 1991), high-power consumers who tend to experience higher confidence should be more likely to rely on affective feelings than reasons in making decisions compared to low-power consumers.

We tested our hypothesis in five experiments. To provide initial evidence for our hypothesis, experiment 1A first manipulated power using episodic recall (see Galinsky, Gruenfeld and Magee 2003). Participants indicated their relative preference between an affectively superior and a cognitively superior laptop. Results showed that participants in the high-power condition exhibited a stronger preference for the affectively superior laptop ($M = 4.53$) than those in the low-power condition ($M = 3.56$; $F(1, 64) = 4.17, p < .05$).

Experiment 1B replicated the result of experiment 1A using a word fragment completion task to manipulate power (see Magee et al. 2007). Furthermore, experiment 1B directly measured participants' relative reliance on feelings versus reasons in making their

choices. Mediation analysis confirmed that the observed effect of power on the choice between an affectively superior and a cognitively superior laptop was driven by participants' differential reliance on feelings versus reasons in decision making.

Experiment 2 tested the hypothesized effect by manipulating participants' incidental feelings and power states orthogonally. Based on prior research (e.g., Schwarz and Clore 1983), we hypothesized that incidental moods should exert a greater influence on product evaluation for high-power participants than low-power participants. Results revealed a significant interaction between mood and power ($F(1, 277) = 4.11, p < .05$): high-power participants indicated higher willingness-to-pay (WTP) for the product in the positive-mood condition ($M = \$57.31$ SD) than in the negative-mood condition ($M = \$41.46$; $t(277) = 2.95, p < .05$). In contrast, low-power participants indicated comparable WTP regardless of their mood states ($M_{\text{positive}} = \$52.22, M_{\text{negative}} = \50.19 ; $t(277) = .20, p = .84$).

Experiment 3 examined the hypothesized effect by observing whether a fit between a consumer's power state and the decision strategy induced by this particular power state leads to increased valuation of the chosen option (see Higgins 2005). Participants whose power states were varied were instructed to rely on feelings or reasons in making their decisions. The analysis yielded a significant interaction effect ($F(1, 137) = 4.50, p < .05$) such that high-power participants (vs. low-power participants) indicated higher WTP when they made their decisions following a feeling-based (reason-based) strategy.

Experiment 4 tested an implication of the hypothesized effect. Hsee and Rottenstreich (2004) suggest that valuations based on affect is less sensitive to the "scope" of the evaluative stimulus than those based on cognition. If high- (vs. low-) power states promote a greater relative reliance on feelings, high-power consumers should be more likely to exhibit scope insensitivity compared to low-power consumers. Participants whose power states were varied were shown a one-day travel package containing one or four tourist spots, and asked for their WTP for the package. Results showed a significant interaction between power and scope ($F(1, 139) = 5.30, p < .05$). For low-power participants, their WTP was higher for the four-spot package than for the one-spot package ($M_{4\text{-spot}} = \$160.61$ vs. $M_{1\text{-spot}} = \$87.62$; $F(1, 139) = 4.26, p < .05$). However, for high-power participants, their WTP exhibited the scope-insensitivity bias ($M_{4\text{-spot}} = \$122.24$ vs. $M_{1\text{-spot}} = \$106.80$; $F(1, 139) < 1, p = .36$).

Our research contributes to the literature on power by following an emerging stream of research that examine how power might influence decision-making processes. In another study (not reported due to space limit), we directly varied confidence and power orthogonally to examine our conceptual rationale that the hypothesized effect is due to confidence. Our research offers practical suggestions for designing advertisements. Campaigns with largely emotional (functional) appeals might be more effective for a high-power (low-power) audience.

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Crush on You: Romantic Crush Increases Consumers' Preferences for Strong Sensory Stimuli

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EXTENDED ABSTRACT

Romantic crush is formed by desiring for another person whom one finds powerfully attracted to and wants to spend a lot of time with. It is a universal experience which is often expressed in movies, songs, romance novels, and even social media apps (e.g., Crush Notifier on Facebook). However, given the prevalence of this experience, relatively little attention has been given in understanding the effect of this experience on consumer preference.

Romantic crush has some distinct features from other desirable experiences. First, during a crush, people are romantically attracted to a specific another. This longing can be very profound. To this extent, romantic crush is the same as romantic love. However, in a crush, the desired intimacy and sensory contact with the target person is absent (Furman and Collins 2009; Oettingen and Mayer 2002). Due to the lack of enough sensory stimulation from their desired person, people in a crush may fantasy about having sensory contact with this person (seeing, hearing, smelling, touching, or kissing this person; Furman and Collins 2009). Second, not only does a romantic crush differ from a typical romantic love, it also differs from other affections, like those between family members or close friends. The latter kinds tend to be mutual. Third, a romantic crush is also different from the desire for other non-human end states (e.g., a dream job). The latter is more abstract and does not involve the desire for sensory intimacy.

In our view, the experience of romantic crush is a positive, passionate, romantic feeling for another person. This experience is unilateral and characterized by the lack of intimacy and sensory stimulation from the desired other. This experience, once activated, can be powerful, even if it may be short-lived or never acted on.

Drawing on the growing body of literature on compensatory consumption (e.g., Lee and Shrum 2013; Lisjak et al. 2015; Rucker and Galinsky 2013), we propose that when the experience of romantic crush is salient, the unsatisfied desire for intimacy and sensory stimulation (from the desired another) may lead people to have a general preference for products and services that can elicit strong (vs. weak) sensory stimulations (e.g., a louder store music, a strongly scented hotel room).

We conducted a pretest and six experiments to test these propositions. The results of pretest showed the predicted similarities and differences between romantic crush and other related experiences (e.g., stable romantic relationship, mother's love, and desiring for a dream job).

Study 1 was conducted on participants who self-reported as being single. We compared participants' choices for products and services between those who were having a romantic crush and those who were not. Participants were presented with multiple pairs of options and were asked to make a choice. In each pair, one option elicited a strong sensory stimulation whereas the other elicited a weak stimulation (e.g., strong vs. weak-flavored coffee; an iPad cover of smooth vs. rugged texture). Results showed that participants who had a romantic crush were more likely to choose the options eliciting stronger sensation than those who did not.

Study 2 replicated the effect of Study 1 by manipulating the salient experience of romantic crush. Participants were asked to write a detailed story about a personal experience (romantic crush, desired job and shopping trip). To avoid any potential interference across the

sensory domains, we employed five sub-studies to examine the effect of romantic crush on each of the five senses respectively. Again, we found that after participants imagined and described a personal experience of romantic crush, they would prefer products or services that can elicit stronger (vs. weaker) sensory stimulation.

Study 3 tested the mediating role of the unsatisfied desire for intimacy and sensory contact with the desired person. This study had two conditions: romantic crush versus stable romantic relationship. The results showed that participants who imagined romantic crush (vs. stable relationship) vividly expressed a greater preference for a higher level of sensory stimulation when watching a 4D movie. This effect was mediated by the desire for intimacy and sensory contact with the imagined social target.

In Studies 4 to 6, we employed a more natural and easy-to-implement manipulation of romantic crush: the exposure to posters depicting crush-related images and statements. In Study 4, we compared the crush-themed posters condition with a no-poster baseline. The results showed that participants in the crush condition preferred a tight (vs. loose) hug from "Mickey Mouse", a dark (vs. light) colored T-shirt, a high (vs. low) volume store music, a strongly (vs. lightly) scented candle, and a strong (vs. weak) flavored coffee. Moreover, after viewing crush-related posters, participants had a general preference for stronger sensory stimulation, as compared to their counterparts in the baseline.

Studies 5 and 6 then used real behavior as DVs, and included the experience of *mother's love* as the control. Specifically, in Study 5, participants were asked to self-pick tea leaves to make their own cup of tea; the actual amount of loose leaf tea was measured as the DV. As expected, participants in a romantic crush condition took greater amount of tea leaves (i.e., preferring a stronger taste). Study 6 measured participants' real choice between two types of gift cards. As predicted, those in the romantic crush condition were more likely to choose the 4D movie (rather than the bookstore) gift card, indicating a preference for stronger sensory stimulation.

Taken together, we have identified a novel antecedent of consumers' preference for stronger (vs. weaker) sensory stimulation, namely, the salient experience of romantic crush. This research contributes to the literature of subjective experiences, sensory marketing, and compensatory consumption. (926 words)

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From Nothingness into Being: Creation and Resilience of a Decentralized Brand

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EXTENDED ABSTRACT

Money has long been considered the source of all evils in society, linked variously to envy, greed, and the corrosion of human relations (Miller 1987, Belk and Wallendorf 1990). Simmel (1978) said money alienates beings by making relations more abstract, and argued that cynicism lies at the root of alienation by reducing every human relation to a monetary value -- an idea for which neo-liberalism is often critiqued. Mauss (1954) too might well agree that it was money that made it possible to replace the social obligations and underlying debt that gifts created. Graeber (2014) points out in his treatise on debt how coinage changed the nature of social relations, where individuals became able to trust in the promise of a payment. But what if money became a mystical source of faith and fodder for ideological beliefs uniting a diverse community? What if it went from *nothingness* into *being*?

The cryptocurrency Bitcoin destabilizes many of the assumptions about the nature of money. In this study, we focus on Bitcoin as an instance of a *decentralized brand*. These are brands without any central authority, that operate as a network of different people or groups working with different ideals who, by design or default, collaborate in creating them. These brands are usually not created with profit as the main goal although it may exist. Pitt et al. (2006) and Hemetsberger and Reinhardt (2009) for instance describe how the Linux brand is supported and shaped by the open source community and monetized by IBM. This is more than "prosumption" (Ritzer and Jurgenson 2010) where both consumers and producers co-create in producing and adding to brand value (e.g., Facebook, Twitter, YouTube, eBay). Decentralized brands share a distributed user base with different motivations and goals; they act without any central authority. Anonymous, Wikileaks, and Tor are examples of other decentralized brands. Our question here is: what factors help decentralized brands weather multiple setbacks and emerge as resilient?

Bitcoin is essentially a digital 'currency' or a computer file (bit) that represents digital cash. It was created by a person or persons going by the name of Satoshi Nakamoto who remain(s) anonymous. Bitcoin came into being on the heels of the financial crisis of 2008 (Maurer, Nelms, and Swartz 2013, Bjerg 2016) and Satoshi is a messiah-like figure who gave the world Bitcoin and then selflessly disappeared into anonymity (Goodman 2014, McMillan 2014). With appropriate religious flourish, the first block of Bitcoins created eventually came to be known as "the Genesis Block" (Schneider 2015). Over the course of its short lifespan, Bitcoin has been subject to numerous crises, including the online illegal market Silk Road, the collapse of the Bitcoin exchange Mt. Gox, governance issues in its open source community, and being banned in several countries.

We draw on the ecological resilience framework as a metaphor to study Bitcoin as a decentralized brand (Gunderson 2000, Holling 1973). There are a number of key concepts from the resilience framework that are useful in understanding the progression of Bitcoin over the years. First, "change is neither continuous and gradual, nor consistently chaotic" (Redman 2005, 72, Holling 1973, Holling and Gunderson 2002), rather change relies on a slow accumulation of natural capital over time. And progress is "punctuated by sudden releases of and reorganizations of those legacies" (Redman 2005, 72). The resilience

framework also provides the concept of an adaptive cycle comprised of four stages: exploitation, conservation, release (creative destruction), and renewal (reorganization). These adaptive cycles evolve through stabilizing forces and destabilizing forces that occur. Destabilizing forces are "important in maintaining diversity, flexibility, and opportunity"; while stabilizing forces help in maintaining "productivity, fixed capital and social memory" (Redman 2005, 72). Another feature of the resilience framework is the concept of "panarchy" which was coined to represent how ecosystems are governed (Allen et al. 2014, Garmestani and Allen 2006, Holling, Gunderson, and Ludwig 2002). This is important in understanding how decentralized networks, particularly those that depend on the internet, are governed.

The resilience of an ecosystem is tested each time there is a crisis, which means that historical analysis is often necessary in making sense of crisis impacts. Thus in studying Bitcoin ecosystem resilience, we focus on a few key events in recent history that have called into question Bitcoin's survival and helped transform it. These events include the closure of Silk Road, the collapse of Mt. Gox, the block-size debate, and the multiple Satoshi exposés. This is not a comprehensive list of crises that the currency has experienced; rather they represent incidents that fundamentally challenged Bitcoin's future and questioned its existence on an international scale. We use the price of Bitcoin and its evolving media coverage as proxies of its resilience. Through participant observation at Bitcoin events, in-depth interviews, archival data (newspapers), and a netnography, we analyze how consumers and different publics' narratives around Bitcoin changed over the course of these events and in their aftermath.

Our findings indicate that consumers invest Bitcoin with strong religious overtones, making it a technological 'religion of atheists' so to speak. Bitcoin has developed a network of advocates who appreciate being referred to as Bitcoin evangelists, proselytizers, backers, boosters, or fans (Muñiz and Schau 2005, Belk and Tumbat 2005, Kozinets 2001). The block-size debate, which threatened to split the Bitcoin community in two, highlights proprietary governance issues in a seemingly altruistic open source community with conflicts between the more capitalist-oriented and more libertarian ideology. Destabilizing forces such as the closure of Silk Road and Mt. Gox highlight how Bitcoin's memory and myth-making machine operates. With decentralized brands, the nature of information that gets shared is of crucial importance, and social media plays an important role as a stabilizing force.

This paper provides a conceptualization of decentralized brands and how they develop resilience. Our analysis adds a socio-cultural and historical facet to ecological resilience framework. There are also implications for understanding how consumers are changing the dynamics of cementing social media as a modern day myth-making engine.

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¹ With apologies to Sartre.

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Blaming McDonald's: Anthropomorphized Temptation, Failed Self-Control, and Support for Paternalistic Intervention

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EXTENDED ABSTRACT

Temptation is a challenge for most people. Dieters get enticed by sugary cookies, students get tempted by TV shows when studying for exams, and smokers get seduced by the smell of a cigarette when trying to quit smoking. When facing self-control failures, one starts searching for a target to blame, and assesses whether the self or something else in the environment should be accountable for the failure (Heatherton and Nichols 1994). For example, do children fail to lose weight because they do not exercise enough, or because their school cafeteria is filled with junk foods?

Where people attribute responsibility for self-control failures has important implications for what strategies they use to prevent such failures in the future (Polivy and Herman 2002). If one holds the food industry responsible for causing obesity, for example, one will be more likely to support regulations on the industry's practices to reduce obesity. Those regulations often take the form of paternalistic interventions—policies and campaigns that change (Thaler and Sunstein 2008) or restrict the environment (Jonson, Lindorff, and McGuire 2012) to assist individual self-control—such as putting health warnings on tobacco products and restricting fast foods in schools. Despite potential benefits, one of the biggest hurdles for the implementation of paternalistic interventions is the public's lack of support, because interventions are often perceived to infringe upon personal autonomy and freedom (Felsen, Castelo, and Reiner 2013). It is thus of interest to examine factors that influence the endorsement of interventions.

The current research examines anthropomorphism—ascription of humanlike traits to a non-human agent—as one such factor that shifts the way people attribute responsibility for self-control failures, and thereby affects the extent to which people support paternalistic interventions to prevent such failures in the future. We propose that anthropomorphizing a tempting object (e.g., putting faces on food products) will increase delegation of responsibility to the object itself (e.g., fast food) and its manufacturer (e.g., fast-food companies). Anthropomorphizing a temptation creates the perception of another agent imbued with capability and intentionality and this agentic “presence” can lead people to delegate more responsibility to it for the outcomes of self-control. When people believe that a tempting object is responsible for causing self-control failure, they will also be more likely to hold the manufacturer that produces it accountable (Puzakova, Kwak, and Rocereto 2013). It follows that people will also be more likely to believe that regulating the object and its manufacturer is an effective strategy to prevent self-control failure in the future (e.g., fast-food ban in schools). That is, anthropomorphizing a tempting object will increase one's support for paternalistic interventions that impose regulations on it to prevent future failure.

Study 1 tested whether anthropomorphizing a tempting object would increase the delegation of responsibility for individuals' self-control failures to the object's manufacturer. We recruited only dieters, and presented them with potential weight gain as self-control failure. We used a high-calorie cookie as a tempting object, and as a manipulation of anthropomorphism, we applied a human-like (vs. round) shape to the cookie, provided it with a human name (“Jamie” vs. no human name), and described it in the first person (I vs. It). Participants then imagined a scenario whereby they gained weight after adding the cookie to their regular diet, and indicated the extent

to which they attribute responsibility for the weight gain to the object's manufacturer (delegation of responsibility) and to themselves (self-accountability). As predicted, anthropomorphism increased delegation of responsibility to the tempting object's manufacturer but decreased self-accountability.

Study 2 extended the effect of anthropomorphism from the individual to societal levels (childhood obesity). Participants were presented with a poster for a health campaign in which the tempting object (i.e., fast food) was either anthropomorphized or not, and reported to what extent they held the object responsible for childhood obesity. As a manipulation of anthropomorphism, the poster contained pictures of fast foods that had human-face features (eyes and eyebrows vs. no such features) and the following tagline describing the fast foods in the first person [vs. objective]: “Do you blame *us* [these]?” As predicted, anthropomorphism increased the delegation of responsibility for causing childhood obesity to fast foods.

When people hold a tempting object responsible for self-control failure, they will be more likely to believe that regulating it is an effective strategy to prevent self-control failure in the future. Accordingly, Study 3 examined whether anthropomorphizing the tempting object increases one's support for paternalistic interventions that impose regulations on the object. We used the same materials and anthropomorphism manipulation as in Study 2, and measured the extent to which fast foods and their manufacturers should be regulated in a paternalistic manner with three items (e.g., “How strongly do you feel that fast food sales to children should be regulated by the government?”). As predicted, anthropomorphism increased participants' support of regulating fast foods and their manufacturers.

Lastly, Study 4 was designed to provide a more rigorous test on one's support for paternalistic regulations of a tempting object. Participants view the same poster on childhood obesity from Studies 2 and 3. They then read about two non-profit organizations that promoted either paternalistic regulation of the object (“Safe Lunch”; emphasizing the need for regulating the sales of fast foods in school cafeterias) or personal effort in self-control (“Youth Run”; emphasizing the role of exercise and the need for developing running programs for children), and chose one to which they were willing to donate their money and time. Participants also evaluated the perceived effectiveness of each organization's approach. As predicted, anthropomorphism increased perceived effectiveness of Safe Lunch's approach, which in turn increased the likelihood of supporting Safe Lunch over Youth Run.

In sum, the findings provide novel insights into the attribution of responsibility for self-control failures through the lens of anthropomorphism. When facing self-control failure, anthropomorphizing a tempting object increases one's delegation of responsibility for self-control failure to the object itself and its manufacturer. Subsequently, anthropomorphism increases the perceived effectiveness of paternalistic intervention as a strategy to prevent future failure, which further motivates people to support it.

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Let's Look the Gift Horse in the Mouth: A Closer Examination of How Consumers Respond to Free Offers

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EXTENDED ABSTRACT

Consumers' demand for free (i.e., zero-priced) offerings is an increasingly important issue, particularly online where free services grow continuously due to low costs and ongoing technological advances (Bryce, Dyer, and Hatch 2011). Indeed, free online offers are estimated to account for a market of \$260-300 BN (Anderson 2009), and – notably – the world's most valuable company, Alphabet, offers free online consumer services through Google (Guardian 2016). Although consumers may not experience any monetary charge for free online services (Gupta and Mela 2008), the providers' business models typically rely on advertisements, on collecting and selling consumer data (e.g., e-mail addresses), and on 'Freemium offers' (i.e., consumers can purchase a Premium version of the offering for a fee). This insight triggers at least two questions: How do consumers perceive the corresponding benefits and non-monetary costs of free offerings? What underlying emotional processes drive consumers' responses to such offerings?

Prior research offers valuable preliminary insights into the mechanisms that drive the success of free products. Most notably, Shampanier, Mazar, and Ariely (2007) discovered the "zero-price effect" (ZPE), which describes the irrationally high demand for free offers when consumers choose between a free and a cost option (e.g., free versus 1 cent). According to the ZPE, free offerings imply only benefits but no downsides (i.e. no costs), which leads to an overly positive affective response, which in turn drives consumers to opt for the free option (Finucane et al. 2000). Because the costs are presumed to be constant (zero), Shampanier et al. (2007) theorize that the free character of a product constitutes an additional benefit for consumers.

The present research further investigates the mechanisms related to the ZPE, but expands prior work by proposing that non-monetary costs (NMC) play a systematic and meaningful role in how consumers respond to free offerings (Schumann, von Wangenheim, and Groene 2014). In the marketplace, consumers experience NMC two-fold: they are exposed to advertisements (Anderson 2009), and they must disclose personal data (Anderl, März, and Schumann 2015), which are important sources of revenue for companies. However, if consumers perceive such NMC, does the assumption of an overly positive affective reaction to free offers, as established by Shampanier, Mazar, and Ariely (2007) still hold? Because research on the NMC of free offerings is scant, we investigate the following research questions:

1. How do consumer-perceived non-monetary costs influence the ZPE?
2. Is the ZPE linked to an increase in perceived benefits regarding a focal offer?

Because the majority of zero-price (free) offerings consumers encounter are, in fact, online services (i.e., e-services) (Anderson 2009), our analytic focus rests in this context. We propose that at least three aspects might sabotage the ZPE: First, consumers have a 'free mentality' regarding e-services; that is, they believe that online content is supposed to be free (Dou 2004). Second, relative to physical products, free e-services could present a lower utility because they are intangible and consumers only obtain access rights (but no physical rights). Third, although there is no monetary charge, free

e-services typically come with non-monetary costs (e.g., interruption through advertisements), which could mitigate the ZPE. These insights question why consumers would show an overly positive affective response to zero-priced e-services.

As outlined above, extant explanations for the ZPE state that the cost-free nature of free offers elicits a positive affective reaction, which leads to consumers choosing the free product (Shampanier et al. 2007). We propose a more nuanced account for the ZPE, which goes beyond affect as a *mere decision making cue*. Rather, we theorize that affect related to free offers can systematically alter consumers' perceptions of corresponding benefits and risks (e.g., non-monetary costs resulting from data disclosure).

Consumers' risk perceptions are central to their evaluations, behaviors, and choices (Dowling and Staelin 1994). Risk and benefits are often positively correlated (Alhakami and Slovic 1994). However, research suggests that risks and benefits are frequently *negatively related in consumer's minds* (Slovic et al. 1991). The greater the perceived benefits, the lower the perceived risk, and vice versa. The distance between perceived benefits and risks is particularly high when affect is involved (Alhakami and Slovic 1994). Drawing on these findings, we suggest that the positive affective reaction to a free offer should lead not only to the attribution of higher benefits, as assumed by Shampanier et al. (2007), *but also to a lower judgment of the non-monetary costs (i.e. risks)*.

First, across five experiments, our results extend prior research on the zero-price effect (Shampanier et al. 2007) by providing the first empirical evidence for the assumption that consumers attribute additional benefits to free offers. Second, we add a new perspective to the ZPE by taking non-monetary costs into account. Results show that the positive affective reaction towards free offers (i) *increases* consumers' attribution of benefits and (ii) *separately decreases* consumers' judgment of non-monetary costs (here, exposure to advertising). Furthermore we show the serial mediation driving the ZPE. Specifically, our analyses reveal that the affect-induced higher benefits as well as the affect-induced lower judgment of non-monetary costs are indeed the reason for the irrational demand pattern of the zero-price effect. Thus, we contribute to research on non-monetary value contributions of consumers (Anderson 2009) and customer engagement (Van Doorn et al. 2010) by providing further evidence that consumers actually perceive their non-monetary costs as costs and by demonstrating the impact of the non-monetary costs on the choice behavior of consumers. Third, we reveal additional process variables which explain why consumers' judgments of NMC are biased (i.e. reduced) in light of free offerings. Results show reciprocity as the underlying psychological process of consumers' lower judgement of non-monetary costs. Furthermore, we exclude the alternative explanation that consumers' lower judgements of NMC are due to a naïve underestimation of the scope of NMC related to free offers. Fourth, these studies generalize the zero-price effect, which has previously been studied with chocolates, to a novel context: e-services. Consumers show an irrationally high demand when the monetary price is zero despite the 'free mentality' online and despite the presence of non-monetary costs.

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Do Skewed Base-Rates Affect Advertising Effects on Brand Attitudes? On the Role of Pseudocontingencies in Evaluative Conditioning

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EXTENDED ABSTRACT

Evaluative conditioning (EC) serves as the prototypical paradigm to study advertising effects on product and brand attitudes (Sweldens, Van Osselaer, and Janiszewski 2010; Walther, Nagengast, and Trasselli 2005). In a typical EC procedure, an (often initially neutral) conditioned stimulus (CS; e.g., a product) repeatedly co-occurs in close spatio-temporal proximity with a valenced unconditioned stimulus (US; e.g., beautiful landscapes, smiling people, celebrity endorsers). As a result, evaluations of the CS change in the direction of the US—a phenomenon known as the EC effect.

The investigation of EC has been mainly concerned with the effects on a specific CS (e.g., a product) in encapsulated pairing episodes. The conditioning of stimulus features across pairing episodes has received little attention. Recent findings demonstrate, however, that the pairing with valenced stimuli does not only have the potential to change attitudes towards individual CSs, but also towards cues that are shared by many CSs (Hütter, Kutzner, and Fiedler 2014). One shared cue in the consumer context is the brand by which an array of products is put on the market.

In the paradigm adapted for the present research, participants make more positive experiences with products of one brand than with another brand. That is, there is a statistical contingency between brand and valence of experience. However, this contingency is not perfect. That is, consumers also make negative experiences with products of the positive brand and positive experiences with products of a negative brand. One can thus disentangle the evaluation of the brands from the evaluation of single products. That is, if many positive experiences with one brand increase the liking even in products that led to negative experiences (and vice versa), it can be assumed that the evaluation of the brand exerts a direct effect on the evaluation of the products that carry its brand. This is precisely what Hütter et al. (2014) have shown across several experiments.

In the present research, we examine the impact of an intriguing contingency illusion that is caused by the joint skew of two variables irrespective of actual contingencies. This illusion is called a pseudocontingency. A pseudocontingency constitutes a logically unwarranted inference that relates a rare (frequent) cue value to the rare (frequent) criterion value (i.e., valence; Fiedler, Kutzner, and Vogel 2013). For instance, if consumers sample many products of one brand and generally make positive experiences when sampling products, they might infer that this brand is generally positive—irrespective of the actual contingency existing between brands and consumer experience. The present research tested whether the evaluation of rare versus frequent brands is affected by the valence of the rare versus frequent USs, using a typical EC paradigm.

In the present research, we used schematic butterflies as CSs that each had an individual wing pattern, but systematically varied on three cue dimensions (i.e., wing color, wing shape, and body size). For each participant, one of these cue dimensions was skewed, so that there were few stimuli realizing one pole of the cue dimension, but many stimuli of the opposite cue category. At the same time, the valence of the USs was skewed, so that there were either many positive stimuli and few negative stimuli, or vice versa. All actual contingencies were zero.

Study 1 ($N = 245$) is a meta-analysis across three experiments that implemented skewed base-rates for the CS cues and US valence. The experiments differed only concerning the arrangement of stimuli on the screen during the conditioning phase. Overall, we found evidence for pseudocontingencies in evaluative ratings of the individual CSs only when participants saw many negative USs. These findings were further restricted to evaluative ratings of the CSs used for learning, that is, they did not spread to isolated ratings of the cue values.

In Study 2 ($N = 240$), we manipulated the strength of the skew (1:2 vs. 1:3) and included a manipulation check that assessed participants' perceptions of skew of all variables (i.e., US valence and all cue dimensions). This study did not demonstrate evidence of pseudocontingencies in the evaluative ratings. The manipulation check helped us to disentangle the perception of skew and the illusory inference of a contingency. It turned out that participants extracted the skew in the US valence, but not in the skewed cue. Hence, participants did not perceive joint skew in the first place. Moreover, an index of perceived joint skew also did not predict the size of the pseudocontingency in the evaluative ratings. That is, perceiving the joint skew was not related to evaluations.

In summary, the present research shows that the evaluations are rarely influenced by this contingency illusion – in contrast to a number of research paradigms in which pseudocontingencies were demonstrated to override actual contingencies. The present research differs from these paradigms in one important aspect. That is, participants have to extract the relevant cue themselves, while in recent investigations of the role of pseudocontingencies, stimuli differed on the cue only and/or that cue was explicitly stated. While we think that our operationalization is more ecologically valid than the previous ones, it is possible that participants would draw pseudocontingency inferences if they noted the joint skew of the CS and US variables. Future research should thus use a simpler paradigm, for instance, where stimuli differ only on the skewed cue dimension to draw conclusions.

In summary, at this point the present research suggests that the evaluation of rare versus frequent brands is not influenced by the valence of the rare versus frequent USs. Hence, if consumers are confronted with many commercials of a given company and usually see many positive (e.g., attractive, funny) commercials, the brand does not profit from frequent presentations in this positive context. In the present research, EC depended primarily on a statistical contingency between CS and US. That is, the evaluation of a brand will change when the brand predicts positive or negative experiences more than others, and when positive or negative experiences with a product are related to a given brand.

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The Pursuit of Happiness and Quest for Wealth: Do Materialists Really Save Less and Borrow More, and if so Why?

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EXTENDED ABSTRACT

This research examines consumer saving and debt and how these are related to materialism, over time. The amounts of money that people save and borrow have important consequences at both the individual and the macro-economic level. Fifty-five percent of U.S. households can replace less than one month of their income through liquid savings (Pew Charitable Trusts 2015), and the average U.S. household spends 9% of their income on debt interests alone (El Issa 2015). A number of psychological factors contribute to consumer debt, such as consumers' tendency to make incorrect predictions about future spending, and the categorization of saving and debt in separate mental accounts (Hershfield et al. 2015). Financial literacy (Soll, Keeney, and Larrick 2013) and consumers' propensity to plan (Fernandes, Lynch Jr., and Netemeyer 2014; Lynch Jr. et al. 2010) have also been found to be related to financial behavior. Other frequently mentioned causes of debt are poor management of finances, unrealistically high standards of living, and individuals' desire to "keep up with the Joneses" (Barba and Pivetti 2009; Christen and Morgan 2005; Schor 1998). In fact, excessive consumer debt has been blamed on materialistic values that are considered inherent in Western society (Richins 2011), but empirical research in this domain is surprisingly rare. This research aims to contribute to closing this important knowledge gap.

We propose that the three motivations for materialism ("possession-defined success," "acquisition centrality," and "acquisition as the pursuit of happiness") might have different effects on saving and debt. In particular, those who pursue happiness through acquisition rather than through other means (acquisition as the pursuit of happiness) may save less and be more inclined to get into financial debt than those who believe that possessions are a measure of success (possession-defined success). If the former view money predominantly as a means to gratify their immediate acquisitive desires, they might be more likely to overspend and consequently, get into debt. We also examine a potential explanation for why materialism may be a cause of debt, namely that materialistic consumers are impatient. Consumers have a general preference to consume now rather than later (Angeletos et al. 2001; Frederick, Loewenstein, and O'Donoghue 2002; Laibson 1998; Loewenstein and Thaler 1989), and we test the idea that consumers high in materialism are more impatient than consumers low in materialism. If this is the case, materialistic people should also prefer liquid assets over illiquid assets as these enable immediate spending, and thus instant gratification of acquisitive desires.

Two studies tested our theory. Study 1 used data from four waves of the annual household survey run by the Dutch National bank (DHS household survey) among a representative sample of 2,155 consumers in the Netherlands. The survey provides complete and precise measures of both saving and debt and the longitudinal nature of the data allow us to identify possible bi-directional associations between materialism and saving and debt over time, and to establish Granger causality (Granger 1988). This extends prior research on materialism which had to rely on general attitudinal rather than behavioral measures of saving and debt, on cross-sectional rather than longitudinal data, and on student rather than general population samples (Norvilitis et al. 2006; Pirog and Roberts 2007; Watson 1998). Using a cross-lagged panel model it found that overall materialism did not influence later saving, but did predict later debt. Importantly, and in

line with our predictions, acquisition as the pursuit of happiness was negatively related to saving and positively related to debt. However, in this study, possession-defined success was unrelated to both saving and debt, counter to our predictions. The results do show that the three materialism motivations have differential effects on saving and debt. Moreover, saving and debt influenced all three materialism motivations such that people with lower saving and more debt had higher levels of materialism in later years. This reveals, not only that materialism influences saving and debt over time, but also that materialism is a response to a consumer's financial situation.

Study 2 used a large scale experiment of 2,848 regular consumers to test predictions about the associations between materialism, impatience and liquidity preferences. Participants engaged in a delay discounting task (Thaler 1981; Van den Bergh, Dewitte, and Warlop 2008), and indicated preferences for liquid or illiquid saving and debt based on two scenarios. The results showed that people high in overall materialism were indeed systematically more impatient and were more likely to prefer liquid debt over illiquid debt. Again, these associations appeared to be driven by the motivation acquisition as the pursuit of happiness. That is, people who strongly believed that possessions and acquisition are essential for their satisfaction and well-being in life were more impatient and preferred liquidity for both saving and debt. Acquisition centrality and possession-defined success did not significantly influence impatience or liquidity preferences.

Together, the results contribute to financial decision making research by showing that materialism not only influences consumer saving and debt, but that saving and debt also influence materialism, which can result in a self-perpetuating cycle. A recent study by Tully, Hershfield, and Meyvis (2015) showed that consumers facing financial constraint engage in more materialistic and less experiential consumption. Our results extend these findings by showing that those who are more financially restrained become more materialistic over time, whereas those who are better off financially become less materialistic over time. Furthermore, previous research has already shown that materialists are more impulsive buyers (Dittmar and Bond 2010) but the finding that materialism, and particularly the motivation acquisition as the pursuit of happiness, is related to impatience and liquidity preferences is new and has broader potential in explaining why materialism may lead to reduced consumer saving and increased debts.

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Shake Hard Play Hard: The Impact of Risk on Consumer Behavior in the Aftermath of Disaster

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EXTENDED ABSTRACT

Danger is an inescapable part of human existence; understanding how consumers naturally respond to and behaviorally cope with risk is theoretically important not only for marketing but for fields ranging from psychology to finance to public health. We use geo-physical and mobile phone data of 157,358 victims of the 2013 Ya'an earthquake (Ms 7.0) in China to diagnose the effects of the disaster and test the hypothesis that hedonic activities have an important role in promoting psychological recovery. Combining mobile phone app usage data, field surveys, and the naturally occurring instrument of an earthquake, we investigate how experiencing different levels of real disaster risk changes human behavior. Contrary to the intuition that solemnity dominates society's response to tragedy, we find that hedonic activity (i.e., having fun) has a special role in alleviating the negative psychological impact of disaster. Furthermore, we document and model the temporal patterns of post-disaster recovery to advance a dynamic understanding of behavioral processes that are often studied from a static perspective.

We investigate how experiencing real risk (different levels of earthquake intensity) changes post-disaster behavior captured by daily individual-level usage of mobile applications, telecommunications, and internet, and whether these behavioral responses ameliorate perceived risk, the negative psychological state inflicted by the disaster. In this research, the earthquake is conceptually a multi-leveled experiential treatment of risk (that is difficult to replicate in the lab). The population scale data about each individual's daily app usage patterns reflects changes in daily life patterns after the shock of the earthquake. For example, one might infer that informational app usage corresponds to greater information seeking (i.e., greater uncertainty or greater desire for information).

We find that rather than reduce the scope of human activity, higher earthquake intensity yielded graded increases in communications (e.g., social networking, messaging), functional (e.g., informational tools), and hedonic (e.g., music, videos, games) app usage. Formally, we used a fixed effects model to show that higher levels of experienced earthquake intensity caused graded increases in app usage in each category. However, only increased hedonic behavior reduced perceived risk during recovery.

We measured perceived risk a week after the earthquake in a large scale field survey conducted by phone ($N = 2000$) that was linked to the mobile data (we only surveyed earthquake victims who we had mobile data for). Prior literature has used perceived risk to capture the negative psychological feeling induced by risk, which in our research reflects the negative psychological impact of experiencing earthquake risk). An instrumental variable analysis using a two-stage Tobit model (with censored dependent variables to account for the heavily right-censored perceived risk measures), showed that only increased hedonic behavior reduced perceived risk after the earthquake. Increased communications behavior, which one might have thought brought greater emotional support, predicted an increase in perceived risk, possibly as a result of more exposure to risk-related information. Functional behaviors were not significant

predictors of change in perceived risk, possibly because functional behaviors (like checking one's finances) occurred independently of risk perception.

We also map the temporal patterns of post-disaster behavioral recovery, which are not linear, but typically follow exponential-decay functions, i.e., initial behavioral spikes quickly decline and then persist for a long time at a low level. Overall, the characteristics and relative efficacy of each facet of the population's behavioral response intuit their shifting roles over time, and suggest that hedonics are an effective population-scale coping strategy that is often missing in society's response to disaster.

This research makes several conceptual, applied, and methodological contributions. Conceptually, the paper focuses on risk, which is a classic topic in marketing and the behavioral sciences. From a theoretical standpoint, we investigate the potential of utilizing hedonic consumer behavior as a means of promoting psychological recovery from negative psychological states. Despite the existence of an established literature on the power of hedonics, fun is traditionally perceived to be divorced from risk and governments often enforce anti-hedonic policies, such as compulsory national mourning and bans on leisure activities such as fun television programming. However, our results suggest that pleasure should be allowed to mix with tragedy, and that hedonics (particularly hedonic consumer behavior) play an important role in promoting population-scale psychological recovery. This finding is not only of interest to marketers, governments, and NGO's alike.

In addition to our conceptual findings related to risk and experiential psychology, we make numerous methodological contributions to consumer behavior research. We use new mobile big-data methods to explore several empirical questions in consumer psychology that have only become possible after the mobile and big data revolutions (e.g., the relationship between real risk experiences and changes in consumer behavior over time; it would have been difficult to replicate the psychological effect of the earthquake in a lab setting, or to measure its impact over time.). Our use of a mobile data in a rare natural experiment setting also explores the meaning of 'big data' (e.g., individual-level population-scale app usage) from a consumer behavior perspective. Our methodology is applicable to many domains of consumer behavior and social psychology, which have traditionally been criticized for small sample sizes, biased selection, and other methodology flaws, and stands to benefit from new advances of the big-data revolution. Both academia and industry are both increasingly affected by 'big-data' insights; finding new ways in which behavioral sciences can contribute to this growing conversation is existentially important for our field. We believe many such opportunities exist: statistics-oriented data sciences are often theory-light in human behavior and do not rigorously explore the psychological meaning of many behaviors that are observable in big-data. For example, what can mobile meta-data such as app usage reflect about what a person is thinking or feeling? In exploring such questions, we hope to demonstrate the value of consumer behavior research and psychological theory in 'big data'.

Argumentum ad Novitatem: Mere Newness as a Choice Heuristic

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EXTENDED ABSTRACT

Marketing researchers have extensively documented the role of product features that serve as a signal of quality such as price (De Langhe et al. 2014), brand (Keller 1993), country of origin (Hong and Wyer Jr 1989), and warranty (Purohit and Srivastava 2001). However, the date a product was released or produced, a readily available extrinsic cue (Miyazaki, Grewal, and Goodstein 2005) for many consumer products, has been largely ignored. More broadly speaking, we know very little about how chronological newness—newness related to the time dimension, such as production date or release date—impacts consumer decisions. The present research contributes to the extant literature in marketing and psychology on novelty by proposing a new kind of novelty seeking for options that are chronologically newer.

By construction, people should ignore chronological newness if the two options are identical in every other way. However, in four studies, we show that, when choosing between newer and older options with identical quality information, people prefer the newer option across a range of domains (studies 1-3). The preference for newer options persists even for die rolls and coin tosses, where there cannot be any difference in quality and where there is no social relevance to newness (study 2).

We propose a newness as heuristic hypothesis to explain our finding: in tasks involving the complexity of assessing probabilities and predicting values (Tversky and Kahneman 1974), people will use newness a shortcut to resolve choice difficulty. We provided process evidence, for they spent less time choosing newer options than older options (study 3a and study 3b) and deliberation can mitigate people's newness bias (study 3b). Last but not least, we found that newness can lead to higher willingness to pay in joint evaluation but not in separate evaluation (study 4).

In study 1, 100 participants were told that we randomly pick a great George Carlin joke each day and could choose to read either today's joke or yesterday's joke. Since the jokes were randomly picked from the same pool of old jokes, the expected quality should not differ by day; yet, 78% of participants chose today's joke over yesterday's joke, significantly greater than chance ($p < 0.001$).

In Study 2, 204 participants read that "every morning, one staff member will roll a fair die and record its result." They were told that they could bet on the die result from that morning or the morning one week ago, with winners doubling their experimental pay. Participants can self-determine whether the bigger or smaller die win. Among the participants for which "the bigger (smaller) die wins," 75.5% (65%) chose to bet on today's die ($p < .001$ and $p < .01$).

In Study 3a, 329 students placed a bet on today's die vs. yesterday's die roll, with winners doubling their pay. We randomly assigned students into high cognitive load and low cognitive load group (Gilbert and Osborne 1989; Kessler and Meier 2014; Shiv and Fedorikhin 1999). We again found the newness effect but no group difference between high load (79%, $p < 0.001$) and low load group (79%, $p < 0.001$), suggesting that the effect is quite automatic and not affected by cognitive load. Participants' time spent on making the choice predicts their choice in the low load group (logistic regression, $\beta = -0.13$, $z = -2.89$, $p < 0.01$), but not in high load group ($\beta = -0.03$, NS). The result shows that deliberation (as measured by decision time) affects the people's choice when cognitive resource are abundant, but not when they are limited.

In study 3b, we have adapted study 1 by asking 265 students to pick a George Carlin joke to read. Again we have found that the majority of participants chose the newer option (80%, $p < 0.001$). We also recorded their need for cognition (NFC) as a measure of deliberation tendency (Epstein et al. 1996; Godek and Murray 2008). Logistic regression shows that both NFC ($\beta = -0.12$, $z = -2.17$, $p < 0.05$) and decision time ($\beta = -0.26$, $z = -4.14$, $p < 0.001$) have a negative effect on mere newness bias, confirming the heuristic hypothesis.

In Study 4, 265 students were randomly assigned into 2 groups (lottery winning chance: high vs. low), and each student's willingness to pay (WTP) for the raffle ticket were measured five times, differing in when the raffle was drawn (one year ago, one month ago, one week ago, yesterday, today, in random order). Participants' willingness to pay was submitted to a 2 (between-subject factor chance) \times 5 (within-subject factor time) repeated measure ANOVA. Not surprisingly, higher chances to win leads to higher willingness to pay ($F(1, 263) = 8.06$, $p < 0.01$). There was also significant effect on WTP ($F(4, 1052) = 9.14$, $p < 0.001$), but no interaction effect between risk and time ($F(4, 1052) = 1.80$, NS). To further test the linearity hypothesis within subject, we did a contrast in repeated measure design by constructing a Lambda Score for every participant (Rosenthal and Rosnow 1991). Both high risk group ($t(132) = 2.38$, $p < 0.05$) and low risk ($t(131) = 3.31$, $p < 0.01$) showed a significant linear trend. Even though every raffle ticket was the same and had the same chance to be drawn, they were still willing to pay a premium for a newly drawn raffle ticket.

Even though people may prefer newer option (or older option) for a variety of reasons, our study tried to answer a basic question: does people have a predictable preference pattern toward chronological newness (or oldness) when choosing from identical options. No matter it is choosing a randomly selected joke of a dead comedian, or betting on a die roll or a coin, the majority of people picked the newer option. Rational inferences, such as newer things being more advanced, trendier, more fresh, more pure, less contaminated, or containing more information value are very hard to explain our findings. We proposed a heuristic account and found process evidence to support it.

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What Comes Next? Family Carers' Experiences of Role and Identity Transition on Cessation of the Caring Role

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EXTENDED ABSTRACT

Life transitions are key stages of identity formation impacting family consumption (Hibbert, Piacentini and Hogg 2016). Yet, while family carers experience loss when those whom they care for transition from home to residential care and eventually pass on, to date, extant caregiving and family consumption research and practice has not viewed the post-caregiving stage (i.e. when the caring role has ceased) as part of the larger care giving life course (Orzeck and Silverman 2008). Such transitions approximate cumulative rites of passage (Van Gennep 1960, Turner 1969) comprising identity rebuilding and present practical and emotional challenges for family carers. The purpose of this paper is to explore how family carers experience role and identity transition as they progress from 'family member' to 'family carer', to 'post-carer', with the latter reflecting the cessation of the caring role as the individual being cared for moves to or dies in a care home or dies at home. In line with Barnhart and Penalzoza (2013), we characterize family caring as a dynamic and situated, socially constructed group phenomenon, where the assisting functions of family, friends, and paid service providers create a family caring ensemble (FCE). Within FCEs, performances of family care giving are multifaceted (Barnhart, Huff and Cotte 2014), resulting in the integration of family carers' role-based and person-based identities to constitute relational identities (Simpson and Carroll 2008).

An idealist ontology and relational constructionist perspective frames this qualitative study (Blaikie 2010). Depth interviews were conducted with eight family carers, four females and four males, who had experienced loss in relation to their family caregiving role, and who were identified through a Family Carer representative association. Emergent themes relating to carers' experiences of role and identity transitions and losses were induced from participants' narratives (Spiggle 1994).

We induced three phases of role and identity transition precipitated by multiple losses across the care giving life course, which we term reconfiguring, distancing and reconstituting. The first phase, reconfiguring, revealed how family members disengaged from their previous family identities on assuming the family carer role, often losing friends in the process. For some, the transition from family member to family carer was subtle and gradual, for others it was experienced as sudden and disruptive. During the second phase, distancing, family carers contemporaneously experienced feelings of connection and separateness as the dual roles and identities of family member-family carer become entwined. In particular, some family carers wrestled with the transition from caring at home to caring at a distance following the care recipient's move to a care home. In other cases, experiences of gain were also evident. In the final reconstituting phase, family carers had to adjust to the ultimate and final transition – death of the care recipient and refashioning new identities.

Our first contribution relates to illuminating family carers' experiences of role and identity transitions on cessation of the caring role. While the role and identity transition phases induced might suggest a linear transition from family member to family carer over time, they were in fact cumulative, multifaceted and overlapping. We highlight that family carers faced multiple losses long before the death of the care-recipient (Orzeck and Silverman 2008) and that they are often uncertain as to what is "normal" and "expected" in terms of dealing with such losses (Moss and Moss 2012). We also

integrate insights from the loss and bereavement literature with rites of passage perspectives to reveal that family carers moved between experiencing multiple losses to co-creating and reconfiguring new identities as they adjusted to life after care. Our second contribution is that we empirically illustrate how family carers' experiences of role and identity transition frame relational identities. Family carers narratives of multiple losses co-evolved as both they and the family members that they care(d) for experience parallel role and identity transitions. This relational perspective extends the work of Ashforth et al. (2001) and Ashforth (2000), which conceptualizes role occupancy in relation to occupying a single as opposed to multiple roles. Our third contribution is the extension of consumer research perspectives of care and family consumption (e.g. Barnhart, Huff and Cotte 2014; Barnhart and Penalzoza 2013; Dean, Kellie and Mould 2014). We illustrate that family carers represent a "shadow workforce" whose work and role performance goes far beyond provision of care in the home to extend to care inside health care facilities and in conjunction with community services (Bookman and Harrington 2007).

As with all studies, our study suffers from a number of limitations. All participants were members of a regional Family Carer Association so the role of family carer was central to their identities prior to participating in the study, which was reinforced by other family carers in the association. Future studies might therefore examine whether family carers who are more isolated have different experiences to those highlighted in this study. Future studies might also integrate and overlay the family care recipient and other family members' experiences of role and identity transition with those of family carers in order to develop a more relational perspective on family caring.

In conclusion, transitions from family member to family carer to post carer are experienced as major life transitions that require family carers to juggle multiple roles, which can often a source of chronic stress for the duration of the caregiving period and implies intensive identity re-building within and beyond family networks (Orzeck and Silverman 2008). While family carers experience multiple losses and bereavement throughout the care giving life course (Boerner and Schultz 2009), over time a sense of renewal and positive gain may emerge as post carers refashion identities within and beyond the family (Ong et al. 2014). In line with Ghesquiere et al. (2011), we believe that family caregiving responsibilities should be categorized as work that should be supported and shared with public, social and health services, and not just viewed as familial duty. In this way, family carers can be supported in facilitating crucial family, community and societal roles in relation to family care provision.

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The Impact of Large Versus Small Menu Size on Calorie Estimation

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EXTENDED ABSTRACT

Estimating daily caloric intake, colloquially known as ‘counting calories,’ is a common tool for consumers seeking to maintain a healthy diet. Prior research on calorie estimation suggests that people tend to use heuristics when estimating number of calories; such reliance on heuristics, however, may be misguided, as judgmental biases such as the averaging bias or the healthy halo effect can result in inaccurate estimates (Chandon and Wansink 2007; Chernev and Chandon 2010; Raghunathan, Naylor, and Hoyer 2006). Prior research has focused on the biasing impact of meal-specific or item-specific factors (e.g., a meal with healthy and unhealthy items). Before evaluating each item, however, consumers may form an overall impression about a menu offered at a restaurant, which implies that the number of options on a menu may influence consumers’ perceptions of both items and the restaurant. In addition, previous studies on the impact of assortment size have focused on preferences between a large and a small assortment and its influence on brand perception and choice (Berger et al. 2007; Chernev 2012). Nevertheless, there has been less attention on how the number of options on a menu may affect consumers’ calorie estimation.

The present research aims at filling this gap by investigating the effect of menu size on consumers’ calorie estimations and its consequences for their food choices. We specifically focus on i) the impact of menu size, in terms of the number of available options, on calorie estimations and ii) the process that underlie this estimation bias. Across four studies, we manipulate menu size by presenting a sandwich menu with different numbers of options and then ask participants to estimate the caloric content of a target item. Note that we only varied the number of sandwiches on a menu, but balanced items based on perceived healthiness to prevent potential issues that may affect calorie estimations (e.g., differences in overall calories for the menu).

In Study 1A (N = 205), we hypothesize that participants provided with a menu with more items estimate a higher caloric content of a target item than those given a menu with fewer items. We also propose that this estimate is distorted irrespective of the perceived healthiness of a target. A 2 (menu size: large vs. small) × 2 (perceived healthiness of a target item: healthy vs. unhealthy) ANOVA revealed that participants estimated a higher caloric content of a target item in the large menu condition regardless of its perceived healthiness ($M_{large} = 439.51$ vs. $M_{small} = 374.54$ for a healthy target item; $M_{large} = 495.87$ vs. $M_{small} = 435.58$ for an unhealthy target item).

The objective of Study 1B (N = 149) is to replicate the effect of menu size on calorie estimations and, more importantly, to rule out an alternative explanation (i.e., the contrast effect). In this study, we predict that participants will provide higher calorie estimate for a target item in a larger menu, but they will not show significant differences between two small menu size conditions. As expected, the data support our hypothesis that participants presented with the large menu not only estimated higher calories for the target than those who saw the small size menu with two unhealthy sandwiches ($M_{large} = 502.18$ kcal vs. $M_{small(unhealthy-unhealthy)} = 432.06$ kcal, $p < .05$) but also believed it has more calories than those who saw the small menu with healthy and unhealthy sandwiches ($M_{large} = 502.18$ kcal vs. $M_{small(healthy-unhealthy)} = 408.50$ kcal, $p < .02$). More importantly, we

found that participants in the two small conditions did not differ in their estimates for the target item ($p > .50$).

Study 2 (N = 95) examines the process underlying the menu size effect on calorie estimations. Building on prior literature on range theory (Parducci 1965), we specifically compare a range of calorie estimates for a menu (i.e., the highest and lowest calorie estimate) and determine whether this subjective range drives the menu size effect on calorie estimations. Once again, the larger menu led to higher calorie estimates for the target item ($F(1, 93) = 3.59$, $p = .06$; $M_{large} = 427.20$ vs. $M_{small} = 370.39$); importantly, this effect was mediated by the estimated calorie range for the menu (CI: .001 to .095). Though these results support our hypothesis that menu size widens estimated calorie ranges, one could argue that it is still unclear why they provided a greater calorie estimate *within* the range they widely formed. We propose that participants will tend to use an average of calorie estimates for the menu as a proxy when estimating a target item’s caloric content (Huttenlocher et al. 1991; Huttenlocher et al. 2000). We further suggest that both a subjective range of calorie estimates for the menu and the average calorie content sequentially mediate the impact of menu size on calorie estimation.

In Study 3 (N = 144), we directly test this hypothesis using two-step mediation analysis. The data support our hypothesis that the number of options on a menu significantly influences i) participants’ calorie estimates for the target ($M_{large} = 739.1$ vs. $M_{small} = 664.6$; $F(1, 142) = 2.98$, $p = .09$), ii) range of calorie estimates for the menu ($M_{large} = 495.01$ vs. $M_{small} = 328.08$; $F(1, 142) = 27.68$, $p < .01$), and iii) an estimated average calorie for the menu ($M_{large} = 621$ vs. $M_{small} = 543.4$; $F(1, 142) = 4.53$, $p < .05$). A sequential mediation analysis showed that there was a significant indirect effect of two mediators on calorie estimation (95% CI: .075 to .229). In this study, we also compared the actual calories of participants’ sandwich choices in order to investigate how the calorie estimation bias affects consumers’ food choice. We expected that actual calorie contents in the selected sandwiches would be smaller when chosen from the large menu because participants may believe the same sandwich in a large (vs. small) menu contains more calories and thus choose one with fewer calories to maintain a healthy diet. As expected, the actual caloric content of participants’ food choice is significantly lower (vs. higher) in the large (vs. small) menu condition ($M_{large} = 709.5$ kcal vs. $M_{small} = 783.3$ kcal; $F(1, 117) = 3.93$, $p = .05$).

Taken together, our findings suggest that the number of options on a menu systematically influences consumers’ calorie estimations. Further, this paper proposes a new underlying mechanism of calorie estimation bias and its impact on consumer food choice.

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How Heavy is Your Smartphone?

Imaginary Weight Perception of Smartphone Users and Its Impact on Product Evaluation

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EXTENDED ABSTRACT

Smartphone usage is widespread, and many cellphone models have pre-installed applications for the consumers' convenience. It is also the most common way to add features on the smartphone by downloading different types of mobile applications. As many consumer researchers have studied the role of sense on consumer behavior, we were curious to investigate that the number of application icons works as subconscious visual cues and that such sensory experience affects the perception and judgment of the users. We hypothesize that seeing a greater number of software icons on the electronic devices may bring about the perception related to weight. More specifically, we want to find out whether people perceive their devices heavier given more icons displayed on the screen.

The current research is built upon previous research on sensory marketing, which is defined as the marketing activity "that engages the consumers' senses and affects their perception, judgment, and behavior" (Krishna 2012, 332). In marketing literature, much research has been done to explain the role of visual attributes of products and advertisements on consumer behavior (e.g. Jiang et al. 2015; Krishna 2012; Krishna and Schwarz 2014; Meert, Pandelaere, and Patrick 2014; Xu and Labroo 2013). Consumers perceive the product heavier when product visuals are located at the bottom-right (in comparison to top-left) position (van Rompay, Fransen, and Borgelink 2013), or they perceive the product heaviness increases when the product image is located in the bottom (Deng and Kahn 2009). Visual imagery, as a consequence, functions as a cue for weight perception.

Based on prior research, we expect that exposure to a greater number of objects could change the user's weight perception of the product. Specifically, the number of application icons can function as a visual cue, thus as more icons are displayed on the smartphone screen, consumers will perceive the product heavier. While the actual weight does not change, consumers could think heavy devices are full of software, running to its capacity, or lacked in speed. Consequently, greater perceived heaviness would have negative impact on the product evaluation.

In the pretest, we tested the hypothesis that the number of apps presented on the smartphone screen would increase the user's perceived heaviness. Participants read a short scenario that the manufacturer W is going to launch the smartphone model Y and participants were requested to estimate the weight of model Y in gram or ounce based on the information on model Y and competing models ranged from 129g to 145g. The result revealed that the group who viewed 60 app icons reported significantly higher perceived weight than the group who viewed 30 app icons ($M_{large} = 147.61g$, $M_{small} = 137.83g$; $p = .020$).

Study 1 replicated this result and screened out the most plausible alternative explanation that the effect of the number of apps on smartphone weight perception might be caused by visual density. The stimuli were identical to those of pretest except that the size of application icon was smaller in low-density condition than that of in high-density condition. Results indicate that participants in the 60 apps (large) condition rated the smartphone heavier than participants in the 30 apps (small) condition ($M_{large} = 141.53g$, $M_{small} = 136.921g$; $p = .038$). However, participants in the high-density condition rated the model Y as heavy as participants in the low-density condition ($M_{high} = 139.80g$, $M_{low} = 138.20g$; $p = .457$). Also, the interaction effect of the two main factors was not significant ($F(1, 132) = 1.651$, $p = .201$).

Study 2 examined whether a smartphone with more applications installed is perceived as less appealing compared to a smartphone with a smaller number of applications, and whether this effect is mediated by the perceived heaviness. Participants read a short scenario that s/he is now using the model Y produced by the manufacturer W. In addition to the weight estimation, participants reported their attitude toward the smartphone, perceived quality, and satisfaction level. First, the effect of the number of apps on perceived heaviness was reconfirmed. Additionally, the mean score of attitude toward the smartphone for the large condition was lower than the mean score for the small condition ($M_{large} = 5.1587$, $M_{small} = 5.5025$; $p = .026$). The same tendency was found in perceived quality and satisfaction level. In addition, a bootstrap analysis with 5,000 resamples revealed that the 95% confidence intervals for the significant indirect effect excluded zero (CI: $-.2416 \sim -.0207$, $p < .05$). We also found that the perceived heaviness partially mediated the effect of the number of apps on perceived quality and fully mediated the effect on satisfaction level.

Study 3 diagnosed whether a smartphone with a larger number of applications installed decreases purchase likelihood of new mobile application than the one with smaller number of applications, and whether this effect is mediated by the perceived heaviness. After exposed identical scenario and stimuli with Study 2, participants read detailed information about fictitious media player application XYZ. Participants were then requested to report their estimation on smartphone weight and purchase intention toward the new released app XYZ. First, the effect of the number of apps on perceived heaviness was reconfirmed. Furthermore, the mean score of purchase intention on app XYZ for the large condition was lower than the mean score for the small condition ($M_{large} = 4.2184$, $M_{small} = 4.7661$; $p = .035$). In addition, a bootstrap analysis with 5,000 resamples determined that the 95% confidence intervals for the significant indirect effect excluded zero (CI: $-.3282 \sim -.0310$, $p < .05$), supporting our hypotheses.

The findings in the current research extend the knowledge about the role of visual on consumer judgments. While prior research has mainly dealt with the role of bodily experience of weight on perception (e.g. Chandler, Reinhard, and Schwarz 2012; Jostmann, Lakens, and Schubert 2009), the present research is the first to examine that the visual experience using app icons can function as a cue to estimate weight and to explore its impact on the product evaluation. This research provides insights about how providing pre-installed applications on smartphone may backfire; consumers may think that bloatware makes their product sluggish. Marketers might want to be cautious to communicate about many installed features. In order to overcome the limitations of scenario-based experiment, field studies with actual stimuli using a real smartphone are suggested to confirm our findings in the future.

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Residential Mobility and Uniqueness Seeking

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EXTENDED ABSTRACT

People have a general desire to distinguish themselves from others (Brewer 1991; Snyder and Fromkin, 1977). This desire for uniqueness is clearly manifested in consumption as material possessions that consumers acquire and display make them look and feel different, and signal their distinctiveness to other consumers (Belk, 1988; Lynn and Harris, 1997a; Tian, Bearden, and Hunter 2001). The goal of the present research is to introduce personal history of residential mobility, the frequency of geographic relocation, as a novel predictor of the preferences for unique consumption and examine its underlying mechanism and moderating conditions.

We posit that personal history of residential mobility enhances the motivation to strive for personal distinctiveness, expressed by a preference for possessing and displaying unique consumer products. This is because residentially mobile people tend to place more importance on their personal selves (e.g., personality, skills) than collective selves (e.g., group affiliation, membership) as the former are less susceptible to social environmental changes than the latter (Oishi, Lun, and Sherman 2007). Since the personal self is achieved by possessing unique personal attributes that differentiate oneself from others (Brewer and Gardner 1996), residentially mobile (vs. stable) people who place more emphasis on their personal (vs. collective) selves will have a greater need for unique consumption.

We further expect that the link between residential mobility and uniqueness seeking would be heightened only when one's personal self can be manifested through consumption but not when such manifestation is not likely. Specifically, we predict that the effect on uniqueness seeking would be observed for symbolic products with which one could express one's desired identity (Berger and Heath 2007) rather than utilitarian products (Shavitt 1990). It is because people's preferences and identity can be inferred from the products they purchase (Belk, Bahn and Mayer 1982), and particularly consumption of products with symbolic versus functional benefits is likely to be diagnostic of consumer characteristics (Shavitt 1990).

In addition, we assume that not everyone with the experience of moving prefers unique products because residential mobility has both positive and negative affective consequences (e.g., excitement as well as anxiety or loneliness) (Oishi et al. 2012). If moving to another city or town brings about significant changes in the existing social network and affiliations and thus the need to regain a sense of belonging in the new community, the need for social conformity may increase while the desire to stand out may decrease. In other words, while residential mobility can enhance the need for uniqueness through a heightened sense of personal self, this effect could be mitigated by the need for conformity associated with moving and shifting social relationships.

Uniqueness seeking involves social normative characteristics as manifested in the choice of uncommon or counter-conformity products that are endorsed by a minority group (Kim and Markus 1999). We predict that if the need for conformity is heightened in the process of moving and settling in a new community, individuals will be motivated not to stand out through the choice of counter-conformity products but to fit in with others by choosing more common or conventional products. This would particularly be the case when individuals are more prone to avoid risks and less explorative in trying

new options but not when they are not afraid to take risks and tend to seek novelty.

In Study 1, we tested our central hypothesis that one's personal history of residential mobility predicts a general uniqueness-seeking tendency. Participants were shown seven sets of different combinations of shapes and asked to indicate the one that they liked the most. One of the shapes in each set was different from the other six shapes and thus was more unique than the rest. Participants reported the number of times that they had moved during elementary school, during middle school, and during high school. The total number of moves across the three different time periods was summed and served as an index for personal history of residential mobility. As expected, we found that one's personal history of residential mobility predicts their preferences for unique shapes.

In Study 2, we examined one's self-concept as the underlying psychological mechanism of the effect of residential mobility on the desire for uniqueness by measuring people's emotional reactions and intention to purchase unique products in a hypothetical scenario involving consumer products and brands. We found that personal history of residential mobility predicts positive emotional reactions and greater willingness to purchase unique products over common products when the product domain is identity-symbolic but that this effect disappeared when the product domain is not symbolic of one's identity.

In Study 3, we directly investigated the underlying mechanism by showing that the relative centrality of one's self-concept (personal versus collective) (Triandis and Gelfand 1998) mediated the relationship between personal history of residential mobility and self-reported chronic need for uniqueness (Lynn and Harris 1997b).

In Study 4, instead of measuring one's personal history of residential mobility, we established the causal relationship between residential mobility and consumer uniqueness seeking by priming the mindset for moving versus staying. Participants who were primed with a mobility (vs. stability) mindset showed greater desire for unique products. More importantly, this effect was observed only among those who have a tendency to engage in exploratory buying behaviour (Baumgartner & Steenkamp, 1996), a chronic disposition to seek novelty, to be curious about, and take risks in trying new options.

Our findings offer a number of important theoretical as well as practical implications for understanding the impact of geographic relocation of consumers by revealing the novel effect of residential mobility on uniqueness seeking. These findings also have novel practical implications for market segmentation and managerial decisions suggesting that the demand for unique products such as limited editions or the effectiveness of the use of popularity cues in advertising messages could be estimated based on the residential mobility of target consumers.

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The Asymmetric Nature and Motivation of Experiential and Material Purchases, and Their Impact on Happiness

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EXTENDED ABSTRACT

Experiential purchases have been found to make people happier than material purchases. In fact, several studies point to what Nicolao, Irwin, and Goodman (2009) call the ‘experience recommendation’, referring to the greater capacity of experiential purchases to contribute to happiness compared to that of material purchases. Experiential purchases, like vacations, concerts and spa treatments, made with the goal of adding another experience in life, contribute more to happiness than material purchases (Van Boven and Gilovich 2003; Nicolao et al. 2009; Howell and Hill 2009; Carter and Gilovich 2012). However, it has been asserted that the direct comparison between these two types of purchases is problematic, due to their inherent differences (Schmitt, Brakus, and Zarantonello 2015). The aim of the present research is to further explore and empirically test this hypothesis, and analyze its impact on happiness. The intended research outcomes can have significant implications for both consumer spending and wellbeing, and marketing strategic decisions.

Analyzing the recalled purchase examples and purchase options cited in published research on the topic points to some underlying biases: experiences mentioned tend to be hedonic and special one-time events, while materials more utilitarian, ordinary and in the context of respondents’ everyday life. Additionally, as mentioned by Carter and Gilovich (2012) experiences tend to be more expressive of one’s identity than materials, and thus potentially by extension more involving, providing an additional source of bias. No research to date has explored the impact of these characteristics on the relative happiness between the two types of purchases. The current research tests the hypotheses that recalled experiential purchases are more hedonic (H1), extraordinary (H2), self-expressive (H3), and involving (H4) than material purchases, and that given the same levels of these characteristics happiness derived is the same between experiences and materials (H5).

These fundamental differences in the nature of the purchases, by extension, impact the motivation behind each purchase. “Consumers purchase goods and services and perform consumption behaviors for two basic reasons: 1) consummatory affective (hedonic) gratification, and 2) instrumental, utilitarian reasons (Batra and Ahlota, 1990, 159). The current research also tests the hypothesis that experiential purchases are motivated by happiness-seeking (hedonic gratification), while material purchases are motivated by need satisfaction (instrumental reasons) (H6). Moreover, since hedonic and eudaimonic wellbeing overlap conceptually (Kashdan, Biswas-Diener, and King 2008), the above hypothesis can be extended to include meaning-seeking, which is an ingredient of eudaimonic happiness (Huta and Ryan 2010). Hence, an additional hypothesis is that experiential purchases are motivated more strongly by meaning-seeking than material purchases (H7).

Study 1: A series of 18 in-depth interviews were conducted. Participants completed a card sorting exercise, exploring their understanding of the distinction between experiences and materials. They were asked to categorize index cards with a material or experiential purchase written on them, using their own criteria. Unaided, participants did not make the distinction when sorting the cards. However, when the interviewer divided the cards into materials and experiences, participants understood the distinction and highlighted two key areas of difference between them. The first one focused on the na-

ture of the purchases: experiential purchases were described as more hedonic and extraordinary, while material purchases were described as utilitarian and ordinary. The second difference was the purchase motivation: while experiential purchases were motivated by pleasure and leisure considerations, material purchases were motivated primarily by practical needs.

Study 2: The results of the qualitative study were empirically tested through a 2 (purchase type: experience, object) x 2 (purchase time: past, future) between subjects experiment. Experiences were indeed found to be more hedonic and extraordinary, but also more self-expressing and involving than material possessions. Moreover, experiential purchases were more highly motivated by both happiness and meaning seeking than material purchases. Respondents seem to have a stronger, more conscious motivation behind their experiential purchases. At the same time, both types of purchases were equally motivated by a sense of need. All the above properties give experiences a natural advantage, as they correlate highly with happiness. At the same time, the properties that were more pronounced in material purchases, such as the ordinary, utilitarian nature and a need motivation, were not correlated with happiness.

When these asymmetries were corrected by splitting each property into high and low using median split, experiential and material purchases contributed equally to happiness: material and experiential purchases resulted in similar levels of happiness when they were equally highly hedonic, self-expressing, extraordinary, involving and equally strongly motivated by happiness and meaning. This points to the mediating role of these properties, and highlights the fact that both types of purchases have the capacity to contribute to wellbeing.

The results of the study indicate that experiential and material purchases should indeed not be directly compared, as they differ greatly both in their nature and the motivation behind them. However, studying experiential purchases is important, since their natural happiness advantage can be a useful guide to learning how to maximize the happiness derived from our purchases. Studying experiential purchases more closely can give us a deeper understanding of the specific elements of consumption that enhance wellbeing. These elements can then be adapted to material purchases in order to increase the wellbeing elicited by them. Understanding these differences can also contribute to marketing communication and product positioning, for instance, by highlighting the hedonic nature and motivation behind a material purchase in advertising. Research is needed to further explore the impact of the different motivators on happiness, which would help consumers make more educated choices that will maximize their wellbeing.

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The Absolute More, The Merrier: How Dispositional Greed Influences Individual Thinking Styles

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EXTENDED ABSTRACT

Classic economic theories state that economic choices are based on rational thinking and an absolute thinking style (Stigler, 1987). However, research in psychology showed that information processing responds to changes in stimuli in a relative style (Fetherstonhaugh et al., 1997). Limited attention has been given to information showing that neither relative nor absolute thinking is generalizable across the population. Several basic experiments (e.g. Tversky and Kahneman, 1981) indicating relative thinking actually found that 30%-60% of the population show an absolute thinking style. As studies have shown that thinking style affects a variety of consumer decisions, individual differences in numerical information processing is hugely important for academics and management practitioners.

We examine dispositional greed, a personality trait that entails an insatiable, self-centered desire for more resources (Krekels & Pandelaere, 2015), to investigate stable individual differences in thinking style. We believe that their insatiability might drive greedy people to focus on absolute changes. In a first study, 150 MTurkers (90 Males, M age = 37.5, SD = 12.4) indicated their willingness to travel 6 minutes to save 10\$ on two items (a USB flash drive (15\$) and a winter jacket (125\$), separated by filler items) (based on Tversky & Kahneman, 1981) and answered the Dispositional Greed Scale (DGS, Krekels & Pandelaere, 2015). A binary logistic regression including the location of the USB question (to control for order effects) showed that the greedier people are, the less they changed their answer between the USB drive and the jacket, indicating absolute thinking.

In a second study based on Azar (2011), 117 students (50 Males, M age = 23.4, SD = 5.7) saw three products (a laptop, household shopping, a plane ticket) at either a randomized expensive or cheap price (659€ - 475€, 76€ - 47€, 157€ - 98€). Respondents indicated their WTP for a similar product (a smaller laptop, shopping for lesser quality items, a plane ticket with transfer) and answered the DGS. We calculated respondents' absolute and relative price difference. Two general linear mixed models indicate that non-greedy people think relatively ($F(321.33, 309.76) = 5.53, p < .05$), as their relative WTP is independent of the original price. Greedy people on the other hand think absolutely ($F(268.73, 130.58) = 5.86, p < .05$), as their absolute WTP is independent of the original price.

Second, we suggest that this effect is due to a difference in marginal utility. The literature on scope neglect states that the value of an increase in X depends on the affective value of X (Frederick & Fischhoff, 1998). We hypothesize that for non-greedy people the original amount dictates subjective value, where above a certain threshold the subjective value of an increase is limited due to diminishing marginal utility. For greedy people on the other hand, the original amount has less informative value and thus less effect on the subjective value of an increase, showing less diminishing sensitivity (Kahneman & Tversky, 1984). 124 Students (54 Males, M age = 20.6, SD = 1.1) won candy bars (1 versus 4), and were given 1 extra bar. They indicated their happiness with the extra bar and answered the DGS. A linear regression showed that the effect of the original amount disappeared for greedy people (+1 SD, $F(1.128) = .082, p = .78$) but was present for non-greedy people (-1 SD, $F(1.128) = 9.802, p < .01$). This confirms that dispositional greed reduces diminishing utility.

A fourth study tracked the actual value functions: an absolute thinking style is not only linked with a smaller diminishing utility (a stronger correlation between the scope of a stimulus and its subjective value) but also with a higher associated value (a larger slope of the scope of a stimulus on its subjective value) (Kahneman & Tversky, 1984). 119 MTurkers (58 Males, M age = 41.7, SD = 13.5) saw 4 products (a steak, restaurant meal, a tablet, a television subscription) at 5 different levels (weight, number of courses, internal memory, number of channels) for which the lowest levels was priced (\$5.99, \$35, 129\$, 25\$). Respondents indicated their WTP for the 4 subsequent levels and answered the DGS. We calculated for each respondent and product separately, the correlation between the quantitative amount given and respondents' WTP and the slope of the regression line. A Manova analysis showed that greed positively predicts the correlations (Wilks' Lambda=0.839, $F(6, 90) = 2.882, p < 0.05$) for the steak ($p < .05$), restaurant meal ($p < .05$) and marginally the tablet ($p = .072$) but not the television subscription ($p = .477$). A second Manova showed that greed also positively predicts the slopes of the regression (Wilks' Lambda=0.095, $F(150, 311) = 1.264, p < 0.05$) for all products (all $p < .05$). Thus, more greedy people depict smaller diminishing utility and higher associated values.

Finally, absolute thinking supposedly leads to more rational decision making (van Boom, 2011). Therefore in a final study we examine the unit effect: attribute differences appear larger on scales with a higher number of units. In this situation relative thinking should lead to better choices. 133 students (57 Males, M age = 23.1, SD = 5.4) saw 12 home cinemas, rated on a 10-point scale ranging from 4 to 9.5 in steps of 0.5, or on a 1000-point scale ranging from 400 to 950 in steps of 50. Each participant indicated for the 12 systems their WTP to upgrade to the perfect system (based on Pandelaere, Briers and Lembregts, 2011) and answered the DGS. A multilevel linear regression analysis indicated that the stronger effect of quality in the 1000-point condition is enhanced for greedy people ($F(1, 1250.146) = 5.338, p < .05$), but greed does not moderate the effect in the 10-point condition ($F(1, 1250.426) = 1.154, p = .28$). These results indicate that in situations where relative thinking leads to more optimal decision making, it is greedy people who are worse off.

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Out of Proportion?

The Role of Leftovers in Eating-Related Affect and Behavior

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EXTENDED ABSTRACT

Food leftovers are commonplace, and have become more so. Average portion and package sizes have increased over time (Nielsen and Popkin 2003; Smiciklas-Wright et al. 2003). While these increased portion sizes brought along increased consumption (for a review see Herman, Pliner, Polivy, and Vartanian 2015), the increase in consumption has not kept up with the increase in portion size: a recent meta-analysis found that when portion sizes are expanded by 100%, people eat only about 35% more (Zlatevska, Dubelaar, and Holden 2014). As such, on average, consumers today tend to have greater amounts of food leftover.

Much prior work has investigated how larger *portions* directly lead to greater consumption, such as through visual biases (Chandon and Ordabayeva 2009; Krider, Raghubir, and Krishna 2001) or inferences about portion appropriateness (Diliberti et al. 2004; Herman et al. 2015). However, no attention has been given to how the larger *leftovers* that stem from larger portions may impact consumer behavior. Clearly, eating more food is an important and intuitive cause of weight gain. But is it possible that having more food *leftover* could also contribute to obesity, by giving consumers the sense that they didn't consume all that much after all?

As mentioned before, when portion size increases, consumption increases to a much smaller degree, effectively leading to more leftovers. This paper is the first to examine whether given equal actual consumption merely having more food leftover changes consumers' perception of how much they ate and consequently impacts subsequent eating and exercising behavior—an important and timely question that has, to our knowledge, not yet been studied. By holding constant the amount of food eaten and only varying the amount of leftovers, we are able to isolate any effects of amount *leftover* from amount *consumed*—two variables that are typically confounded in food consumption studies.

In brief, we propose that, holding actual consumption constant, larger amounts of food leftovers may increase subsequent eating and decrease subsequent exercising by reducing perceived consumption and thus bolstering consumers' self-evaluative feelings. The rationale for this proposition is as follows. Theories of perception (for a review see Stewart, Brown, and Chater 2005) and judgment and decision making (Hsee 1996; Tversky and Kahneman 1991), in one way or another, suggest that people perform relative rather than absolute judgments. For equal absolute consumption, having more food leftover means that the relative proportion of food eaten from the whole portion is smaller, and thus we predict that larger leftovers lead people to perceive they consumed less. Given that many consumers have a goal to curb their consumption or at least not overeat (Bublitz, Peracchio, and Block 2010; Vohs and Heatherton 2000) and feel bad when they overindulge (Ramanathan and Williams 2007), we predict that perceiving lower consumption may bolster people's self-evaluation. Based on findings that feeling better about one's current status regarding a goal can decrease efforts towards that goal (Amodio, Devine, and Harmon-Jones 2007; Carver 2003), we predict that the bolstered self-evaluation reduces consumers' motivation to compensate for their prior eating later on, as manifested in eating more and exercising less afterwards. Four experiments provide evidence in support of these predictions.

In study 1, people were asked to eat six squares of chocolate from a chocolate bar, either from an eight-square bar (small leftovers) or an 18-square-bar (large leftovers). People who ate six squares but had large leftovers rated their absolute consumption as lower than did those who ate six squares but had small leftovers.

Study 2A replicated this finding and also examined its impact on compensatory behaviors, as manifested in increased subsequent consumption. Students were presented with a cookie and asked to eat a designated equally sized area, either from a small cookie (small leftovers) or a large cookie (large leftovers). Afterwards, they could participate in an optional additional tasting of mini cookies. People with large leftovers rated their absolute consumption as lower and also ate more cookies afterwards than people with small leftovers. Study 2B replicated study 2A with a different type of compensatory behavior: exercising. People with large leftovers rated their absolute consumption as lower and walked fewer steps during a subsequent stepper task than people with small leftovers.

Study 3 tested the whole process model. Participants saw an image of the remainder of a chocolate bar resting on its wrapper with six squares had been eaten from the whole, and either three, six, 14, or 22 squares left. They were asked to imagine vividly having eaten the chocolate bar down to what they left of it. The larger the amount leftover, the lower was people's perceived consumption the lower were their negative self-evaluative feelings (guilty/regretful/shameful), and the lower was their motivation to compensate (eat less/work out/work out longer). Indeed, perceived consumption and negative self-evaluative feelings serially mediated the effect of leftovers on motivation to compensate.

In sum, across real and imagined consumption, we find that, holding actual consumption constant, larger amounts of food leftovers lead people to feel they consumed less. Importantly, this reduces real consequential compensatory behaviors—larger leftovers lead people to eat more and exercise less because perceiving lower consumption bolsters self-evaluative feelings, which in turn undermines their motivation to compensate.

This research reveals that food leftovers—that is, unconsumed food—can exert meaningful influence on consumers' perceptions, affect, motivation, and important health-related behavior. Aside from making yet another case against growing portion sizes, these findings highlight that proudly foregoing half one's meal may actually backfire and subtly undermine subsequent healthy behaviors. Implications for how consumers may better deal with leftovers to prevent or reduce this effect should be investigated.

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It's Not You, It's Me: Consequences of Charitable Support Allocation on Consumer Prosocial Identity and Subsequent Support Behaviors

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EXTENDED ABSTRACT

The debate regarding non-profit fiscal practices continues to grow. Difficult economic conditions have prompted charitable organizations to implement large-scale marketing programs and attract highly skilled leaders. Whether salient to consumers or not, the funds to support these initiatives come from consumer support. The current research examines what happens to consumers' own prosocial identity and to their subsequent charitable contributions when they realize that less of their initial donation than expected has gone to the recipients of a charitable cause. While some research suggests that consumers might protect their identities by giving themselves credit for intending to act prosocially (Kruger and Gilovich 2004), we make the novel proposition that learning that support allocation (i.e., the amount of donation going to the charitable cause) was lower than expected can lead consumers to see themselves as less prosocial which also leads to decreased future prosocial action.

We define prosocial identity as the perception of how prosocial one perceives him/herself to be. On the one hand, research suggests that low support allocation information may not affect prosocial identity or future support due to the motivation to protect the self from ego or identity threats. For example, research finds that consumers judge their actions based on the impact they *intended* to make rather than actual performance (Kruger and Gilovich 2004). Alternatively, research also suggests that consumers may *internalize* this prosocial identity threat and reduce subsequent support. For example, research has shown that situational factors may positively or negatively impact prosocial identity and subsequent behavior (Aquino et al. 2009; Bandura 1991).

We make the novel prediction that after providing meaningful support for a charitable organization, consumers will perceive *themselves* to be less prosocial upon learning that less of their support went to cause recipients. We propose this novel process occurs because low allocation information reduces the positive benefits received from believing one's support made an impact in the lives of others (Aknin et al. 2014). Moreover, we propose this decreased prosocial identity process will reduce subsequent support not only for the supported organization, but also future support behavior. Thus, managerial decisions made by one organization may have detrimental effects on the success of others.

Study 1 documented our proposed model. After imagining supporting a charity, participants ($n = 101$) read one of two versions of a press release that outlined how funds were allocated between cause recipients (High = 91%, Low = 31%) and costs. Participants exposed to the low (vs. high) allocation information showed a decreased prosocial identity ($p < .05$), as well as lower likelihood of future support ($p < .05$, significant mediation).

Study 2 showed support for our decreased prosocial identity prediction by introducing an expectations moderator designed to elicit external attributions (Design: 2 (Allocation: Low, High) x 2 (Expectations: Control, High)). Participants ($n = 266$) followed the procedure of study 1 but received an expectations manipulation prior to the allocation information. Participants in the control (high) condition read that similar charities allocated between 30-50% (90-100%) of support to recipients. Results revealed the predicted interaction.

Low (vs. high) allocation participants showed a reduced prosocial identity in the control condition which reduced support for both the previously supported and unrelated charities; no differences emerged when expectations were high (significant conditional indirect effect).

Study 3 introduced a task to bolster prosocial identity and used a (Design: 2 (Allocation: Low, High) x 2 (Bolster: Present, Absent)). Participants ($n = 170$) first completed an effortful charitable volunteer task for a real charity for 20 minutes. Participants next read the press release manipulation, then performed the bolster essay task in which they wrote about a time they performed a charitable act (Present) or what they ate for lunch yesterday (Absent). Finally, participants completed prosocial identity and subsequent support measures. The predicted interaction emerged. Participants in the bolter absent condition exhibited the identity consequence (Low < High), which predicted a reduced support when allocation, but no differences emerged among bolstered participants.

Study 4 provided direct evidence for reduced prosocial identity using a repeated-measures design. Further, we ruled out deception as an alternative explanation (Darke and Richie 2007). Prosocial identity data was collected in two phases: first (via pre-survey) and last (lab experiment) weeks of the semester, resulting in a 2 (Allocation: Low, High) x 2 (Prosocial Identity: Pre-, Post-Support) mixed design. Participants ($n = 135$) completed the real volunteer task from study 3, read one of the two press releases, then completed post-support identity measures. Participants also indicated feelings deception and betrayal. At the end of the session, participants received a support request from a different non-profit. A significant interaction emerged ($p < .05$). Participants exposed to the low allocation information showed a direct reduction in prosocial identity ($p < .05$), but no difference emerged when allocation was high. Reduced prosocial identity then predicted lower agreement to help the unrelated organization ($p < .05$). Support allocation had no effect on feelings of deception or betrayal.

Study 5 reconciled our framework with action and intention research by introducing a novel moderator: support success. We predicted that when participants failed to meet their intended support, they give themselves credit for their intentions. However, after successfully supporting, we expected our prosocial identity consequence. Participants ($n = 124$) completed a modified form of the cold pressor task in which they submerged their arms in freezing water for 10 minutes to earn \$10 for a charity. A separate group watched videos of participants completing the task, resulting in a 2 (Allocation: Low, High) x 2 (Support Success: Success, Failure) + 1 (Observer) design. After the support task, participants completed prosocial identity items. As expected, participants succeeding in supporting the organization showed a lower prosocial identity after exposure to low (vs. high) allocation information ($p < .05$), but failing participants showed no differences ($p > .65$). Analysis of observer ratings showed that participants who failed (succeeded) gave themselves credit for intentions and rated their identities as higher (lower) than observers judged them to be, thus rectifying our novel process with previous work.

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Positive Effects from Negative Virtual Experiences: How Virtual Reality Can Be Used Effectively in Marketing

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EXTENDED ABSTRACT

Virtual reality (VR) technology is coming, and consumers are projected to spend over \$5 billion in 2016 (Grubb 2016). Producers such as Samsung and Google are pushing VR hardware to consumers for extremely low cost, and content designers can now create and distribute VR content to consumers by streaming directly to smartphones (Pierce 2015). Brands and marketers have also leaped in head first under the assumption that the technology's increased immersion or transportation will engage consumers and increase sales (Escalas 2004a, 2004b, 2007). However, no research has examined how the VR transportation actually occurs, or how marketing might be able to use it most effectively. This research seeks to take the first step in understanding the impact of this emerging technology by investigating the psychological processes that lead consumers to experience increased transportation in VR environments, and the downstream marketing consequences that this can have.

We make the novel prediction that increased transportation in VR over traditional two-dimensional (2D) media is driven by heightened orienting responses associated with emotion experienced through the VR environment; more specifically, the point of reference change from observer to actor (Hung and Mukhopadhyay 2012). Moreover, we predict that increased transportation resulting from orienting reactions will increase consumer intentions to engage in and support the same experience in the real world compared to a parallel 2D experience. Importantly, we demonstrate that the positive downstream consequences of VR can be driven by both positive and negative emotional content. In all studies, we contrast a VR medium with a 360-degree 2D medium. Thus, both formats are novel, cutting-edge tactics currently being explored by marketers, yet never tested theoretically for effectiveness.

Study 1 demonstrates that VR can lead to higher orienting reactions than 2D using a fear response. Participants ($n=101$) watched an aerial tour of Icelandic landscapes in VR or 2D. Shortly into the experience, the helicopter flew over a cliff exposing a rushing river below. The experimenter instructed participants to look down and step forward, giving the perception of stepping into the river below. Orienting fear responses (e.g., hesitation) were coded and as predicted, participants in VR (vs. 2D) exhibited significantly higher fear responses ($p < .0001$).

Study 2 shows support for our full framework using a different emotional response (protective). Participants ($n=124$) watched a video in either VR or 2D created to elicit a protective orienting response. When the video started, a man walked towards the camera to start a conversation. He *nonchalantly* turned away, then turned back and punched the camera. The camera snapped backwards then returned to its original position to mimic an individual taking a punch to the head. Upon completion, participants completed measures to assess how transported they felt in the environment. As predicted, VR (vs. 2D) participants exhibited higher protective responses (e.g., flinch, duck, $p < .01$) and reported higher transportation ($p < .01$). Supporting our framework, the indirect effect was significant.

Study 3 demonstrates our conceptual process using orienting responses associated with a positive emotion and extends our investigation to the downstream marketing potential. Undergraduates ($n=123$) participated in this study for \$5. Participants watched a vid-

eo in VR or 2D about a real non-profit endangered species conservation organization. The video showed a baby rhino drinking her morning bottle and elicited a happiness response. In the video, participants perceived to be standing beside the rhino in her pen with the curator. Upon completion, participants completed transportation measures. At the end of the study, they were given the chance to donate their \$5 payment to the organization. As predicted, VR participants exhibited a significantly higher positive emotional response ($p < .001$) and reported significantly higher transportation ($p < .001$). Replicating study 2, the indirect effect was significant. Next, we found that VR participants were significantly more likely to donate their payment ($p < .01$), and that this higher support was driven by perceived transportation in VR. To test whether our proposed process led to the higher donation behavior, we performed a serial mediation analysis to test the indirect effect of media type on organizational support through emotional response and transportation. The serial indirect effect was significant at the 90% level, suggesting that it is in fact the stronger emotional responses consumers experience in VR that leads to the increased transportation, which then leads to higher subsequent support behavior.

Study 4 provides further process evidence through moderation using a negative orienting response (fear) and an experiential product. Because our theorizing proposes that it is the orienting responses driving transportation and persuasion, anything that weakens the degree to which consumers experience emotional reactions in VR should mitigate the observed increased presence. In Study 4, we operationalize this by using participants' fear of heights as a moderating factor. Participants ($n=102$) watched a video we created to elicit a fear response. The video took place on the edge at the steep mountain peak of Camelback Mountain. Participants were instructed to look down and take step off the cliff; afterwards they completed transportation measures, indicated their fear of heights, and finally their desire to hike Camelback in the near future. Results revealed that VR elicited significantly higher orienting fear responses than 2D among participants with moderate to high fear of heights, but not among individuals with no fear of heights. The results on transportation were identical, showing support for our claim that orienting reactions are necessary to elicit transportation in VR. Finally, increased transportation predicted a higher desire to seek out the featured real-world experience.

We provide the first investigation of the impact VR can have in marketing. We demonstrate that it is the heightened orienting responses experienced in VR that lead to increased transportation in VR versus 2D media. We show this process results from both positive and negative emotional content, and that increased transportation does not occur when the orienting response is not realized. Finally, we demonstrate that the increased presence in VR leads to increased support for the promoting organization and a higher desire for the real life experience.

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The Effects of Self-Identity Activation and Emotions on Donation Decisions

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EXTENDED ABSTRACT

Sensitizing people to their self-identity at the time they receive an appeal for help can influence their compliance with this request (Hung and Wyer 2014; Langer and Abelson 1972). There are contingencies in this effect. Hung and Wyer (2014), for example, found that calling individuals' attention to themselves increased their willingness to help in-group members but decreased their willingness to help out-group members. This effect could simply reflect the use of similarity as a heuristic for decisions when the criterion is salient. However, it could also affect the subset of self-relevant knowledge that is salient to them at the time a donation decision is made and is used to interpret the situation at hand. This interpretation, and the emotional reactions it elicits, could mediate helping decisions.

The present research investigated the effects of activating self-identity on the use of these criteria and the emotions they elicit. We showed that when individuals are conscious of their self-identity at the time they receive an appeal, their donation decisions can be mediated by both empathy-induced distress and feelings of anticipated guilt. However, the effects of these reactions differ, depending on both characteristics of the victims and the perspective from which the situation is viewed.

IDENTITY ACTIVATION AND THE IMPACT OF EMOTIONAL REACTIONS

At least two types of emotions can mediate the impact of a donation appeal. First, people who feel socially close to victims may empathize with them and their donation decisions might be based on the feelings of distress resulting from this empathy (e.g., Aron and Aron, 1986). Second, these decisions can be influenced by perceptions of responsibility (e.g., Lowenstein and Small 2007) and the anticipation of feeling guilty if individuals do not fulfill their responsibility (Carlson and Miller 1987).

However, the effects of both empathy and obligation perceptions on donation decisions can depend on both (a) characteristics of the victims and the situation confronting them and (b) the accessibility of the self-knowledge used to interpret these characteristics. People's empathy, for example, may depend on their perceived connectedness to the beneficiaries. This, in turn, could be influenced by their interpretation of the beneficiaries as valued in their society at large. To this extent, empathy is likely to depend on the accessibility of self-knowledge that is relevant to the assessment of this connectedness. The assessment of one's personal obligation may likewise depend on the nature of these persons. However, it also depends on whether concepts associated with this normative obligation are called to one's attention at the time a donation decision is made.

Relatedly, Kettle and Häubl (2011) found that merely signing one's name was sufficient to activate people's self-identity and to increase the accessibility of self-knowledge. However, which aspects of this knowledge are likely to be applied in making judgments also depend on features of the situation at hand. When aspects of self-identity have implications for their behavior in a situation, priming their identity is likely to call attention to these implications. If their identity is not activated, however, concepts associated with these roles may not be applied.

EXPERIMENTS AND RESULTS

In Experiment 1 ($N = 110$), (Chinese) participants received an appeal for donations to help victims of child-trafficking. In this case, the victims were either Chinese (in-group members) or African (out-group members). Results yielded a significant interaction of self-identity priming and victim ethnicity ($F(1, 106) = 4.95, p = .028$), suggesting that activating their self-identity increased participants' donations to Chinese victims (from HK\$111 to HK\$164) but decreased their donations to African victims (from HK\$135 to HK\$61). These findings were accompanied by a similar interaction on disposition to empathize ($F(1, 106) = 4.87, p = .029$). Thus, this study provided evidence that the effects of identity activation depend on contextual factors that exist in the situation at hand.

Experiment 2 ($N = 109$) examined the specific emotions that mediate donation decisions and the impact of self-identity activation on the elicitation of these emotions. In this case, the victims to be helped were endangered species that were culturally desirable, undesirable, or irrelevant to (Asian) participants (sharks vs. snakes vs. dolphins, respectively). Results indicated that priming self-identity increased participants' disposition to preserve sharks (from HK\$67 to HK\$74; $F(1, 98) = 3.31, p = .072$), decreased their disposition to preserve snakes (from HK\$46 to HK\$26; $F(1, 98) = 3.25, p = .075$) and had little impact on their disposition to preserve dolphins ($F < 1$). Results of bootstrapping showed that empathic distress mediated the effect of self-identity priming on the donations to snakes (95% CI: -2.0778 to $-.2874$; based on 5000 samples) but not sharks (95% CI: $-.0657$ to 1.9921). In contrast, guilt mediated the effect on the donations to sharks (95% CI: -1.4441 to $-.0213$) but not snakes (95% CI: $-.3189$ to $.4489$).

In Experiment 3 ($N = 73$), we conducted a 2 (signature: signing own name vs. signing another's name) \times 2 (perspective: situation vs. donor) experiment. After the handwriting task, participants received an appeal to help victims of child trafficking. Some described either how the victims' situation occurred (situation condition) whereas others described either how they should help (donor condition). Activating self-identity increased donations when participants took the perspective of a donor (from HK\$72 to HK\$133; $F(1, 69) = 14.19, p < .001$) but had no impact on donations when they focused on the situation confronting the victims (HK\$82 vs. HK\$73; $F < 1$). Results of bootstrapping indicated two significant mediation pathways: (a) self-identity priming \rightarrow perceptions of obligations \rightarrow guilt \rightarrow donations (95% CI: $.0014$ to $.5552$) and (b) self-identity priming \rightarrow disposition to empathize \rightarrow empathic distress \rightarrow donations (95% CI: $.0927$ to 1.0145).

In summary, unobtrusively activating people's self-identity can have a significant impact on their responses to a donation appeal. These effects are mediated by different emotional reactions that depend on both (a) whether the potential beneficiaries are personally relevant and (b) whether recipients consider themselves as a donor at the time they encounter the appeal or focus on the situation confronting the victims.

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The Impact of Hierarchical Decisions on Choice Extremeness

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EXTENDED ABSTRACT

When consumers make a choice from a large number of alternatives, instead of viewing all available options at once and arrive at a final choice in one step, they often engage in a hierarchical decision process (e.g., Hauser 1986; Tversky and Sattath 1979). In the present article, we explore how making hierarchical choices (vs. one-step ones) impacts the extremity of consumers' preference in situations where alternatives are grouped into subsets trading off on two key attributes (e.g., tastiness and healthiness of food items). Although there is ample evidence showing that consumers tend to be loss-averse and opt for the middle-options when choosing from alternatives trading off on two attributes (e.g., compromise effect, Simonson and Tversky 1992; Simonson 1989), what remains relatively unclear is whether the same effect holds when they follow a hierarchical decision process.

Our research suggests that the choice following a hierarchical process would differ significantly from the original one in a one-step choice. We build our investigation on the theory of goal-based choice (e.g., Barsalou 1983; Dhar and Simonson 1999) and the theory of self-perception (e.g., Bem 1967; 1972) and propose that, as compared to a one-step decision, a hierarchical decision provides consumers with the opportunity to identify their preference such that they would behave in a way that is consistent with the initial choice, resulting in more extreme final choices. This hypothesis is derived on the notion that people form their attitudes and preferences partially by inferring from their own behaviors, especially when the attitudes/preferences are weak or ambiguous (Bem 1972; Schnall and Laird 2003). To the extent that in a typical trade-off context all attributes involved are important, consumers tend not to hold a strong, pre-existing, or fixed preference. This ambiguity in preference, in turn, leads to compromises that are acceptable on all dimensions when people need to trade off on multiple attributes in a one-step decision (e.g., Simonson 1989; Simonson and Tversky 1992). However, in a hierarchical decision context, the initial choice for a category in some ways forces consumers to declare a preference between the competing attributes and choose a subset dominating in one of the attributes. Phenomenally, we should expect that, compared with a one-step choice, individuals are more likely to go for the extreme options in a hierarchical choice context.

Study 1 (n=172) was conducted with undergraduate students using a 2 (decision process: one-step vs. two-step) x 1 between-subjects design. All participants were asked to choose a snack as the reward for a filler study. In the one-step condition, participants chose from 4 snack options (A to D: whole natural almonds, slated roasted almonds, multigrain chips, and classic chips). In the two-step condition, participants chose between almond and chips snacks first, and then chose within the selected subset. The results showed that there was a significant increase in the choice share of the extreme option A (38.71% to 61.70%, $Z = -1.98$, $p < .05$), and a decrease in the middle option B (61.29% to 38.30%) in the two-step (vs. one-step) condition. Similarly, there was an increase in the choice share of the extreme option D (46.88% to 85.48%, $Z = -3.96$, $p < .01$) and a decrease in the middle option C (53.13% to 14.52%) in the two-step (vs. one-step) condition.

In study 2 (n=201), we directly manipulated the trade-off between two attributes using a 2 (decision process: one-step vs. two-step) x 1 between-subjects design with Mturk workers. They were instructed to solve as many puzzles as they can within 2 minutes. They

were also told that viewing color patterns with calming or alerting effects can help solve puzzles. In the one-step condition, participants were asked to choose from 6 color patterns (A to F) with the calmness and alertness ratings. In the two-step condition, participants first chose between "patterns that make your mind calmer" and "patterns that make your mind more alert", and then chose a pattern within the selected subset. The results replicated our findings about the extremeness effect in study 1.

In study 3 (n=238), we tried to eliminate the extremeness effect using a 3 (decision process: one-step vs. two-step free-choice vs. two-step random-choice) x 1 between-subjects design with Mturk workers. In the one-step condition, participants chose a snack from four options of almonds. In the two-step free-choice condition, participants first chose between "original almonds" and "almonds with coatings", and then chose within the selected subset. In the two-step random choice condition, participants first chose between the two types of almonds by flipping a coin and then chose a snack from it. The comparisons between the one-step and the two-step free choice condition replicated our earlier findings about the extremeness effect. The comparison between the one-step and the two-step random-choice condition showed that, the increase in the choice share of the extreme option A (natural raw almonds) in the two-step random-choice condition was not significant (45.24% vs. 36.84%, $Z = 0.80$, $p > .20$), neither was the decrease in the choice share of the middle option B (low salted roasted almonds) (54.76% vs. 63.16%, $Z = 0.80$, $p > .20$). Similarly, the changes in the choice shares of options D and C were not significant. These results showed that, while a two-step process can make people choose more extreme options, it is on the condition that the subset decision is not attributed to an external (random) factor.

First, our research shows that when consumers make a single choice, breaking this task into multiple steps of a hierarchical process (e.g., subset decision and final choice) can make them focus on a particular goal and choose extreme options to highlight the goal. Our research also indicates that consumers need to re-evaluate the benefits of a compromising versus a maximizing strategy in their decisions. It seems intuitively wise to choose the middle options when consumers make trade-off decisions between two important aspects/attributes. However, in the cases when we are better off having more extreme options, simply changing the decision procedure can help us circumvent the instinct of choosing a compromised option.

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Paying More to Save Less: The Effect of Self-selected Price Bundling on Willingness to Pay

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EXTENDED ABSTRACT

Price bundling is a prevalent marketing practice, where consumers receive a discount if they purchase two or more products together (Stremersch and Tellis 2002). Prior research has not investigated a specific type of price bundling in which retailers only fix the total number of products included in the bundle, and consumers can decide which products to put in the bundle, which we term “self-selected price bundling”. Compared to price bundling with fixed bundled goods, self-selected price bundling can reduce the risk that consumers will react negatively to a perceived constraint of their freedom of choice (Bertini and Dholakia 2009) and decrease the likelihood that consumers will update their internal reference prices for the discounted goods (Raghubir 2004). Despite these advantages, self-selected price bundling gives retailers little control over which products consumers are going to purchase and how much they are going to spend on the bundle. Therefore, the current study attempts to understand consumers’ spending decisions under the self-selected price bundling promotion.

In order to investigate consumers’ spending decisions, we compare two simplest forms of self-selected price bundling: (A) buy two items, get a discount on both items; and (B) buy two items, get a discount on the cheaper item. Between these two promotions, at any given price discount, the “discount on both items” (hereafter “DoBI”) promotion generates greater absolute savings than the “discount on the cheaper item” (hereafter “DoCI”) promotion. If consumers’ spending decisions are driven by the absolute savings, they should spend more when offered DoBI promotion than DoCI promotion. Two experiments showed the opposite spending outcome.

Study 1A adopted a single-factor (DoBI vs. DoCI) between-subject design. Participants read that they were shopping at a large apparel store, which offered a promotion: “If you buy two items, you get a 40% discount on both items [on the cheaper of the two items]”. They had decided to buy a jacket that cost \$50 and to purchase a second item in order to take advantage of the promotion. They were asked how much they were willing to spend on the second item on a six-item marked scale where 1=“less than \$10” and 6=“more than \$60”. One-way ANOVA revealed that participants were willing to spend significantly less on the second item in DoBI condition ($M=3.3$), than in DoCI condition ($M=4.1$, $F(1, 51)=6.05$, $p=.02$). Study 1B replicated study 1A using a different price of the first item (\$80), a different discount magnitude (20%) and a different type of response scale (a sliding bar anchored on \$0 on the left, and \$100 on the right). One-way ANOVA revealed again that participants were willing to spend less in DoBI condition (\$30 vs. \$40, $F(1, 60)=4.93$, $p=.03$).

Building on the literature in relative thinking and mental accounting, we propose a relative savings account to explain the spending decisions under the self-selected bundling promotion. The purchase of the second item triggers savings, which makes the spending on the second item and the savings on the whole bundle salient. Instead of evaluating the absolute savings, individuals consider whether greater savings on the bundle can be obtained with smaller spending on the second item. This relative savings consideration thus predicts that in DoBI condition, consumers will opt for a low spending on the second item to obtain a steep increase in savings on the first item. In other words, the absolute savings

on the first item attracts down the spending on the second item. Therefore, even though DoBI generates greater absolute savings, consumers spend less on the second item in DoBI condition than in DoCI promotion.

Following this theorizing, we expect that consumers’ spending on the second item will increase if the absolute savings on the first item is removed from DoBI condition (study 2) and will decrease if some savings is added to DoCI condition (study 3). Study 2 employed a 2 (DoBI vs. DoCI)×2 (control vs. coupon) between-subject design. In the coupon condition, participants read that they would use a coupon to pay for the first item. However, paying with coupon invalidated any savings on the first item. A two-way ANOVA revealed a significant interaction ($F(1, 101)=4.53$, $p=.04$). The result in the control condition replicated the previous findings ($M_{DoBI}=\$18$, $M_{DoCI}=\$35$, $F(1, 101)=26.21$, $p<.001$). The difference in spending became marginal in the coupon condition ($M_{DoBI}=\$26$, $M_{DoCI}=\$33$, $F(1, 101)=3.51$, $p=.06$). As predicted, the spending on the second item increased in DoBI condition after using the coupon (\$26 vs. \$18, $F(1, 101)=5.59$, $p=.02$). In study 3, we used a 2 (DoBI vs. DoCI)×2 (cash rebate vs. control) between-subject design. In cash rebate condition, participants received a cash reward conditional on purchasing two items, in addition to the bundle discount, which adds a steep increase in savings to DoCI condition. A two-way ANOVA revealed a significant interaction ($F(1, 137)=8.99$, $p=.003$). The result in the control condition replicated the previous findings ($M_{DoBI}=2.9$, $M_{DoCI}=5.9$, $F(1, 137)=28.59$, $p<.001$). In the cash deduction condition, there was no difference in spending across promotion formats ($M_{DoBI}=4.1$, $M_{DoCI}=3.7$, $F(1, 137)=.36$, $p=.55$). As predicted, participants in the DoCI condition reduced spending when there was a cash rebate (4.1 vs. 5.9, $F(1, 137)=8.7$, $p=.004$). Thus, study 2 and 3 provide processing evidence in support of a relative savings account: consumers evaluate their spending on the second item relative to the savings on the bundle and try to maximize the exchange efficiency.

Study 4 tested whether individuals switch to consider absolute savings rather than gain-loss ratios in the joint evaluation mode, providing that previous research shows the reliance of absolute versus relative evaluation is sensitive to evaluation mode (Bartels 2006; Hsee and Leclerc 1998). Study 4 employed a one-factor (DoBI vs. DoCI) within-subject experiment. Participants read both promotions and predicted consumers’ spending on the second item in each promotion respectively. A pair-wise t-test showed that participants predicted consumers spend more in the DoBI condition ($M=\$66.05$) than in the DoCI condition ($M=\$44.86$, $t(21)=4.04$, $p=.001$), which was opposite to the findings above. This finding suggests that store managers may adopt a seemingly superior promotion which actually motivates consumers to spend less.

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Cognitively Optimized Measurement of Preferences

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EXTENDED ABSTRACT

Researchers, managers, and policy-makers are increasingly interested in measuring individual differences to predict behavior in the field. From measuring time and risk preferences in economics to contingent valuation in environmental science and policy, and from consumer surveys to conjoint analysis in marketing, predicting people's behavior is a big deal.

Every time we ask a respondent a question, we do two things: (1) We obtain data about some parameter(s) of interest, such as their discount rate or the part worth of a product attribute, and (2) We expend some of the respondent's limited attentional resources. This paper focuses on the tradeoff between additional precision and the depletion of attentional resources.

The intersection of precision and depletion is of increasing interest because of two related applications: The first is preference elicitation. Marketing has expended considerable effort to study how to model choices in one environment in order to predict choices in another. A good example of this is the use of conjoint analysis in new product design. The problem of how many questions to ask to get the best model is central to designing elicitation procedures. A related version of this question arises when we use adaptive procedures thought to minimize respondent fatigue (e.g., Green et al 1991; Toubia et al 2003).

The second application is more general: To test theories, researchers in marketing and psychology have increasingly turned to asking respondents to make many decisions. Several different trends have led to an increased use of many elicitation questions: More complex models require more observations as the number of parameters increases, and new techniques, such as functional magnetic resonance imaging (fMRI), demand many decisions to overcome noise in the desired physiological signals.

Both of these developments raise a general concern about the changes that occur as we ask respondents more questions. By asking more questions, are we changing the underlying process by which respondents answer them? A specific concern about the effects of answering questions on attention is ego depletion (Baumeister, Bratslavsky, Muraven, and Tice 1998), an idea originating in the social psychological literature. Perhaps, as respondents use this scarce executive resource to answer more questions (Vohs et al. 2008; Wang et al. 2010), they will move toward simpler, heuristic processes that may differ from those used for decisions in the real world application (Pochepstsova et al. 2009). For example, Levav and colleagues (2010) found that asking more questions increases the acceptance of defaults by the decision-maker, particularly when those questions are cognitively difficult.

In this paper, we develop a framework for understanding the tradeoff between additional signal and noise. Our goal is to help identify *a priori* changes in the underlying decision processes that might occur with more questions answered and how those changes will affect the reliability and validity of the models that are estimated on the data. One more specific goal of this research to help researchers thing about the best number of questions to ask, a term we will call q^* , in various situations.

We first develop a conceptual model that will generate predictions and insights to test in a series of three experiments that measure time preferences. We focus on time preferences for several reasons: (1) they are among the strongest individual difference predictors in

the social sciences (Chabris et al 2008; Reimers et al 2009); (2) they are usually measured using minimal external information, often as binary intertemporal choices between a smaller outcome that is available sooner (e.g., \$50 in today) and a larger outcome that is available later (e.g., \$60 in 1 month); (3) there is a rapidly growing literature of both descriptive and normative models; and finally (4) they have become increasingly important in marketing, particularly in areas as diverse as food choice and consumer finance. We conclude by discussing general implications for preference measurement.

CONCEPTUAL MODEL

To study how repeated questioning may affect the reliability and external validity of preference measurement, we first develop a stylized model. In particular, we are interested in exploring conditions under which reliability and/or external validity may in fact decrease after some number of questions. The conditions we explore relate to the level of response error, the efficiency of the questions, the amount of variations in heuristics across decision makers and across sessions, and the speed with which respondents adopt heuristics within a session.

Our model reflects two countervailing forces that vary as the number of questions increase. First, more questions provide more data, which reduces the standard error of parameter estimates—i.e., estimates converges to some value. Second, more questions may increase the intensity of heuristic use, which may introduce bias. In other words, as more questions are added, our estimates become more precise (i.e., they have less standard error and converge to some value), but also potentially more biased (i.e., the value to which they converge may be further from the truth).

In this setting, we argue that a respondent, as they become fatigued or disinterested, might be tempted to adopt a heuristic. For example, for intertemporal choices, they may see if the difference in money is proportionally smaller or larger than the difference in time and chose the later option only if the payment seems to justify the wait, a heuristic that has recently gained significant empirical support (Marzilli et al 2015; Scholten and Read 2010; Scholten, Read, and Sanborn 2014). While such data will provide a clear estimate of the parameter in this estimation setting, the parameter that we estimate may not apply to situations when that heuristic is not used. For example, perhaps decisions to delay are made in advance so the smaller sooner is not available now. This removes any overweighting of the immediate reward, or present bias, from the decision, a factor that is confounded in the estimation procedure we have described. Alternately, in the actual savings decision, the time frames might be described in years or in terms of a specific date, and a different heuristic might be used in these circumstances (LeBoeuf 2006; Read et al 2005). If this is true, the increased accuracy that might be offered by asking more questions might be diminished or even offset by the increased use of heuristic processes.

Formally, we assume that Y_i varies with true individual parameters, denoted by X_i , and allow for idiosyncratic variations, reflected by a normally-distributed error term, ε_i :

$$(1) \quad Y_i = X_i + \varepsilon_i, \text{ where } \varepsilon_i \sim N(0, \sigma_\varepsilon)$$

We consider a researcher who tries to predict Y_i based on an estimate of X_i , generated by asking respondents questions (e.g., in-

tertemporal choices), a process which is potentially repeated over multiple sessions. $\hat{X}_{i,wq}$ is the estimate of X_i for decision maker i in session w after question q . $\hat{X}_{i,wq}$ reflects the two countervailing forces mentioned above: additional questions lead to convergence, but the quantity to which the estimate converges may become increasingly further from the truth due to the use of heuristics. In particular, as decision-makers answer questions, decision-makers may switch to a cognitively less demanding heuristic. This heuristic may use a subset of the information or make attribute-based comparisons rather than calculate expected utilities, and therefore using the heuristic produces estimates that may differ from X_i . If heuristic use is systematic, the result may be a biased estimate of X_i .

We denote the *potential* bias introduced by the use of heuristics as β_{iw} . The *actual* bias is likely to increase as the questionnaire progresses, and to converge to the potential bias as the number of questions increases. Therefore, we weigh β_{iw} by a function $\sqrt{\alpha(q)}$ which is non-decreasing in the number of questions.

With these assumptions, the combined effect of the true underlying value X_i and the use of heuristics after q questions is: $X_i + \sqrt{\alpha(q)}\beta_{iw}$. On the other hand, asking more questions reduces the standard error of the estimate—i.e., there is convergence with more questions. Respondents likely report their preferences with error, leading to imperfect estimates. However, as respondents answer more questions, estimates converge to the underlying construct, $X_i + \beta_{iw}$. We model this convergence using an additional normally-distributed error term, η_{iwq} . To reflect the idea that estimates converge within a session, we model the variance of η_{iwq} as decreasing in q , that is, we assume: $\eta_{iwq} \sim N(0, \sigma_\eta \sqrt{\gamma(q)})$, where $\gamma(q)$ is a non-increasing function of q .

In sum, we assume that our estimate of X_i for decision maker i in session w after question q , is given as follows:

$$(2) \hat{X}_{i,wq} = X_i + \sqrt{\alpha(q)}\beta_{iw} + \eta_{iwq}$$

Where $\alpha(q)$ is a non-decreasing function of q , $\eta_{iwq} \sim N(0, \sigma_\eta \sqrt{\gamma(q)})$, and $\gamma(q)$ is a non-increasing function of q . Again, the second and third right-hand terms in Equation (2) capture the two countervailing forces mentioned above: $\sqrt{\alpha(q)}\beta_{iw}$ leads to an increasing bias due to heuristic use as q increases, and η_{iwq} leads to a reduction in standard error as q increase.

In interest of space, we skip the proofs and present the most interesting model predictions about reliability and external validity.

Hypothesis 1: The use of heuristics can give rise to an eventual decrease in reliability with more questions asked, leading to an inverted U-shaped pattern (i.e., a peak) in reliability

Hypothesis 2: A decrease in reliability with more questions asked is more likely when heuristics vary more across sessions.

Hypothesis 3: A decrease in reliability with more questions asked is more likely when questions are asked in a more efficient manner, i.e., when convergence within a session is faster and/or when the use of heuristics increases at a slower rate.

Hypothesis 4: The use of heuristics can give rise to an eventual decrease in external validity, leading to an inverted-U shaped (i.e., a peak) pattern of external validity.

Hypothesis 5: An inverted-U shaped external validity pattern is more likely when the use of heuristics is more pronounced. Moreover, the peak happens earlier when the use of heuristics is more pronounced.

Hypothesis 6: An inverted-U shaped external validity pattern is more likely when questions are asked in a more efficient manner. Moreover, the peak happens earlier when questions are asked more efficiently.

STUDY 1: CONCURRENT VALIDITY IN DEEP TIME

Study 1 reanalyzed data from DEEP Time and the time preference external validity task collected by Toubia and colleagues (2013). This task consisted of 20 binary choices between smaller, sooner and large, later cash rewards. To assess external validity for estimated DEEP parameters, participants first completed a different time preference measure similar to the one used in Benhabib, Bisin, and Schotter (BBS; 2010). Specifically, each participant completed eight intertemporal matching questions, specifying the amount of money that would make them indifferent between a smaller, sooner amount and a larger, later amount. Half of the questions required filling out the smaller, sooner amount and half the larger, later amount.

After participants completed the BBS task, they were given the DEEP Time task, as described above. To make choices incentive compatible, 1 in every 100 participants was randomly selected to have one of their chosen DEEP Time alternatives paid for real money at the chosen time. All payments were made electronically.

Results

Concurrent validity

In order to investigate the effect of asking additional adaptive questions, we used the hierarchical Bayes approach to estimate β and δ after each of the 20 DEEP questions. That is, we fit all participants' responses to only the first question, to the first two questions, etc., up to all 20 questions, resulting in 20 sets of β 's and δ 's for each participant.

To understand the effect of answering additional questions on external validity, we calculated the absolute deviation (in dollars) between participants' actual responses on the BBS task with the predicted responses generated by their QTD model parameters. We then computed the median absolute deviation across the eight BBS questions for each participant, and took the median of each participant's medians. We found similar trends when looking at the mean of each question's median absolute deviation. We repeated this process using the QTD parameters estimated after each of the 20 DEEP time questions.

In order to demonstrate a statistical plateau in validity, we examined Pearson correlations (across the eight external validity questions) between each participant's actual responses and their predicted responses based on QTD parameters after each successive DEEP time question. We then converted these correlations to z-scores using Fisher's r-to-z transformation for ease of comparison, with clear evidence of an increase after the sixth question and no significant change after seven questions. To statistically test the trend, we analyzed a multilevel model on the r-to-z transformed correlations, with participant intercepts and fixed effects for each question order (20 separate effects), thus controlling for the correlated errors within each participant.

STUDY 2: RELIABILITY AND PREDICTIVE VALIDITY FOR REAL-WORLD TASKS.

In Study 2, in addition to measuring concurrent validity as a function of number of questions asked, we examined *predictive validity* by see how well DEEP Time parameters predicted self-reports of field intertemporal choice behaviors across health, financial, and personal domains (e.g., flossing, smoking, savings, and credit card repayment). We also assessed *test-retest reliability* by comparing participants' responses on two sessions separated by 4 months.

Methods

We reanalyzed data obtained from Bartels & Li (2015), who recruited a large, broadly sampled set of 1308 participants (542 female, ranging in age from 18 to 86, with a mean age of 40.91) including 603 from Amazon Mechanical Turk and 705 from Pureprofile (a market research firm).

Data consisted of DEEP Time data as a part of a larger study on how time preferences relate to field intertemporal choices. In addition to DEEP Time, participants completed a static set of intertemporal choices designed using Item Response theory, which can be used for tests of concurrent validity. Finally, participants self-reported the degree to which they exhibited a variety of field behaviors related to intertemporal choice (e.g. going to the dentist, eating healthily, and saving for retirement). All measures were collected twice, with about 4 months delay between sessions and an 83% retention rate. No time preference, field behavior, or demographic variable predicted attrition from the study. For more details, see Bartels & Li (2015).

Similar to study 1, we used the hierarchical Bayesian method to estimate the DEEP Time estimates after each of 20 questions answered, separately for each session.

Results

Reliability

Test-retest reliability specifically requires that participants' parameters elicited at different times are highly correlated. An important prediction of our model is a plateau or peak in test-retest reliability. This is, in our model, due to the heuristic process dominating the complex process. Test-retest reliability for the QTD beta and delta parameters estimated by DEEP time after each question plateaued after about six questions.

Concurrent Validity

We compared the DEEP estimates after each question to an external intertemporal titrator. Our model of choices predicts that external validity plateaus, or in some cases peaks, due to fact that the heuristic processes is elicitation specific and may not be measuring the "truth."

Using the QTD parameters after each of the DEEP questions, we calculated the estimated indifference point for all of the 12 matching questions, which can be found in the appendix. Then for each question within each participant we calculated the Pearson's correlation between the predicted and actual indifference points, meaning that we had 20 correlations for each of the 1308 participants. Due to skewness we then transformed these correlations via Fisher's r-to-z transformation. Next we ran a multilevel model with fixed effects for each of the 20 DEEP questions and random effects for participant. Fixed effects showed that concurrent validity plateaued at eight questions.

Predictive validity for real-world behaviors

Further in Study 2 we had multiple real world measures of time discounting. We oriented all variables such that higher numbers indicated more patience. For instance, the more often you go to the dentist the higher your score. To determine if the items could

be combined into one measure, we looked at Cronbach's alpha. The raw alpha for all of the items combined was .57. Since alpha was sufficiently large, we z-scored all of the relevant items and combined them into one real world intertemporal behavior factor. Then we ran a multilevel model with fixed effects for each of the questions along with the beta parameters. Predictive validity peaked at six to eight questions for beta and five to six questions for delta.

Discussion

Study 2 expands on Study 1 by reproducing the concurrent validity plateau with a different time discounting instrument. Further Study 2 shows that test-retest reliability peaks at a similar point and that validity with real world intertemporal choices peaks at about 4 questions. We do not, however, see how information acquisition changes as more questions are asked. Study 3 analyzes process data to track the evolution of acquisition across contexts, how these contexts lead to varying choices, and how well parameters within and across contexts predict real world decisions.

STUDY 3: SHIFTING HEURISTICS

While studies 1 and 2 replicate a plateau in predictive validity, they do not indicate why that plateau exists. As the number of questions grows, respondents may, because of fatigue, adopt a simplified strategy that minimizes effort. One version of this fatigue argument might say that respondents respond randomly, at the extreme simply not looking at any information or a small but random subset of information.

If this were the case, we would expect predictive validity to decrease with the number of questions each additional question adds random error to the estimated. The second possibility is that decision-makers adopt a heuristic strategy that simplifies choices, but that is consistent with the preferences established in the first few choices. If this were the case, we would expect predictive validity to remain constant, since each choice simply reflects prior choices and carries very little additional information.

However, to the extent that such heuristics reflect the context used in the experiment, we may see parameters that reflect both true tastes and the context. This suggests a rather interesting hypothesis: That predictions will be better within a context than across contexts.

Methods

Participants

We recruited 533 participants from Amazon Mechanical Turk and used MouselabWeb (Willemsen and Johnson, 2010), a process tracing technique to study information acquisition.

We constructed a set of 16 choices and randomly added or subtracted a small percentage of each of the amounts to make the amounts harder to process. We then generated a random presentation order for the 16 choices. Participants saw two blocks of these sixteen choices in the same random presentation order in a 2 (first block: day vs. hour) x 2 (second block: day vs. hour). The original 16 items were created with days as the time unit. To convert these to hour items we multiplied the number of days times 24. For both days and hours, we labeled today items "now." This was done because we felt that 0 hours has a different connotation than 0 days.). The second block could be consistent with the first block (e.g. if the participant saw hour items in the first block they saw the same items again in the second block) or could be inconsistent (e.g., if the participant saw day items in the first block the saw hour items in the second block.)

We also measured the same self-reports of real-world intertemporal choices as in study 2.

Results

Choices

We ran a multilevel regression with choice as the dependent measure (smaller sooner = 0, larger later = 1) and random effects of participant. We included main effects of context (day vs hour), which block the choice was in (first or second), and whether or not the second block was consistent with the first block (consistent vs. inconsistent), as well as all possible interactions.

Participants made significantly more impatient choices in the hours condition as compared to the days condition. The effect of hour versus day was more pronounced in the first block of choices. This attenuation in the second block could be due to a persistent heuristic which is created in the first block and lasts until the second block.

One of the major advantages of Mouselab Web is that we acquire how participants search. We leverage this advantage to investigate if heuristics develop as more questions are asked. One metric which can be used to describe how people are searching is the Payne Index (PI). The PI is calculated for each choice by subtracting the number of attribute transitions from the number of alternative based transitions then dividing by the sum of attribute and alternative based transitions. A higher PI means that participants make more within option transitions (e.g. a transition between the larger later amount and the larger later time) than between option transitions (e.g. a transition between the larger later amount and the smaller sooner amount).

We also ran a model to see if there was a difference in PI between the first block and the second block. Since choices were shown in the exact same random order we subtracted the block 2 paPI from the block 1 PI to get a measure of how differently participants were acquiring data in the second half. We ran a multilevel model predicting for each choice the difference in PI with varying intercepts for each participant. We also included main effects of what was the first frame that the participant saw (days or hours), whether the second block had a consistent or inconsistent framing with the first block, and an index of the number of choices made, and all possible interactions. The results suggest that participants maintain their heuristic in the consistent condition, but alter it, especially early, when seeing items which have an inconsistent frame.

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Buy One Get One to Share: Preference between Bonus Packs and Price Discounts For Experiential Versus Material Products

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EXTENDED ABSTRACT

Previous research on sales promotions has documented that consumers respond differently to economically equivalent price discounts and bonus pack promotions (Diamond and Campbell 1989; Li, Sun, and Wang 2007). However, most research has focused on the perceived economic value of promotional offers, and it remains unclear whether these promotions can offer different non-monetary benefits. This paper examines whether these promotions can entail different social benefits, and how this can change consumers' preferences between price discounts and bonus packs.

From an economic perspective, consumers may derive greater transactional utility from price discounts than from bonus packs (Sinha and Smith 2000). A reduction in cost provides greater savings in terms of the total expenditure than bonus pack offers; this enables consumers to spend the saved money for other purposes. Bonus pack promotions (especially, Buy-One-Get-One), however, can generate a unique social utility that price discount promotions cannot. Namely, an extra product can offer opportunities to enjoy consumption experiences with others, or shared consumption.

We argue that bonus pack promotions would be more likely to suggest shared consumption when offered for experiential goods than for material goods. Caprariello and Reis (2013) highlighted that unlike material products, experiential products are often consumed in the company of other people. Due to this social nature, an extra item for experiential products would be more likely to invite shared consumption, which allows consumers to share their emotions with companions and to build social bonds (Raghunathan and Corfman 2006; Ramanathan and McGill, 2007). However, for material products, the second item in a bonus pack deal would likely be used for the buyer herself, resulting in a superfluous item. Building on this, we propose that consumers' preference will shift toward bonus pack promotions from price discounts in particular for experiential goods rather than material goods.

Study 1 examined whether people prefer bonus pack promotions (vs. price discounts) differently depending on the product type. Participants were shown material or experiential goods with a side-by-side description of a price discount (i.e., 50% off) and a bonus pack (i.e., BOGO). For each product, they were asked to choose between the two options. As expected, participants chose the bonus pack over the price discount more often for experiential products than for material ones (53.1% vs. 25.8%; $B = .59$, Wald $\chi^2 = 7.94$, $p < .01$).

Study 2 tested whether this effect is driven by the social benefits associated with bonus pack promotions. The procedure of Study 2 paralleled that of Study 1, except the fact that we manipulated the shared use of bonus packs for experiential goods. Bonus packs for experiential goods were described as to needing to be used on the buyers' next purchase (non-shared consumption) or for an accompanying friend (shared consumption). When bonus packs for experiential products were framed as being for shared consumption, participants were more likely to choose the bonus pack for experiential products (56.2%) than for material ones (14.5%; $B = -2.02$, Wald $\chi^2 = 19.31$, $p < .001$). However, this difference in promotion choice was

eliminated when bonus packs for experiential products was framed as for non-shared use (14.5% vs. 19.1%; $B = .33$, Wald $\chi^2 = .41$, $p > .5$).

Studies 3 and 4 investigated whether the desire for social interaction moderates preference for promotion type. In Study 3, results revealed a significant interaction between extraversion and product type ($B = .25$, Wald $\chi^2 = 4.73$, $p < .05$). For experiential products, the more extraverted participants were, the more likely they were to choose the bonus pack over the price discount ($B = .40$, Wald $\chi^2 = 4.74$, $p < .05$); however, for material products, the level of extraversion did not predict the promotion choice ($B = -.11$, Wald $\chi^2 = .62$, $p > .4$).

Study 4 attempted to further verify the moderating effect of the desire for social interaction by manipulating social exclusion with the Cyberball game task. Consistent with our prediction, a significant social exclusion \times product type interaction emerged ($B = .28$, Wald $\chi^2 = 5.37$, $p < .05$). For experiential products, participants who were socially excluded chose the bonus pack promotion more often than those who were not (54.9% vs. 38.2%; $B = .34$, Wald $\chi^2 = 3.86$, $p < .05$). On the contrary, for material products, choice of the bonus pack option did not differ between the exclusion and inclusion conditions (19.6% vs. 27.6%; $B = -.22$, Wald $\chi^2 = 1.71$, $p > .2$).

In conclusion, this research demonstrates that preference for bonus packs (vs. price discounts) is greater for experiential products than for material ones, and this pattern is attributable to shared consumption of bonus pack promotions. Taken together, this paper highlights the importance of the social benefits associated with sales promotion.

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Moderation by Extremes: Biases in Reward Perceptions Drive Compromise Effects in Financial Bundles

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EXTENDED ABSTRACT

*“Moderation in all things, especially moderation.”
—Ralph Waldo Emerson*

Consumers strongly prefer compromise options with medium attribute levels rather than extreme options that are strong on one attribute but not another (e.g., Simonson 1989; Simonson and Tversky 1992). In a typical demonstration, people trading off quality and price prefer a medium quality and medium price option over a high quality but high price option and a low quality but low price option (Simonson and Tversky 1992). Indeed, a recent meta-analysis of 142 experiments showed that this tendency appears is robust across many contexts, study designs, and participant types (Neumann, Böckenholt, and Sinha 2016).

However, middle options in bundles (the simultaneous choice of multiple items) can take more than one form. Herein, we focus on financial portfolios, in which people commonly trade-off attributes of risk and potential reward across multiple items (Kaufmann et al. 2013; Urminsky and Kivetz 2011) and in which encouraging attribute balance is important. Past research on the compromise effect might suggest that people prefer an option with medium risk and medium return (hereafter, “moderate RR”) to extreme options with low risk and low return (“low RR”) or high risk and high return (“high RR”).

Of note, however, the vast majority of compromise effect research has focused exclusively on choice when the middle option consists of a single item. By contrast, we propose that when consumers build portfolios, there is another way to arrive at a middle “balanced” option: a bundle of the extremes—50% low RR and 50% high RR items. Such a “bundle-of-extremes” option objectively has the same average risk and expected reward as a “bundle-of-pure-moderation” consisting of 100% moderate RR items. If people are simply averse to extremes and instead value average risk and average returns, then both options should be similarly valued, as they both offer moderate risk and moderate returns in the aggregate. Thus, the compromise effect should emerge in the same magnitude regardless of whether the middle bundle option is purely moderate or composed of extremes.

However, we propose that the option to select a bundle-of-extremes may lead to a stronger compromise effect than the option to select a bundle-of-pure-moderation. We argue that this will occur because the bundled context changes the way that people evaluate potential reward. Note that a bundle-of-extremes includes both high RR items and low RR items. We propose that people will anchor on the high rewards offered by the high RR items in the bundle-of-extremes, making it particularly attractive as a compromise option, without appropriately accounting for the high risk such potential rewards entail. There are several reasons for this prediction. First, such a pattern may reflect a self-positivity bias (Taylor et al. 2003), wherein consumers believe that positive outcomes will accrue to them, but that their risks of damage are lower than are others’. Second, it is well-established that a general optimism bias exists across many domains (Sharot 2011), which could lead individuals to focus on the upside potential of the reward rather than the downside of

the risk involved. Third, people often exhibit motivated reasoning that biases their evaluations (Kunda 1990). Indeed, recent research suggests that aggregate evaluations are influenced less by unfavorable information, such as risk, than by favorable information, such as reward (Peysakhovich and Karmarkar 2016). Such a bias makes the bundle-of-extremes not only justifiable, allowing individuals to avoid an extreme choice either in terms of aggregate risk or reward, but attractive, in that it is perceived to offer higher reward.

Five studies supported our predictions: people were more likely to choose the middle option over the extremes (i.e., show stronger compromise effects) when the middle option consisted of a bundle-of-extremes than when it consisted of a bundle-of-pure-moderation, both with hypothetical stock portfolio allocations (Studies 1, 2, 5) and lottery ticket allocations involving actual monetary outcomes (Studies 3-4). This preference for a bundle-of-extremes over a bundle-of-pure-moderation was robust: it emerged both when only one middle option was available to each participant (Studies 1-4) and when both middle options were available (Study 5); when qualitative information was provided about the different options (Studies 1-3, 5) and when quantitative information was provided, explicitly equating the expected value of the options (Study 4). The results also emerged regardless of various participant characteristics (e.g., financial literacy, income, education).

Moreover, from a process perspective, variety seeking or naïve diversification did not explain this effect (Study 1). Rather, analysis of risk and potential reward perceptions showed that the two middle options were perceived as similarly risky but the bundle-of-extremes was viewed as more potentially rewarding; indeed, perceptions of the potential reward provided by the middle option mediate the effect of the different middle option offerings on choice (Studies 2-3). Given this perceptual bias, we also show that preference for a bundle-of-extremes over a bundle-of-pure-moderation is eliminated either when the bundle-of-pure-moderation middle option’s expected value is increased (Study 4) or when people view a side-by-side simulation of potential options over time (Study 5), which allowed consumers to see that the higher risk entailed in a bundle-of-extremes offsets the higher potential rewards that it might offer, leading to the same objective outcome as the bundle-of-pure-moderation.

From a theoretical perspective, this research identifies a new moderator leading to amplification of the compromise effect. Importantly, our work also suggests that people may perceive risk and reward differentially as a function of a portfolio’s variance. Accordingly, we introduce a new type of context effect—one in which the variance among aspects of a portfolio alters perceptions of the portfolio’s explicitly-stated values. This research also has practical implications. Given that balance is often encouraged in investments, our research sheds light on which type of balance (a bundle-of-extremes or a bundle-of-pure-moderation) is more attractive to people and why. Additionally, our research suggests a practical way to shift people from one type of balance to the other: observing the potential outcomes of a bundle-of-extremes shifts preference to a bundle-of-pure-moderation—seeing the consequences of high variance makes it less attractive than it is in prospect alone.

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The Unit Bias: Evidence for a Categorization Bias in Estimating Quantities

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EXTENDED ABSTRACT

Consumers all the time estimate quantities as part of their decision making, purchase and consumption activities. For example, when they decide to go on a shopping trip to a supermarket, they may estimate how long it will take to drive to a store; how many candies there may be in a bag on the shelf; how long the tape on a tape-roll may be; and how heavy the shopping bag with the items that they purchased may be. Past research has shown several specific biases in estimating quantities, such as distance (Kang, Herr, and Page 2003), duration (Irmak, Walker, and Bearden 2010), volume (Raghubir and Krishna 1999), product count (Madzharov and Block 2010), area (Krider, Raghubir, and Krishna 2001), and calories (Chandon and Wansink 2007). This paper contributes to this literature by identifying a new and general bias when consumers estimate quantities similar to the examples given above.

We refer to this general estimation bias as the “unit bias.” We posit that the unit bias results from the very nature of human categorization. That is, two or more categories do not only suggest or prime differences between the members of these categories (as a lot of prior research has shown); rather, categorization also includes subtle quantitative information, resulting in a heuristic that the components of two units or categories are perceived as having greater combined numeric value than one unit, even though, in reality, both may have the same value.

In seven experiments with five quantities, we show that when two units are contrasted with one, consumers provide longer time estimates, farther distance estimates, higher quantity estimates, longer length estimates, and higher weight estimates. Participants in all studies were recruited from Amazon’s Mechanical Turk and randomly assigned to different experimental conditions as parts of between-subjects designs. Study 1 shows that people perceive a longer time walking between two kiosks, compared to walking between two windows within one kiosk, although the distance is the same. Study 2 asks participants to estimate their traveling distance on a train in 12 hours. People believe that they travel a longer distance from 18:00 to 6:00 (that is, over two days) than from 6:00 to 18:00 (that is, during the same day). Study 3 tests the unit bias with estimation tasks of product quantity. Given same weight, participants indicate that two smaller candy bags (weight = 11 oz + 6 oz) have more pieces of candy than one larger bag (weight = 17 oz). They also believe that the individual candy in the smaller bags weighs lighter than the larger bag. Study 4 expands the unit bias to length estimates. In a task to estimate the length of tape rolls, participants believe that the total length of two 4-ounce tape rolls to be longer than an 8-ounce roll. To illustrate the effect in weight estimation, Study 5a asks people to estimate the weight of two full 10L grocery bags (vs. one 20L bag). People believe two smaller bags weigh heavier than one larger bag. Study 5b uses the same between-group design with multiple units: one 30L bag, two 15L bags, three 10L bags, four 7.5L bags, five 6L bags, and six 5L bags. There is a significant linear trend between the estimated weight and unit number. Significant difference is found on the contrasts between one and two bags, and between three and four bags, but not other contrasts.

The final study explores the psychological mechanisms behind the unit bias by examining directly “pure” numbers as such, devoid of any object-related judgment. Specifically, we created random numbers and showed these numbers either categorized or not. That

is, one group of participants saw the numbers in different colors, and the other group saw the numbers in black. After seeing all the numbers, both groups were asked how many numbers had been shown to them. Results indicated that the group with the colored numbers perceived to have seen more numbers than the group with all black numbers, supporting our claim that the mere act of categorization includes numeric information.

To summarize, our studies show that when consumers estimate critical numeric values as part of their decision-making process, two units result in a greater combined numeric value than one unit. Moreover, as Study 5b indicated, multiple units may lead to an even higher perceived value. Most importantly, we provide evidence that a categorical heuristic is the key mechanism behind the unit bias. The major contribution of our research is thus the identification of a general estimation bias in multiple domains and demonstration on how this bias operates. Whereas prior research focused on domain-specific effects and biases, including those that may be subsumed under the unit bias (Chandon and Wansink 2007; Irmak et al. 2010), the bias that we identified here manifests itself across a wide range of estimation judgments in which unit information is salient or be constructed ad hoc as salient (Barselou, 1983). This research thus contributes to consumer categorization theory by providing evidence for a new type of categorization effect, resulting from the activation of quantitative information inherent in categorization. Consumers seem to use this subtle information as a judgmental anchor to make numeric estimation judgments (Tversky and Kahneman, 1974).

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Less Willing to Pay but More Willing to Buy: Preference Reversals for Freebie and Non-Freebie Bundles

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EXTENDED ABSTRACT

Normatively, both willingness-to-pay (WTP) and willingness-to-buy (WTB) reflect individuals' underlying preferences, and should yield the same preference order (Shafir 1993). For example, if individuals are willing to pay more for A than for B, that means they value A over B. Then, if the prices of A and B are the same, they should also be more willing to buy A than to buy B.

However, in the current research, we propose that holding items in a bundle constant, individuals' preferences for a freebie bundle (in which one or more items are designated as free) and for a non-freebie bundle (in which no items are designated as free) can reverse between WTP and WTB. Specifically, relative to individuals who encounter the non-freebie bundle, individuals who encounter the freebie bundle will indicate a lower WTP for the bundle, but a higher WTB for the bundle at a given price.

The reason, we propose, is that individuals base their WTP and WTB decisions on their inferences of the value of the bundle. When asked about WTP, individuals are not told about the price of their bundle, and will use their general knowledge about other products in the same category to infer the value of their bundle. Consequently, holding items in a bundle constant, individuals who encounter the freebie bundle will perceive the value of their bundle to be at least the same as individuals who encounter the non-freebie bundle; since part of their bundle is marked free, they will indicate a lower WTP price for their bundle. By contrast, when asked about their WTB, individuals are told about the price of their bundle, and will use the given price to infer the value of their bundle. Consequently, holding items in a bundle constant, individuals who encounter the freebie bundle will perceive the value of their bundle to be higher than individuals who encounter the non-freebie bundle (Simonson, Carmon and O'curry 1994; Thaler 1985), and therefore indicate a higher WTB at the given price.

Moreover, we propose that consumers will show not only a preference reversal between WTP and WTB, but also within each elicitation method. Specifically, if WTB is elicited directly, individuals encountering the freebie bundle will indicate a higher WTB at the given price than individuals encountering the non-freebie bundle; if WTB is elicited after WTP, individuals encountering the freebie bundle will indicate a lower WTB at a given price than individuals encountering the non-freebie bundle. Likewise, if WTP is elicited directly, individuals encountering the freebie bundle will indicate a lower WTP than individuals encountering the non-freebie edition; if WTP is elicited after WTB, individuals encountering the freebie bundle will indicate a higher WTP than individuals encountering the non-freebie bundle.

Five experiments, covering diverse contexts, tested our propositions.

In Study 1, participants (N=200) were randomly assigned to one of four conditions that constituted a 2 (bundle type: non-freebie versus freebie) x 2 (elicitation method: WTP versus WTB) factorial design. The stimulus was a twin-pack body wash. In the freebie condition, one of the two bottles was marked as "Free"; in the non-freebie condition, neither was marked as free. In the WTP condition, participants indicated how much they were willing to pay for the twin-pack of body wash; in the WTB condition, participants were told the price of the twin-pack was \$12 and asked to rate how willing

they were to buy it on a 7-point scale. The results demonstrated the predicted preference reversal: Participants were willing to pay more for the non-freebie bundle than for the freebie bundle ($t(100) = 5.25, p < .01$), yet they were more willing to buy the freebie bundle than the non-freebie bundle ($t(96) = 2.27, p < .05$).

Study 2 (N=220) replicated the preference reversal between WTP and WTB in a different context (purchasing a gift-set consisting of two coffee mugs). The study also probed for the underlying reason, and found that in the WTP condition, perceived value of the freebie bundle and the non-freebie bundle were statistically the same ($t(109) = 1.24, n.s.$), but in the WTB condition, perceived value of the bundle was significantly higher in the freebie condition than in the non-freebie condition ($t(105) = 3.25, p < .01$). These results corroborated our proposition that the WTP-WTB preference reversal stems from consumers' differential perception of the value of the product between the freebie and the non-freebie bundles.

Study 3 (N=201) adopted a 2 (bundle type: non-freebie versus freebie) x 2 (elicitation method: WTP+WTB versus WTB) factorial design. In the WTP+WTB condition, participants first responded to the question "What's the highest price you are willing to pay to get the two pens?" and then they responded to the question "The price for the two pens today is \$1.20. Are you willing to pay this price to get the two pens?". The results showed that, in the WTP+WTB condition, 43% of the participants bought the non-freebie bundle, whereas 18% of the participants bought the freebie bundle ($\chi^2(1) = 7.24, p < .01$); in the WTB condition, 10% of the participants bought the non-freebie bundle, whereas 25% of the participants bought the freebie bundle ($\chi^2(1) = 4.14, p < .05$). A logistic regression on WTB shows a significant interaction between the bundle type and the elicitation procedure ($B = 2.35, SE = .74; p < .01$).

Study 4 and Study 5 replicated the above findings in mixed (rather than homogeneous) bundles. Furthermore, Study 5 showed that prompting consumers to consider their WTB before they indicated their WTP reversed their WTP for the freebie and the non-freebie bundles.

These results reconcile the seemingly contradicting findings in the existing literature on freebie evaluations -- that the presence of a freebie may either promote or devalue the bundle (e.g., Ascarza, Lambrecht and Vilcassim 2012; Kamins, Folkes and Fedorikhin 2009; Nunes and Park 2003), corroborate prior research postulating that preferences are constructed (e.g., Bettman, Luce and Payne 1998; Coupey, Irwin and Payne 1998; Lichtenstein and Slovic 2006), and highlight the role of inference in preference construction.

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Gender Identity-related Reactions to Sex-typed and Unisex labeled Products

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EXTENDED ABSTRACT

For decades, managers have recognized the importance of gender labeling, which describes a managerial approach that categorizes products on the basis of visible design features such as gendered symbols, names, or phrases according to the gender of the target group (Alreck 1994). Thereby, two approaches of labeling products with respect to gender have been used in daily practice. The first is to target the audience of one specific sex—so called sex-typed labeling (Milner and Fodness 1996). The second approach is integrative labeling, which addresses both sexes in one label—so-called unisex labeling (Markham and Cangelosi 1999).

Conventional wisdom suggests that targeting a specific audience should be more effective than addressing both genders in one label. While a link has been established in previous research between sex-typed labeling and important consumer outcomes, such as product evaluation or purchase intention (Ulrich 2013), no such relationship has been demonstrated for unisex labeling. This widespread belief in targeting a sex-specific audience with sex-typed labeling seems to prevail among practitioners, as indicated by results of a pilot study we conducted with 101 marketing managers. Indeed, 73.3% of the managers were convinced that sex-typed labeling is more effective than unisex labeling.

In two studies ($N_{\text{Study1}} = 91$; $N_{\text{Study2}} = 149$), we question the wisdom of the popular belief that sex-typed labeling is universally superior and thereby contribute in several ways. First, consumer researchers have recently argued that we are in a post-gender period in which the stark lines that have historically divided men's and women's consumption are blurring (Avery 2012). In responding to this suggestion, we introduce gender labeling as another area of marketing in which consumers' gender identity can explain behavior better than biological sex. The match of gender labeled products with an individual's biological sex was the basic argumentation in previous research highlighting the effectiveness of sex-typed labeling (e.g., Ulrich 2013), although it is now well understood that many roles, attributes, and attitudinal differences attributed to biological sex are, in fact, manifestations of gender identity (e.g., Costa, Terracciano, and McCrae 2001). Our results indicate that the explanatory power of biological sex for consumers' response to gender labeled products is negligible when additionally considering the more complex construct of gender identity. In this respect, we provide further evidence that a one-dimensional view on product gender (either masculine or feminine, or simply biological sex) is no longer adequate in studying product gender perceptions (Fugate and Phillips 2010), but a multi-dimensional understanding of gender might better explain the perception of gender cues such as product gender labels. Our results show that unisex labels evoke high perceptions of masculinity and femininity and therefore can be defined as androgynous.

Second, based on self-congruity theory, previous research has long argued for a superiority of sex-typed labeled products to fit the existing self-concepts of schematic consumers (possessing either masculine or feminine gender traits) and thus to stimulate their purchase behavior (Feiereisen, Broderick, and Douglas 2009). We acknowledge that gender congruity is an important mechanism to explain preferences for products, but further introduce the perceived functionality of a product as another highly relevant mechanism. We argue and empirically show that schematics engage in a dual process-

ing, evaluating gender expressive and functional aspects of the product and find that their need for gender self-congruity, which is satisfied by sex-typed labeled products, is counterbalanced by higher levels of perceived functionality prevalent in unisex labeled products. Unisex labeled products are associated with a larger repertoire of attributes and behavioral options. Just like people, these products are not limited to gender-appropriate usage, regardless of the nature of situations, but can better adapt to situational characteristics and are more flexible to their environments. Consequently, schematic consumers are indifferent between sex-typed and unisex labeled products.

Finally, we are first to study aschematic consumers' preferences for gender labeled products. In times of metrosexuality, this large consumer segment has emerged, possessing both a high level of masculine and a high level of feminine gender identity traits—the so-called androgynous consumer. For instance, recent research has consistently found that more than 30% of total participants fit this segment (Martin and Gnoth 2009). We assume and empirically show that gender congruity is less relevant for purchase decision and thus perceived functionality being the only decisive mechanism, which is why higher preference for unisex labeled products should exist. This assumption builds on gender schema theory (Bem 1981), which suggests that gender identity is a criterion that differentiates people with regard to processing gender linked information. Schematics are said to become even more traditional when gender-related roles are made salient, whereas nontraditional aschematics are expected to be less sensitive to gender cues, because they do not hold a strong gender-related internal cognitive structure (Schmitt, Leclerc, and Dubé-Rioux 1988). Instead, only utilitarian aspects, and more specifically perceived functionality, remain of importance for purchase decisions of aschematic consumers. Those individuals have a particular interest of a larger repertoire of behavioral options because they can better adapt to situations, respond more flexibly to their environments, and eventually experience better psychological health (van Tilburg et al. 2015). Consequently, our results show that the behavior of gender aschematic consumers differs significantly from that of gender schematics and gender labeling describes another area of marketing where targeting might backfire (Bhattacharjee, Berger, and Menon 2014).

We acknowledge several limitations that open avenues for future research. First, while our study employs a realistic online shopping scenario, research has shown that gender identity might be expressed differently when shopping online than when shopping offline (Dittmar, Long, and Meek 2004). The latter would imply a social situation and possibly cause social pressure. Second, in both studies, gender identity was measured before the evaluation of the target product, which might have activated the gender schema. Replication studies should consider measuring the variables separately. Finally, the sex-typed labels in our study were shown only to consumers of the respective biological sex. Although this is the most common labeling practice in daily management, it prevents from analyzing cross-gender labeling perceptions.

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He's Just Not That Into Anyone: The Impact of Sex Fantasy on Attraction

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EXTENDED ABSTRACT

A sex fantasy can be a fleeting thought of some sexual activity or an elaborate story about a sexual encounter; it can involve a blizzard of images or a quite realistic scene; it can involve memories of the past or anticipations of the future; it can occur during sexual activity or apart from it (Wilson 1978). We live in a world enriched with countless triggers of sexual fantasies (e.g., porn, TV, movie, sex in advertising), it is important to examine the consequences of sex fantasies on individuals. Many popular media suggest that sex fantasies can spice up people's romantic relationships, such that fantasies add more fun and steam to romantic encounters and provide erotic stimulation to routine sex life. However, an increasing number of popular press reports suggest that many men would rather watch pornography and fantasize about unrealistic sex than engage in romantic dating and enjoy real sex with their partners. Nonetheless, academic research on the consumption of sexual content and its impact on individuals' romantic relationships is limited and mostly correlational in nature (for a review, see Leitenberg and Henning 1995). This research is to investigate the causal impact of sex fantasies on individuals' romantic relationships with a focus on adult males.

We hypothesize that sex fantasies can decrease individuals' attraction to potential romantic dates and demotivate them to engage in romantic dating. This hypothesis is based on past goal research showing that the activation of a goal might lead to devaluation of stimuli that are inconsistent with or irrelevant to this activated goal (e.g., Ferguson 2007; Brendl, Markman, and Messner 2003). For example, participants who were primed with an academic goal generated negative evaluations of words that were related to a social goal that might undermine the activated academic goal. Brendl and colleagues (Brendl et al. 2003; Markman and Brendl 2000) have suggested that such "devaluation effects" occur when the activation of a given goal renders as negative those objects that might draw resources away from this activated goal. For example, when a goal of getting food is activated by hunger, individuals would devalue goal irrelevant objects, such as movie tickets. Even though movie tickets do not directly undermine the goal of getting food, they do so indirectly by drawing limited resources away from the focal pursuit (Shah, Friedman, and Kruglanski 2002).

In the current context, we propose that fantasizing about sex can activate the goal to engage in sexual activities. Romantic dating, although it might lead to sex, draws too many resources (e.g., time and effort) that are not directly relevant to sexual activities. Thus, we propose that engaging in sexual fantasy tends to decrease attraction to potential romantic dates and that this decrease is driven by a devaluation of the goal to engage in romantic dating.

In Experiment 1, 169 single Chinese heterosexual males between the ages of 20 to 35 living in the Chicago area were invited by email to register for a famous Chinese dating show hosted in Chicago. This dating show provides single heterosexual males the chance to find female dates. Before they began to read the invitation, they were assigned to two conditions (fantasy and control) by fantasizing (or not) about a sexual encounter with a celebrity. Then they evaluated the attractiveness of 12 female participants for this dating show. Lastly, they decided whether to register for the dating show. The results showed that engaging in sexual fantasy decreased male participants' attraction to potential female dates ($M=3.42$, $SD=1.55$ vs. $M=3.84$, $SD=1.52$; $F(1,101)=4.31$, $p<.05$) and fewer participants in the sex fantasy condition actually registered for the dating show ($M=2\%$ vs. $M=10\%$, $\chi^2(1)=4.06$, $p<.05$).

To rule out contrast effect, Experiment 2 tested whether the impact of fantasy on attraction depends on the fantasy content. 37 single male undergraduates were randomly assigned to two conditions by engaging in a highly vs. mildly sexual fantasy then evaluated the attractiveness of 3 females. The results showed that engaging in a highly sexual fantasy decreased participants' attraction to females ($M=2.27$, $SD=1.29$ vs. $M=3.09$, $SD=1.26$; $F(1,35)=6.88$, $p<.01$).

Experiment 3 was to examine the mechanism of the impact of sex fantasy on attraction. 491 heterosexual adult males recruited from Mturk were assigned to two conditions (fantasy vs. control) by looking at sexual vs. non-sexual pictures of the same celebrities and then fantasize. We measured their attraction to 5 females and their valuation of romance by their agreement with the statement--dating is a waste of time and money for guys. Results showed that fantasy produced significantly lower attraction to potential female dates ($M=3.27$, $SD=1.55$ vs. $M=4.12$, $SD=1.52$; $F(1,489)=82.55$, $p<.001$) and also produced a devaluation of romance ($M=3.65$, $SD=1.75$ vs. $M=3.16$, $SD=1.72$; $F(1,489)=6.41$, $p<.01$). A mediation analysis showed that the devaluation of romance mediates the effect of fantasy on attraction.

In Experiment 4, 426 heterosexual adult males (82% unmarried) recruited from Mturk were assigned to two fantasy conditions similar as Experiment 1. Then they were assigned to two scenarios: looking for a date on a dating website or looking for a one-night stand in a bar. Within each scenario, they were asked to rate either two average looking females or two Victoria's Secret models. This constituted a 2 (fantasy: fantasy vs. control) x 2 (target goal-fit: dating vs. sex) x 2 (target attractiveness: average looking women vs. Victoria's Secret models) between-subject design. The results showed that no matter for the average looking women or the VC models, fantasy decreased attraction when male participants were looking for a date but increased attraction when they were looking for a one-night stand. The findings of experiment 4 support the idea that fantasy activates a sex goal, and that sex and dating tend to operate as conflicting goals. As a result, engaging in sexual fantasy increases attraction to sexual targets, but decreases attraction to romantic targets.

This research adds to the literature on sex fantasy, attraction, and offers practical implications on porn watching, sex in advertising, and relationships.

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Happiness From Experiences: It's All in the Mind(set)

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EXTENDED ABSTRACT

"Want to be happy in life? Buy experiences instead of things."

(Dunn, Gilbert, and Wilson 2011, p. 115)

Extant research on happiness and well being shows that the first principle of using money to increase happiness is to spend it on experiences and not possessions (Van Boven and Gilovich 2003). Experiences (going to a Broadway show, hiking) bring more happiness than possessions (designer dress, electronic gadget). There are several reasons underlying this preference – experiences are less prone to adaptation (Nicolao, Irwin, and Goodman 2009), more amenable to positive re-interpretation (Van Boven and Gilovich, 2003), more social (Caprariello and Reis 2013) and less prone to comparison (Carter and Gilovich 2010). Thus far, research seems to suggest that preference for experiences is almost universal – with few purchaser characteristics (lower income consumers and those high in materialism, Van Boven and Gilovich 2003; Zhang et al. 2014) and a solitary purchase characteristic (valence of the purchase, Nicolao et al. 2009) leading to a lack of preference for experiences (over material possessions).

However, we propose that this may not be true for all consumers. Not all consumers will derive similar happiness from experiential consumption. Specifically, mindsets or, belief in malleability (vs. fixedness) of personality will drive the preference for experiential purchases (over material possessions). Incremental theorists, who believe in malleability of self and others, are actively seeking opportunities for self-growth and advancement (Elliot and Dweck 1988). Hence, they would likely derive greater value from experiential consumption, as they believe that experiences add to their personalities and help them grow as individuals. In contrast, entity theorists who believe in the immutability of the world (Dweck 2000) are less likely to view experiences as a tool for self-development, thus not preferring experiences over material possessions. Hence, incremental theorists will be more positively disposed towards experiences (over material goods) than entity theorists. Further, we propose that incremental theorists' preference for experiences is driven by the belief that experiences contribute to self-growth. Even a negative experience may be construed positively as a learning opportunity.

We test these hypotheses across three studies. Driven by the belief that experiences contribute to self-growth, incremental theorists (vs. entity) are more likely to favor experiences over material goods. We show this by measuring the general tendency to make experiential purchases (Study 1), self-generated purchase (Study 2) and manipulating the type of purchase to be recalled (Study 3). Participants were from US and recruited via MTurk.

Study 1 measured participants' habitual propensity to buy experiences using the Experiential Buying Tendency Scale (EBTS; $\alpha=.89$) by Howell et al. (2012). This 4-item scale was developed to measure the general tendency to make experiential rather than material purchases. We measured implicit theory orientation ($\alpha=.96$) using the 3-item measure (Levy et al. 1998). As hypothesized, incremental theory orientation and experiential buying tendency were positively correlated, $r(49)=.36, p<.05$. Specifically, entity theory orientation (+1SD) was linked with a lower propensity

to buy experiences ($M_{ENT}=3.6$) compared to incremental theory orientation (-1SD, $M_{INC}=4.74, p<.05$).

In line with prior research, Study 2 asked participants to self-generate a recent purchase that they "*thought would make them happier*" (Guevarra and Howell 2014, p. 31), with the prediction that incremental theorists will be more likely to recall an experiential purchase. Implicit theory orientation ($\alpha=.93$) was measured using the 8-item scale (Levy et al. 1998). We measured materialism (Richins 2004) and asked for wealth and income details as prior research shows that these two variables moderate the relationship between purchase type and happiness (Van Boven 2005). Participants' purchase descriptions were coded into two categories - material(1) and experiential(0) using the Van Boven and Gilovich's (2003) definition. Ordinal logistic regression using this coding as dependent variable, implicit theory score as predictor, and controlling for materialism and wealth/income levels, revealed an overall significant model (Chi square=8.46, $p<.05, df=3$) and significant effect of implicit theory orientation on type of purchase recalled (Chi square=3.94, $p<.05$). As hypothesized, participants with incremental theory orientation were more likely to recall an experiential purchase.

Study 3 manipulated purchase type in a post-consumption recall task. Participants were asked to recall a recent purchase, either material or experiential (Nicolao et al. 2009). Then they evaluated the subjective economic value of the purchase (Guevarra and Howell 2014). To investigate the role of self-growth as the mechanism, we asked participants to respond to "To what extent did this purchase help you grow as a person?" from 1 (not at all) to 9 (very much). Participants completed the implicit theory (Levy et al. 1998) and materialism (Richins 2004) scales.

Regressing type of purchase, participants' score on implicit theory scale, their interaction, and belief in materialistic values (as control variable) on subjective economic value (SEV) resulted in a significant interaction ($F(2,136)=9.46, p<.05$). Spotlight analysis showed that incremental theorists assigned higher SEV to their experiential purchases ($M_{INC}=8$), compared to entity theorists ($M_{ENT}=6.67, p<.05$). No such difference was found for material purchases ($M_{INC}=7.15, M_{ENT}=7.59, p=NS$). Further, incremental theorists derived higher economic value from their experiential purchases vis-à-vis material objects ($M_{EXP}=8, M_{MAT}=7.15, p<.05$) whereas entity theorists rated their material purchases ($M_{MAT}=7.59$) to be more economically beneficial than experiential purchases ($M_{EXP}=6.67, p<.05$). To test self-growth as the process, we performed moderated mediation analysis using Hayes' (2012) Model 7. Bootstrapping with 5000 iterations revealed a significant indirect effect (95%CI=[.07,.53]) and was significant only for incremental theorists.

The experience-over-goods effect is thought to be near universal with only a few moderators investigated till date. Our research shows that difference in mindsets or implicit theory orientation has a tangible impact on consumers' preference for experiences. Our research contributes to happiness and well-being literature by highlighting a key difference that drives value derivation from experiential purchases. Further, we show experiential purchase's ability to contribute to self-growth as the underlying mechanism. We contribute to growing consumer research that establishes implicit theory as a meaningful individual difference variable with impact on choice and preferences (Mathur et al. 2015). This research

has practical relevance for developing compelling products and communication for different consumers. While we used chronic and post-consumption measures, future research may look at predicting choice and also manipulate mindsets.

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Choice Overload or Time Stress: What Determines Purchase Decisions for Airline Tickets?

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ABSTRACT

Previous research has identified choice overload as a potential cause for purchase deferral. Researchers suggest that the decision difficulties and frustration consumers experience when processing significant amounts of information can lead to decision avoidance and have also found that, consistent with such explanation, that time constraints act as a moderator: approaching deadlines seems to amplify choice overload due to an increased cognitive burden. Identifying moderators of choice overload and discovering contexts in which choice overload occurs is a promising research direction and more importantly it is still unclear whether this phenomenon exists in real business contexts. With the present study, we address this gap and study the interaction between assortment size and time constraints in a purchase context dominated by uncertainty. We conducted two studies to investigate how number of options and time pressure influence purchase decisions. Past research in time effects vary in understanding of time pressure and focus on either real decision deadlines (physical time) or subjective feeling of pressure associated with time (sense of urgency or psychological time). We test both the moderating effect of physical time and psychological time and compare their impact.

In Study 1, we investigate the effect of number of choices and purchase deadlines (physical time limit) on consumers' purchase decisions using secondary data on consumers' purchase and search of airline tickets. We collected secondary data from a European online travel agency, an ideal context with large number of options and in which both deadlines and subjective feeling of time pressure can have influence on people's decisions. Our results are consistent with the presence of choice overload: we find a negative relationship between number of options and purchase probability. Due to nature and detail of the data, we are also able to exclude alternative explanations including option filtering as consumers go through the purchase funnel. However, our results suggest an alternative mechanism behind the choice-overload phenomenon. We then test for the potential moderating effect of time pressure: further away from departure we expect consumers to experience little if any time pressure leaving sufficient cognitive resources to process the available information as a result choice overload is less likely to impact purchase. In contrast we find that further away from departure the negative effect of having more options is stronger. This means that purchase deferral is more likely when consumers face greater options far from departure. Closer to departure, the negative impact of number of options is not as strong. These results suggest that it is likely that number of options, though negatively impacting purchase decision (i.e., leading to a postponed purchase) is not the result of choice overload but perhaps the result of other alternative psychological mechanisms. This mechanism is the temporal shift of choice preferences. While processing information of an activity in a near future, decision makers tend to use a lower level construal that is more concrete, detailed and includes "contextual and incidental features" (Trope and Liberman, 2003) of the activity. Decision makers prefer the desirability to the feasibility of a decision outcome when they are distant from the decision deadline, because decision makers are able to postpone their choice till they are closer to the decision deadline and therefore postpone thinking of the information that can be used to evaluate the feasibility of the decision, such as details, concrete aspects and context of the

decision. When the decision deadline approaches, however, decision makers prefer feasibility to desirability. In the context of purchasing airline tickets online, desirability of a decision is finding an ideal option such as lowest price, most convenient departure / arrival time etc. Feasibility of the decision, however, is to have one airline ticket before planned departure date and avoid missing the travel plan. The interaction between number of options and decision time limit (number of days till planned travel date) has a negative effect on purchase probabilities. This negative effect indicates that when purchase deadline is distant and there are numerous options, customers tend to construct a higher-level construal and are attracted by desirability of the decision and therefore prefer to defer choice and continue to search for the best option. While purchase deadlines are near or number of options decrease, customers form a lower-level construal, prefer feasibility of the decision and are more likely to make a purchase to avoid having no options or missing planned travel dates. The uncertainty regarding alternatives and recent price changes, seem to contribute to shifts to lower-level construal. We find also that consumers' subjective sense of urgency, or *psychological time*, has a greater impact on this shift than physical time and the number of options. Despite controls for heterogeneous personal characteristics that may influence people's psychological time pressure, these effects exist.

In Study 2, we conducted an experiment to further verify the effect of sense of urgency. We constructed a mock website of an online travel agency, providing either 6 or 12 options of flight tickets to choose from. We set up two planned travel dates (purchase deadlines) for participants: 7 days till departure and 30 days till departure. We randomly assign participants to each of these departure dates. In order to manipulate sense of urgency, we established four scenarios of scarcity: flight departure in 7 days; flight departure in 7 days with limited seats available; flight departure in 30 days; flight departure in 30 days with limited seats available. An icon of "3 seats left" was shown to participants in scenarios of scarcity for example a scenario of "flight departure in 7 days with limited seats". Participants' sense of urgency of making a purchase will be activated when customers observe this scarcity icon. These scenarios were randomly presented to participants. Participants were asked to make a decision of either "Confirm and Purchase Now" or "Cancel and Make Purchase Later" on last page of this mock website. 205 respondents show that in scenarios with same level of scarcity, average purchase rate is higher when purchase deadline is near (7 days till departure) than when deadline is distant away. However, both scenarios with scarcity have higher purchase rates than scenarios without scarcity. Our experimental results verify that while decision time limit moderates the effect of number of options on purchase decisions, perceptions of time stress play a greater role in changing behaviour.

Through this study we highlight that a sense of urgency or *psychological time* play a significant role both in the shift of decision makers' temporal construal levels and in moderating the impact of number of options on purchase deferral. We also suggested that the shift of consumers' temporal construal levels is the mechanism behind the choice overload effect in a context where customers have a purchase deadline. As information gathered while searching could influence the perceived time pressure resulting in a sense of urgency and a shift to prevention focus resulting in less choice deferral despite large assortments. Thus there is a close association between a

consumer's real or psychological perceptions of time and assortment size. Our findings suggest that managers can manipulate consumers' sense of urgency by showing different numbers of options, different varieties, price increase/decrease to customers in order to decrease choice deferrals.

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A Consumer Theory of Acquisitions

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EXTENDED ABSTRACT

Acquiring other firms is a common way for companies to grow. In 2015, the global value of acquisitions was five trillion dollars, a record since the late 2000s' financial crisis (J.P. Morgan 2016). What draws the attention of acquirers is often the brand and market position that the target firm was able to develop. Acquirers often possess the resources to create new brands, but they find it difficult and time-consuming to build brands with unique identities. Given the weight of brand assets in motivating acquisitions, one would expect that academic research on the topic carefully examined how acquisitions impact consumers' attitudes towards acquired brands. However, the extant literature on acquisitions—in accounting, finance, strategy, organizational behaviour, and in marketing—adopts a predominantly internal, supply-side view on acquisitions (e.g., Capron and Hulland 1999; Moeller, Schlingemann, and Stulz 2005). Therefore, the literature is silent regarding the impact of acquisitions on consumer response towards the acquired brand.

In this paper, we address this gap by focusing on consumer reactions to acquisitions.

Given today's ease of access to information about companies via the Internet and social media, it is particularly important to study if and how acquisitions have downstream consequences for consumer behavior.

From an information economics view, we would expect that consumers respond positively to acquisition news. According to signaling theory (Boulding and Kirmani 1993; Spence 1974), consumers should interpret an acquisition as a quality signal regarding the acquired firm and reason heuristically ("if the firm was bought up, it must be good"). As a consequence, they should exhibit increased attitudes and purchase intentions.

However, we argue that acquisitions do not only prompt positive but also negative consumer reactions. In particular, we hypothesize that acquisitions lead to decreased attitudes towards brands and products of acquired firms that operate in identity-relevant product categories. The reason for these negative response is that acquisitions dilute the identity of the acquired brand in the eyes of consumers. Thus, the very asset that motivated the acquisition—the brand—can be damaged by it.

Six studies document the existence of a negative effect of acquisitions on a series of consumer response measures (i.e., attitude towards the acquired brand, choice, online posting behavior), and support identity loss as the process driving the negative effect of acquisitions. The pattern of results in our study allow us to rule out alternative explanations for the negative effect of acquisitions such as consumers' sympathy towards small firms.

Study 1 shows that consumers' preference for products from independent vs. acquired firms is contingent on the identity relevance of the product category in which the acquired firm operates. In product categories characterized by high identity relevance, participants

preferred products sold by independent firms, while in categories low on identity relevance they opted for products sold by acquired firms.

Study 2 documents the negative effect of acquisitions on product choice in a real setting. When asked to choose between two chocolate brand—one acquired and one non-acquired—the majority of participants chose the non-acquired brand. Revealing that an acquisition took place was detrimental because it reduced the choice share of the acquired brand compared to the non-acquired one.

Study 3 complements the results of Study 2 and provides evidence that the negative effect of acquisitions holds in the field. To test our main prediction, we retrieved user comments on online newspaper articles about craft beer. Using sentiment analysis, we find that the sentiment expressed in user comments is more negative when the main subject of the news article is craft beer acquisitions rather than craft beer in general.

Study 4a shows that when consumers are informed that founders are still involved in the acquired firm after the acquisition, the negative effect of acquisition is attenuated.

Study 4b provides further support to our identity loss account by showing that the identity of the acquired brand becomes weaker as a result of the acquisition, and such weakening brings forth a decrease in consumer attitudes.

Study 5 shows that consumers' reactions to acquisitions vary depending on the positioning of the acquired brand. We find that an acquisition is especially detrimental for a brand that leverages identity-related aspects (e.g., uniqueness or style) in its positioning. That is, however, not the case for a brand with a positioning focused on non identity-related aspects (e.g., technological sophistication).

In sum, this set of studies advances research on acquisitions by giving insights on the consumer perspective, which, despite its importance, has been largely ignored by previous literature.

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The Population Penalty: Why Common Brands Benefit from Dense Populations Less than Uncommon Brands

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EXTENDED ABSTRACT

The population of an area underlies many marketing decisions, such as sales strategies and retail site selection. Although the basis for these decisions are based on a well-established relationship between population and expected sales (Christaller 1935; Craig et al. 1984; Ingene and Lusch 1980; Ingene and Yu 1981; Kumar and Karande 2000; Reinartz and Kumar 1999) we show that this relationship is not always straightforward. One factor that may moderate this relationship is brand commonness - the number of units associated with a particular brand in the marketplace at a given time. Consumers often avoid common brands, such as stores with many locations, as a way to maintain a distinct identity (Ariely and Levav 2000; Berger and Heath 2007). According to Brewer's (1991) optimal distinctiveness theory consumers derive their identity, in part, from belonging to social groups, but large groups tend to be inclusive and indistinct, and do a poor job of satisfying an innate need for distinctiveness. An important group is the community where consumers reside, and thus residents of densely populated areas are likely to have a greater need for distinctiveness than residents of sparsely populated areas. Sociologists have consistently found that urban residents are more heterogeneous than rural residents (Fischer 1984; Wirth 1938) and are more likely to belong to distinct religious organizations (Ogburn and Duncan 1964) and more likely to prefer unique art, fads and fashions (Fischer 1975; Weber 1976). Thus, we predict that consumers in densely populated areas have heightened motivation to express their distinctiveness, reducing their preference for common brands. Thus common brands suffer from a "population penalty" in which the effect of population density on sales is weaker than it is for uncommon brands.

Our first study analyzed brand commonness as a moderator of alcoholic beverages sales. The data included 11 years of alcoholic beverage sales (beer, wine and spirits) for all bars and restaurants in Texas. We modeled sales with county population density, commonness - the total number of locations - and their interaction. As predicted there was a negative interaction between brand commonness and population density on sales indicating that the population-sales relationship grows weaker with commonness. We conducted multiple versions of this model, examining population rather than population density, and controlling for cannibalization and number of competitors, but they did not change the conclusion.

While the empirical analyses provided direct measures of population density, the many factors associated with density create potential alternative explanations. Therefore, study 2 used an experimental design, manipulating density by asking participants to imagine people moving into or away from their hometown. Study 2 also examined whether the desire to be distinct was the underlying process. We manipulated the desire to distinguish from others using a task adapted from Escalas and Bettman (2005) in which participants wrote about an experience in which they were associated with/separate from a close knit social group. Afterwards, participants rated their interest in shopping at a common furniture chain. As predicted, shopping interest depended on both density and disaffiliation. In the disaffiliation condition, as well as the control condition where there was no motive prime, participants were less interested in the common store when they imagined living in a densely populated area

than a sparsely populated area. However, participants primed with affiliation showed no effect of population density, supporting the social identity process underlying these effects.

Although the evidence suggests that common brands may pay a population penalty, it does not necessarily mean that they should avoid densely populated areas. Common brands may be able to reduce the population penalty by sub-branding, which involves creating a new brand that is partially independent but affiliated with an established family brand (Aaker 1994; Milberg, Park and McCarthy 1997). Consumers mentally categorize sub-brands differently than family brands (Sood and Keller 2012) creating an appearance of an uncommon brand. Our third study examines whether sub-branding may be used to help brands overcome the population penalty. As in the previous study, participants imagined a large population moving into or away from their hometown. Next, participants read a brief description of a new hair salon that was considering opening in their area. In the sub-branding absent condition, the salon was described as a "Great Clips" salon with over 3,700 locations. In the sub-branding present condition, the salon was described as a "Trend Styles by Great Clips" salon, a new salon with a single location, but owned by Great Clips which had 3,700 locations. Consistent with the previous studies, without a sub-brand, the common store (Great Clips) elicited marginally greater purchase intention among participants who imagined living in a sparsely populated area than those who imagined living in a densely populated area. However, population density had no significant effect on the sub-branded store (Trend Styles by Great Clips). These results suggest that sub-branding may offer a way for common brands to avoid the population penalty.

Many marketing decisions are based on the assumed financial benefits of operating in densely populated areas. Yet despite its importance, there is little research on the factors that affect the strength and direction of the population-sales relationship. The results presented here demonstrate that this relationship varies with the commonness of the brand. Based on optimal distinctiveness theory, our results indicate that common brands, such as large chain retailers, pay a population penalty by failing to benefit from dense populations as much as uncommon brands. Indeed for the most common brands sales may be actually lower in areas with dense populations than sparse populations. Although it is common practice for marketers to prefer market areas based on their large populations, these results imply that common brands should carefully reexamine this criterion, or consider strategies to avoid this population penalty, such as sub-branding. We hope that this research raises awareness of the variability of population's relationship with sales, and look forward to future research examining marketing strategy from a social psychological lens.

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Framing Wait Time Changes Time Perception and Patience

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EXTENDED ABSTRACT

In intertemporal choice settings, patience is driven by perceptions of the larger-later relative to the smaller-sooner reward (Loewenstein 1996; Zauberman and Lynch 2005), and by perceptions of wait time (Zauberman et al. 2009). Considering patience for receiving a larger-later (LL) reward of \$150 in one week (vs. \$100 now), increasing LL (e.g., from \$150 to \$600) is known to increase patience. Thus, increased patience can result from increasing LL magnitude. We show that this effect of LL magnitude may arise via contracted wait time perception, particularly under certain frames of wait time.

Wait time may be viewed using a *long* frame (e.g., “how long the time until X day seems”) or a *far* frame (e.g., “how far X day seems”). Intertemporal choice research has assessed time perceptions primarily using *long* (Kim, Zauberman, and Bettman 2012; LeBoeuf 2006) while other research has primarily used *far* (Ross and Wilson 2002; Jiga-Boy et al. 2010). Although these frames appear similar, research on semantic framing suggests that similar words may lead to different judgments (Fillmore 1976; Patrick and Hagdtvedt 2012).

THEORY

Similar semantic frames may evoke different judgments (Fillmore 1976; Patrick and Hagdtvedt 2012). In our context, given a one week wait, people may think of how long the week seems, or how far the end of the week seems. Given the mapping between space and time (Boroditsky and Ramscar 2002; Kim, Zauberman, and Bettman 2012), we argue that although both *long* and *far* refer to the “distance” of wait time, *far* is associated more with the LL available at the end—the “destination.”

Long is the root of the word “length,” and refers to the distance itself (“extending a great distance”), with its antonym being short (“not great in distance”). Thus, a long-short continuum conveys distance by referring to the distance itself. In contrast, *far* alludes to distance in terms of the destination (“at or to a great distance”), and so does its antonym *near* (“close to someone or something in distance.”). Thus, a far-near continuum conveys distance by referring to the object that is at that distance.

Due to repeated co-occurrence, *far* rather than *long* should have a stronger association with “destination” (Anderson and Bower 1973; Collins and Loftus 1975). This difference in association will lead to different weights in judgment (Srull and Wyer 1979). Specifically, “destination” should receive more weight in judgment for those who encounter a *far* rather than *long* frame. Differential weight given to “destination” should influence perceptions of wait time because destinations are known to appear closer when they are physically larger (Sousta, Smeets, and Brenner 2013; Raghubir, Morwitz, and Chakravarti 2010) and affectively prominent (Balcetis and Dunning 2010; Alter and Balcetis 2010). Thus, a week may seem similarly *long* whether the eventual reward is \$150 or \$600. However, the end of the week may seem *far* when the reward is \$150, but less so when it is \$600. We propose that in the case of *far* (vs. *long*), a destination of larger magnitude (e.g., LL=\$600 vs. \$150) contracts wait time perception, leading to higher patience.

STUDIES

In Study 1, we verified that *far* (vs. *long*) is more associated with destination-related words. In Implicit Association Tests, reaction times were faster when the predicted associations were matched

(far-destination and long-distance) rather than mismatched (far-distance and long-destination).

In study 2, we used a 2 (frame: far vs. long) x 2 (LL magnitude: low (\$125) vs. high (\$200)) design. Participants first created sentences using either *far* or *long*. Supporting the predicted associations, destination words were mentioned more frequently in *far* (vs. *long*) sentences. Additionally, when faced with receiving \$100 today or the larger reward (\$125 vs. \$200) in one month, the effect of a larger magnitude LL leading to higher patience was stronger for the *far* (vs. *long*) frame.

In study 3, we used a design similar to study 2. Participants faced the prospect of receiving \$100 today or a larger reward (\$125 or \$200) in two months, and indicated their perceptions of wait time by answering a *far* (i.e., How far away does that day seem?) or *long* (i.e., How long does the time until that day seem?) question. The effect of a of magnitude (i.e., higher magnitude→greater patience) was stronger for the *far* (vs. *long*) frame, and time perception mediated this effect.

In study 4, we used a design similar to study 3, and framed the questions in terms of “how near” and “how short”. Participants faced a lottery with a \$10 payoff today or a larger payoff (\$12 or \$15) in one week, and indicated perceptions of wait time by answering a *near* or *short* question. Again, the effect of magnitude (i.e., higher magnitude→greater patience) was stronger for the *near* (vs. *short*) frame, and time perception mediated this effect.

In study 5, we utilized a product context: an iPad Air shipped today versus a superior version shipped in 2 months. Again, we manipulated frame and LL magnitude. Frame was manipulated with an advertisement: “The new iPad Air. How far (long)? Not very far (long). April 18, 2014.” The effect of magnitude (i.e., higher magnitude→greater patience) was stronger for the *far* (vs. *long*) frame, and perceptions of the aversiveness of wait time mediated this effect.

In study 6, we showed that the *far-long* asymmetry dissipates if all participants consider the destination when providing wait time judgments. We used a design similar to that used in study 3, with an additional increased LL salience condition. In this condition, we prefaced time perception questions with “Considering the larger amount...”. In the low-destination salience condition, the effects mirrored study 3. However, in the high-destination salience condition, the interaction was not significant and only a main effect of magnitude emerged (i.e., higher magnitude→greater patience). Again, time perception mediated these effects.

DISCUSSION

Two frames of wait time—*far* versus *long*—seem equivalent, but yield different consequences. Destination (i.e., magnitude of the LL) influences patience more strongly when the wait time frame is *far* (vs. *long*). We reveal a new antecedent of intertemporal choice: semantic framing of wait time.

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Objective Measures of Design Typicality that Predict Aesthetic Liking, Fluency, and Car Sales

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EXTENDED ABSTRACT

Visual typicality is a general principle of product design aesthetics, and ample research suggests that humans prefer prototypical designs over atypical ones (Veryzer and Hutchinson 1998). The link between typicality and aesthetic preferences has been demonstrated in various domains such as paintings (Purcell 1993) and automobile designs (Landwehr, Labroo, and Herrmann 2011; Landwehr, Wentzel, and Herrmann 2013); and one of the most influential explanations for typicality's positive effects is based on the concept of processing fluency (Reber, Schwarz, and Winkielman 2004).

However, studies establishing associations between typicality and aesthetic preferences have been criticized based on potential circularity in their measurements since only the subjective percept of both constructs is usually measured (Boselie 1995). That is, directly asking people about their typicality perception may yield a biased measure because the answer is partly driven by the overall aesthetic impression. Hence, the answer captures the subjective response towards the stimulus instead of the objective stimulus characteristics. An unbiased measure of design typicality, in contrast, would optimally capture solely the stimulus' typicality.

Against this background, we examine the relationships between design typicality, processing fluency, aesthetic liking of consumers, and car sales using 3D models of cars. In accordance with previous studies on car design (e.g., Landwehr et al. 2011), we argue that consumers will experience greater fluency when processing typical rather than atypical designs and will interpret the fluency signal as their aesthetic liking. We further expect the effect of typicality on car sales to be sequentially mediated by processing fluency and aesthetic liking.

In order to capture all possible aspects of typicality, we compare four objective measures of design typicality. In line with previous research on prototypicality (Langlois and Roggman 1990), we consider a prototype as possessing the average values of the visual features of a specific category. Thus, all of our four measures follow the idea that the prototype is a representation of the common characteristics of all designs within a category. A car's design, for example, is typical if the distance to the prototype's design is low, and atypical if the distance to the prototype's design is high. The specific calculation of the prototype and the distance measure, however, differs between our four measures: Two are based on feature points, two are based on a grid that is placed over the image.

The two feature point-based measures rely on the identification of characteristic design features. The first approach applies an established measure that has been used in prior studies on car designs (Landwehr et al. 2011) where predefined characteristic feature points (e.g., the vertex of headlights) are manually set for each image (*manually coded feature point measure*). The second approach follows the same idea of characteristic feature points. However, in contrast to manually coding the feature points, we use a new, algorithmic approach based on perceptual image hashing (Monga and Evans 2006). The advantage of this new approach is that feature points do not have to be set manually but are found automatically (*algorithmic coded feature point measure*).

The two grid-based measures are computationally very simple and do not rely on characteristic feature points; hence they are also applicable to less standardized shapes. In both approaches, we rely

on the key idea of perceptual image hashing to reduce an image to its perceptually relevant parts. In particular, we first divide the image into grid cells and calculate the average gray value within each grid. We repeat this for all images and create average grid cells over all images to construe a morphed grid prototype (i.e., a cross-blended image). The typicality of a particular image is then simply the correlation of the grayscale values of its grid with the grayscale values of the morph's grid. We use two versions of the above grid approach. For the first version, we vary the grid size from a 2x2 grid up to the full pixel information to capture all levels of visual typicality (coarse structures, finer details). Typicality is calculated as the average across the typicality values over all grids (*grid measure*). For the second version, we only use the full pixel resolution and calculate typicality simply as the correlation of the grayscale image with the mean image (*grid measure at full resolution*).

We apply the proposed measures to a database consisting of 77 automobile designs from four segments, and compare them to subjectively rated design typicality. As outcomes, we use ratings of aesthetic liking, processing fluency, and cumulative sales.

The comparison with subjectively rated typicality indicates that all objective typicality measures but the manually coded feature point measure correlate significantly with the subjectively rated design typicality scores. For the cumulative sales data, we estimate OLS regressions (one for each typicality measure) at the individual image level, predicting sales from typicality. Subjectively rated typicality and the grid measure of typicality predict sales. Both feature point measures and the full resolution grid measure are, however, not significantly associated to sales. The liking and fluency ratings of the car models are analyzed using a Linear Mixed-Model approach. For aesthetic liking, the models yield significant positive effects of typicality for all but the algorithmic feature point measure. Fluency experience, in contrast, is only associated with the subjective typicality measure and both grid measures. Using a serial mediation analyses based on the PROCESS Macro for SPSS (Hayes 2013), we further show that the underlying processes of the positive effect of typicality on sales are processing fluency and aesthetic liking. In sum, a recommendation would be to use the subjective typicality measure if one is interested in the psychological process. However, if one's goal is to econometrically model the effect of (pure) typicality, it seems adequate to use the unbiased grid measure, thereby avoiding the reversed causality problem.

Overall, our findings demonstrate the possibility to use algorithmic, objective measures of design typicality to predict consumers' aesthetic preferences. Our research thereby contributes to marketing theory and practice by providing algorithmic, objective approaches to assess design typicality that can be used from the very first step of the product design process.

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Compensatory Contagion: A Psychological Defense Against Threat

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EXTENDED ABSTRACT

A substantial body of research has demonstrated that people are able to respond to psychological threat with interchangeable defenses, a phenomenon broadly referred to as fluid compensation (Baumeister and Jones 1978; Sobol and Darke 2013; Heine et al. 2006; Steele 1988; Tesser 2000). Drawing on this work, we find that self-esteem threat augments preference for objects that have come into contact with a celebrity who is unrelated to the threatened domain—an effect we call compensatory contagion. Across four experiments, we make several theoretical contributions. First, we provide the first evidence, to our knowledge, that contagion can serve a defensive function. Second, we extend prior work by demonstrating a coping strategy that is unrelated to social signaling (cf. Lee and Shrum 2013; Rucker and Galinsky 2013). We also find that this response is not an avoidance of products related to threat (White and Argo 2009), but rather an approach motivation directed towards positive contagion. Third, we provide process evidence that contagion is the underlying mechanism driving these effects. Fourth, we identify two key moderators—self-affirmation and constrained cognitive resources—to further isolate the role of threat and contagion, respectively. Lastly, we find that compensatory contagion is not explained by positive or negative affect and, similar to other compensatory responses (Rucker et al. 2011), it is dominantly exhibited by consumers who feel connected to the celebrity's domain.

Research suggests preferences for celebrity memorabilia are largely due to seeking an essence—the underlying or unobservable qualities in an object (Newman et al. 2011). In the face of discomfort, many people seek relief in retail therapy as a means of boosting various aspects of the self (Gao et al 2009). Yet another response to threat is to compensate through self-enhancement by emphasizing desirable traits which are not currently under threat (Baumeister and Jones, 1978; Greenberg and Pyszczynski 1985). Bringing these two methods of coping together, we propose that people can compensate from threats to self-esteem by purchasing their desirable traits. If the purchase of celebrity objects is ultimately driven by the desire to acquire the essence of positive figures, can contaminated products act as a compensatory vehicle?

In study 1, participants ($N = 218$) were randomly assigned to a 3 (threat: athletic vs. business vs. control) \times 2 (celebrity: Bill Gates vs. LeBron James) between-subjects design. Participants first wrote about a time when they failed in an athletic or business context. Then in an ostensibly separate study, participants viewed a product from an online auction on celebrity memorabilia. Participants reported their valuations for an unbranded cotton sweater that was described as being previously *owned and worn* by Bill Gates or LeBron James. Results showed that valuations varied by celebrity in the athletic threat and business threat conditions but not in the control condition. Consistent with our theorizing, when the sweater was owned by LeBron James, participants in the business threat condition were willing to pay more compared to participants in either the athletic threat condition or the control condition. Critically, the athletic threat was no lower than the control. Conversely, when the sweater was owned by Bill Gates, participants in the athletic threat condition were willing to pay more compared to participants

in either the business threat condition or the control condition. These results provided initial evidence to suggest that people compensate for ego-threat by paying more for celebrity-contaminated memorabilia from domains outside that of the initial threat.

Study 2 directly investigated the role of contagion by (1) manipulating contact, and by (2) demonstrating the underlying intuitive nature of the phenomenon (Kramer and Block 2011). Participants ($N = 159$) were randomly assigned to a 2 (threat: athletic vs. business) \times 2 (contagion: no contact vs. contact) \times 2 (cognitive load: high load vs. no load) between-subjects design (procedures similar to study 1). Participants viewed a sweater supposedly worn by Sidney Crosby. Consistent with Study 1, when the celebrity had physical contact with the object, valuations in the business threat condition were significantly elevated compared to the athletic threat condition. As predicted, when the celebrity touched the product, valuations in the business threat condition were even further elevated under load (vs. no load). This suggests that the observed effects are automatic and not being driven by a cognitive association.

Study 3 conceptually replicated our findings, isolated the role of threat by manipulating self-affirmation, and further confirmed the role of contagion using statistical mediation. Participants ($N = 121$) were randomly assigned to a 2 (threat: volunteer vs. business) \times 2 (self-affirmation: yes vs. no) between-subjects design. Participants evaluated a sweater owned by Mark Zuckerberg. As predicted, contagion (e.g., wanting to shake hands with Zuckerberg) only mediated the relationship between threat and valuations when participants did not self-affirm. Hence, without the shield of self-affirmation (Steele 1988), participants sought compensatory contagion. Together, these results suggest that compensatory contagion is a defensive response.

Study 4 assessed the connection to the compensatory domain, included a negative control condition, and examined the role of affect in our compensatory contagion effect. Participants ($N = 132$) were randomly assigned to one of two between-subjects conditions in a 2 (threat: dental pain vs. business) \times domain connectedness (measured trait) design. Participants then evaluated a sweater owned by LeBron James. As predicted, simple slopes revealed that when participants had high levels of domain connectedness, valuations were elevated for those who experienced a business domain threat compared to dental pain threat. These findings suggest that, on some level, people must value the traits imbued in the celebrity contaminated object for them to hold compensatory value. That is, threat leads to compensation in other important domains, not just any domain.

In sum, we contribute to the literature by showing positive contagion can serve a defensive psychological function. Although the desirability of positive contagion is thought to be universal and stable—George Clooney's sweater will be desired by many and for the foreseeable future—the current research suggests that threat can alter preference for an otherwise desirable essence.

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The Push and Pull of Attachment Styles on Romantic Consumption

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EXTENDED ABSTRACT

The modern experience of romantic love is interlocked with the consumption of commodities and leisure goods (Illouz 1997). Consumers engage in romantic consumption routinely (e.g., romantic movies) and for exceptional events (e.g., weddings). Accordingly, romantic consumption is of crucial economic importance. For example, weddings are a \$50+ billion business per year (IBISWorld). Surprisingly, given its ubiquitous nature, romantic consumption has received scant attention in consumer research.

We examine how and why consumers engage in romantic consumption. We posit that consumers' attachment styles explain systematic differences in their romantic consumption. Individuals function in relationships differently through their *attachment styles*, defined as the systematic pattern of relational expectations, needs, emotions, and behaviors that results from the internalization of a particular history of attachment experiences (Bowlby, 1969/1982; Mikulincer & Shaver 2007). Attachment styles are conceptualized through two dimensions: Attachment anxiety is the extent to which a person worries and ruminates about being abandoned; attachment avoidance is the extent to which a person possesses an excessive need for self-reliance (Brennan, Clark, & Shaver 1998). Because people can experience varying levels of each of these dimensions, the literature distinguishes four attachment styles (e.g., Brennan, Clark, & Shaver 1998).

We propose that attachment anxiety and avoidance trigger systematic patterns of romantic consumption. Given that attachment anxiety and avoidance are linked to engagement in or flight from romantic love, we argue that romance-themed offerings will trigger the attachment system. Specifically, a hyperactivated (deactivated) attachment system related to the anxious (avoidant) attachment style should result in distinct responses to romantic offerings:

Hypothesis 1: Consumer preference for, and consumption of, offerings that evoke romantic love (a) increase with an increasing level of attachment anxiety, but (b) decrease with an increasing level of attachment avoidance.

As the two dimensions interact, we propose that the positive effect of attachment anxiety in the context of romantic consumption counteracts the negative effect of avoidance:

Hypothesis 2: Attachment anxiety and attachment avoidance interact to influence romantic consumption, such that the negative effect of attachment avoidance declines with an increasing level of attachment anxiety.

People have a fundamental motivation to form interpersonal bonds, to fulfil their need for belongingness (Baumeister & Leary 1995). Fulfilling this need has been shown to mediate the effect of attachment styles on psychological well-being. We explore whether romantic consumption helps fulfil the motive to achieve emotional intimacy.

Hypothesis 3: The effects triggered by attachment anxiety, attachment avoidance, and their interplay in response to offerings that evoke romantic love will be mediated by a motive for emotional intimacy.

We test these hypotheses in two studies. The first study is a survey of married women who report on their actual wedding spending. Results indicate that, at low levels of anxiety, avoidant consumers spend far less than secure consumers). At high levels of anxiety, avoidance has no effect: anxious and fearful consumers do not differ in their spending, which also does not differ from the spending of secure consumers. These results support H1-H2: attachment avoidance reduces romantic consumption (in the form of wedding spending)—but less so as attachment anxiety increases. That is, attachment avoidance pushes consumers away from romantic consumption, but attachment anxiety pulls them back.

In the second study, participants watch a preview to a romantic movie and indicate their intentions to watch the rest of the romantic movie (or a non-romantic movie alternative). At low levels of anxiety, intentions to watch the romantic movie decline as avoidance increases; at high levels of anxiety, avoidance has no effect (anxious and fearful consumers do not differ in their intentions, nor from secure consumers). These results support H1-H2: Avoidance deters romantic consumption whereas anxiety pulls consumers back toward romantic consumption (and outweighs the effect of avoidance). Moreover, mediation analyses support H3: Attachment effects on romantic consumption arise from differences in the desire for emotional intimacy by attachment style.

Together, this research contributes to the literature in several ways. First, we contribute to consumer attachment research (e.g., Thomson & Johnson 2006; Thomson, Whelan, & Johnson 2012) by demonstrating the influence of the interplay between attachment anxiety and avoidance on romantic consumption. Second, we expand the examination of romantic consumption beyond gift-giving (Belk & Coon 1993; Huang & Yu 2000) as romantic consumption frequently is not gift-giving (e.g., watching a romantic movie). Third, our work helps inform the psychological process driving romantic consumption: Desire for emotional intimacy—an arguably ironic motive inasmuch as the consumption of products that evoke romantic themes (e.g., watching a romantic movie alone) may not necessarily create close connections with others.

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Paying Up for Fair Pay: Consumers Prefer Firms With Lower CEO-to-Worker Pay Ratios

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EXTENDED ABSTRACT

Starting on January 1, 2017, public companies in the United States will be required to disclose the ratio of the total compensation of the CEO to the average annual compensation of all other employees in their annual reports. We propose that disclosing high pay ratios will have a marked impact on consumer behavior, given that previous research shows that consumers believe pay ratios are far lower than they actually are (Kiatpongsan and Norton 2014). In fact, consumers' ideal ratio of CEO pay to average unskilled worker pay is 4.6 to 1, while their estimated actual ratio of CEO pay to average unskilled worker pay is 10 to 1 (Kiatpongsan and Norton 2014). Note that these estimated ratios are far lower than the average pay ratio across US firms, which is estimated to be approximately 331 to 1 (AFL-CIO 2014). Perceived fairness plays a critical role in shaping consumer behavior; generally speaking, individuals prefer equitable to inequitable distributions of outcomes (Adams 1965). Fairness increases individuals' happiness (Tabibnia, Satpute, and Lieberman 2008) and reduces negative affect (Sanfey et al. 2003). Thus, we hypothesize that the CEO-to-worker pay ratio spurs fairness considerations and that consumers perceive high pay ratios to be less fair than low ratios. Perceived wage fairness, in turn, will drive consumers' purchase intentions and willingness to pay, thus mediating the effect of high (vs. low) CEO-to-worker pay ratios on consumers.

Disclosing pay ratios is not without potential downsides to the firm. It is possible that while disclosing low pay ratios enhances firm perceptions among some consumer segments, it may backfire with others. Political ideology is an important individual-specific factor: for instance, liberal Americans are more likely to support increases in the minimum wage (and therefore lower pay ratios) than conservative Americans (Kuziemko Norton, Saez, and Stantcheva 2015). Given the central role that political ideology plays in consumption (Crockett and Wallendorf 2004; Hirschman 1993) and the fact that different persuasive messages have different appeal to different political affiliations (Kidwell, Farmer, and Hardesty 2013; Winterich, Zhang, and Mittal 2012), it is possible that while low pay ratios may appeal to liberal consumers, they may serve as a deterrent to more conservative consumers.

In this paper, we test the effect of disclosure of pay ratio on product and brand desirability in three experiments.

In Study 1 we tested whether the disclosure of pay ratios can causally affect consumers' willingness to pay in a controlled, incentive-compatible context. We sold gift cards to two retailers that vary in their real-world pay ratio – Urban Outfitters (with a pay ratio of 15:1) and GAP (with a pay ratio of 456:1; AFL-CIO 2014) – and varied the presence of pay ratios by revealing this information or not. Participants ($N = 232$, $M_{Age} = 35.63$, 42% male) completed this online experiment in exchange for \$0.50. We used the log of the amount participants bid on the gift cards. We also measured perceived wage fairness: participants indicated their perception of wage fairness on a 7-point scale.

We conducted a 2(Ratio Presence: Absent vs. Revealed) by 2(Pay Ratio: High vs. Low) ANOVA on the amount participants bid on the gift card. A linear regression with an interaction between both factors showed that revealing the pay ratio lowers the amount par-

ticipants bid for the gift card when the pay ratio was high relative to when the pay ratio was low ($\beta_{Low} = -0.153$, $t = -0.833$, $p = 0.41$; $\beta_{Revealed} = -0.049$, $t = -0.272$, $p = 0.79$; $\beta_{Revealed \times Low} = 0.579$, $t = 2.230$, $p < 0.05$).

We used moderated mediation to examine whether perceived wage fairness mediated the effect of high and low pay ratio on the amount participants bid on the gift card depending on pay ratio presence. A 5,000-sample bootstrap analysis revealed that the 95% bias-corrected confidence interval for the indirect effect did not exclude zero when no pay ratio was revealed [-0.01, 0.16] but excluded the zero when the pay ratio was revealed [-0.60, -0.48]. The direct effect of the pay ratio (high vs. low) became insignificant [-0.44, 0.26], indicating moderated mediation (Preacher and Hayes 2008).

In Study 2, we tested whether these effects hold across different product categories and price ranges. Within subjects, participants assessed 12 products. The products represented a wide range of categories and prices: listed retail prices for similar products sold online ranged from \$3.99 (cereal box) to \$499.99 (flat screen television). Between subjects, we once again manipulated pay ratio to be either low or high. We again found a significant main effect on willingness to buy of disclosing a high pay ratio ($F(1,149) = 5.43$, $p = 0.02$). Importantly, the interaction between product type and pay ratio was not significant ($F(9,141) = 0.66$, $p = 0.75$), indicating that the impact of pay ratio disclosure was not significantly different across product categories.

In Study 3, we tested whether a low pay ratio will alienate certain customer subgroups. Prior research shows that people have varying perceptions of inequality; for instance, Republican voters desire relatively less equal distributions of wealth than their Democratic counterparts (Norton and Ariely 2011). We find that in three of the four subgroups by political affiliation (Democrat, Independent, Other) there were significant differences in willingness to buy between the high-pay-ratio and the low-pay-ratio retailer, with participants more willing to buy in the high-pay-ratio condition (p 's < 0.02). In the Republican subgroup, there was no significant difference in willingness to buy between the high-pay-ratio and the low-pay-ratio retailer ($M_{Low} = 5.36$, $SD = 1.32$ vs. $M_{High} = 5.36$, $SD = 1.68$; $t(45) = -0.01$, $p = 0.99$). Thus, a low pay ratio increases positive perceptions of most customers without harming perceptions of other customers.

In sum, our results suggest that pay disclosure can have benefits: firms with low pay ratios stand to garner improved consumer perceptions via disclosure relative to firms with very high ratios.

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Alternative Consumption Experiences Via Imaginative Fantasy Creation

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EXTENDED ABSTRACT

Consumers often wish to have consumption items or experiences, which they also realize may be unattainable for them. Consumption-related research suggests consumers who want an item or an experience engage in various activities to prepare for the anticipated benefits eventual consumption will bring. However, when consumers believe the item or experience is unattainable, can they ever gain some of the benefits of consumption without actually engaging in consumption? That is, might perceptions of unattainability motivate consumers to develop imaginative fantasies of their consumption items to gain consumption-related outcomes without physically experiencing or engaging with the item? In this exploratory research, we examine whether consumers who engage in pre-consumption activities, such as mental imagery (MacInnis and Price 1987, 1990), wish list creation (Fournier and Guiry 1993), consumption visions (Phillips, Olson, and Baumgartner 1995; Phillips 1996), and consumption dreaming (d'Astous and Deschênes 2005), for unattainable consumption items or experiences integrate these pre-consumption processes within an imaginative fantasy creation resulting in a mental experience that, while not a physical consumption experience, provides them with feelings of excitement, satisfaction and satiation akin to a physical consumption experience.

We suggest that consumers, as a result of imaginatively exploring their unattainable consumption items, gain outcomes associated with consumption even if they do not experience consumption. Consumers may be able to develop clear, cogent reasons that pertain to their inability to consume, providing a catalyst to develop an alternative to actually experiencing what they want via engaging in imaginative fantasy creation. Although the fantasy experience is specific to the individual and may not offer a true representation of what the actual experience may be, consumers integrate their prior knowledge and stored mental imagery within the fantasy creation to explore what they wish to actually experience. Although this suggested process is devoid of traditionally understood consumption stages and does not involve the consumer actually interacting with the item or experience, consumers may still be able to develop an enjoyable experience, satiate their wanting for the item without investing or transacting for the actual object, and also alter their feelings towards the brand, potentially affecting their knowledge and impressions of the brand in addition to future consumption interactions. This suggestion draws on the work of Holbrook and Hirschman (1982) who recognize that consumers do not just participate in consumption to satisfy needs and wants but for the feelings of fantasy and fun that are part of the experience.

To gain an initial understanding of whether consumers who perceive consumption as unattainable are engaging in activities that may contribute to a consumption experience within the mind of the consumer, an exploratory interview-based study was conducted. Findings from our exploratory study suggest consumers are able to identify consumption items they perceive as unattainable yet still engage in imaginative fantasy creations that offer consumers a consumption

“experience” within the mind. Consumers who recognize what they want is unattainable appear to develop imaginative mental experiences involving the consumption experience they wish to have. These occurrences incorporate known pre-consumption processes yet are more developed and complex, suggesting that coupled with imaginative fantasy creation, consumers develop a consumption-like experience that does not involve physically interacting with the actual item they want.

While exploratory in nature, preliminary findings suggest the marketing literature's present understanding of consumption is often limited to the suggestion that consumers engage in these types of behaviors specifically for the purposes of engaging in actual consumption experiences and this understanding should be adjusted to accommodate these types of experiences as part of how we view consumption. These types of fantasy creations offer consumers an alternative consumption experience as well as benefits typically associated with actual consumption experiences, which provides an interesting basis for future exploration of how we view consumption and the ways in which consumers may be able to interact with the things they want without actually experiencing those things. Consumers are likely already benefiting from the creation of these types of experiences, thus understanding more about how consumers engage with what they want through imaginative fantasy creations can only benefit both marketers and consumer researchers, as well as consumers.

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Righteous Indignation: When Anger Consumption Makes You Feel Better

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EXTENDED ABSTRACT

“Half of all Americans are angrier today than they were a year ago,” says a new survey (Esquire 2016). In addition, 68% of the respondents also reported hearing or reading something in the news that makes them angry at least once a day. Why do people consume things (e.g., news) that make them angry? Is getting angry always negative?

Anger is defined as a strong negative feeling of being upset or annoyed (Averill 1983), and one might therefore expect people to refrain from consuming anger-eliciting items. However, we suggest, and show, that sometimes people deliberately engage in, rather than avoid, the consumption of items that elicit anger. Based on findings about the instrumentality of anger in protecting the self in confrontational contexts (McCullough et al. 1997; Parrott 2001; Tamir et al. 2008; Tamir and Ford 2011; Tiedens 2001), we propose this consumption of anger-eliciting items may happen when a conflict accompanies the consumption. Specifically, we suggest that when people experience a conflict between their personal attitudes and the message conveyed by a consumed item, anger will increase that item consumption. We further suggest that in such cases, the anger-involved consumption may help people feel better about themselves, sustaining their sense of righteous indignation.

A set of studies provides empirical support for the consumption of anger-eliciting items, its underlying mechanism, and the favorable consequences of such consumption in terms of self-perceptions.

A pilot study (n=116) demonstrated consumers deliberately consume items they expected to elicit anger. Participants reported that even when they expect the consumption to make them angry, they read articles (78%; significantly greater than 50%, $p < .001$) and blogs (62%; significantly greater than 50%, $p = .01$) and watch television programs (48%; not different from 50%, $p > .7$).

Study 1 (n=90) showed consumers might consume more of an anger-eliciting item when they experience a conflict between their attitudes and the message conveyed by that item. Participants, who voted for either a left-wing or a right-wing party in the last pre-election survey, rated a satirical television program, which was known for its left-wing political bias. After participants watched a short clip of that program, we played an additional section and let participants decide at which point to withdraw from watching. We regressed the log-transformed watching time on political opinion, anger ratings, and their interaction, while controlling for conventional motivations to consume a satire—fun and interest. The results showed a significant interaction between political opinion and anger ($F(1,84)=5.89$, $p = .02$). As predicted, the more anger eliciting the program was, the more time right-wing voters (who were in higher conflict) watched it ($\beta = .22$; $SE = .09$; $t(84)=2.44$; $p = .02$). However, anger did not affect left-wing voters' watching time ($p > .3$). This effect remained significant after we controlled for participants' television-watching habits and general interest in politics.

Study 2 (n=145) further supported the effect of anger on consumption of conflictual items, and showed the instrumentality of anger-involved consumption for self-perceptions. Study 2 therefore revealed a link between conflict, anger, consumption, and self-perceptions. Participants read about a parliament member who accused another parliament member with muscular dystrophy of double voting. Participants who were assigned to the low-conflict condition also read that the focal parliament member had been genuinely concerned about double voting, whereas participants in the high-conflict condition read

that this parliament member had been repeatedly teasing the disabled member. Participants reported their level of anger and then received an article that provided additional information about the incident. After reading, they indicated how much they elaborated on the article (as a proxy to consumption), and reported their self-perceptions. We regressed elaboration on conflict, anger, and their interaction. The results showed a marginally significant interaction between conflict and anger on elaboration ($F(1,141)=3.53$, $p = .06$). As predicted, the angrier participants in high-conflict were, the more they elaborated on the article ($\beta = .35$; $SE = .12$; $t(141)=2.91$; $p = .004$). However, anger did not affect elaboration of participants who were low in conflict ($p > .5$). We also conducted a moderated-mediation analysis with self-perception as the dependent variable, anger as the independent variable, elaboration as the mediator, and conflict as the moderator. As expected, greater anger increased elaboration only in high (vs. low) conflict, which in turn elevated participants' self-perceptions ($\beta = .04$, $SE = 0.03$; 95% CI: 0.04 to 0.12). By contrast, we found no significant indirect effect when conflict was low (95% CI: -0.02 to 0.05).

If people in conflict consume the anger-eliciting item to feel better about themselves, then only when the message the consumed item conveys is relevant (vs. non-relevant) to the conflict anger should increase consumption among people who experience a conflict. Study 3 (n=129) tested this hypothesis by manipulating both conflict and the extent to which the consumed message was relevant to the conflict. We told residents of a specific city about either a politician's acts that impair the city's unique identity or tourist activities in the city, and then asked them to report their willingness to read an article about either topic. A regression analysis revealed a significant three-way interaction between conflict, relevance, and anger ($\beta = 1.01$; $t(121)=2.23$, $p = .03$). As expected, we found anger increased participants' willingness to read the article only when they experienced a conflict and the article was relevant to that conflict ($\beta = .55$; $t(121)=3.63$, $p = .004$; all other $ps > .1$).

Taken together, these results provide evidence for deliberate consumption of anger-eliciting (conflictual) items, and they suggest the anger involved in the consumption of conflictual items provides consumers with a sense of righteous indignation: when consumers experience a conflict between their attitudes and the message an item conveys, anger-involved consumption of that item seems to prompt improved self-perceptions.

Our research contributes to a better understanding of the evasive interplay between emotions and consumption, identifying situations in which the experience of anger—a negative emotion—causes people to consume more, rather than less, of the anger-eliciting item. From a practical perspective, our findings undermine the commonly held view that people are only motivated to avoid unpleasant feelings in general, and anger in particular.

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Semantic Price Claims and Discount Expectations

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EXTENDED ABSTRACT

Extant research on “semantic price cues” employed in sale ads has focused almost exclusively on the effects of words that refer to externally supplied reference prices and offer prices. However, with the exception of Barnes (1975), there has been no exploration into how phrases that describe sales affect value perceptions and purchase intention. In this paper, we investigate whether consumers have consistent numeric interpretations of semantic price claims. We find that claims and numeric price information jointly influence purchase intentions and that this interaction occurs through expectancy-disconfirmation.

The ‘encoding-complex’ model (Campbell and Clark 1988) views individuals as developing numerous cognitive representations of numerical data (verbal, visual, magnitude, etc.), depending on the modality/format of the inputs. This framework suggests that numbers, in addition to words and phrases, will be associatively connected to other words and phrases in semantic memory. A considerable body of research evidence is consistent with this model (e.g., Bernado 2001; Campbell 1994; Campbell and Epp 2005; Campbell, Parker, and Doetzel 2004; Lee and Kang 2002; Sciamia, Semenza, and Butterworth 1999). We suggest that expectations stemming from word-number associations are activated when consumers view sale information, since such messages typically combine a verbal phrase (semantic claim) with numeric discount information. Based on this:

Hypothesis 1: Consumers expect greater numeric discounts following exposure to high value semantic price claims than when they are exposed to low value semantic claims.

The evaluation of the “value of a deal” requires a relative comparison to other available information, and we expect that claims cue internally held comparison standards for discounts and therefore influence perceptions of deal value, or transaction value. We also hypothesize that the effect on acquisition value will work through transaction value, consistent with Grewal et al. (1998) who found that price influenced acquisition value through transaction value. Based on this:

Hypothesis 2: Semantic claim and numeric discount information will affect perceived transaction value, which will mediate the effect of claim and numeric discount information on acquisition value.

Originating from Helson’s (1948) adaptation level theory, expectancy disconfirmation suggests that one’s evaluation of an object is based on the discrepancy between expectations which develop over time and a performance outcome (Oliver 1980). Disconfirmation is typically applied in marketing to satisfaction, but has also been applied to other contexts, such as its effect on new product quality expectations (Kopalle and Lehmann 1995; Olshavsky and Miller 1972) and price recall (Helgeson and Beatty 1987). Zeithaml and Graham (1983) suggest that a reference price can be thought of as a price expectation. Mazumar, Raj and Sinha (2005) suggests that in addition to integrating previously encountered price information into price expectation (internal reference price), consumers also in-

tegrate contextual information into that expectation. Consequently we propose:

Hypothesis 3: Differences between expectations based on semantic cues and actual discount information impact purchase intentions.

Study 1, a 2 (special [low], blowout [high]) modifier x 2 (sale, deal) core word between-participants design, tested the effects of claims on discount expectations and value perceptions. Chosen claims resulted from a content analysis on newspaper sale ads. Claims were pretested for numeric discount associations. One hundred undergraduates were asked to fill in the numeric discount they believed would be in an ad for a watch based on the semantic claim displayed. They also answered questions on perceived value and purchase intention. ANOVA revealed significantly different numeric discount expectation by phrase ($F(3, 95) = 16.45, p < .001$). Pairwise comparisons showed that discount perceptions of high value phrases were different from low value phrases ($p < .01$), supporting H1. Transaction value significantly differed by condition ($F(3, 96) = 3.92, p = .01$) and was found to fully mediate the relationship between semantic claim/numeric discount and acquisition value, supporting H2.

Study 2 replicated and extended these results by investigating the discount associations between more core words (cool, smart, blowout, unbeatable) and modifier words (deal, sale, savings). 357 participants drawn from an online panel viewed one of 12 possible ads, and then answered questions to assess expected discount, acquisition value and transaction value. We again found support for H1 and H2, as semantic claims were again linked to numeric discount expectations, and transaction value mediated the relationship between claim/numeric discount and acquisition value.

Study 3 tested whether semantic price claims interacted with explicit discount information to influence purchase intentions through expectancy-disconfirmation and fluency, as predicted by Hypothesis 3. 297 participants recruited from Amazon’s Mechanical Turk read a promotional advertisement for sunglasses, normally priced at \$149, and read one of six conditions in a between-participants design manipulating semantic discount claims (blowout savings [high] vs. cool savings [low]) and actual discount levels (5%, 30%, 70%). Participants rated likelihood of buying the sunglasses, fluency questions, and controls.

Consistently with Study 1, participants expected a greater discount after reading that the savings were “blowout” than “cool” ($M_{\text{blowout}} = 39.38, SD_{\text{blowout}} = 17.4; M_{\text{cool}} = 27.81, SD_{\text{cool}} = 13.77; F(1, 295) = 40.15; p < 0.0001$), supporting H1. Purchase likelihood is a function of expected discount ($p < 0.001$), unexpected discount ($p < 0.001$) and fit ($p < 0.001$). In jointly-estimated simultaneous equations with three mediators (fluency, expected savings, unexpected savings) the indirect effects of expected and unexpected discount each mediate semantic price and purchase intentions (expected discount: $\beta = 0.45, 95\% \text{ CI} = \{.26, 0.67\}, p < .001$; unexpected discount: $\beta = 0.52, 95\% \text{ CI} = \{.35, 0.71\}, p < .001$) while fluency does not ($p > 0.30$ and CI includes 0). Notably, semantic prices lead to disconfirmed expectations which impacts purchase intentions.

Together, these studies provide support for the ideas that semantic price claims affect not just price expectations, but that these

expectations interact with actual discount information to influence purchase likelihood. We tested and found that semantic price claims influence expected savings, unexpected savings, and fluency. Notably, we find that semantically-induced discount expectations and disconfirmations influence purchase intentions. This research highlights the need to carefully consider wording in sale ads.

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The Tipping Point Of Perceived Change: Asymmetric Thresholds In Diagnosing Improvement Versus Decline

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EXTENDED ABSTRACT

Things change. From private fluctuations in health and habits to broader cycles in the climate and economy, people must continually respond to the possibility of something being different now than it was before. Responding effectively, however, requires people to first come to the conclusion an entity has indeed changed in some substantive manner. We refer to this moment as the perception of the tipping point—the point at which people begin to perceive noise as signal. Four studies reveal a pervasive asymmetry: things change, but they are perceived as actually tipping at different rates and in different ways depending on whether people think about change for the better or change for the worse.

Study 1 established the basic effect. Participants evaluated changes related to athletic performance, academic performance, health, mood, luck, habits, friendship, or personality, described in different hypothetical scenarios. For each, “decline” participants were given a positive starting point and indicated how many observations of the next 10 must be bad for them to be convinced in genuine change for the worse. For example, in the athlete scenario, they indicated how many games of the next 10 must a good athlete play poorly to signal official decline. “Improvement” participants rated the opposite. Participants demanded about twice as much positive evidence to tip for improvement than for decline. For example, a handful of awkward encounters, failed exams, bad games, gained pounds, and lost bets led people to judge romantic prospects, academic performance, athletic ability, health, and luck as having “officially” changed for the worse; yet corresponding positive developments were dismissed as fickle flukes.

Study 2 replicated these findings via mere framing. Participants perused a static image of a graph, allegedly depicting real fluctuations in an index of the United States economy over time. The depicted trend line was slightly and ambiguously sloped, and participants’ task was to interpret it. Participants were told that lower values suggest things are getting worse on this particular index (“decline” condition), or that things are getting better (“improvement” condition). Note that everyone saw the exact same graph. And yet, it was interpreted as more “real” when framed as decline versus improvement. We replicated this effect in the domain of public health (rather than the economy) and also when inverting the slope direction, suggesting that the effect asymmetry generalizes.

Study 3 significantly expanded this basic effect by assessing real consequential behavior. Participants played three completely random, completely independent card-flipping games. The games were rigged such that some participants lost the first two (“decline” participants) and others won the first two (“improvement” participants). Before the third game, they were invited to bet on the outcome using their participation payment: “decline” participants were invited to bet that their third game would be another loss, while “improvement” participants were invited to bet that their third game would be another win. While exactly 50% of “improvement” par-

ticipants gambled on a third win in a row, nearly 75% of “decline” participants gambled on a third loss in a row. A hot streak apparently runs out quickly (positive signals are perceived as a passing fluke) while an identical cold streak seems here to stay (negative signals are perceived as a lasting trend).

Study 4 sought to explain this asymmetry, in particular going beyond hedging. Participants imagined repeated social interactions, one at a time. “Decline” participants read about a morally good person who, at Interaction #1, behaved slightly immorally. At this point, they could choose to click to the next page to find out how the person behaved at Interaction #2, or indicate they had seen enough evidence to conclude the person had truly changed. “Improvement” participants evaluated a bad person who behaved morally. Here we replicated the asymmetry: participants amassed a pair of bad behaviors before tipping for decline but twice as many good behaviors before tipping for improvement. In another version, however, participants role-played as “Evil Evaluators” and imagined needing to find a fallen saint who indeed changed for the worse, and that they would be penalized if the person was misdiagnosed. And yet, participants were still twice as fast to tip for decline. This suggests the asymmetry is not driven by hedging alone. Participants had to be especially cautious in their diagnosis of decline but still tipped just as readily as they normally do; signals of decline are overweighted not only to hedge against costs but because capacities to change for the worse (hit floor) may seem more universally likely.

Taken together, an asymmetry at the tipping point of change not only fills missing gaps in the change perception literature, but also raises significant practical implications.

People might be overly quick to punish others but overly slow to reward others who are trying to change, and likewise too slow to appreciate their own progress but too quick to feel hopeless from equivalent regression. In general, people should bear in mind how suddenly cold streaks can (appear to) form and consider the fickleness of reputation; in our studies, being moral or having a happy relationship at the start counted for less than one might hope.

Finally, our framework as a whole also invites a novel perspective for re-thinking important policy debates over broader societal changes, such as climatic, economic, and viral cycles. Traditionally, “effective persuasion” is first and foremost thought to involve convincing the other side that a chosen problem indeed exists and should be addressed, even if one’s exact method of convincing (e.g., central/peripheral routes) might vary. We suggest a more crucial (and, to date, overlooked) piece: as difficult as it is to convince others that one’s chosen issue is a problem (a negative change likely demanding little evidence), it may be even harder to convince others that policy solutions will be effective (a positive change likely demanding greater evidence). Policy-makers should put more effort into this back-end of the persuasion process and emphasize the gradual nature of improvement following a proposed intervention, beyond the mere existence of decline.

The Effect of Processing Modes and Lighting Types on Shoppers' Engagement in a Store

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EXTENDED ABSTRACT

When perceiving physical environments, Westerners tend to use a local processing mode by focusing on foreground objects with a narrowed scope of attention, whereas East Asians tend to see contexts through a global processing mode that includes a broadened scope of attention (Miyamoto, Nisbett, & Masuda, 2006). Patterns of attention associated with cultures exhibit predispositions toward approaching and exploring an environment (Masuda et al. 2008). In stores, shoppers either zoom out to see a whole store (global processing) or focus in on a product for its details (local processing). The type of lighting (holistic vs. focused) guides the shopper's attention toward focusing on gestalt or detail in a store; therefore, lighting can potentially interact with shoppers' processing modes. Despite the potential benefits of enhanced retail store lighting, little is known about how specific lighting decisions influence shoppers' in-store behaviors (Quartier, Vanrie, and Van Cleempoel 2014). This study assesses the influence of focused versus holistic lighting. In this study, we posit that a person is more likely to approach and explore a store when a store environment arranges an attentional scope to match the person's processing style.

Hypothesis 1: Global processors will show a higher intention to spend time in a store with holistic lighting, whereas local processors will show a higher intention to spend time in a store with focused lighting.

We investigate H1 by comparing Westerners (Americans) and Easterners (Koreans) in Study 1. We manipulate a temporary processing mode in Study 2 and Study 3 to confirm the fit effect between processing mode and lighting type on shopping behavior. Of practical significance, we test whether a positive mood can enhance the fit effect. Two different predictions can be proposed, depending on two opposite views of mood effect: fixed view or flexible view. According to the fixed view, positive moods lead people to perceive gestalt by broadening their attention (Gasper & Clore, 2002). Likewise, negative moods lead shoppers to view detail by narrowing their attention. Also, positive moods can override local processing and lead to preferences for holistic lighting. In contrast, according to the flexible view, positive moods empower momentarily dominant attentional focus (Huntsinger et al., 2010). Then, positive moods will confer the local Western processing style and lead to preferences for focused lighting. Adopting the flexible view on positive moods, we hypothesize that the fit effect remains with positive moods (H2). We test H2 with people from Western (American) culture in Study 4 and with people from both Western and Eastern cultures in Study 5.

Hypothesis 2: The fit effect on the enhanced intention to spend time in a store is likely to occur in the positive mood condition.

We conducted five experimental studies using the same lighting stimuli. In a store for digital products, holistic and focused lighting displays were developed. Both a perception study (n = 17) and an

eye-tracking study (n = 33) demonstrated the different attentional scopes between holistic lighting and focused lighting. In Study 1, 236 students (127 Americans and 155 South Koreans) participated. After reporting their moods and shopping orientation, participants were shown a store with holistic or focused lighting and asked to indicate their intention to spend time in the store. Supporting H₁, a culture x lighting interaction (F [1,278] = 7.97, p = .008) suggested that Americans prefer focused lighting (M_{focused} = 4.51, M_{holistic} = 3.98, F [1,278] = 4.204, p = .045) and Koreans prefer holistic lighting (M_{holistic} = 4.93, M_{focused} = 4.35, F [1,278] = 3.96, p = .048).

In Study 2, we directly manipulated processing mode using Navon letters (Navon, 1977), which consist of large letters composed of small letters. A total of 187 American participants were asked to identify global letters in the global mode condition, local letters in the local mode condition, and both global and local letters in the neutral condition. Supporting H₁, a processing prime x lighting type interaction was significant, F (1,180) = 5.51, p = .005. The intention to spend time was higher for the holistic lighting (M_{holistic} = 5.86, M_{focused} = 5.13; F [180] = 5.08, p = .025) in the global mode condition, and for the focused lighting in the local mode condition (M_{focused} = 5.62, M_{holistic} = 4.85; F [180] = 4.63, p = .033). There was no difference in the neutral condition (p = .210).

Study 3 replicated the fit effect by using a map-viewing task (Friedman et al. 2003) which in turn bolsters or undermines creative generation. In the first two experiments, participants completed visual tasks that forced them to focus perceptual attention on a comparatively broad or narrow visual area. As predicted, broad, compared to narrow initial focusing of perceptual attention subsequently led to generation of more original uses for a brick (Experiment 1). A total of 179 MTurk participants were instructed to look at a map's shape in the global processing condition, the map's details in the local processing condition, or both details and shape in the neutral condition. Then, participants were asked to report their intention to spend time in a store. An interaction was significant: F (2,170) = 5.15, p = .007. Participants in the global processing condition preferred the holistic lighting (M_{focused} = 4.36, M_{holistic} = 5.01; F [1,170] = 3.88, p = .051), whereas participants in the local processing condition preferred the focused lighting (M_{focused} = 4.55, M_{holistic} = 3.87; F [1,170] = 6.53, p = .012). Participants in the neutral condition showed no difference (p = .995). The variations in attention from culture (Study 1) and temporary priming in Study 2 and Study 3 support H1, suggesting processing fit as a driver of shoppers' intentions to spend time in a store.

In Study 4, a total of 141 American students listened to Mozart's *Eine kleine Nachtmusik* (positive mood induction) or Mahler's *Adagio* (negative mood induction). Supporting H2, there was a significant mood x lighting interaction: F (1,133) = 9.80, p = .002. Positive mood enhanced local processors' approach intention toward the focused lighting store (M_{focused} = 5.34, M_{holistic} = 4.57), F [1,133] = 5.19, p = .024), whereas negative mood induced the opposite results (M_{holistic} = 5.26, M_{focused} = 4.44, F [1,133] = 4.38, p = .038).

Study 5 replicated Study 4 using both North Americans (n = 69) and East Asians (n = 96). A significant three-way interaction (F [1,153] = 7.42, p = .007) indicated that positive moods drove prefer-

ence for lighting type aligned with the culturally dominant processing mode. Americans in positive moods preferred focused lighting ($M_{\text{focused}} = 5.75$, $M_{\text{holistic}} = 4.77$, $F [1,157] = 6.94$, $p = .009$), whereas Koreans in positive moods preferred holistic lighting ($M_{\text{focused}} = 4.53$, $M_{\text{holistic}} = 5.34$, $F [1,157] = 8.06$, $p = .005$).

Our research points out that the attentional scope shaped by lighting type influences the ways people engage in a store. The fit in lighting type and processing style facilitates engagement in a store as shoppers more attentively process information aligned with their processing style in a given moment.

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Defining and Differentiating Marketplace Tranquility

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EXTENDED ABSTRACT

Recently, demand has increased for products, services, and experiences that facilitate consumers' ability to withdraw from a technology-driven, multitasked, fast-paced, and typically urban world. For example, over 20,000 spas in the U.S. generate \$15.5 billion in revenue (International Spa Association, 2014). More recently, coloring books for adults, which enable them to achieve respite from stress-filled, overstimulated lives, dominate lists of bestselling books (Harrison, 2016). Increasingly, people who seek respite from an "age of incessancy" (Prochnik, 2011, 12) are turning to the marketplace for solutions.

But despite the increase in demand for such offerings, there is little understanding of how and why consumers acquire them. Rather, the long-dominant paradigm of the "experience economy" (Pine II and Gilmore 1999) advocates offering consumers sensory-laden, stimulating marketplace experiences. Likewise, most research on retail atmospherics centers on how to keep customers excited, thrilled, and stimulated (Fulberg 2003; Lesser and Kamal 1991; Wakefield and Baker 1998), implying these outcomes yield optimal outcomes for firms and consumers. Yet the increased demand for offerings such as Bose noise-reducing headphones, Amtrak Quiet Cars (Gallagher 2014), and even monastic retreats may indicate that the experience economy paradigm is overlooking consumers' needs to leverage the marketplace to achieve peace, quiet, and associated consumer-welfare benefits.

We address this theoretical and empirical gap by exploring an emergent construct that we label "marketplace tranquility" (MT). In so doing, we explore these questions: 1) How do consumers understand tranquility in general (GT), and how do they perceive it differs from MT? 2) What marketplace resources and practices do they identify as potential sources of tranquility? 3) What motivates consumers to seek out these sources? Our main contributions of this admittedly exploratory study are to demonstrate the salience of MT to consumers, and to show how they perceive MT as meaningfully different from GT. In short, while consumers perceive GT as abstract and often unattainable in a hyper-urbanized, hectic world, they conceptualize MT as a "practical" form of tranquility – one both accessible and useful in their pursuit of life goals. Furthermore, consumers now seem to take it for granted that the commercial sphere will, and should, provide opportunities for them to try and achieve tranquility-related outcomes.

Below, we discuss current academic understandings of tranquility, and differentiate it from distinct but related constructs. We then explicate our methods, analyze our research questions, discuss the paradoxes inherent in MT, and offer ideas for future research.

BACKGROUND

Tranquility

The OED ("Tranquility," 2016) defines tranquility as "free from disturbance [and] calm." Research supports this delineation, explaining tranquility as a state symbolized by emotional ease and lack of anxiety (Ellison, Burdette, and Hill 2009; Yager 1982). Along similar lines, Herzog and Bosley (1992) refer to tranquility as calmness, serenity, and peace. Other research highlights the importance of the external environment in achieving these outcomes. Eliovson

(1971) interprets tranquility as a desirable state of mind, promoted by certain components of a natural environment (Herzog and Bosley 1992). Likewise, Hunter et al. (2010) detail tranquility as a mental state likely occurring in the presence of sensory inputs from the natural environment. Thus it appears tranquility stems from two components, feelings of calmness and peace (or low-arousal positive affect; Russell 1980) and the external environment that supports it. Consolidating the above characterizations, we offer a cohesive definition of general tranquility (GT) as a state of mind resulting from the experience of low-arousal positive emotions, emerging from immersion in an external environment typified by lack of disturbance.

Related But Dissimilar Constructs

Some studies (e.g., Puccinelli et al. 2009) argue it is critical to understand the role of atmospherics in consumers' marketplace experiences. However, no extant research explores how consumers seek or leverage marketplaces or resources to achieve tranquility. Nevertheless, GT can be compared to similar constructs studied within consumer behavior. For example, *consumption simplicity* pertains to consumers' voluntary simplification or reduction of consumption levels through downshifting (Schor 1998), and may involve consumers foregoing maximum consumption and income-earning opportunities (Shaw and Newholm 2002). Such simplicity may remove consumers' burdens, enabling them to enjoy "non-materialistic satisfaction...from slowing down to enjoying nature...to reading of challenging books to watching...classic[s] on television" (Etzioni 1998, 637). Although tranquility and consumer simplicity may appear similar, we believe simplicity is more accurately understood as an antecedent to tranquility. Furthermore, *solitude* (or aloneness) may seem related to tranquility—but the two may not be the same. Previous research argues that togetherness, as manifest through healthy human relationships, may actually contribute to tranquil outcomes (Stoilova et al. 2014; Williams, Page, and Petrosky 2010). On similar lines, although *silence* shares common features with tranquility, we argue it is also distinct. Indeed, some types of sounds (especially those emanating from nature; e.g., wind and water) may contribute to tranquil experience (Herzog 1985).

METHOD

Given our goal to explicate a new construct (MacInnis and De Mello 2005), we chose in-depth interviews as our primary research technique. These enable consumers to articulate their own experiences, understandings, and meanings pertaining to GT and MT. We began with an initial, broad question, "What comes to mind when you hear the word tranquility?" We then asked them to describe how they sought tranquility in their lives, and to discuss any marketplace entities they thought could (or could not) contribute to their tranquility. We also allowed informants to discuss other aspects of MT they believed to be important.

We interviewed six informants (three males, three females) from September-October 2015. All were acquaintances. Interviews were conducted face-to-face or via Skype. All but one informant is Korean, and all are graduate students in their 20s. Each read and signed consent forms prior to the interviews, permitting us to transcribe the text and use excerpts when disseminating research, while protecting their anonymity. Interviews lasted 60-90 minutes and

were audiotaped and transcribed, yielding almost 100 pages of typed transcripts. We supplemented these interviews with two one-hour observations of marketplace offerings designed to foster tranquility – a yoga class and a class held at a Japanese teahouse in the Midwest, contributing twelve pages of field notes to the data set. The research team read the data set individually, seeking codes and patterns across the text, and discussed and negotiated emergent themes pertaining to general and marketplace tranquility. Our discussion led us to devise the following definition of MT, as distinct from general tranquility (GT): “Marketplace tranquility is an outcome consumers acquire when leveraging products, services, and experiences that enable them to enjoy peace, quiet, and related benefits.”

FINDINGS

Our first research question is: How do consumers understand tranquility in general (GT), and how do they perceive that it differs from MT? Similar to the elements emanating from previous research, informants associate GT with the experience of low-arousal, positive emotions such as peace, serenity, and calmness. In addition, they emphasize that immersion in a natural environment is necessary for tranquility to emerge. In fact, many “define” GT by offering vivid, nature-laden descriptions: [GT is] “feeling like flowers, like a plateau, and lying on it”. Yet they express skepticism as to whether GT is attainable, or in any sense permanent. Summer notes, “I know...[GT] is...good for my mind, but in reality [it] feels...distant from me.” Likewise, Paul notes GT can last “that day, that few hours... you [can’t] be tranquil for 50 years (laughs)... likely there are chunks of time [in which to feel] complete and utter peace.”

Also consistent with the literature, informants note GT requires escape from crowded, fast-paced environments such as city living, which David equates with a “chicken cage.” Especially salient is their desire to escape from crowds of people in general, and from stress-inducing social groups in particular: “you don’t have people over your shoulder saying, ‘you should do it a certain way’” (Paul). Yet while escaping oppressive others was prevalent in the text, some of our informants’ descriptions of GT do feature small groups of intimate others, typically enjoying themselves in natural settings.

General Tranquility vs. Marketplace Tranquility

Asked whether the marketplace can offer tranquility, our informants concur, offering many examples of this phenomenon. But contrary to their more abstract, elusive conceptualizations of GT, we assert they perceive MT as *practical and goal-oriented*. We root this assertion in the emergence of three key aspects of MT: its ability to help informants feel nostalgic, informants’ beliefs that the marketplace should socialize them in where and how to attain tranquil offerings, and the ability of MT to help informants achieve goals related to coping with their stressful daily lives.

First, although scholars recognize nostalgia as driving many forms of consumption (Holbrook 1993; Holbrook and Schindler 2003), we are unaware of any studies linking nostalgia and tranquility. However, Paul clearly links the two constructs, noting about bookstores that “they could be peaceful ‘cause it’s quiet usually. And very soft music. When I was a child my [parents] would take me to a bookstore a lot...I remember I was sad when it closed. I think that the tranquility thing is something that takes you to your childhood.” Likewise, other informants equate the simplicity of certain retail atmospheres, or marketplace offerings (e.g., adult coloring books) with simpler times in their lives.

Furthermore, informants rely upon the marketplace to educate and train them on offerings that can help them achieve tranquility. As the table reveals, they identify a plethora of offerings contribut-

ing to this outcome. Joy avers: “we absolutely need these kinds of books [about] peacefulness and enjoying the present.... you don’t know how to do it by yourself. I think it’s good to purchase the methods....” However, many offerings entail mastering rituals and behaviors that informants realize they should incorporate into their daily lives for maximum effect (e.g., meditation, yoga). For example, at a calligraphy class at the Japanese teahouse, students first engage in a purification ceremony, then pay their respects to sacred scrolls prior to entering the class. Furthermore, prolonged instances such as Buddhist “Temple Stays” in Korea feature monks schooling their visitors in specific “ritual utterances” (e.g., “blessings;” Otnes, Ilhan, and Kulkarni, 2012) to promote tranquility during and after the visit.

Finally, informants often seek out commercial offerings to help them cope with the stress of their everyday lives, using words like “heal” and “refresh” to reflect their motivations. Summer notes “if [marketers] can make...really good places where people in this modern society can rest or find peace, it will be good for [us], and profitable too.” Nicole notes marketplace offerings enable people to “purify...so that you can do your work hard.” The yoga class we observed reflects consumers’ desires for such outcomes. Offered as part of a program promoting wellness in general (and held outside), its instructor encouraged participants to incorporate yoga practice into their lives to help them deal with daily stress.

Marketplace Aspects and Resources

Our second research question explores the elements consumers identify as contributing to MT. As the table reveals, they mention brands, products, retailers, services, and experiences they believe do so. Three important characteristics of these entities emerge: 1) muted features/atmospherics; 2) quietude; and 3) privacy. First, consumers perceive market offerings as tranquil when they are less intrusive upon the senses. Paul mentions Banana Republic as a tranquil retail space due to its “smooth” and “beach tone and black” colors. Likewise, the simplicity associated with a lack of patterns or labels contributes to consumers’ perceptions of brands as tranquil. Furthermore, quietude is also a critical element contributing to MT—although quietude does not equal silence. Many informants note soft, instrumental music can play an important role in fostering a calm, peaceful mindset. Together with muteness and quietude, privacy also contributes to MT. Securing a private commercial place or space helps consumers feel secure, safe, and comfortable. In fact, many informants use the word “safe” when describing retail outlets that protect them somewhat from the outside world, offering nooks or spaces where they can feel secluded in a (relatively) noise-free, comfortable environment.

Motivations for Seeking MT

Not surprisingly, informants’ goals for seeking MT correspond to the issues discussed above: namely, coping and managing the pressures of their stress-filled, hectic lives. Specifically, our analysis reveals three specific goals they pursue when seeking commercial offerings to gain peace and quiet. We discuss these briefly below.

Escape

We mention above that informants often use the word “safe” to describe marketplaces and resources that enable them to experience MT. Indeed, we were intrigued that almost all of our informants used the word “safe” as an outcome for experiencing MT. However, they do not use the term to denote concerns over their personal safety. Instead, safety appears to refer to their ability to enjoy personal freedom and exercise agency in an otherwise-demanding world. Nicole notes she feels safe at a particular area of a coffee shop “‘cause it’s

small, blocked a little bit, so ...it feels like I have my own space? It's still public, but I feel like I have some private space in there so...I can do my own thing." Ironically, some retail spaces such as Starbucks that were originally designed to offer consumers a "caffeine-induced oasis" (Kim and Mauborgne, 1999, 90) in their lives may have become so popular, they can no longer offer MT as a viable benefit.

Engagement

It may seem paradoxical that consumers use tranquility to foster engagement. However, the type of engagement is not typically social, but mental. Our informants note their jam-packed lives do not afford them opportunities to pursue creative activities, or to engage with their authentic selves. In pursuing MT, consumers are very specific about leveraging products and services that help them delve into passions in a creative manner. Paul observes of his photography hobby that it is "a more active way I seek tranquility...I am creating a new shot. I am...exploring the city while I am doing it. And I say, "Oh wow, I captured that moment.... it's kind of the same buzz people get when they learn something." Thus, our informants demonstrate that the "flow" they seek when engaged in creative pursuits (Csikszentmihalyi 1996) both requires tranquility, and can prolong it as well.

(Marketplace) Emancipation

As we note above, our informants often discuss how they wish to free themselves from the confines of their stressful and typically urbanized existence. Ironically, however, one context they specify describe as wanting to escape – and where they believe the MT can offer a solution – are overstuffed, overstimulating retail outlets themselves. Many of our informants describe the information overload they experience when engaged in retail stores (Eroglu, Machleit, and Chebat, 2004). However, Paul extends his discussion of the oppressive nature of the marketplace by remarking on the drain on self-esteem he believes women must endure, given the strict norms governing beauty in American culture that retail outlets often reflect: "I think clothing [purchasing] is more tranquil to guys...because body image [is] very obvious in clothing....and girls are constantly comparing themselves with the models in a very unfair standard.... that's not fair. Not a very safe environment. You feel very insecure." In short, informants contrast tranquil marketspaces with the overabundant and normative retail spaces that characterize contemporary consumer culture. Furthermore, they imply there may be a moral imperative to offer alternatives to these marketspaces to enhance consumer welfare – an issue that may interest marketers and practitioners whose agendas intersect with that of transformative consumer research (e.g., Mick et al., 2012).

DISCUSSION

The present work advances current understanding of tranquility, and how consumers may perceive it as integral to marketplace offerings. Specifically, we explore three main research questions that pertain to consumers' understanding of GT and its distinction from MT. We find that consumers perceive MT as meaningfully different from GT and actively seek products, services and experiences that enable tranquility. Further, three main motivations emerge as driving the need for tranquility from marketplace offerings. It appears consumers want to escape from sensory-laden external environments (including retail environments), and find environments typified by relative peace and quiet where they can engage with their authentic selves.

Interestingly, our findings illuminate intriguing paradoxes that not only enhance the current understanding of MT, but offer significant implications and open research avenues for academics and practitioners. The first paradox is that consumers use the marketplace to try and escape the overabundance and cacophony of the marketplace. Second, it appears consumers seek to leverage MT to clear their minds so they can then engage their minds. Third, consumers detail that they rely on MT because they may find GT increasingly unattainable; in fact, MT be their only available resource in a world where nature is increasingly detached from everyday experience, and where time pressures mean they must seek tranquility from sources available to them in urban settings—such as the marketplace.

This research thus highlights implications for both consumers and marketers. It appears tranquil retail spaces may wield implications for consumer well-being and mental health. Currently, retail environments focus on providing stimulating rather than calm and peaceful environments. In addition, our research offers new insights for practitioners, with respect to customer needs and expectations from marketplace offerings. Marketers can adopt new strategies to satisfy this emerging customer need. Furthermore, implications for pricing strategies may be salient; e.g., are consumers willing to pay more for tranquil marketplace experiences?

Other future research implications emerge from these findings. For example, it would be valuable to understand the effect of product types on tranquility experiences. For example, many luxury products or hedonic consumption offerings promise calmness and hint at tranquil experiences; is it possible then that hedonic and compared to utilitarian consumption may lead to higher tranquil experiences? Another interesting future research question may entail understanding how consumers reconcile undelivered promises by service providers with respect to tranquility. For example, how would loud conversations and other distracting sensory input at a "tranquil" service provider (e.g., a spa) impact customer expectations, service evaluations and brand loyalty? These and many other interesting questions arising from this research may merit further attention.

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The Role of Employee Physical Dominance on Male Customers' Status-Signaling Consumption

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EXTENDED ABSTRACT

Abercrombie & Fitch has become known for hiring physically fit male employees to pose at store entrances shirtless. However, it is not clear whether this strategy is effective in enticing male or female customers to make purchases.

Research has shown that youth, health, and attractiveness are important characteristics for men in a mate; whereas status, wealth, and dominance are priorities for women (Burd 1986). One way to understand gender differences in mate preferences is through Darwin's (1871) principle of sexual selection. A heterosexual man will search for young, healthy and attractive female mates because they are generally more fertile, which increases the probability that the man's genes can be passed on (Kenrick & Griskevicius 2013). Women place greater importance on a potential mate's capacity for investment (Trivers 1972); in terms of time, effort, and ability to provide resources. It is therefore unsurprising that women value a mate's status, as this has been linked to survival (Geary 2000).

Just as male peacocks with the most impressive feathers are more successful at attracting females, some men communicate fitness to potential mates and demonstrate competitiveness to rivals through flashy and noticeable displays (Buss 1988). Given that two of the most important cues in making inferences about people's status are the cost and noticeability of the products they buy (Belk, Bahn, & Mayer 1982), men are also more prone than women to use consumption as a way to signal status (Sundie et al. 2011). Men without large resources may attempt to signal status through the consumption of conspicuous brand logos, tipping more at dinner, or buying a more expensive brand than their peers.

The current research investigates whether physically dominant male employees can increase male customers' status-signaling consumption. We expect that men whose status is threatened by a physically dominant male employee will show a greater willingness to spend money on products associated with status.

391 members of an online research panel completed Study 1 and were randomly assigned to a 2 (participant gender: male vs. female) \times 2 (customer gender: male vs. female) between-subjects design. All participants read a scenario: "Retail companies have started to hire athletic, fit male employees to attract customers. These employees stand at the store entrances, where they greet arriving customers." Participants then indicated their agreement on the following: "I think female [male] customers will spend more money in the store compared with male [female] customers" and "purchase more expensive products in the store than male [female] customers." Respondents then answered demographic questions including gender (independent variable).

Conducting a two-way ANOVA with participant gender and customer gender as between-subjects factors, we found a main effect of customer gender ($F(1,387) = 131.55, p < .001$). Participants predicted that female customers would spend more money ($M_{\text{female}} = 6.22$) than male customers ($M_{\text{male}} = 3.84$) in the presence of a dominant male employee. Similarly, we found a significant main effect of customer gender on purchasing more expensive products ($F(1,387) = 65.54, p < .001$), indicating that female customers would purchase

more expensive products ($M_{\text{female}} = 5.77$) than male customers ($M_{\text{male}} = 3.92$) in the presence of a dominant male employee.

Study 2 included 369 customers in a 2 (customer gender: female vs. male) \times 2 (dominant employee: absent vs. present) between-subjects design. Customers in the dominant employee present condition entered the store where a dominant male employee greeted them. Customers in the dominant employee absent condition entered the store, but were not greeted by an employee. They then continued with their normal shopping. After checking-out, customers were asked if they would be willing to participate and their gender was recorded. A photograph was taken of their receipt to count the number of items purchased and the amount spent. To measure status-signaling consumption, we used the average price paid per item (Eastman, Goldsmith, & Flynn 1999).

Conducting a two-way ANOVA with customer gender and dominant employee as between-subjects factors on price paid per item, we found a main effect of the dominant employee condition ($F(1,341) = 3.64, p = .05$) and a main effect of gender ($F(1,341) = 6.88, p = .009$). These were qualified by an interaction ($F(1,341) = 3.67, p = .05$). The average price per item purchased by men ($M = \$18.33$) was approximately 94% more expensive than the average price per item purchased by women ($M = \$9.43$) in the presence of the dominant male employee ($t(172) = 2.61, p = .010$). When the employee was absent, we found no difference ($t < 1$).

Study 3, a 2 (participant gender: male versus female) \times 2 (employee: dominant versus non-dominant) between-subjects design utilized 114 undergraduate students. They were given a photograph depicting the male employee, who was either dominant or non-dominant (but equally attractive). Participants were told the study would investigate participants' ability to form impressions of employees. Participants answered questions consistent with the story and indicated their logo size preferences on clothing as research has demonstrated that a desire for larger logos indicates a willingness to engage in status-signaling consumption (Lee & Shrum 2012). Finally, participants indicated demographic information.

We conducted a two-way ANOVA on logo size preferences. We found a significant main effect of employee condition ($F(1,110) = 5.84, p = .017$) and of participant gender ($F(1,110) = 6.67, p = .011$). These effects were qualified by an interaction ($F(1,110) = 8.28, p = .005$). Male participants in the dominant employee condition ($M_{\text{dominant}} = 5.20$) preferred significantly larger logos compared with male participants in the non-dominant employee condition ($M_{\text{non-dominant}} = 3.52; t(54) = 3.57, p < .001$); female participants did not differ between conditions ($t < 1$).

Collectively, we found that a dominant male employee motivates male customers to spend more money and buy more expensive products than female customers – while lay theory would suggest that female customers' purchase behavior should be more positively influenced under such conditions. While previous research has focused on the effect that attractive women have on men's status-signaling consumption, our main theoretical contribution is the finding that dominant male employees assert real-world consequences on men's purchase behavior.

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The Elaboration of Ethical Brand Crises on Social Media

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EXTENDED ABSTRACT

A crisis is a severe occurrence in the life of an organization threatening its own existence (Coombs 2007). Crises that breach the ethical values of a brand can impair the root values of the company. Marketplace resources – including brands – can be highly contested by opposing views of society (Luedicke, Thompson, and Giesler 2012). Disadvantaged or stigmatized segments of society adopt marketplace resources as an intermediate step to affirm their legitimacy before a wider legitimacy is reached in other sectors of the society.

Most of the extant literature on consumer identity politics (Sandikci and Ger 2010; Scaraboto and Fischer 2013; Thompson 2013; Üstüner and Holt 2010) focuses on situation of normal market practices. In these situations, consumers affirm their identity rights by using (or boycotting) products and brands, and by adopting consumption practices as identity markers. Yet, the marketplace inertia tends to weaken and postpone the effects of the consumer identity political change. A brand crisis brings instead a sudden and serious break in the normal life of a brand and thus opens the opportunity for a radical change in the brand meanings and it may represent an occasion for the stigmatized segments to prove their discrimination and assert a change in society.

Conventional crisis communication adopts a Public Relations approach (Coombs 2007). This top-down managerial approach is effective and consolidated. However, social media publics ask for a renewed mindset that would take into account the power of the audience. Social media require companies to adopt a stakeholder theory (Xu and Li 2013) to approach crisis communication, so that what the audience say about the crisis is as relevant as what the organization says. The research question is how consumers debate online around the apology by the company after an ethical brand crisis.

In 2013, during an interview, the president of the Barilla group expressed a view that triggered intense protests. According to his declaration, the advertising by Barilla will never feature a family of gay persons, because the brand Barilla – though it respects gays – would represent the traditional idea of family. After the interview, Guido Barilla released a video where he apologized and reassured that he and the company have the utmost respect for gays.

Through a qualitative content analysis (Spiggle 1994; Strauss and Corbin 1990), using Atlas.ti, we analyzed the Facebook comments published for a period of three months under the video of apologies by Barilla. The corpus of data is made of 41.000 words. We complemented the content analysis with an examination – inspired by netnography (Kozinets 2015) – of the online material generated around the crisis.

A good part of the comments obviously concerns in a direct way the issue of civil rights. Other comments take a different approach in their defense or criticism of the brand. Comments expressing agreement with the Barilla position adopt two major discursive strategies: sublimation and minimization of the crisis. In the first strategy (sublimation), commenters defend the right of the brand representative to express any opinion, even unpopular and questionable ones. Minimization consists in considering the statement by Barilla simply as a marketing strategy that would be neutral in terms of ethics, reducing the crisis to a simple marketing affair without a real infringement of ethics. The critics combine and reverse the sublimation and reduction strategies employed by the brand defenders. In this critical position, marketing is not a simple company function detached from ethics;

marketing is instead a powerful ideology (Firat 2012), that has to be updated and cleaned from biases. The two sides of sublimation and minimization are tied together by critics to affirm a holistic vision of marketing, which should express the higher values of civil rights through its tools and techniques.

The online audience here analyzed does not show the dynamic of change in their rhetorical positions, differently from professional stakeholders directly touched by a crisis (Vallaster and von Wallpach 2013). The online interaction is often limited to reiteration of one's own opinion and a series of attacks and counter-attacks with no further articulation. There is no synthesis, but rather a positional battle of opposing ideas. This structure of the conversation may be due to the structure of the social network analyzed. On social networks, in occasion of a crisis, it may happen that comments add to each other, without a real interaction and there is a risk of polarization (Yardi and boyd 2010), preventing the formation of a discussion generating new ideas that synthesize opposite views.

The emerging findings may provide some contributions. First, in most extant studies, the subjects affirm their identity politics via a personal use of products (Sandikci and Ger 2010; Scaraboto and Fischer 2013; Thompson 2013; Üstüner and Holt 2010). In the case examined, the subjects are not necessarily consumers of the brand; they are interested in the ethical issues raised during the crisis. In addition, the product (pasta) is a fast-moving consumer good, which is not able per se to signal the identity project of the individual. In this situation, the subjects focus more on the ethical discussion and less on product-related issues. Differently from other more complex products, fast-moving consumer good may have less intense ethical or political underpinnings. The crisis gives the opportunity to reassert that a product is just a product (the reduction strategy of the brand defenders) or, on the contrary, to discover that fast-moving consumer goods can be useful to a project of consumer identity politics. The unfolding discussion can be a rich elaboration of different positions. Second, to affirm their legitimate identity, consumers normally build a whole lifestyle through many brands. In the case of the brand crises, consumers pick one single brand and a specific crisis and scale it up to a wider discussion. Consumption in a normal setting seems to need an aggregation of different brands to state an identity position, while a brand crisis allows for a sharper focus on a single brand, used to state a wide identity politics strategy.

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Old, But Gold! The Role of Aging Stereotypes on Consumers' Purchase Intentions in Second-Hand Marketplaces

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EXTENDED ABSTRACT

The global population is aging. Due to a combination of increased life expectancy and reduction in fertility rates (Lutz et al. 2008), the percentage of people over 60 years old is expected to double in the next few years (United Nations 2013). Therefore, marketers should be attentive to this new growing market of senior consumers.

The online presence of seniors is rapidly expanding as well. In Europe alone, Internet usage has doubled among people over 65 years old (Edwards et al. 2015). The “silver surfers” are increasingly subscribing to online social networks (Choudrie and Vyas 2014) and also turning to Internet to earn additional income (Winch 2014).

Online second-hand markets are one of the fastest growing markets (Walia and Zahedi 2013). Websites such as Ebay and Amazon are just a few examples. Such markets are peculiar to the extent that available products are pre-owned by someone that buyers rarely know. Evidence suggests that people perceive certain invisible properties of previous owners to be transferred to goods (Kapitan and Bhargava 2013).

Age is one of the three primary dimensions of interpersonal categorization (North and Fiske 2012). Previous research shows that consumers often use stereotypes as heuristics to judge elderly people (Fiske et al. 2002; Cuddy, Norton and Fiske 2005), both in positive (e.g. warm) and negative ways (e.g. less competent) (Couto and Koller, 2012). In addition, the theory of consumer contamination (Argo, Dahl and Morales 2006, 2008) suggests that a physical contact between a product and a given source (e.g. person) can contaminate the referred product with the source's essence (Argo, Dahl and Morales 2006, 2008).

In this scenario, does the seller's age has an impact on consumers' purchase intentions toward a second-hand product? Considering the mixed-nature of age stereotypes, to what extent does an elderly seller contaminate their used goods? Does the contamination lead to a positive or negative outcome in terms of purchase intentions?

In study 1, we primed participants with a picture of either a young or an old seller of a second-hand product. Participants saw the same product and the same details for the seller (e.g. seller rating). We used purchase intentions as the main dependent variable. A one-way ANCOVA using physical attractiveness as a covariate shows a significant main effect of age condition on purchase intentions. Participants showed higher intentions to purchase the armchair when the seller was an old (vs. young) lady.

In study 2, we use a similar procedure as in study 1. To control for seller attractiveness, in this study we use a written description of the seller. Again, we used purchase intentions as the main dependent variable and included interpersonal warmth as a mediator. The results suggest a positive effect of seller's age on purchase intentions toward a second-hand product. Using a 5,000 bootstrapped samples (Preacher and Hayes 2008; Zhao, Lynch, and Chen 2010), results show that age has a marginally significant effect on purchase intentions ($\beta = 0.37$; $t(114) = 1.88$, $p = .06$). Additionally, the effect of interpersonal warmth on purchase intention is significant ($\beta = 0.38$; $t(114) = 2.68$, $p < .01$). Finally, when controlling for interpersonal warmth, age no longer has a significant impact on purchase intentions

($\beta = 0.28$, $t(114) = 0.93$, $p > .3$), which confirms that interpersonal warmth mediates the effects of age condition on purchase intentions (95%, CI 0.005 to 0.3783). These findings suggest that consumers have higher intentions to purchase second-hand goods that were pre-owned by senior (vs. young) people.

While referring to the warmth dimension in elderly stereotyping, it is interesting to test boundary conditions. Prior research connects social exclusion with warmth-seeking behavior (Zhong and Leonardelli 2008; Li and Liao 2013). When a person is feeling lonely and socially excluded, he/she literally experiences interpersonal coldness, which leads to a need for warmth (Zhong and Leonardelli 2008). Thus, in situations where consumers feel socially excluded, it is expected that senior sellers of second-hand products will be preferred because they would be perceived as adding a warmth dimension to the product. That is, because social exclusion prompts consumers to search for social warmth, an older seller with a stereotypical image of warmth would better fulfill the need of socially excluded buyers. In contrast, those who do not feel socially excluded are not likely to be in a great need for warmth.

Study 3 uses a 2 (seller age: young vs. old) x 2 (social exclusion: excluded vs. control) between-subjects experimental design. The experimental procedure was very similar to the one of study 1 (using pictures). To manipulate social exclusion, we asked participants to take part in an unrelated task, which consisted in the “Southampton Loneliness Scale” (Wildschut, Sedikides and Cordaro 2011). Once the participants completed this task, we gave them their Loneliness Score. Participants received either a negative result (informing that they scored above the average on loneliness compared with the other undergraduates) or a positive result (informing that they scored very low on loneliness compared with the other undergraduates). Then, participants gave their opinion about a second-hand product (an armchair) that was being sold on Ebay. We used purchase intentions as the main dependent variable. A two-way ANOVA showed a marginally significant interaction between sellers' age and social exclusion conditions on purchase intentions ($F(1,106) = 3.41$, $p = .068$). When feeling socially excluded, participants showed higher intentions to purchase the armchair when the seller was an old lady ($M_{\text{young}} = 1.50$; $M_{\text{old}} = 2.06$; $F(1,106) = 3.02$, $p = .085$). However, when participants do not feel socially excluded (i.e. control condition) the preference for the old seller dissipates ($M_{\text{young}} = 1.98$ and $M_{\text{old}} = 1.71$; $F(1,106) = 0.76$, $p = \text{NS}$).

Finally, across three studies we provide preliminary evidence that the age of the seller in second-hand markets has an important role on consumers' purchase intentions. Specifically, the results show higher purchase intentions toward a product that was pre-owned by a senior (vs. young) seller and perceived interpersonal warmth mediates this effect.

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Does Suspense Spur or Hamper Consumer Creativity?

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EXTENDED ABSTRACT

A mixed emotion arises from simultaneously experiencing two or more discrete emotions opposite in valence (Aaker, Drolet, & Griffin, 2008). Any time consumers decide to engage in a creative activity (i.e., when they solve an ill-defined problem), they are accepting ambiguous conditions that often foster mixed emotions. Then, their creativity may be influenced by such mixed emotions.

Past research focuses mainly on the effect of univalent emotions on creativity. Positive emotions facilitate creativity (Amabile, Barsade, Mueller, & Staw, 2005; Baas, De Dreu & Nijstad 2008; Isen & Daubman, 1984) while negative emotions do so under certain circumstances (Baas, De Dreu, & Nijstad, 2008; Van Kleef, Anastopoulou, & Nijstad, 2010). Little effort has been made, however, to examine how mixed emotions influence creativity (for exceptions, Amabile et al., 2005; Fong, 2006). This research examines the relationship between consumer creativity and suspense as a mixed emotion.

Suspense is a mixture of hope and fear (Alwitt, 2002; Madrigal & Bee, 2005) which is coupled with “a cognitive state of uncertainty” (Ortony, Clore, & Collins, 1990, p.131), frequently arising in consumption settings (Alwitt, 2002; Madrigal & Bee, 2005; Moulard, Kroff, & Folse, 2012). For example, when assembling an IKEA do-it-yourself product, h/she may feel hope (a positive emotion) in the prospect of successfully assembling and benefiting from the product. At the same time, h/she may feel fear (a negative emotion) as h/she is uncertain of how to assemble the product.

Suspense may bring about a psychological discomfort or conflict as its two components, hope and fear, are opposite in valence (Hong & Lee, 2010; Williams & Aaker, 2002). To resolve the felt conflict, the consumer may adopt a flexible mindset, which enhances his/her creativity (Huang & Galinsky, 2011; Miron-Spektor, Gino, & Argote, 2011).

Four online experimental studies were conducted, using Amazon’s Mechanical Turk (MTurk). In Study 1, 92 participants were randomly assigned to either of the two conditions (suspense vs. control) in a between-subjects design. The suspense group read a scenario, recalled similar life events, and described them in writing. Then, creativity was measured by using the method of Duncker’s candle problem (Duncker & Lees, 1945). Results show that the suspense group felt hope, fear, suspense, and emotional ambivalence more than the control group. A logistic regression analysis indicates that more participants correctly solved the candle problem in the suspense condition (23/44, 52%) than the control condition (15/48, 39%; $\chi^2(1, 92) = 4.21, p < .05$).

Study 2 differs from Study 1 in the ways of mood induction and creativity measurement. 122 participants were randomly assigned to either of the two conditions (suspense vs. control) in a between-subjects design. A gambling task was applied to arouse suspense. The winning probability and amount differ between the two groups. Then, the participants were asked to list in writing as many creative uses for a block of brick within three minutes. The creative uses listed by each participant were evaluated in terms of novelty, meaningfulness, and fluency (Amabile et al., 2005; Moreau & Dahl, 2005). Results show that the suspense group is higher in novelty ($M_{\text{suspense}} = 3.07$ vs. $M_{\text{control}} = 2.97; p < .05$), meaningfulness ($M_{\text{suspense}} =$

5.05 vs. $M_{\text{control}} = 4.69; p < .01$), and fluency ($M_{\text{suspense}} = 7.30$ vs. $M_{\text{control}} = 6.02; p < .05$) than the control group.

Study 3 compares suspense with multiple univalent-emotions in consumer creativity. 191 participants were randomly assigned to one of the four conditions (suspense, happy, sad, and affect-neutral) in a between-subjects design. For mood induction, participants were asked to recall and describe an affectively charged past experience corresponding to the condition to which they were assigned. Ten problems from the Remote Associates Test (RAT; Mednick, 1962) were used to measure consumer creativity. Each problem presents three seemingly unrelated words (e.g., Cottage, Swiss, Cake), and asks participants to think of a fourth word that relates to all three words (e.g., Cheese). Results show higher creativity scores in the suspense condition ($M = 7.22$) than in the sad ($M = 5.83, p < .001$) and control conditions ($M = 6.18, p < .002$). The creativity difference between the suspense and happy conditions ($M = 6.63$) is marginally significant ($p = .059$). In addition, the happy condition produced higher creativity scores ($M = 6.63$) than the sad condition ($M = 5.83, p < .05$).

Study 4 aims to identify a mediating role of felt conflict between suspense and creativity. 118 participants were randomly assigned to either of the two conditions (suspense vs. control) in a between-subjects design. The mood manipulation procedure in Study 2 was used to induce suspense, and creativity was measured by using the method in Study 3. Participants were asked to rate how much conflict they felt while describing the life events they had recalled (1 = not at all, 11 = very much; $\alpha = .84$). Results show that the creativity score is higher in the suspense group ($M = 5.94$) than the control group ($M = 5.10; p < .05$). A mediation analysis reveals that felt conflict significantly ($CI = -.22$ to $-.06$) mediates the effect of suspense on consumer creativity (Preacher & Hayes, 2008).

Findings of the four studies indicate that suspense enhances consumer creativity via felt conflict. Results provide a basis for further work on how mixed emotions relate to consumer creativity. In this aspect, it is important to discuss shortcomings of the four studies and directions for future research. This discussion is developed mainly in four ways as follows.

First, online experiments compromise internal validity and thus laboratory experiments should be considered in future studies. Second, mediators between felt conflict and creativity need to be examined. For example, a flexible or an abstract mindset to resolve felt conflict could be a mediator. Third, future studies should attend to mixed emotions other than suspense (e.g., guilty pleasure, bitterness). Lastly, mixed emotions may be felt and interpreted differently across cultures (William & Aaker, 2002), and thus cultural factors should be considered in future studies.

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Preference Versus Freedom: Two Psychological Meanings of Scarcity and Their Influences on Consumer Choice

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EXTENDED ABSTRACT

Marketers frequently use scarcity appeals, such as “while supplies last” and “nearly sold out.” The key message is that product units will soon become unavailable. However, some natural settings may create the feeling of scarcity even when item units are not limited. For example, a store may offer a price discount on only a subset of the entire product category. In this case, even assuming that all sale and non-sale items are fully stocked, the restricted sale promotion may make consumers feel that options available for sale are scarce. Despite this conceptual distinction, prior literature has largely focused on unit scarcity, concealing potential differential effects of the two types of scarcity behind the broad label of “scarcity effects.” This article seeks to address this issue by examining how they may exert different influences on consumer choice, particularly their tendency to seek variety.

We posit that *unit scarcity* and *option scarcity* may trigger distinct psychological processes. Based on the finding that scarcity (as operationalized by limited availability of units) polarizes preferences (Zhu and Ratner 2015), we argue that unit scarcity highlights one’s preferences, leading consumers to narrow their item selections to choices that they strongly prefer. Conversely, option scarcity highlights consumers’ freedom of choice (Kim and Drolet 2003), leading them to widen their item selections to re-attain their restricted behavioral freedom (Brehm 1966). Accordingly, we propose that unit scarcity decreases choice variety, while option scarcity increases choice variety.

Study 1 (N=489) tested and contrasted the two scarcity effects. Participants in the control condition read a scenario about a store offering a price discount on 9 soda brands (with pictures), all of which were fully stocked. Participants in the option scarcity condition read the control scenario and were also told that the store had been offering the discount on all of its 21 soda brands but starting this week the discount is limited to 9 brands. Participants in the unit scarcity condition read the control scenario, but were told that there are not many units remaining for each brand. To control for potential confounds due to varied set sizes/brands, the same choice set was used in all three conditions. Participants then indicated which brand(s) of soda and how many bottles of each they would select. There was no restriction on total purchase quantity. Two choice variety measures were used: (1) proportion (i.e., number of different brands chosen relative to total number of brands); and (2) Herfindhal index (Nowlis et al. 2010). The Herfindhal index measure was additionally used because it controls for purchase quantity. As predicted, the results using the proportion/Herfindhal index revealed that compared to those under no scarcity (control), participants made a less varied selection of soda brands under unit scarcity ($F(1, 330) = 8.89/5.19, p < .01/.05$; for proportion/Herfindhal-index, respectively), while participants made a more varied selection of soda brands under option scarcity ($F(1, 321) = 9.12/10.56, p < .01/.01$), supporting the existence of two scarcity effects that exert opposite influences on variety seeking.

Study 2 (N=191) provided real-world evidence for the proposed scarcity effects. A field experiment was conducted at an Asian supermarket. Four brands of cookies were selected as the target brands, and were placed together in an endcap display. A total of 411 boxes of cookies across 191 purchase cases were checked during a two month period. The control (product display) setting only used a regular sale tag. The unit scarcity setting used, in addition to the regular

sale tag, a tag saying “Limited Quantity.” One option scarcity setting used, in lieu of “Limited Quantity,” a tag saying “Sales Limited to Four Flavors.” A second option scarcity setting only included three out of the four brands of cookies and only used the regular sale tag as in the control setting. As earlier, the unit scarcity setting yielded less choice variety than did the control setting ($F(1, 94) = 5.86/6.69, p < .05/.05$ for the proportion and Herfindhal-index variety-seeking measures, respectively), while the option scarcity setting yielded more choice variety than did the control setting ($F(1, 91) = 4.95/5.37, p < .05/.05$, for first option scarcity setting; $F(1, 85) = 14.54, p < .01$, for second option scarcity setting).

Study 3 (N=290) examined participants’ focus on preference (for unit scarcity) and focus on freedom of choice (for option scarcity) as factors underlying the relation between the two types of scarcity and variety seeking. Separate mediation analyses were conducted for each process. The indirect negative effect of unit scarcity on choice variety was significantly mediated by focus on preference (95% CI = [.0010, .0281]/[.0017, .0414] for the two variety-seeking measures). The indirect positive effect of option scarcity on choice variety was significantly mediated by focus on freedom of choice (95% CI = [.0005, .0279]/[.0035, .0212]).

Study 4 (N=570) examined the presence of the favorite option as a boundary condition. If our theorizing regarding the process is correct, we should observe both scarcity effects only when the favorite option is included in the set. A 3(type of scarcity: control vs. unit scarcity vs. option scarcity) x 2(inclusion of favorite: favorite included vs. favorite not included) design was used. As expected, there was a significant interaction between scarcity and inclusion of favorite ($F(2, 564) = 3.07, p < .05$; proportion measure). Both scarcity effects were replicated when the favorite was included ($F(1, 210) = 2.87, p < .08$ for unit scarcity; $F(1, 228) = 4.20, p < .05$ for option scarcity). However, scarcity had no impact on variety seeking among participants whose favorite was not present ($F_s < 1$).

To conclude, our work extends the scope of scarcity research by conceptualizing a new dimension of scarcity. Further, it provides an integrative framework suggesting why unit scarcity decreases variety seeking (preference mechanism), while option scarcity increases variety seeking (freedom mechanism). A successful manipulation of option scarcity in the retail environment may provide potential benefits, including balanced sales, prevention of stock-outs, inventory cost reduction, and customers’ increased frequency of visiting the store.

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Don't Believe the Hype

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EXTENDED ABSTRACT

Championships. Series finales. Award shows. Televised events that draw millions of viewers. Many viewers—even those without intrinsic interest—tune in because of the surrounding *hype*: intense, coordinated, multi-pronged, and exaggerated publicity efforts driven by commercial interests. Indeed, millions of people who care little about boxing, period dramas, or filmmaking watched Mayweather fight Pacquiao, the *Mad Men* finale, and the Academy Awards. We ask how consumers' decisions to give in to the hype (or not) affect their well-being.

There are good reasons to believe that hype both helps and hinders well-being. On one hand, pursuing hyped events can expose people to novel experiences (Keinan & Kivetz 2011), allow them to bond with others through a shared experience (Bhargave & Montgomery 2013), or simply draw their attention to something that they otherwise might have missed. However, hype can also inflate expectations and lead to disappointment (Anderson, 1973; Oliver, 1980; Mellers and McGraw 2001). Social pressure to experience hyped events and a “fear of missing out” (aka fomo; Grohol 2011) might cause people to switch away from activities that are more in line with their interests, goals, and values.

Our inquiry examines responses from nearly 7,000 people, across 16 hyped television events. We found that people who experienced hyped events reported less positive effects on their well-being than people who engaged in alternative activities. While the magnitude of the difference varied based on individual preferences, the effect persisted in all but the most extreme cases.

Although giving in to the hype did not improve people's well-being compared to pursuing alternative activities, there was one exception: social well-being. Drawing from recent work in positive psychology demonstrating the importance of considering well-being as an evaluation based on multiple distinct dimensions (Baumeister, Vohs, Aaker, & Garbinsky 2013; Seligman 2011), we examined effects on each dimension separately and found that engaging in hyped (versus alternative) events could benefit well-being by way of social relationships. This effect occurred primarily when participants' experiences were solitary. It seems that when people are alone, hyped events offer a kind of shared experience that is socially rewarding. We find support for this effect using both correlational (Study 1) and experimental (Study 2) data.

The first study was a long-term field survey conducted across 15 hyped events. The first event occurred in February of 2015 (Super Bowl XLIX) and the last event occurred in November of 2015 (final game of the World Series). We recruited all participants ($n = 6,406$, $M_{Age} = 33.4$, 60% male) on Amazon's Mechanical Turk (MTurk) via study postings that specifically recruited people who had watched the hyped event or done something fun and entertaining for themselves in the previous 24 hours. We find that engaging in a hyped versus alternative activity has significant negative effects on well-being. This pattern of results is diminished but persists when hyped activities are social and alternative activities are not, and is diminished but never reverses when participants are general fans of the event or fans who “won.” However, hype does seem to offer unique social benefits for some people. When we analyzed the effect of engaging in hype on the distinct underlying dimensions of well-being, we found that solitary participants found hyped events to be more beneficial than alternative activities when it came to social well-being.

In our second study, we examined whether it is possible to improve people's experience with hyped events by drawing their attention to the social elements of the experience. This study was a three-part quasi-experimental field study, with data collected before, during and after a single hyped event: Super Bowl 50. The first survey occurred before the game started. We asked participants whether or not they planned to watch the Super Bowl. We randomly assigned participants who indicated they planned to watch the Super Bowl to one of two conditions, one featuring instructions to focus on the specifics of the game and another featuring instructions to focus on the social aspects of watching the game. We conducted our analyses using only participants who watched the game and thus, received our manipulation ($N=485$). Our analyses supported our prediction. A mixed effects model allowing for random effects of participant and time period during which the measure was taken revealed a significant interaction of the manipulation to focus on the details of the game or the social elements of the game and whether participants watched the game alone or with others ($t(442.07) = -2.38, p = .02$). Decomposing the interaction, we find that when participants watched the game alone, focusing on the social benefits of the game resulted in higher reported well-being than focusing on the details of the game ($t(120.79) = 2.37, p = .02$) while the manipulation had no effect when participants watched the game with others ($t(20.09) = -0.6, p = .57$). Analyses for each time point using a simple linear model revealed consistent results both using only half time responses (half time: interaction $t(234) = -2.13, p = .03$, condition simple effect among participants who watched alone $t(234) = 2.28, p = .03$, condition simple effect among participants who watched with others $t(234) = -0.10, p = .71$), and using only post-game responses (half time: interaction $t(395) = -1.80, p = .07$, condition simple effect among participants who watched alone $t(395) = 1.61, p = .11$, condition simple effect among participants who watched with others $t(395) = -0.82, p = .41$).

Hype is everywhere, but modern life also features a tremendous amount of choice over how we spend our time. Giving into the hype comes at a cost, most notably the opportunity cost of not pursuing other non-hyped, intrinsically motivating interests. Given the limited benefits of hype, our data lend themselves to a straightforward recommendation: unless you are alone and want to feel connected to others, don't believe the hype.

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Volume Estimation as Simulated Judgment

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EXTENDED ABSTRACT

While standing in line at a coffee shop, consumers can eye different-sized cups on display, trying to determine which size looks ideal. While at a container store, consumers may peruse various storage boxes, trying to determine which is the right size to store the junk that has been accumulating on one's dining room table. Previous research has examined different sources of bias when estimating volume—either the shape of the object to be judged (e.g., Anderson & Cuneo, 1978; Wansink & van Ittersum, 2003; Ordabayeva & Chandon, 2013), or the psychological states of the judge (Cornil, Ordabayeva, Kaiser, Weber, & Chandon, 2014). Although such work has identified robust sources of estimate error, they largely remain “as-if models”—algorithms that can predict when consumers' judgments will err, but that remain agnostic about the actual process by which those judgments are made. We instead propose a specific mental process by which volume estimations often unfold, thereby allowing us to make two novel predictions about what biases such judgments.

We posit that volume estimation is often made through *simulated judgment*. This proposal draws on diverse literatures that converge to suggest the key role of mental simulation in judgments and forecasts. For example, features that make it easier to imagine what global warming would feel like can make the simulations seem sharper and thus more likely (Risen & Critcher, 2011). Closer to physical judgments, Proffitt and colleagues (1996, 2003) demonstrate that being weighted down makes hills appear steeper: Because the weight would make the climb more difficult, people simulate the climb (and thus the slope) as steeper.

Building on these literatures, we suggest that estimating a receptacle's volume can involve simulating an interaction with it: how much one can imagine pouring into the container. But given that pouring happens with the flow of gravity—from top to bottom—we suggest that two features can (and do) influence such judgments. First, we hypothesize an *orientation effect*—that the same glass will appear bigger right-side-up than upside-down. We test whether this is explained by the simpler mental simulation of filling an upright cup. Second, we posit a *cavern effect*—that imagining pouring through a narrow top into a wide base (as though into a cavern) makes the volume seem bigger than pouring through a wide top into a narrow base. More precisely, we suggest that—all else equal—a container with a small top-to-base ratio will look bigger than one with a large top-to-base ratio.

Study 1 focuses on the *orientation effect*. Participants ($N = 302$) were presented with a sequence of 24 images of 12 actual glasses (taken from Google Images) that varied in shape (e.g., plastic cup, coffee mug, stemless wineglass), size, and color. Each image was presented twice—once right-side-up, and once upside-down. In all studies, participants saw a reference cylinder of a specified size (in order to make the scaling clear) before being shown the target cup. Consistent with hypotheses, the exact same cup looked bigger when right-side-up than upside-down $t(5989.90) = 2.92, p = .004$.

Study 2 ($N = 250$) built on Study 1 in two primary ways. First, whereas Study 1 used images of actual glasses (for purposes of external validity), Study 2 used computer-generated images. This allowed us to hold the shape of a cup constant, but vary whether the wide or narrow end was depicted as the open top or the closed base. Second, we modified the images so that the cup appeared empty, or entirely full of water. We then asked participants how much they could pour into the *empty* cup, or pour out of the *full* cup. We observed main effects of orientation and the top-to-base ratio, $t_s > 4.70, p_s < .01$,

consistent with the orientation effect (right-side-up cups looked bigger) and cavern effect (cups with narrow tops and wide bases looked bigger), respectively. Showing the key role of simulation in these judgments, both effects were larger when participants imagined filling up (as opposed to emptying) the cup, $t_s > 4.19, p_s < .01$.

Study 3 ($N = 209$) delved more deeply into both the orientation and cavern effects. First, we asked participants about the ease of the simulation (“To what extent did you find it easy or difficult to mentally simulate filling up the cup?”) Participants' higher volume estimates of right-side-up cups were partially mediated by simulation ease. Second, we held the volume of the cups constant, but varied the top-to-base ratio. This permitted us to observe that the cavern effect emerges only when there is a sufficient mismatch between a narrow top and wide base (versus the reverse), and not from the size of the top or base alone.

Study 4 ($N = 388$) more precisely tested the role of mental simulation (versus mere container shape) in producing the cavern effect. Participants saw open or lidded cups. In filling an open cup, the size of the top is the size of the aperture through which the cup can be filled. But for the lidded cups, which always included only a small hole through which to fill the cup, this link was disrupted. Showing the key role of simulated judgment (as opposed to mere shape), the lidded nature of the cups moderated the cavern effect: narrow tops and wide bases exaggerated the size of containers, but only when open.

Although considerable attention has been given to biases in psychophysical judgments, the present work is among the first to propose a specific psychological process by which such judgments are made. The present findings suggest that restaurant and store owners would do well to display containers right-side-up. Furthermore, packaging designers may be wise to design products with low top-to-base ratios (e.g., Yoplait yogurt) as opposed to the reverse (e.g., snowcones). Through this talk, we will emphasize the complimentary roles that basic and applied research can play: Only by offering and testing a new theoretical process account of how volume estimation unfolds were we able to make predictions for what externally-valid features should distort such judgment.

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Education, Liberalism and Consumers' Response to Luxury Brands

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EXTENDED ABSTRACT

This research examines the relationship between education and consumers' response to luxury brands. Previous research finds that people who are higher in education are more likely to hold liberal values compared to those with less education (Deary, Batty, and Gale 2008; Hastie 2007; Pascarella and Terenzini 2005). Social liberalism is defined as being concerned about equality and having the desire to act in a socially responsible manner (Graham, Haidt, and Nosek 2009).

While highly educated people are more likely to be socially liberal, evidence suggests that luxury brands are inconsistent with liberal values. Although there are positive associations with luxury brands, they are also associated with excess, exclusivity, wealth, and self-enhancement (Dubois, Czellar, and Laurent 2005; Torelli, Monga, and Kaikati 2012). Luxury consumption can lead consumers to choose personal interests over the concern about the society (Chua and Zou 2009), which adds to the perception of luxury as undemocratic and elitist. Additionally, luxury consumption is often considered a selfish behavior (Griskevicius, Tybur, and Van den Bergh 2010). These negative concepts associated with luxury brands are inconsistent with liberal values, the values of highly educated consumers.

When people evaluate a target, they often form their judgment by comparing the target to relevant information in memory, such as one's personal beliefs and values (Markus 1977). These concepts can serve as a standard for evaluating the target (Tourangeau and Rasinski 1988). When a target is inconsistent with the standard of comparison, it often results in a contrast effect such that judgment of a target shifts away from the standard (Schwarz and Bless 1992). In the context of a luxury brand, this suggests that when people judge how socially conscious a luxury brand is perceived to be, they may form their evaluation by comparing the luxury brand to their personal values. Thus, we predict that:

Hypothesis 1: Consumers with higher education will perceive luxury brands to be less socially conscious compared to those with less education.

Hypothesis 2: Liberalism mediates this relationship.

Luxury brands, however, are increasingly positioning themselves as socially responsible (e.g. Davies et al. 2012). Our theory suggests that highly educated consumers may be more responsive to a luxury brand that adopts a socially responsible positioning strategy. As stated, when judging how socially conscious a luxury brand is perceived to be, consumers use their values as a standard of comparison. When a luxury brand is positioned as socially responsible, the brand's positioning is consistent with liberal values. When a target is consistent with the standard of comparison, it often results in an assimilation effect such that the judgment of the target shifts toward the standard. Thus:

Hypothesis 3: Consumers with higher education will perceive a socially responsible luxury brand to be more socially conscious compared to those with less education.

Hypothesis 4: Liberalism mediates this relationship.

Study 1 (N=319) employed a 2 (luxury vs. non-luxury brand) by 2 (real vs. mock brand) between-subjects design. In the real brand, luxury (non-luxury) condition participants saw an advertisement for Gucci (Zara). We included a mock brand (Rami) as a replicate. Participants indicated the extent to which they associated the brand with social justice, social well-being, and social concerns. Education was measured with a 5-point scale. In a regression, we found the predicted interaction between education and brand positioning ($\beta = -.14$, $t(311) = -2.25$, $p < .05$). In the luxury brand condition, education had a negative and significant effect on perceived social consciousness, supporting H1. Education did not have a significant effect for the non-luxury brand. The three-way interaction was not significant.

Study 2 (N=178) employed a 2 (control vs. socially responsible) between-subjects design. Education was measured. Liberalism was measured with two items (social and political liberalism). Participants then saw one of two ads for Parmigiani Fleurier watches. The control ad promoted typical luxury brand attributes. The socially responsible ad promoted commitment to social equality. Participants indicated the brand's social consciousness on the same previous scale. We found the predicted interaction between education and positioning ($\beta = .37$, $t(174) = 2.81$, $p < .01$). When participants saw the control ad, education had a negative and significant effect on the luxury brand's social consciousness. Consistent with H3, when participants saw the socially responsible ad education had a positive and marginally significant effect. We also found an interaction between liberalism and positioning ($\beta = .23$, $t(174) = 3.45$, $p < .001$). When participants saw the control ad, liberalism had a negative and significant effect, but when participants saw the socially responsible ad, liberalism had a positive and significant effect. Mediation analysis suggested that liberalism mediates both in the control condition and in the socially responsible conditions.

Study 3 (N=150) employed a 2 (control vs. socially responsible) by 2 (high vs. low liberal values) between-subjects design. We primed liberal values. To manipulate brand positioning participants saw one of two ads for the Rolex brand of watches similar to the previous study. Participants completed the same previous social consciousness scale. An ANOVA revealed a main effect of positioning and the predicted interaction ($F(1, 146) = 11.00$, $p < .01$). When liberal values were high, those exposed to the socially responsible (vs. control) ad perceived Rolex as more socially conscious. When liberal values were low, perceptions of Rolex' social consciousness were not significantly different.

Study 4 (N=934) was a survey. We measured perceived social consciousness, willingness to buy luxury products with two items, willingness to spend on luxury brands, and actual behaviors regarding luxury brands with three items. Regressions showed a negative and significant effect of education on perceptions of luxury brands as socially conscious, willingness to buy luxury brands, willingness to spend on luxury brands, and actual behavior regarding luxury brands (all $p < .05$). Perceived social consciousness mediated the effect of education on behavioral measures.

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Gift-giving an Identity: The Effect of Gifts on Receiver Identity

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EXTENDED ABSTRACT

Existing work on gift-giving has tended to focus on how and why givers' choose the gifts that they do. One of the central findings of this research is that givers frequently choose gifts for their symbolic meaning (Belk 1976; McCracken 1986). Gifts can be chosen to communicate a valued relationship (Sherry 1983), shared identities and interests (Larsen and Watson 2001), and even how the giver would like the receiver to perceive them (Larsen and Watson 2001). Little research, however, has examined the impact of such gifts on receivers, despite several calls for more research on this topic (Joy 2001; Larsen and Watson 2001; Minowa and Gould 1999).

The current work suggests that receivers often see gifts as indicative of how the giver views them. Receiving a certain team's hockey jersey, for example, suggests that the giver perceives the receiver as a fan. Or receiving a coffee cup suggests the giver must view the receiver as a coffee drinker. And because gifts have the potential to convey such information (i.e., reflected appraisals; Tice and Wallace 2011), they should also be capable of affecting individuals' self-appraisals (Cooley 1902; Mead 1934; Shrauger and Schoeneman 1979). In short, the current work investigates the idea that gifts can alter aspects of individuals' identity because of what they convey about how others view them.

GIFTS AS REFLECTED APPRAISALS

Schwartz (1967) first suggested that gifts might act as "generators of identity," where at a young age parents use gifts to push gender identities (e.g., dolls for girls, guns for boys). Such gifts could potentially affect identity via selective exposure, but they could also affect identity by communicating information about how the giver perceives the receiver to be. This latter suggestion is consistent with the looking glass view of self, where individuals come to learn about themselves through the eyes of others (Cooley 1902; Mead 1934; Shrauger and Schoeneman 1979). According to this perspective, beliefs about how others view us (i.e., reflected appraisals) can directly influence how we see ourselves (i.e., self-appraisals).

Gifts should be capable of providing a very clear picture – from the receivers' perspective – about what the giver thinks of them. Even gifts that receivers dislike should presumably convey information about what the giver *thought* the receiver might like. As such, receivers might often see gifts as diagnostic of how the giver views them. This is not to say that this view is necessarily *accurate*. The giver may have chosen the gift for reasons that have nothing to do with what they thought the receiver would like. Our suggestion is simply that gifts are often likely to be seen as indicative of what a giver thinks the receiver would like, and therefore, that they provide information about how the giver views the receiver.

Given the possibility that gifts might be interpreted this way (i.e., as information about how one is seen by other people), we suggest that they provide a strong context in which to study the effect of reflected-appraisals on self-appraisals. Extant work has largely investigated this relationship in naturalistic settings, and therefore relied on correlational data, or else has examined contexts in which actual appraisals are highly ambiguous (e.g., Kenny and DePaulo 1993; Tice and Wallace 2003). Gift receipt is one context where we believe we might find evidence of the impact of reflected appraisals on self-appraisals. This would contribute to the gift-giving literature

by investigating the impact of gifts on receivers' reflected appraisals and, in turn, on identity formation, but would also contribute to the literature on reflected appraisals by providing an experimental demonstration of the role of reflected appraisals on self-appraisals.

OVERVIEW OF STUDIES

To test these ideas we conducted a series of studies examining how receiving gifts can influence both self-identity and beliefs about how the giver perceives the receiver (i.e., reflected appraisals). Across four experiments and a field study we find support for our predictions.

Experiment 1 demonstrated that receiving a team jersey (Experiment 1a) or a city branded mug (Experiment 1b) as a gift vs. receiving the same item as a randomly drawn prize increased gift-congruent identity and reflected appraisals. In other words, people who received these items as gifts vs. as a prize identified more strongly with the sports team (Experiment 1a) or city (Experiment 1b). This effect is mediated by the receiver's belief that the giver views the receiver as possessing the identity signaled by the gift (i.e., reflected appraisals).

Experiment 2 and 3 replicates the effect and demonstrates moderation of process by manipulating whether the gift is diagnostic for how the giver sees the receiver or not. Specifically, Experiment 2 found that the effect of receiving an identity-signaling gift on identity was larger when the gift was personal and not given to anyone else (diagnostic) compared to when the same gift was given to multiple people (non-diagnostic). Similar results were found in Experiment 3 where the effect of receiving an identity-signaling gift on identity is larger when given by a close (diagnostic) vs. distant (non-diagnostic) other. Evidence is provided that this moderated effect is mediated by the receiver's belief that the giver views the receiver as possessing the identity signaled by the gift.

Lastly, in Experiment 4 we examined this effect outside the laboratory in a natural experiment. Specifically, during the new naming of a business school in the Fall of 2015, students on campus were given t-shirts with the new name and logo by the schools' administration. Survey results later found that receiving the t-shirt (vs. not) resulted in higher self-identity perceptions aligning with the new school name.

CONCLUSION

Overall, by showing that gifts can drive recipients' identity, we highlight an important consequence of gifts from the receiver's perspective. Across five studies we provide evidence that receivers use gifts to inform them of how the giver views them. We demonstrate that these reflected appraisals can then influence how the receiver perceives themselves, influencing their own identity perceptions.

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Feeling Stupid About Nothing: Inferring Competence From Externally Caused Negative Outcomes

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EXTENDED ABSTRACT

It is easy to think of personally dissatisfying consumption experiences. Maybe it was from receiving horrible service at a restaurant, a product not living up to its claims, or being ripped off by a salesperson. In either case, these experiences are typically unexpected and essentially random. Sometimes, they just happen. Since they are firm-caused, consumers should not feel any self-blame (e.g., Folkes 1984; Weiner 1980; 1995; 2000). There is, however, research that has examined how victims of horrible crimes and diseases sometimes blame and feel worse about themselves for having these externally caused experiences. We seek to clarify this discrepancy and provide evidence for when people feel worse about themselves (i.e., decreased self-esteem and feel incompetent) following externally caused consumption outcomes.

In this current research, we argue that consumers can feel incompetent for firm-caused dissatisfying outcomes, while simultaneously feeling dissatisfied with the firm for causing the dissatisfying outcome. Although these ideas have not received much attention in the context of consumer decisions, there is variety of evidence in the victimization and health literatures that is consistent. For example, victims of rape typically take some responsibility for the attack (Littleton, Magee, and Axsom 2007). Similar attributions of self-blame have been shown for victims of spinal cord injury and cancer, even when the objective circumstances indicate the victim had little control over their outcome (e.g., Bearison et al. 1993; Bulman and Wortman 1977; Burgess and Haaga 1998; Davis et al. 1996; Fogel 2004; Glinder and Compas 1999; Malcarne et al. 1995). Overall, existing work has shown that victims of various misfortunes, from real life crime, accidents, and illness, will take some blame for what happened to them, even when the outcome was caused entirely by another party or was essentially random. From this, we ask, can consumers blame and feel worse about themselves for firm-caused dissatisfying outcomes? If so, when is this likely to occur? And what impact can this have on the consumer?

Reasons behind blaming the self appear to be mixed (Littleton et al. 2007). However, in the victimization literature, Davis et al. (1996), provides evidence that after controlling for causal attributions, individuals who perceived the negative outcome to be more avoidable were more likely to foster feelings of self-blame. This is because attributions of causality (i.e., the who or what that caused the negative outcome) should be conceptually different from what the victim believes they could have done in hindsight to avoid the negative outcome. We suggest many analogous situations can exist in a consumer context. For example, consumers having the freedom to choose whatever store they want versus being restricted in their choice will increase the perception that a negative outcome was, in hindsight, avoidable. From this, we predict that consumers will feel incompetent following firm-caused dissatisfaction when they believe, in hindsight, that they could have done something to avoid it. In other words, even though the consumer blames and is dissatisfied with the firm, under conditions of increased perceptions of avoidability consumers will also feel as an incompetent consumer.

SUMMARY OF STUDIES AND RESULTS

Three studies were conducted to demonstrate that firm-caused dissatisfaction can lead to feelings of incompetence (Study 1, 2, 3),

that this effect is moderated by perceived avoidability (Study 2 and 3), and that these perceptions can arise from truly random negative outcomes (Study 3).

In study 1, participants were asked to either describe four Satisfying or four Dissatisfying firm-caused consumption experiences they recently had for which the outcome was unforeseeable, unintended, unexpected, and/or they could not have planned for it to have occurred. Results find that recalling firm-caused dissatisfying experiences compared to satisfying ones increase self-reported feelings of incompetence ($M_s = 3.09$ vs. 2.42 ; $F(1, 60) = 6.77, p < .05$).

In study 2, participants read a scenario depicting them having a lot of time (Avoidable) or little time (Less-Avoidable) to make a necessary purchase that later turned out to be a firm-caused dissatisfying or normal experience. A significant Dissatisfaction X Avoidability interaction ($F(1, 96) = 7.55, p < .01$) indicated that the effect of a firm-caused dissatisfying experience on feelings of incompetence is smaller when the situation is perceived to be non-avoidable ($M_s = 3.92$ vs. 3.22 ; $F(1, 96) = 2.07, p > .10$) than when it is perceived to be avoidable ($M_s = 4.78$ vs. 2.68 ; $F(1, 96) = 39.81, p < .001$).

Study 3 was a behavioral experiment that manipulated participants actual outcome to be a random negative or neutral outcome and also manipulated whether the situation was perceived to be more vs. less avoidable. Specifically, all participants entered into a lab and were given a chocolate bar to keep. However, all participants then drew from a lottery (Avoidable) or had a ticket drawn for them (Less-Avoidable) to see if they would keep their chocolate bar or not. Results showed a significant Random Outcome X Perceived Avoidability interaction ($F(1, 131) = 4.17, p < .05$) indicating that the effect of randomly losing a chocolate bar, versus not, on feelings of incompetence is larger when participants pick their own lottery ticket ($M_s = 3.08$ vs. 2.33 ; $F(1, 131) = 8.47, p < .01$) and smaller when participants had their ticket picked for them ($M_s = 2.80$ vs. 2.79 ; $F < 1$).

CONCLUSION

These results demonstrate that consumers can feel incompetent for negative outcomes they did not cause. Since perceptions of competence is a central component to self-identity, self-esteem, and self-efficacy, demonstrating that this can be influenced by firm-caused dissatisfaction is very interesting. Existing research examining firm-caused dissatisfaction would assume the consumer to be a blame externalizer. However, we provide evidence that consumers' sense of self is fragile and under certain circumstances they can feel incompetent for essentially random and uncontrollable negative outcomes. Future research examining consumer reactions to firm-caused dissatisfaction should consider these findings and how feelings of incompetence can influence their reactions and future behaviors.

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Human Brand Identity Types and Dynamics: The Role of Incongruent Extensions and Legitimacy Mechanisms - The Case of Film Directors

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EXTENDED ABSTRACT

Professional human brands have become substantial research objects. Scholars have already focused on professional human brand building strategies (Parmentier, Fischer and Reuber, 2008, 2013; Dion and Arnould, 2016) but have neglected to raise the question of human brand identity evolution. This issue needs to be addressed, as branded individuals are seen undertaking incongruent extension strategies in their careers, which come to alter their human brand's identity.

Previous research suggests that only human brand identities resting on expertise associations (the chameleon conformist), or on expertise and creativity associations (the archetype) are viable (Parmentier et al., 2013). On the contrary, we assume that a human brand identity solely rooted in creativity associations can exist socially, and is thus also viable such as it is for artists (Becker, 1988) or charismatic creative persona (Dion and Arnould, 2011). Furthermore, we link the social existence of human brands to the legitimacy they hold (Arnould and Dion, 2013) in regards to various constituencies, that is, inside members of the industry (specific legitimacy), critics (bourgeois legitimacy) and the public (popular legitimacy) (Bourdieu, 1983). By conceptualizing incongruent extensions as sources of legitimacy loss/gain, the aim of our paper is thus to understand the legitimacy mechanisms which are activated by incongruent human brand extensions and which bring a branded individual to evolve from one professional human brand identity type to another. We focus on film director who are key human brands in the film industry (Kerrigan, 2010). We conduct two studies to answer two research questions: What are the professional identities available to human brands? What are the dynamics of professional human brand identities? The first study is based on an analysis of American Western film directors (1909-2011). The second study is based on in-depth interviews conducted among French film directors, critics, producers, and filmgoers.

Study 1

In order to have a comprehensive view of the existence of human brand categories, we chose to analyze American Western film directors by following a "study of context" approach (Askegaard and Linnet, 2011), that is by confronting personal trajectories to historical and institutional trajectories (Brown, Hirschman, and Maclaran, 2001). From an analysis of 570 American westerns, we identified four western waves (1909-1928: Silent Western movies; 1929-1962: Classic movie westerns and Golden age; 1963-1980: Era of anti-heroes; 1981-2011: Episodic movie westerns). In light of these cycles, we then analyzed the patterns of the 281 filmographies comprised in our database. We selected 20 film directors representative of the various patterns available and conducted deeper analysis of their filmographies with qualitative data (Eisenhardt, 1989).

Our results confirmed the existence of the two human brand identities present in the literature: (1) The "chameleon conformist" who builds its brand by directing highly commercial films (e.g. Andrew V. McLaglen). He forges his professional image by cultivating strong expertise and by giving evidence of performance. (2) The "archetype" director who makes films that fit into a pre-existing socially inscribed definition of the western genre. He follows the rules by cultivating his expertise but also bends them in a creative, yet legitimate manner (e.g. Ralph Nelson).

Our analysis also unveils two other film director types, supporting our assumption: (1) the archetype niche director whose identity rests entirely on the creative attributes of his atypical films (e.g. Fritz Lang) which appeal to a small public of film lovers; and (2) the film director influencing the social definition of the western genre (e.g. John Ford).

Study 2

We define human brand legitimacy as a sociological attribute through which a human brand is perceived as matching an identity inscribed in a socially constructed system (Weber, 1971; Suchman, 1995; Dion, 2013). We propose that film director human brands exist socially because they benefit mainly from specific, bourgeois and popular legitimacy (Bourdieu, 1983) allocated by producers, critics and the public. These different legitimacy types, and thus each human brand, evolve according to the characteristics and success of the director's newest film. But film directors often make incongruent extensions (Heckler and Childers, 1992): with an "unexpected extension", that is a film in a new genre (e.g. a thriller directed by a romance film director) or an "irrelevant extension", which is a film different from its director's original identity (e.g. a conformist film directed by a niche auteur film director).

In order to study the dynamics of professional human brand identities, we conducted eight in depth interviews, comprising 2 film directors, 2 producers, 2 critics and 2 film goers. Film directors were asked to give a detailed history of their careers, while other respondents were asked to create film director categories and extensively talk about directors' filmographies and changes in film director identities. We used the grounded-theory methodology (Glaser and Strauss, 1967) to analyze the data.

The 4-tiered professional human brand categorization emerged again, with the appearance of a new variable: eclecticism. Conformist (high specific legitimacy) and niche (high bourgeois legitimacy) auteur human brands appeared as non eclectic; auteurs for the masses (bourgeois and popular legitimacy) were mostly eclectic, and the consecrated (high specific, bourgeois and popular legitimacy) auteurs were highly eclectic. Respondents highlighted four types of identity dynamics. "Conformist" film directors can evolve towards a niche auteur identity by gaining bourgeois legitimacy with an auteur film (incongruent extension), but they perceive this move as extremely risky for their specific legitimacy. "Niche auteur" directors who attempt to evolve towards the wide public auteur category through incongruent commercial extensions incur low risks on bourgeois legitimacy and can benefit from specific and popular legitimacy gains. "Wide public auteurs" can use risk-free incongruent "commercial" film extensions to reinforce specific and popular legitimacy. But only very successful congruent films may be efficient to also enhance bourgeois legitimacy and attain the "consecrated" human brand category. The "consecrated" human brand type runs the least risk of losing its legitimacy by directing any incongruent film.

In sum, our findings extend Parmentier et al.'s framework (2013) by adding two other viable human brand types (i.e. niche archetype human brand and consecrated human brand) and by showing that human brand identities and evolution depend on the legitimacy forces at play in a given field of practice.

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Contagious Endowment Effect

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EXTENDED ABSTRACT

Endowment effect has typically been conceptualized as a phenomenon that occurs within a transaction at a specific point in time wherein the buyer and seller have differing perspectives that result in different reservation prices: the buyer's willingness-to-pay (hereafter WTP) and the seller's willingness-to-accept (hereafter WTA). There is little in prospect theory to predict any carry-over of the endowment effect to another transaction. However, recent research (e.g., Nayakankuppam and Mishra 2005) has affirmed that the endowment effect is not due to shifts in response language (e.g., buy low, sell high) but reflect actual differences in mental representations of the item by sellers and buyers. Since mental representations are associative networks in memory (Anderson 1983), such associations that have been primed in memory are more accessible. Greater accessibility is likely to bias subsequent information processing and influence subsequent judgments (Houston and Fazio 1989). Therefore, we propose that an endowment, once experienced, can exert an influence the valuations of similar objects in a subsequent transaction.

STUDY 1

One hundred and nineteen undergraduate students (male=58.45%, $M_{age}=20.61$) were randomly assigned to a 3 (buyer-first, seller-first vs. control) X 2 (reservation price in first task vs. second task) X 2 (order: blue mug first vs. red mug first) mixed factorial design. In the buyer first condition, participants were given \$5 cash, randomly assigned to see a mug of a particular color, and asked to provide their WTP. After reporting their WTP, however, the participant was told that the mug was unavailable. S/he was then shown the mug of the other color and asked to provide his/her WTP for this mug. In the seller-first condition, a participant was given a mug of a color and asked to provide their WTA price. Then, s/he was told that the assigned color mug was unavailable. S/he was given \$5 cash instead of the mug and asked to provide his/her WTP for the mug of a different color. In the control condition, participants were given \$5 cash, randomly assigned one of the mugs (blue or red), and asked for their WTP. Next, without the cover story of unavailability, they were asked for their WTP for the other color mug.

Reservation prices in the first task

A one-way (buyer first vs. seller first vs. control) ANOVA yielded a main effect of role on reservation prices in the first task ($F(2, 116)=5.768, p=.004$). Planned comparisons showed that sellers reported significantly larger reservation prices than buyers ($F(1, 116)=7.880, p=.006$) and the control condition ($F(1, 116)=5.114, p=.027$). The classic endowment effect is replicated in these results.

Reservation prices on the second task

A main effect emerged for the role in the first task on the reservation prices quoted in the second task ($F(2, 116)=3.169, p=.046$). Planned analyses revealed that participants who had been sellers in the first task reported greater WTP in the second task than those who had been buyers in the first task ($F(1, 116)=3.268, p=.075$) and those in the control ($F(1, 116)=4.287, p=.041$).

Repeated measure comparisons

Of importance, a role versus task (i.e., first vs. second WTP) analysis yielded only a main effect for the role in the first task ($F(2, 232)=9.224, p<.001$) but neither the task nor the interaction term. A planned comparison of the reservation prices quoted by participants who had been sellers in the first task (and buyers in the second task) yielded no significant effect ($F(1, 232)=1.233, NS$). These individuals changed roles between tasks. In contrast to the predictions of a significant change in reservation prices predicted by prospect theory, we observed no significant change in reservation prices. This result is not a function of the unavailability of the mug in the first task. If that were the case, there would be a difference between the WTP of the "buyers first" participants in their first task and the control condition. In other words, the fact that WTP amounts are higher when one happened to be a seller earlier for a similar object is consistent with the idea of a carry-over of the endowment effect.

STUDY 2

We analyze data from eBay.com. We predict that the experience of being a high bidder on an item creates a change in the bidder's internal representation of the object in much the same way that ownership or possession does. We further argue that if the bidder fails to win the item, his or her reservation price in subsequent auctions for similar, but different, items will be higher than those bidders who never enjoyed the status of being the highest bidder—in other words, the endowment effects are contagious and spread to other products. Our model to estimate the influence of experiences from *prior* auction ($j-1$) on the bidding price of individual bidder i in a *current* auction j is as follows:

Model 1

Indicator Variable for the Endowment Carry-over Effect

$$\begin{aligned} Bid Amount_{ij} = & \beta_0 + \beta_1 Pseudo-Endowment_{j-1} + \beta_2 \ln Bid Time_{ij} + \beta_3 Bidder's Feedback Score_{ij} \\ & + \beta_4 Frequency of Previous Auction_{ij} + \beta_5 Duration of Auction_{ij} \\ & + \beta_6 Starting Price_{ij} + \beta_7 Shipping Cost_{ij} + \beta_8 Seller's Reputation_{ij} \\ & + \beta_9 Posting Per Day_{ij} + \beta_{10} BIN Price_{ij} + \beta_{11} Closed Auction + \epsilon_{ij} \end{aligned}$$

Model 2

Continuous Measure of the Endowment Carry-over Effect

$$\begin{aligned} Bid Amount_{ij} = & \beta_0 + \beta_1 Top Bidder Duration_{j-1} + \beta_2 \ln Bid Time_{ij} + \beta_3 Bidder's Feedback Score_{ij} \\ & + \beta_4 Frequency of Previous Auction_{ij} + \beta_5 Duration of Auction_{ij} \\ & + \beta_6 Starting Price_{ij} + \beta_7 Shipping Cost_{ij} + \beta_8 Seller's Reputation_{ij} \\ & + \beta_9 Posting Per Day_{ij} + \beta_{10} BIN Price_{ij} + \beta_{11} Closed Auction + \epsilon_{ij} \end{aligned}$$

The estimated coefficient of *Pseudo-Endowment* shows that a bidder increases her or his bid by 4.0% of buy-it-now price if s/he had been a high bidder in a prior auction. In addition, we found that the longer the time spent as the top bidder in the prior auction, the higher the subsequent WTP for the same item (*Top Bidder Duration*). These results show that the endowment effect caused by being a top bidder is transferred to a similar object.

GENERAL DISCUSSION

Recent research documents the differences in mental representations of the object in transaction (e.g., Carmon and Ariely 2000;

Johnson et al. 2007). In the current research, we questioned whether the biased mental representations and emotional attachment (which appears to be the source of the endowment effect) wither away once the specific item being transacted is gone for good or it can find its way to a new home to infect another transaction. Our study finds that individuals do appear to transfer their biased mental representations to similar other objects, and thus the endowment effect contaminates future transactions.

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Breaking Free From the Sunk Investment: The Role of Positive Affect and Instrumental Attitude toward Resource Investment in Reducing Sunk Cost Bias

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EXTENDED ABSTRACT

Sunk cost bias is a pervasive problem in consumer decision making that occurs when people continue allocating resources to failing endeavors (Arkes and Blumer 1985; Staw 1976, 1981). This tendency exists because people often focus on prior investments without considering the possibility of failed future returns. While many suggested interventions to attenuate this bias involve altering cognitive processes, the current research examines an alternative affective route. Specifically, we propose that inducing positive affect can mitigate consumers' tendency to rely on sunk costs when making future commitment decisions.

We posit that sunk cost bias is associated with people's attitude toward previously invested money or other economically construed resources. That is, normatively people tend to view their own resource investments as an ultimate asset to conserve or maximize (terminal attitude), and thus salvaging a prior investment is more likely to be prioritized in the decision process. We propose that positive affect naturally attenuates this terminal attitude toward resource investment. Prior work suggests that positive affect enhances people's cognitive flexibility (Ashby, Isen, and Turken 1999; Isen 2008; Pyone and Isen 2011) and thus broadens their scope of thinking (Fredrickson 2001).

In the context of present research, we suggest that positive affect allows people to consider their prior investment in the context of a long-term gain, and thus it will enable consumers to view their prior monetary investment as an instrumental resource to be used for the long-term gain (vs. terminal resource that needs to be salvaged). Thus, when a prior monetary investment is useful in bringing about a long-term gain, people experiencing positive affect will continue to invest in a prior endeavor. However, when a monetary investment is dissociated from a long-term gain, people experiencing positive affect will acknowledge that their prior investment has no instrumental value and thus disregard it in their reinvestment decision, stopping their commitment to it (i.e., reducing sunk cost bias).

We tested our hypothesis over four studies. In Study 1, we test the influence of positive affect on a typical sunk cost problem in everyday consumer decisions involving money. Participants watched either an amusing film clip or a neutral clip depending on their affect condition and then made a commitment decision about an apartment. Specifically, they were asked to choose between an apartment for which they already paid a non-refundable deposit and a new apartment which provide a better long-term benefit. The results showed that the majority of the neutral affect condition chose to keep the old apartment as they planned. However, this commitment tendency was significantly decreased in the positive affect condition.

In Study 2, we test our core effect in a real choice setting and examine if positive affect can attenuate sunk cost bias involving a behavioral resource (effort). Participants were asked to choose their own pen to take after the study. They were led to invest either a high or low amount of effort in choosing their own pen. After making their initial choice, respondents were presented with one more decision. Specifically, the experimenter asked if respondents would like to

trade the pen they chose for a superior pen that received a higher rating than their current option. Respondents' decision to switch or not was recorded and all respondents received their choice of pen after the experiment. The results showed that when participants invested a minimal amount of effort (low sunk cost), the neutral and positive affect conditions did not differ in their decision to keep their original pen. However, when respondents had to spend the extra effort choosing their pen, those in the neutral affect condition showed a greater tendency to keep their initial choice. In contrast, those in the positive affect condition were more willing to switch to the better alternative.

In Study 3, we investigate whether the proposed attenuating effect of positive affect depends on the decision context: specifically, whether the previously incurred cost is redeemable into a long-term gain or not (whether it has instrumental value or not). The results showed that those who were experiencing positive affect were successfully able to disregard their prior investment in their decision making when it was irredeemable (sunk). However, when it was redeemable, they showed continued commitment as controls did.

Finally, in Study 4, we examine our proposed mechanism. We found that participants experiencing positive affect were less likely to view their monetary investment as terminal but more as instrumental resources, and this attenuated terminal attitude toward money mediated the relationship between positive affect and the reduction of sunk cost bias. Taken together, the results of four studies involving hypothetical as well as real consumer choices provide consistent evidence that inducing positive affect reduces sunk cost bias in consumer decision making.

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Morality-based Blame for Victims of Harmful Product Failures

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EXTENDED ABSTRACT

Imagine an automobile accident resulting from faulty brakes. To what extent would the driver be blamed if he was driving to meet his mistress rather than his wife? The objective reason for the accident in both cases is brake failure, yet the moral nature of the driver's behavior is likely to color our assessment of blame to either the victim or company. Victim blaming is an impediment to social change (Ryan 1976) because it stunts market forces that would otherwise punish the company's bad behavior, thus threatening market self-regulation. Victim blame is therefore an important topic that has received little empirical attention in the consumer behavior literature.

Alicke's (2000) theory of culpable control posits that following a harmful event, people automatically assess blame based partly on character evaluations. We propose that product failures harming an immoral (vs. neutral or moral) victim will produce (H1a) more victim blame and (H1b) less company blame. Further, due to its role in predicting victim derogation (Kogut 2011; Lerner and Simmons 1966), we propose that Belief in a Just World (BJW; Lerner 1980) will potentiate the enhanced blame for the immoral (vs. neutral or moral) victim (H2). We also propose that the morality \times BJW interaction will reduce company blame, mediated by victim blame (H3).

STUDY 1

We recruited 182 attentive participants from MTurk ($M_{Age} = 35.87$, $SD_{Age} = 11.87$; 51.1% female). Half the sample began with Lipkus' (1991) seven-item BJW scale ($\alpha = .903$), whereas the other half ended with this scale. Because BJW scale order influenced victim and company blame (both $ps < .095$), we retained it as a dichotomous covariate in all studies. Participants were randomly assigned to read one of two scenarios about a person named Mark in a 2-cell (morality: immoral vs. neutral) between-participants design. In the (immoral) [neutral] scenario, Mark's brakes failed and he crashed into a tree while driving to see his (mistress) [wife]. Participants then responded to two attention checks, a three-item manipulation check of immorality perceptions ($\alpha = .946$), and three-item scales for each of victim blame ($\alpha = .879$) and company blame ($\alpha = .931$).

Independent samples t-tests showed that perceptions of immorality and victim blame were higher and company blame was lower in the immoral (vs. neutral) condition (all $ps < .013$), supporting H1. Moderated mediation analysis (PROCESS model 7; Hayes, 2013) supported H2 and H3, such that the morality \times BJW interaction increased victim blame which in turn decreased company blame ($index = -.265$, $SE = .151$, 95% CI [-.586, -.001]). Though Study 1 provides initial support for our hypotheses, it is not yet clear whether a moral victim will be blamed less than a morally neutral one, or if victim blaming will influence choice of real brands.

STUDY 2

We recruited 278 attentive participants from MTurk ($M_{Age} = 34.74$, $SD_{Age} = 10.79$; 54.3% female), all of whom indicated at least moderate liking for Chipotle, the brand used in this study. Participants were randomly assigned to read one of three stories – ostensibly reported by other respondents – about a coworker named Darren, in a 3-cell (morality: immoral vs. neutral vs. moral) between-participants design. The (immoral) [moral] story described Darren as (lazy, rude, and unpleasant) [hardworking, kind, and fun]; Darren's char-

acter was not described in the neutral story. All stories explained that Darren got food poisoning from Chipotle. We used similar measures of BJW ($\alpha = .892$), manipulation check ($\alpha = .886$), victim blame ($\alpha = .852$), and company blame ($\alpha = .790$). We also offered participants an actual choice between a \$10 gift card to either Subway or Chipotle.

A one-way MANOVA with Bonferroni-corrected contrasts showed that Darren (the victim) was perceived as more immoral in the immoral (vs. neutral) condition ($p < .001$), and more immoral in the neutral (vs. moral) condition ($p < .001$). Supporting H1a, Darren was blamed more in the immoral (vs. neutral or moral) condition (both $ps < .001$), but blamed equally in the neutral and moral conditions ($p > .999$). We dummy-coded morality into dummy1 (0 = neutral; 1 = immoral) and dummy2 (0 = moral; 1 = immoral), and used PROCESS (model 7) to test moderated mediation ($X = \text{dummy1}$, $M = \text{victim blame}$, $W = \text{BJW}$, $Y = \text{company blame}$), showing good fit ($index = -.186$, $SE = .113$, 95% CI [-.484, -.018]) and supporting H2 and H3. Based on this model, we used SEM to examine choice as an outcome of company blame, which exhibited excellent fit ($\chi^2(10) = 8.569$, $p = .573$, CFI $> .999$, RMSEA $< .001$, PCLOSE = .836). Similar results emerged using dummy2 in PROCESS and SEM. Study 2 replicated and extended Study 1, but did not distinguish between moral and neutral victims. Based on Nadler (2012), we expected negligence to moderate the effect of morality, such that a moral (vs. neutral) victim will be blamed less only when he is not negligent (H4).

STUDY 3

We recruited 269 attentive participants from MTurk ($M_{Age} = 35.52$, $SD_{Age} = 11.92$; 49.1% female). Participants were randomly assigned to one of four conditions in a 2 (morality: moral vs. neutral) \times 2 (negligence: yes vs. no) between-participants design. As in Study 2, stimuli were based on a story about Darren, with a similar manipulation of morality. The (negligent) [not negligent] stories explained that Darren was at a bar with his phone on the counter, and (Darren's phone was gone when he returned from the bathroom) [a thief grabbed Darren's phone and ran while Darren was there]. Darren later discovered that his private information was stolen, even though the mobile provider guaranteed identity-theft protection. We used similar measures of BJW ($\alpha = .919$), morality manipulation check ($\alpha = .830$), victim blame ($\alpha = .905$), and company blame ($\alpha = .786$), as well as a three-item negligence manipulation check ($\alpha = .954$).

A 2 \times 2 MANOVA showed that participants in the moral (vs. neutral) conditions perceived the victim as less immoral ($p < .001$), and participants in the negligent (vs. not negligent) conditions perceived the victim as more negligent ($p < .001$). Supporting H4, we observed a morality \times negligence interaction on victim blame ($p < .001$), such that participants blamed the moral (vs. neutral) victim less when he was not negligent ($p < .001$), but not when he was negligent ($p = .143$). PROCESS (model 7) showed that the morality \times negligence interaction reduced company blame, mediated by victim blame ($index = -.295$, $SE = .154$, 95% CI [-.683, -.058]). Thus, consumers only blamed the moral (vs. neutral) victim less when they are explicitly told that the victim was not negligent.

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The Untouchables: The Sacredness of Brand Logos

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EXTENDED ABSTRACT

Companies spend millions of dollars redesigning their logos, often only to revert to the old logo, given consumer backlash. Tropicana, for example, spent \$35 million to unveil a drastically new design, only to go back to the old logo after consumers complained. While Tropicana might be a well-known example, it is hardly the only one. That is not to say that all logo redesigns fail. So what determines whether a brand's logo is "untouchable"? In this research we propose and find evidence that one determinant of how protective consumers are of a brand's logo is the extent to which the brand is collectively considered sacred.

We define brand sacredness as the extent to which brands are perceived as having an extraordinary dimension and are associated with an endless time and space (Belk, Wallendorf, and Sherry 1989; Kesebir, Chiu, and Pyszczynski 2011). Additionally, brand sacredness is conceptualized here in terms of consumers' views about the shared understanding of such transcendence and boundlessness meanings. We propose that brand sacredness is a construct that exist in the mind of consumers, which emerges from an understanding of how sacred meanings are collectively drawn by consumers to construct crucial parts of the self (see McCracken 1986). Thus, we focus on brand sacredness that emerges through external sanctioning by experts and reference groups, i.e., the collective understanding of brand sacredness, instead of on sacredness that might emerge through personal experiences (e.g., rituals, gift giving, or inheritance, Belk, Wallendorf, and Sherry, 1989).

We propose and find evidence in five studies that brand sacredness is a distinct construct that can uniquely predict how protective consumers are of a brand's logo, so that a collective understanding about a brand's level of sacredness can drive consumers' own personal experience of moral outrage as a response to changes to the brand's logo, even when there is a weak connection with the brand. Furthermore, we find evidence that the process underlying this effect is consumers' desire to protect the essence of a brand perceived to have high levels of sacredness.

Given that past research on sacredness consumption has focused more on consumption experiences in general as opposed to brands in particular, we conducted Study 1 with the goal of developing a reliable and valid measure of brand sacredness. A first sample rated different brands on a 5-item sacredness scale. An EFA showed that all items loaded on a single factor, with a high level of internal consistency. A second sample rated another set of brands on sacredness, self-brand connection (SBC), and cultural symbolism (CS). A CFA with the three constructs as separate factors offered a good fit to the data and better than a model with a single factor, suggesting that brand sacredness is a distinct construct that is partially correlated with the other two brand measures.

Study 2 was designed to investigate the impact of brand sacredness on the outrage in response to the logo redesign of a familiar brand (Under Armour). Participants rated the brand in terms of brand sacredness, SBC, and CS. Participants were then shown visual representations of changes to the brand's logo and were asked to rate their own personal emotions (anger and disgust) towards them. Results demonstrate that after controlling for self-brand connection and collective beliefs about cultural symbolism, brand sacredness predicts consumers' experience of moral outrage in response to changes to the symbols of a brand.

Study 3 was designed to provide further evidence of our main prediction using a more controlled environment by manipulating perceptions of sacredness of an unfamiliar brand of chocolates (Milka). Participants were randomly assigned to either the sacredness condition, where they read brand information aimed at manipulating collective beliefs of brand sacredness, or to the control condition (neutral information). Then participants rated the brand in terms of sacredness and reviewed 2 different changes to the most visible element of the brand (i.e., color of the logo). Results from an ANCOVA on ratings of emotions toward the changes with manipulated sacredness as a fixed factor (SBC and CS as covariates) demonstrated that participants in the sacredness (vs. control) condition experienced stronger negative emotions toward the proposed changes to the logo.

Study 4 aimed to provide initial process evidence, namely the desire to protect the essence of the brand. To rule out that the effect is just driven by the possibility that a logo change is simply perceived as ill-conceived to the marketing of the brand, participants rated their reactions to hypothetical changes to the logo as well as other similar ill-conceived changes to the brand strategy as related to new products and target market expansions—that we argue are less essential and central to the brand meaning. As predicted, simple contrasts for the logo-related actions revealed that collective perceptions of brand sacredness were positively related to feelings of anger and disgust in response to changes to the brand logo and not to ill-conceived changes to less essential elements of a brand strategy.

To obtain direct evidence of the underlying mechanism, participants in Study 5 rated the *Columbia* brand in terms of sacredness (as well as on SBC and CS) and then indicated their anger and disgust toward several changes to the brand's logo. Immediately after, they also indicated their level of agreement with statements that reflect a desire to protect the brand's essence (e.g., "It is important for *Columbia* to protect its brand essence"). A mediation analysis with SBC and CS as covariates suggested that the heightened desire to protect the brand's essence mediated participants' negative emotions toward the logo changes of a more (vs. less) sacred brand.

This research aims to contribute to the brand logo literature by empirically investigating a novel construct, namely brand sacredness, to help determine when a brand's logo redesigning efforts might backfire, regardless of consumers' personal connection to the brand. Furthermore, our work has important managerial implications. Every year companies spend millions of dollars redesigning their logos. Our research provides guidance on when these efforts should be avoided, which could prevent a situation like Tropicana's.

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Marketing “Raunch Culture”: Sexualisation and Constructions of Femininity Within the Night-Time Economy

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EXTENDED ABSTRACT

Since the 1990s, there has been significant academic interest in “porn chic”, that pornography and sexualised entertainment permeate almost all aspects of our popular culture and everyday lives. This “pornographication” or “raunch culture” (Levy 2005) relates to numerous social and cultural shifts, and Maclaran (2015) argues that we need to have a better understanding of marketing’s role in this is needed. We focus on one marketing context (the nightclub venue), and examine the role of the venue in supporting and perpetuating the mainstreaming of this sexualised or “raunch” culture.

The mainstreaming of sexualisation relates to more than just sexualised images in advertising or the use of women’s bodies to sell products. The contemporary culture of sexualisation relates to the ways in which these images have entered our everyday lives, resulting in the ‘mainstreaming of sexual explicitness for women’ (Evans et al 2010: 115). One major commercial space where we see evidence of this is the night-time economy (NTE), and particularly the context of nightclub management. Griffin et al (2012) have exposed the contradictions involved here for young women, particularly when inhabiting the current “culture of intoxication” in the UK (Measham and Brain, 2005), where the construction of “femininity” in relation to drinking cultures is problematized, particularly when situated within a post-feminist context. These contradictions are integral to “new” idealised images of femininity (McRobbie 2009).

Research on alcohol consumption amongst young people has focused mainly on public health risks, bodily harm and anti-social behaviour (Szmigin et al, 2008; Measham, 2006), but less has been written on situating these risks in gendered terms. Young men have tended to consume more alcohol than women (Plant, 2008) with heavy drinking traditionally considered a sign of “masculinity” (Willott and Lyons 2012; Dempster 2011). Heavy drinking is also an aspect of contemporary “lad cultures” which may “intensify attempts to put women in their place through misogyny and sexual harassment” (Phipps and Young, 2015, 1). Women participating in the excessive drinking culture has raised concerns about the potential violence, threats, and health risks that women face by entering a historically “masculine” domain (Sheard 2011; Day et. al. 2004). This paper investigates the role of nightclub venues in perpetuating the wider mainstream sexualised culture, and the ways that these environments allow sexual harassment to take place.

The study took place across two UK cities, one in the Midlands (City A) and the other in the North of England (City B). Phase 1 was a social media tracking study, involving selecting and following a number of drinking venues via popular social media sites. For Phase 2, we conducted 10 focus groups with young people (aged 18-28, 13 men and 28 women, students and working adults). The focus was on exploring drinking habits, perceptions of risk in relation to alcohol consumption, venues frequented and social media usage. For Phase 3, we set up a Facebook page where we invited participants (19 members) to post their thoughts on subjects related to alcohol consumption and venues, and where we further explored themes emerging from the focus group data.

The social media analysis showed venues were slightly more active than brands in their postings. Focus groups and Facebook discussion also focused on venues, and findings were organised around

two main themes: (1) sexual discourses and “raunch culture” and (2) sexualisation, harassment and violence.

Sexual discourses and “raunch culture” Club venues regularly use images of female patrons, staff or models to market their nights out. One club in particular appeared to be marketing their events around particular images of hypersexualised femininity, regularly posting images of their female staff wearing revealing “uniforms”, and dancing provocatively. The club uses sex to appeal to a young audience, referring to itself as the “sexiest night out in City A” putting this claim immediately next to an offer for “£1.50 drinks”, linking the notion of “cheap” drinks” with “sexiness”.

Participants highlighted both the sexualised nature of nights out, and the underlying “lad culture” that permeates them. Hetero-normative constructions of sexuality dominate in the marketing of mainstream drinking venues. This “hyper-sexualisation” marks a shift away from what feminist scholars might traditionally have understood as “objectification” (Gill, 2007), as the depiction of women as silent, passive objects has in some cases been replaced by a more explicit, active, knowing female sexual subject where self-sexualisation is a route to success (Levy, 2005).

Sexualisation, harassment and violence Data showed how sexual harassment and the threat of violence were often very “real” aspects of a night out for young women. Many of the Facebook comments highlighted that the sexualised images and language used had a more harmful sub-message, related to the promise of sexualised interactions for men entering these spaces, without repercussion for the men. For young people inhabiting this NTE it was striking how some form of violence is to be expected although not accepted. A consequence of the mainstreaming of sexualised culture is a potential normalising of sexual harassment and assault (Phipps and Young, 2015). Women reported that men tried to make them complicit in their violent interactions through suggesting that it was a ‘game’ or ‘joke’ and being instructed to ‘lighten up’ when they resisted their advances. The hegemonic masculinity associated with contemporary laddism can be viewed as a defence mechanism, and this sexual harassment is one aspect of this (McLaughlin et al, 2012).

Our study has shown how marketing communications serve to ensure that images of femininity are seen and understood against a backdrop of neoliberal, post-feminist discourse of individual choice(s) and empowerment. Nightclubs are contributing to the mainstreaming of porn culture, and thus shaping the ways that young women dress and act in particular situations, in order to fit in with these norms. A consequence of this hyper-sexualised culture is the normalising of sexual harassment and violence towards women (McLaughlin et. al., 2012). Our analysis shows how these marketing materials set up the conditions that are conducive to the normalisation of sexual harassment and violence.

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Seeking Justice: How Harmful Brands Cause Consumers to Punish, Cheat, and Steal

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EXTENDED ABSTRACT

In July of 2015, a group known as The Impact Team hacked into Avid Life Media (AshleyMadison.com, EstablishedMen.com) and then released the names of 37 million users (Watson 2015). While this event caused a whirlwind of media attention, the marketing literature is relatively silent on what might motivate these types of attacks. Why would individuals spend their time, demand no financial incentive, and risk severe imprisonment to attack a company that had not personally wronged them?

Extant research has argued that unethical consumer behavior is a function of two competing motivations: self-interest versus protection of one's positive self-concept (Mazar, Amir, and Ariely 2008). However, a distinct mechanism that has received less attention within the marketing literature is that of moral justification. Unlike the research that has stressed the absence of moral considerations, the current research focuses on moral justification which implies that consumers are acting on a moral imperative in which targets are perceived to be deserving negative treatment (Bandura 1999) – an effect that we argue can impact a brand regardless of any directly attributable personal transgression. There may be no moral intuition more fundamental than the rejection of unwarranted harm and the subsequent need for justified punishment (Greene 2012; Khamitov, Rotman, and Piazza 2016). When entities are perceived as harmful, an individual comes to believe that they possess lower moral worth and subsequently are deserving of moral mistreatment.

Across six studies the current research examines consumers' punishment of brands that they perceive to be harmful. We argue that consumers perceive these brands as being of lower moral worth, and therefore less deserving of fair and ethical treatment. As such, consumers are more willing to lie, cheat, and steal to punish a harmful brand – regardless of whether the brand's harmfulness stems from direct, personal transgressions or a more general harmful reputation.

Study 1 establishes that perceptions of harmfulness predict unethical retribution in the form of real-world theft and fraud across a variety of industries. Results demonstrate that perception of harmfulness was a significant positive predictor of retail fraud ($r = .086, p < .05$) and that the effect held while controlling for perceived size, profitability, ease and riskiness of committing fraud.

Study 2 examines the underlying psychological mechanism and shows that perceptions of a brand's harmfulness translates into increased punishment through lower moral worth. We held the brand constant (Nike) and asked participants about their perceptions of its harmfulness, moral worth, as well as punishment and marketplace aggression (adapted from Grégoire, Laufer, and Tripp 2010). Participants then completed measures of brand attitudes, likeability, and were asked to report whether they could recall Nike having committed any specific transgression towards them personally. Results demonstrate that perceptions of harmfulness predicted both punishment, $\beta = .46, p < .001$ and marketplace aggression, $\beta = .33, p < .01$ while controlling for brand attitudes, perceptions of the brand's likeability, and experience of specific transgressions. Importantly, the influence of perceptions of harmfulness on both punishment and marketplace aggression scores was significantly mediated through moral worth attributions, $\beta = .05, 95\% \text{ CI} = [.00, .14]$ and $\beta = .08, 95\% \text{ CI} = [.04, .18]$.

Study 3 explores this effect by manipulating the level of perceived harmfulness in a more controlled setting using a fictitious brand. Participants were randomly assigned to either a more harmful or less harmful brand condition. The results again supported our moral worth mechanism. Specifically, in the more (vs. less) harmful condition, the brand was attributed lower moral worth, which in turn led to higher punishment intentions ($\beta = .24, 95\% \text{ CI} = [.02, .68]$) and marketplace aggression ($\beta = .17, 95\% \text{ CI} = [.02, .54]$).

Study 4 explores and extends this effect using a behavioral dependent measure of cheating, demonstrating that individuals are more likely to financially cheat harmful brands than less harmful brands. Participants were randomly assigned to one of four conditions: (harmful brand with harmful policy; harmful brand with good policy; non-harmful brand; control). Participants in all four conditions were then asked to complete a matrix task (Mazar et al. 2008), and number of matrices solved was thus used as a proxy for our dependent measure of cheating behavior. Consistent with our predictions, there was a significant main effect of condition on the magnitude of cheating, $F(1,202) = 4.83, p = .003$. Specifically, participants in the control and non-harmful brand condition cheated less than both participants in the harmful brand with harmful policy condition and those in the harmful brand with good policy condition.

Study 5 manipulates the ethicality of consumers' retributive behavior to show that while individuals feel bad lying and cheating a non-harmful brand, they feel no worse off after cheating a harmful one. We randomly assigned participants to a 2 (harmful vs. non-harmful brand) x 2 (lying vs. not lying). The interaction was significant $F(1,166) = 5.86, p = .017$. Simple effects revealed that participants in the no harm condition felt significantly worse in the lying consumer action condition compared to the not lying condition. However, when the brand was manipulated to be harmful there was no statistically significant difference regardless of whether consumers lied or not.

Lastly, Study 6 identifies justice sensitivity as an important moderator of our effect and explores the concept of harmfulness contamination by demonstrating that the mere presence of a harmful product category can color a brand's reputation as harmful. The interaction between the harmfulness of the product category and one's justice sensitivity was significant for both punishment and aggression ($ps < .001$) and were mediated by perceptions of moral worth.

The results of six studies confirm our moral worth account of consumer punishment of harmful brands. We show that consumers view harmful brands as being less deserving of fair moral treatment leading to greater punishment intentions. Importantly, as our moral worth account would predict, a directly attributable personal transgression is not a necessary requirement to lead to the brand being perceived as deserving of lower moral worth and thus greater punishment.

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Brand Logo Salience as a Signal of Brand Status

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EXTENDED ABSTRACT

In our work we seek to address an interesting contradiction in the literature. Although research has consistently demonstrated the positive effects of visual attention on consumer behavior (i.e. Chandon, Hutchinson, Bradlow, & Young, 2009), there is some research that suggests that subtlety is associated with higher status brands and products (i.e. Berger & Ward, 2010). Our work investigates why brands might utilize subtle logos, despite benefits that attention-grabbing qualities (such as color or brightness) might confer. More specifically, we propose that the use of a subtle logo is a signal that high status brands employ as a sign of quality (i.e. the product should speak for itself), wherein the costs associated with decreased visibility and attention are recouped through quality inferences.

The benefits of visual saliency are well-documented. Researchers have revealed a visual saliency bias (Mormann, et al., 2012), which is the finding that low-level properties associated with salience can positively affect consumer preferences and choice. For example, adjusting the brightness of a product increases the likelihood that it will be chosen in a choice task.

Despite this finding, there are reasons to suggest that consumers may draw positive inferences from non-conspicuous attributes. For example, researchers have consistently (Jacobs et al., 1991) found that people associated the color black with expensiveness and power, despite the attention-grabbing qualities of color (Wolfe & Horowitz, 2004; Frey, Honey, & König, 2008). Similarly, researchers have revealed a negative relationship between the extent to which a logo or brand is displayed and the price or status of a brand or product (Berger & Ward, 2010; Han, Nunes, & Dreze, 2010).

We believe these findings are best interpreted within a signaling framework (Kirmani & Rao, 2000). Brands often use a variety of marketing signals to represent quality, at varying costs. For example, a firm may offer a product warranty, which may incur costs to the brand at a later point in time, but is viable for firms with high quality (i.e. Boulding & Kirmani, 1993). A key implication of this interpretation of marketing signals is that only brands that are of higher quality should engage in such signaling, as they are expected to recover (or avoid) the financial penalties sustained as a result of the strategy.

We regard logo subtlety to be another costly signal, wherein the subtle logo may reduce visibility and attention in the marketplace. For high status brands, this penalty should be recovered in the form of increased status perceptions (the product is good enough to speak for itself, apparently); for low status brands, this penalty will not be recovered, as such signals set unreasonably high expectations for products (that will likely not be fulfilled), and they will also lose out on the benefits of increased attention. We thus designed a study to test whether existing brands already adhere to such principles, and then designed original logos to test how manipulated salience affects status perceptions.

In our first study, we asked a sample of participants to gauge the conspicuousness of 14 logos from a consulting firm's 2014 list of top global companies. Critically, seven of these brands were categorized as luxury, and participants estimated seven other randomly selected non-luxury brands. As expected, we found that the average conspicuousness of the luxury brands was lower ($M = 4.71$,

$SD = 1.13$) than the non-luxury brands ($M = 5.39$, $SD = .96$, $t(57) = 5.90$, $p < .001$). This provides evidence that luxury brands do tend to use less salient logos than non-luxury brands.

In our second set of experiments aimed to show that logo salience would reduce brand status perceptions. We presented participants with two similar logos that differed in salience via color (Study 2a) or brightness (Study 2b). As expected, both studies revealed a significant main effect of conspicuousness on perceived status of the brand, ($F(1, 136) = 15.62$, $p < .001$, $d = .67$) and ($F(1, 90) = 9.14$, $p = .055$, $d = .40$), such that the black and white indicated higher status than the color logo ($M_{B\&W} = 4.32$, $SD_{B\&W} = 1.28$; $M_{COLOR} = 3.48$, $SD_{COLOR} = 1.22$) and the dark logo indicated higher status than the bright logo ($M_{DARK} = 4.70$, $SD_{DARK} = 1.55$; $M_{BRIGHT} = 4.07$, $SD_{BRIGHT} = 1.57$). Controlling for liking did not eliminate these effects, indicating that salient logos can signal lower brand status.

Lastly, we intended to show that the status inferences demonstrated in the previous two studies would be mediated by reduced credibility. If, as we predict, salient logos signal a reliance on eye-catching logos, then brands that utilize such techniques should be seen as less credible. Thus, we ran a variant with two pre-tested logos (equal in liking and familiarity, but different in salience), and asked participants to evaluate both the status of the brand and a measure of brand credibility (Kirmani, 1997). Consistent with our predictions, a mediation analysis using the macro PROCESS (Hayes, 2012) confirmed that this effect was indeed driven by brand credibility, such that the salient logo negatively affected credibility, which in turn affected perceived brand status. There was a significant indirect effect of conspicuousness on brand status ($ab = -1.01$; LLCI = -1.50 , ULCI = $-.55$), but the direct effect was not significant ($p = .734$), indicating that credibility fully mediated the negative effect of conspicuousness on status perceptions.

Thus, across four studies we demonstrated that luxury brands tend to utilize less conspicuous logos, that a less conspicuous logo leads consumers to infer that the brand is of higher status, and that this effect is mediated by brand credibility. Our work has implications not just for new firms seeking to design a logo to fit their image, but also brands looking to update their logo.

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Duration of Restrictions Influences Information Processing: The Role of Perception of Control

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EXTENDED ABSTRACT

Restrictions are a part of people's daily lives and they are constraints that limit or confine individual choices. (Botti et al 2008).

Because of the importance and salience of restrictions in daily life, researchers in economics, psychology, and consumer behavior have extensively investigated the antecedents and consequences of having restrictions (Mullainathan and Shafir 2013). However, most of these studies, though not explicitly stated, focus on restrictions of limited duration (i.e., temporary restrictions). This paper investigates how the duration of restrictions influences information processing. Extant research supports the idea that the same event or object can be construed in more or less abstract or concrete ways (Liberman and Trope 1998; Trope and Liberman 2010). Research also shows that these different levels of mental representation enable expansive and contractive thinking, respectively (Trope and Liberman 2010).

In current research, we investigate the possibility that the duration of restrictions influences the way people contract or expand their mind-sets. Specifically, we posit that those who have temporary restrictions tend to process information with a contracted mind-set, focusing on the psychologically proximal situation of having a temporary restriction. In contrast, those who have permanent restrictions tend to process information with an expanded mind-set such that they expand their mental horizons to think about psychologically far-away objects or events. Furthermore, we identify a theoretically derived mediator: perception of control. Those with permanent restrictions perceive more control than those with temporary restrictions and therefore, they tend to have a more expansive mind-set.

Using three studies in the field and one online study, we predict and demonstrate that people with permanent restrictions have a more expansive mind-set and, consequently, process information more abstractly than those with temporary restrictions. Previous research demonstrates that those with permanent restrictions are more self-accepting and less neurotic than those with marginal restrictions (Colman 1971). People with chronic illnesses have to deal with uncertainties about their situation and its accompanying symptoms as well as the ambiguities about the future course of their illness. Research shows that one way in which these feelings of vulnerability and helplessness can be offset is by generating a sense of personal control over the chronic illness, its accompanying effects, and life more generally (Taylor 1983). We suggest that when people with permanent restrictions perceive control over their lives, they focus less on their restrictions. We posit that those who have temporary restrictions tend to process information with a contracted mind-set, focusing on the psychologically proximal situation of having a temporary restriction. In contrast, those who have permanent restrictions tend to process information with an expanded mind-set such that they expand their mental horizons to think about psychologically far-away objects or events.

The first study determines whether those who have permanent restrictions (i.e., those who use wheelchair) have a more expansive mind-set than those with no permanent restrictions. We tested our prediction in the field, specifically, a supermarket. Previous research demonstrates that those who construe events with an expanded mind-set use larger categories to classify objects (Liberman, Sagristano, and Trope 2002). In line with this research stream, we predicted that

those who have permanent restrictions would have fewer items on their shopping list than those with no restrictions.

The second study has a similar aim. Patients of a diabetes clinic and clients of a diet store indicated their preferences for different descriptions of the same brand in five product categories. We inferred participants' mind-sets from their preferences for brand-product category information or brand-product attribute information.

The third study tests our predictions in a controlled environment, in which we manipulated having permanent or temporary restrictions using a restriction on parking scenario. We determine participants' information processing by using an adapted version of the Behavioral Identification Form (BIF). Study 3 also tests the proposed mechanism of perception of control.

Study 4 investigates the information processing of people with permanent and temporary restrictions by testing their preferences for product shelves in retail settings. As a behavioral measure of preference, we asked participants to indicate their preferences for different supermarket shelf formats. We predicted that because a contracted mind-set would cause participants to focus more on details and product features, temporary-restriction participants (i.e., dieters) would prefer shelf formats that contain only gluten-free products. Study 4 also tests for the underlying mechanism of perceived control.

The current work contributes to the budding literature on restrictions by building on and contributing to construal level theory. We provide evidence that people with permanent restrictions have more expansive mind-sets than those with temporary restrictions; consequently, those with permanent restrictions process information more abstractly than those with temporary restrictions. We further provide evidence that people with permanent restrictions perceive more control than those with temporal restrictions and that this perception of control leads to different information processing.

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Descriptive Social Norms Enhance Pro-Environmental Behavior: A Bayesian Reanalysis of Hotel Towel Reuse

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EXTENDED ABSTRACT

Descriptive social norms indicate which behavior is typical or normal in a given situation (Cialdini, Reno, & Kallgren, 1990). Such information can influence people's behavior in important ways (Schultz et al. 2007). A prototypical and widely-cited example for the effectiveness of descriptive social norms concerns the reuse of hotel towels (Goldstein, Cialdini, & Griskevicius, 2008). In the original study, hotel guests received one of two messages that encouraged them to reuse their towels. One message simply informed the guests about the benefits of environmental protection (i.e., the control condition) and another message indicated that the majority of guests actually reused their towels in the past (i.e., the descriptive social norm condition). The results suggested that the latter message facilitated reuse (i.e., Experiment 1: 44.1% versus 35.1% reuse, $p = .05$; Experiment 2: 44.5% versus 37.2% reuse, $p = .03$).

In recent years, however, five replication experiments with a total sample size of 2,466 participants have arguably failed to obtain the original finding of an increased proportion of towel reuse (i.e., all $ps > .14$; Bohner & Schlüter, 2014; Mair & Bergin-Seers, 2010; Schultz, Khazian, & Zaleski, 2008). Here we resolve the apparent contradiction by a Bayesian reanalysis of the data that tests for independence in contingency tables (Gunel & Dickey, 1974; Jamil et al., 2015; see also jasp-stats.org). Bayesian hypothesis tests allow researchers to quantify evidence for both the null and the alternative hypothesis. One prominent advantage of the Bayesian test is that it can distinguish between evidence for absence versus the absence of evidence (e.g., Dienes, 2014).

As a basis for the reanalysis, the number of participants and the proportion of towel reuse in each experimental condition were recorded¹. Figure 1 displays the posterior distribution of the log odds ratio and the default one-sided Bayes factor for a test of equality of two proportions². The bottom row of Figure 1 displays the same information for the data when collapsed across all seven experiments.

Figure 1 reveals, first, that when considered in isolation none of the experiments provide compelling evidence in favor of the descriptive social norm hypothesis. The strongest Bayes factor comes from Experiment 2 of Goldstein et al. (2008) and yields a modest $BF_{10} = 2.02$, meaning that the data are only about twice as likely under the descriptive social norm hypothesis than under the null hypothesis. Three replication attempts also yield only weak evidence. Thus, the apparent contradiction in the literature may be partly attributed to the infamous p value “cliff effect” (Rosenthal & Gaito, 1963), that is, the tendency to believe that findings with $p < .05$ are qualitatively different from those with $p > .05$.

Figure 1 also reveals that, when collapsed across experiments, the data do provide strong evidence in favor of the social norm hypothesis: $BF_{10} = 36.89$, meaning that the data are about 36 times more likely under the descriptive social norm hypothesis than under the null hypothesis. For the combined data, the mean log odds ratio is 0.25. The 95% Bayesian credible interval ranges from 0.11 to 0.39. In absolute terms, the data indicate an average 6% increase in towel

¹ This information was either explicitly stated in the original publications or it was derived from details of the respective statistical tests therein

² The online appendix contains the raw data and the R-code that gave rise to Figure 1.

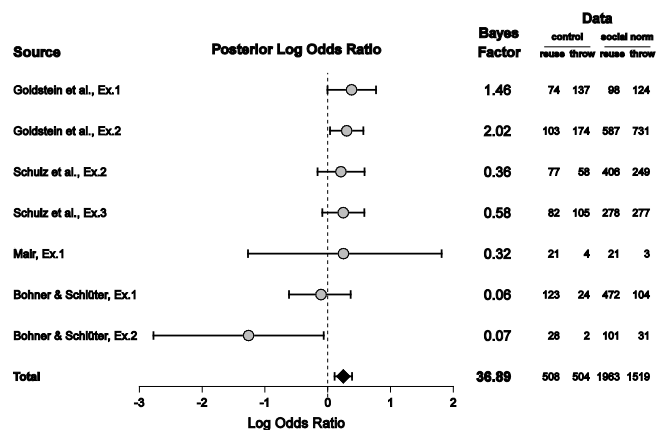


Figure 1: Bayesian reanalysis of seven experiments on the effectiveness of social norms on reuse of hotel towels, separately for each experiment and ordered by publication date. To the left, grey circles indicate the posterior mean of the log odds ratio and error bars indicate 95% credible intervals. To the right are the corresponding Bayes factors in favor of the descriptive social norm hypothesis, as well as the raw data. Positive log odds ratios and Bayes factors greater than 1 indicate evidence for the effectiveness of social norms. The bottom row indicates the same information for the combined data across all experiments.

reuse in the social norm condition. The effect size is modest, but—if it is a veridical reflection of the true effect size—the presence of millions of guest rooms worldwide suggests that its impact can nevertheless be substantial.

Although other statistical models can be specified to analyze these findings, we found the qualitative patterns of results to be robust: When analyzed individually, none of the experiments provides compelling evidence for the effectiveness of descriptive social norms on towel reuse, but together the studies provide strong support for the hypothesis. The analysis on the combined data assumes a fixed effect; with only seven studies and in the absence of strong prior knowledge, we feel a random effects analysis is overly ambitious.

In sum, our Bayesian reanalysis brings good news and bad news. The bad news is that when analyzed individually, the current experiments on towel reuse are evidentially weak. The good news is that when analyzed together, the data provide compelling support for the fact that descriptive social norms can prompt people to alter their behavior ways that help the environment.

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The Psychophysics of Price Perception: Evidence from the Lab and From the Field

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EXTENDED ABSTRACT

The results of a lab ($n=40$) and a field study in a grocery store ($n=966$) indicate a systematic underestimation of shopping basket values that follows a compressive power function. The bias depended on the sequential order but not on the shape of the underlying frequency distribution or simple rounding strategies.

THEORETICAL BACKGROUND

The subjective perception and integration of discrete numerical information is an elementary cognitive process that is highly relevant in a consumer context, where purchase decisions often depend on price estimations. Such integration processes also provides the basis for other relevant measures such as expected utility and the evaluation of risky prospects and keeping track of spending during a shopping trip or at a restaurant can help prevent overspending. Given this importance, the paper at hand presents a lab experiment and a field study to gain a better understanding of how people perceive and aggregate sequentially presented price information and what factors influence their estimation accuracy.

METHOD

In the lab experiment, Local university students ($N=40$) repeatedly estimated the total sum of 24 numbers described as the prices of fictitious items in a shopping basket. The numbers were sequentially displayed on a computer screen for 0.5 s each. After observing each sequence, participants typed in their best estimate for the total sum before proceeding to the next trial. For each sequence, the shape of the underlying frequency distribution, the sequential order in which the numbers were displayed, and the range of these numbers were subject to experimental manipulation. All sequences were presented in random order in a within-subject experimental design.

As facilitation toward subjectively estimating the sum rather than actually adding the exact numbers, participants also completed a secondary working memory task. To incentivize accuracy, participants received a bonus at the end of the experiment that depended on their estimation accuracy. The accuracy of participants' estimations (\hat{y}) was quantified as a bias measure indicating over- or underestimation proportional to the true sum (y):

$$\text{bias} = \frac{\hat{y}-y}{y} \quad (1)$$

To test if the results from the lab experiment generalize to real-world scenarios, a field study was conducted at a grocery store where customers who lined up at the checkout gave a spontaneous estimate of the total value of their shopping basket. After the checkout, this estimate was compared to the actual value indicated on their sales receipt. Besides testing for a possible estimation bias, this design also allowed testing a possible influence of the underlying price distribution, the number and types of items purchased, customers' age, whether they paid cash or credit, if they purchased potential impulse items such as sweet and fatty snacks that could be more prone to underestimation, or if they used shopping lists and thus planned

their purchases. A total of 966 customers participated in the study, 545 in the first session and 421 in the second session.

RESULTS

In the lab experiment, 65% of all sequences were underestimated. The mean bias across participants was $-.055$ ($SD = .066$; Cohen's $d = 0.8$), and for 35 of 40 participants, the bias was negative, indicating underestimation. This proportion of participants was highly unlikely under the null hypothesis of no bias as indicated by a binomial test ($p < .001$). The corresponding Bayes factor (BF) was greater than 10,000, indicating extreme evidence for the alternative hypothesis. Results further indicate that underestimation became slightly stronger for higher sums. For the lowest quintile, participants on average underestimated the true value by about 3.4% while for the highest quintile it was about 7.7%. Further analyses indicated that the bias varied depending on the sequential order.

The main results were confirmed in the field study. Here, the median basket value was 49.9 Swiss Francs (CHF). The median bias was -0.05 (interquartile range = -0.19 to 0.13 ; $M = -.02$; Cohen's $d = 0.2$). In total, 60% of all baskets were underestimated (first session: 62%, second session: 57%), which was unlikely under the null hypothesis of no bias as indicated by a binomial test ($p < .001$; $BF > 10,000$). Results further indicate that underestimation got stronger for larger sums, while small values were slightly overestimated. In particular, a 10% increase in the true basket value yields only a 9% increase in the estimated value. In other words, a basket worth 51 CHF (the average basket value) was underestimated by 3 CHF or 8% while a basket worth 79 CHF (the upper 75% quantile) was underestimated by 8 CHF or 10%.

A stepwise linear regression with bias as dependent variable further indicated that underestimation was stronger for older participants and that underestimation increased for baskets that contained a few (relatively expensive) as compared to many (relatively inexpensive) items. The mode of payment (cash vs. credit) or properties of the distribution of items, including its variance and skewness, did not influence the bias. Under the assumption that items bought first were scanned last by the cashier, the analysis further indicated that underestimation was stronger for sequences that ended with more expensive items.

DISCUSSION

Taken together, the results indicate that basic research on the mental representation of numbers also applies to a consumer context. Thus, even with plenty opportunities for feedback, people still have a bias to underestimate the sum of a sequence of numbers.

From an applied perspective, the results suggest that estimation accuracy can be improved by separately integrating different parts of the number sequence (such as different accounts or product categories) and then adding these separate estimates in a second. Likewise, the observed sequence effect indicates that accuracy may increase when expensive items are encountered early on.

Cultural Engagement in the Age of Social Media

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EXTENDED ABSTRACT

On April 12, 2015, 9:24 AM local time, London, UK, Hannah Atkinson pulled out her smartphone to make a public stance against how advertisers objectify women's bodies. She stands on the platform of an underground subway station, in front of a bright yellow, gigantic advertisement for Protein World's Weight Loss Collection. Featuring a toned model in a yellow bikini, the ad asks: "Are you beach body ready?" (see image 1). Hannah types "This advert pretty much sums up everything that I despise about how we treat and value women's bodies," snaps a photo, and tabs "Tweet." Her's is the second post about Protein World's newest advertising campaign, and the first one to go viral: Five hundred and fifty-seven retweets, 505 favorites.

Conventional social media wisdom suggest that Protein World should have taken immediate action to appease the crowd of over 500 people who retweeted Hannah Atkinson's angry tweet. Protein World, however, did not apologize when it was called out by Hannah Atkinson and others who complained about their portrayal of women's bodies. Instead, it antagonized critics with tweets like "@dazburn [strong arm emoticon] - here is a shoulder for you to cry on [kissing emoticon and heart]" ~ @ProteinWorld, April 27. Responses like this further fueled the controversy: By the end of April, advertisement posters have been vandalized, 70,000 people signed an online petition to remove the ads, and about 100 people gathered in Hyde Park to protest the campaign (Boland 2015; Sweney 2015). Protein World found itself in the midst of one of the fiercest social media storms in history, and even received a bomb threat to its headquarters. However, and to the surprise of many observers, Protein World's engagement strategy paid off. Thousands of Twitter users voiced their support for the brand, whose Twitter follower base grew by 15% over three weeks. Fanning the flames also brought in new sales: Protein World claims to have gained 30,000 first-time customers and a profit of £2 million since the campaign began (Daubney 2015).

We analyze the Protein World case through qualitative (Kozinets 2010; Weijo, Hietanen and Mattila 2014) and quantitative analysis of tweets and other online publications in order to develop the notion of *distributed infuriation* as a social media strategy. As we discuss below, current conceptualizations of consumer engagement cannot explain why Protein World has been successful (at least initially) with its distributed infuriation strategy. In order to fill this gap in the consumer engagement literature, we expand the cultural branding paradigm (Holt 2016; Holt and Cameron 2010) to explain the dynamics of the distributed infuriation strategy. In particular, the purpose of our research is to explore (1) how brands can orchestrate distributed narratives that are ideologically informed, and (2) how the distributed narratives impact the ideological alignment of the brand itself.

We used both qualitative and quantitative analysis techniques in order to answer our research questions. Most of our data for the qualitative analysis is collected by searching for tweets that contained "@proteinworld," "#proteinworld", or "Protein World." Because of the large volume of tweets, only a subset of data from nine different days was used for the qualitative analysis. During this analysis, certain keywords (e.g., #fitshaming, #growupharriet, and #gamer-gate) emerged as particularly important. In addition, we viewed and read images, articles and Facebook posts that were attached to these

tweets. We used the Sysomos software application in order to conduct a qualitative analysis the Protein World controversy. We analyzed the frequency of keywords mentioned in combination with @ProteinWorld mentions in order to better understand what different factions emerged over time. Finally, we visualized the different ideological camps that emerged during the Protein World controversy through interactional clustering analysis (figures 1).

Our findings have practical implications for marketers who wish to employ this strategy. As our analysis revealed, purposefully antagonizing critics on social media in order to mobilize brand supporters can be beneficial for a brand. However, there are inherent risks involved in this strategy: The focal brand can easily become associated with, or even accidentally endorse, extremely polarized narratives (e.g., rape threats) that would harm its image in the eyes of most customers. When using this strategy, brand managers should (1) frame both sides of the ideological battlefield according to their needs, (2) enable supporters to engage with critics from across the clearly defined ideological fault line, and (3) prevent fragmentation and hyper-polarization of the ideological battlefield. The last step not only involves banning critic-trolls, but also banning and marginalizing support-trolls whose actions would harm the original ideological fault line.

Aside from these managerial implication, our study advances the cultural branding paradigm by highlighting how it can be adapted to the age of social media and its emphasis on consumer-to-consumer interactions. While others have pointed out that cultural branding becomes even more suitable to position a brand in the age of social media (Holt 2016), our research is concerned with how the cultural branding paradigm can help marketing managers to *tell* their brand stories and *engage* consumers via social media (i.e., *cultural engagement*). We highlight how marketers can use cultural framing strategies (i.e., creating a clearly marked ideological fault line) in combination with established cultural branding tactics (e.g., cultural jujitsu and evoking ideological flashpoint; Holt and Cameron 2010) in order to facilitate brand supporters' interactions with brand critics across the ideological fault line. And most importantly, we show how the distributed narratives that are exchanged in cultural engagement strategies can impact the ideological alignment of the brand itself.

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The Global Surf Narrative: Using Narratives in Global Market Strategy

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EXTENDED ABSTRACT

Twenty years ago, Appadurai (1996) presented us with dimensions of globalization: ideoscapes, technoscapes, mediascapes and financescapes. Stressing the opportunities that companies should consider in this globalized world, Alden, Steenkamp and Batra (1999) further the concept of Global Consumer Culture (GCC) to Global Consumer Culture Positioning (GCCP). Contexts and paths to such positioning remain elusive. Following Consumer Culture Theory CCT (Arnould and Thompson, 2005) tradition, extant research identifies how local or “glocal” characteristics are integral to consumer behavior. Coffee consumption in Denmark (Kjeldgaard and Askegaard 2006) highlighted resistance to the Starbucks global brand. Cova, Pace and Park (2007) identify important differences between French and US customers of the Warhammer brand, leading the authors to suggest different strategies to attract customers in those countries. We posit that cultural approaches could add value to global market strategy, specifically, how companies could act globally in a “glocal-ized” world.

Penaloza (1998) finds that, more important than the product display, is the story that is told to the consumer as they enter *Niketown*. Action and adventure are some of the meanings created by texts, high ceilings and memorabilia (Penaloza 1998). Kozinets et al (2002) notice that, through the use of lavish décor and sleek finishes, consumers are presented with a stage behind the storefront of ESPN zone in Chicago.

Narratology, the study of narratives, addresses the fundamental role narratives have in our daily lives (Josselson and Lieblich 1999). To narrate something is to tell a story (Miller 1999), and people give meaning to their experiences by telling stories. As Abma (1999) claims, “Storytelling is a socially and situated language performance. Stories imply actions toward others” (Abma 1999, p. 170). Mediascapes (Appadurai 1996) have global reach, and can be carriers of storytelling, imagination and action.

We employ an ethnographic approach to investigate the reigning surf narrative and identify meanings and symbols used within surf retail environments and advertising. We use a mix of techniques (participant observation, naturalistic observation, and in depth interviews) to collect data in Brazil and the US (California and Hawaii) from 2009 to 2016. Our data consist of in excess of 458 photographs from 18 stores observed, combined with more than 30 in depth interviews (store and brand managers, consumers) and field notes from on site observation. Each element of the data set contributes unique insights to the surf retailscape (retailer tactics, brand strategies and consumer perceptions). Together they weave a narrative tapestry that scaffolds the surf market.

Our data reveal counter-intuitive findings around the surf market. We find that actually non surfers are the main consumers of the surf-related products, being responsible for between 50 to 90% of all consumption, according to brand and store managers from all locations observed. This consumption relates basically to apparel (shorts, hats, t-shirts). A specific narrative is created to attract this consumer.

Central to the narrative of surf retail is selling California. Managers from all locations mention that a “Californian scenario” is constructed in their stores, and that the Australian major global surf brands (Rip Curl, Quiksilver and Billabong) are perceived by

buyers as originally from this US state. Importantly, it is not only contemporary California that is sold by surf companies, but an imagined California of the 1960s. Our data shows that movies such as “The Endless Summer” (1966), magazines (*Surfer*) and music (The Beach Boys) were some of the carriers of this imagined reality. This association is perceived in surf stores “scenarios” in pictures of old woodies (wood-paneled station wagons) and VW vans on t-shirts, photographs and ads in all locations observed. This means that California’s imagined reality was spread through mediascapes and is re-imagined, accepted and accessed in different parts of the world.

Within this scenario, executives reveal that selling surfing is also selling an idealized lifestyle. This story involves a good life around the beach, with majestic beachscapes, everlasting summer and beautiful people. These images are presented on storefronts and inside the stores.

Local and global stores use the surfboard merely as a symbol to obtain credibility, to be recognized as a surf store. All surf store and brand managers interviewed claim that the sporting goods (surfboards, wetsuits) are not a significant source of revenue. They make far more profit selling any variation of apparel.

Having surfboards, “the Californian scenario” and photographs of surfers performing extreme practices is a strategy openly realized and developed by surf stores and brand managers to attract non surfers. Consumers (from both countries) clearly articulate that buying apparel is a way of living this great life suggested by surf companies. One consumer (who does not surf – has never tried, nor wishes to) opened his wardrobe and pointed out to all of his items, saying that came from different surf brands. He revealed that all of these brands connected him to a cool, easy going lifestyle, which he always felt related to.

Summarizing our contributions, the narrative around surf retailing is not attached to a single brand or location. Local and global brands, as consumers from different countries engage in the surf narrative in a similar way. Previous work around GCCP (Alden et al 1999) and CCT stressed brand or glocal related phenomena (Kjeldgaard and Askegaard 2006; Penaloza 1998; Kozinets et al 2002). Within our multi-brand, multi-national context, we offer Global Narrative Positioning as a possible intersection between GCCP (Alden et al 1999) and glocal realities addressed in CCT (Arnould and Thompson 2005) studies.

We introduce the global narrative as way for companies to position in the market. If the story has meaning and global reach, the narrative could be attached to any brand, local and global. The main advantage of the global narrative is that is not related to a specific brand or place, e.g., surf-related companies do not face local resistance to their products. We suggest that managers identify possible narratives that have global meaning, that is, consumers from different locales find the narrative resonating. Tattooing, fitness programs and farmer’s markets seem to carry such characteristics.

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The Achilles Heel of Centrality: Group Identification Makes the Central Susceptible to Influence

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EXTENDED ABSTRACT

The groups and communities to which a consumer belongs influence his attitudes and decisions (Escalas & Bettman, 2003). Nowadays, with growing possibilities to form communities online, it is important to understand how groups influence consumers, and in particular – who is most influential and who is most susceptible to influence. Our research focuses on the latter, and examines whether susceptibility to group influence (henceforth labeled ‘SGI’) depends on centrality.

Central consumers, defined as those holding a large number of social ties within their group, are known to be “influentials.” Consequently, one may expect them to resist social influence. However, extant research yields mixed findings; some find the central resistant (Hu & Van den Bulte, 2014), others find him susceptible (Lee, Cotte, & Noseworthy, 2010), yet others report no association between centrality and SGI (Iyengar, Van den Bulte, & Valente, 2011). The seemingly opposing findings call for deeper understanding of the conditions under which centrality increases as opposed to decreases SGI.

We propose that centrality may instigate two distinct processes, resulting in opposite effects on SGI. The ‘status mechanism’ lowers the central’s SGI. Compared to the marginal, the central ranks high in the group’s social hierarchy, and therefore should experience more autonomy (Kifer et al., 2013), and less sensitivity to social pressures (Galinsky et al., 2008). Indeed, research demonstrates that centrality and status are negatively associated with conformity (Bellezza, Gino, & Keinan, 2014; Hu & Van den Bulte, 2014). We acknowledge the status mechanism, but introduce a different process via which centrality increases SGI – the ‘group-identification mechanism’.

We posit that centrality increases group-identification, i.e. that the central identifies with the group more than the marginal does (H1). Due to his numerous relationships in the group, the central obtains a strong sense of belonging (Baumeister & Leary, 1995). The marginal, in contrast, obtains very limited benefits from the group. Thus, the same group is psychologically more rewarding and appears more appealing to the central than to the marginal. Since group-identification facilitates conformity to group norms (Cialdini & Goldstein, 2004), the central should exhibit higher SGI than the marginal (H2). If the group-identification process is driven by belonging motives, it may depend on self-construal - the extent to which the self is defined independently of others or interdependently with others (Markus & Kitayama, 1991). Centrality should increase SGI when the individual is interdependent, rather than independent (H3).

Finally, we posit that the group setting may determine whether centrality instigates a status or a group-identification process. Group settings generally bolster belonging motives (Gardner, Gabriel, & Lee, 1999). However, groups vary in their effect on status motives. While social groups reward egalitarian behavior and inhibit status motives, achievement groups foster inequality and status aspirations. Therefore, in achievement (social) groups, status mechanism will weigh more (less), and centrality would decrease (increase) SGI (H4).

Study 1 tested the association between centrality and SGI using real social groups. We assigned 175 students to 14 groups, and opened a social networking website for each group. Centrality represented the number of friends that each participant had in his group/social network. During two weeks, aside from freely interacting online, participants responded to opinion polls on their social networking website. The SGI measure was derived from numeric responses

to these polls. Prior to expressing their personal opinion, participants saw the cumulative response distribution of preceding respondents from their group. For each participant, we calculated the mean deviation of his answer from the preceding mean opinion, across the 7 polls. Lower deviations indicate greater SGI. Consistent with H2, centrality was negatively associated with deviation from group opinion. In contrast, subjective-status correlated positively with deviation from group opinion. Therefore, a positive association between centrality and SGI is evident, and cannot be attributed to status effects.

Next we explored the effect of centrality on group-identification. Participants in studies 2a and 2b (N_{2a} = 103; N_{2b} = 174) imagined attending a private movie screening with a group of 24 viewers. They rated various aspects of their movie going experience, including how they felt about themselves and about the group of viewers. We told participants in the high (low) centrality condition they were friends with 13 (2) of the other moviegoers. Supporting H1, in both studies central participants showed stronger group-identification than marginals. In study 2a, sense of belonging mediated the effect of centrality on group identification. In study 2b, self-construal moderated that effect. Centrality increased group identification more among interdependents than among independents. Studies 2a&2b demonstrate that centrality increases group identification due to belonging needs. Subjective status, mood, or self-image could not explain these findings.

Study 3 tested whether group-identification mediates the effect of centrality on SGI. Participants (N = 104) imagined residing in a community neighborhood. In the low (high) centrality condition, participants hardly knew any (knew many) of the other neighbors. They imagined voting on three topics during a neighbors meeting. For each topic, participants indicated their preference between two options after learning about the preference of the majority. Supporting H2, central participants showed stronger agreement with the group and greater group-identification than marginal participants. Furthermore, group-identification mediated the effect of centrality on agreement with the group, but subjective status did not. Study 4 (N = 189) employed the same procedure with a self-construal scale. It revealed that among interdependents (independents), centrality increased (decreased) agreement with the group.

Study 5 tested whether group type moderates the effect of centrality on SGI. Participants (N = 207) imagined being tennis club members. Pretest participants perceived club members as tennis fans, so we operationalized SGI using tennis attitudes; more favorable attitudes reflected higher SGI. We described the tennis club as either social or achievement-oriented. Supporting H4, among social (achievement) group participants, centrality enhanced (lowered) tennis attitudes.

Taken together, these studies elucidate the vulnerable side of centrality. Despite their status, central group members depend on the group to satisfy belonging needs, which increases their SGI. The finding that group-identification is more likely to prevail in social than in achievement groups reconciles the seemingly contradictory findings in the literature.

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The Role of Choice Set Size on Consumers' Preference for Unconventional Goods

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EXTENDED ABSTRACT

Choice set size and composition have been the topic of much consumer research in recent years (for a review see Chernev 2011). To-date the majority of the work on this topic has examined the experience of choosing from larger versus smaller choice sets, revealing both advantages and disadvantages. For example, although larger choice sets have been shown to increase option value, flexibility, opportunities for variety, perceptions of choice freedom, and enjoyment related to the overall shopping experience (Kahn, Moore, and Glazer 1987; Simonson 1990; Kahn and Lehmann 1991; Kahneman and Snell 1992; Ratner, Kahn, and Kahneman 1999; Botti and Iyengar 2004; Shin and Ariely 2004), they also lead to increased consumer cost, higher rates of choice deferral, choice overload effects, increased choice difficulty, and lower choice satisfaction (Broniarczyk, Hoyer, and McAlister 1998; Iyengar and Lepper 2000; Schwartz et al. 2002; Chernev 2003).

However, relatively little work has investigated the effect of choice set size on the specific option chosen. Some work has demonstrated that larger choice sets lead to greater variety-seeking and diversification (Read and Loewenstein 1995; Kahn and Wansink 2004). Additionally, Sela et al. (2009) found individuals are more likely to choose easy-to-justify options, such as virtuous products over vice products, in larger choice sets compared to smaller choice sets (Sela, Berger, and Liu 2009). The authors suggest that larger choice sets increase choice difficulty, inducing consumers to focus their decision process on choosing an option supported by good reasons. This suggests that larger choice sets can induce different psychological strategies to deal with choice.

In this paper, we assess whether consumers are more likely to choose an unconventional product in a larger choice context than in a relatively smaller one. Simonson & Nowlis (2000) find that providing reasons for choice promotes more unconventional choices. This occurs because reasons for expressing uniqueness are easier to think of, more accessible, and more persuasive (Simonson and Nowlis 2000). Based on the findings of both Sela et al. (2009) and Simonson & Nowlis (2000), we propose that consumers should be more likely to choose unconventional options in large choice sets than in small choice sets due to a greater reliance on reason-based choice.

In three studies we demonstrate that larger choice sets lead to more unconventional choices compared to smaller choice sets. We show this main effect across ice cream flavor choice in two studies, and through choice shares of a compromise option in a third study. We rule out any moderating effects for two individual-level variables: Need for Uniqueness (NFU) (Snyder and Fromkin 1977) and Intolerance of Ambiguity (IOA) (Budner 1962). Taken together, our empirical findings suggest that choice set size is an important situational variable in determining choice.

STUDY 1

In this study, we show the main effect—that larger choice sets increase choice shares for more unconventional options relative to smaller choice sets. We demonstrate this effect over ice cream flavors. Participants were randomly assigned to one of two choice set size conditions (Large vs. Small). Participants in the Large condition evaluated twelve ice cream flavors, half of which were identified in a pretest as more unconventional, while participants in the Small condition evaluated four ice cream flavors, again half of which were

more unconventional. All participants were asked to choose one flavor to purchase. Our dependent variable of interest is the type of ice cream flavor selected (unconventional or conventional). In addition to our dependent variable, we also measured choice difficulty, IOA, and participant demographics (gender and age). We predicted that participants would choose more unconventional choices in the larger choice set condition.

Pretest

Fifty participants were asked to rank order fifteen ice cream flavors from most conventional to least conventional. Conventionality was defined by the number of people that would be predicted to choose each flavor, such that the more popular flavors were to be identified as more conventional. The ice cream flavors with the lowest average rankings on this pretest were identified as the more conventional flavors, while the flavors with the higher average rankings were identified as the less conventional flavors. For example, the ice cream flavor that had the lowest average ranking (most conventional) was Cookie Dough ($M_{rank} = 5.56$), while the flavor that had the highest average ranking (most unconventional) was Honey Avocado ($M_{rank} = 12.14$).

Method

Two-hundred participants ($M_{age} = 35.2$ years, 55.5% male) on Amazon's Mechanical Turk (mTurk) were randomly assigned to one of two choice set size conditions (Large or Small). All participants were asked to imagine they were choosing an ice cream flavor to purchase. Participants in the Large condition evaluated twelve flavors, while participants in the Small condition evaluated four. The Small choice set was a subset of the twelve flavors used in the Large condition. The flavors used for the Small condition were randomized across participants such that all participants in the Small condition saw a different subset of flavors. We used this method so that across participants in the Small condition all possible combinations of flavors were evaluated, thus controlling for potential individual differences in flavor preferences.

Half of the ice cream flavors were unconventional (as identified in the pretest) while the other half were more conventional. The flavors were not explicitly labeled as conventional or unconventional for participants, instead participants were given the names of the flavors and a brief description. Our dependent measure of interest was whether a participant chose an unconventional ice cream flavor. We also measured choice difficulty ("How difficult was it for you to choose a single flavor to purchase?") and a subscale of the IOA scale related to the preference for novelty (sample question: "What we are used to is always preferable to what is unfamiliar").

Results and Discussion

Participants in the Large choice set condition were significantly more likely to choose an unconventional flavor than participants in the Small condition. Specifically, participants in the Large condition chose an unconventional flavor 37.8% of the time, while participants in the Small condition chose an unconventional flavor only 20.6% of the time ($t(1) = 7.15, p < 0.01$). We also found that choice difficulty was rated higher (more difficult) in the Large condition than the Small condition (2.43 vs. 1.93, $t(190.13) = -2.39, p < 0.02$). Finally, we ran a logistic regression of unconventional choice (1 = chose an unconventional flavor, 0 = chose a conventional flavor) on a dummy

variable for the Large condition, choice difficulty, IOA index, and participant controls. This analysis shows a significant positive effect for the Large condition ($= 0.97, p < 0.01$) such that participants in the Large condition were more likely to choose an unconventional flavor than participants in the Small condition. This effect holds even controlling for choice difficulty ($= 0.01, p > 0.10$), and individual-level differences in IOA ($= -0.55, p > 0.10$).

These results provide initial evidence that larger choice sets lead to different choices than smaller choice sets. Specifically, consumers making a choice in a larger choice set are more likely to choose an unconventional option than consumers making a choice in a smaller choice set. While larger choice sets lead to more choice difficulty, increased choice difficulty does not significantly affect unconventional choice shares. Thus, choice difficulty did not mediate our effect.

STUDY 2

In Study 1, half of the options were unconventional flavors and half were conventional flavors. However, it's possible consumers perceive the choice set differently depending on the choice set size as well as the composition of the choice set (e.g., ratio of conventional and unconventional options), leading to different choices. In order to ensure that the effect from Study 1 is not specific to a certain ratio of unconventional to conventional choices within a choice set, we designed Study 2 to directly manipulate the ratio of unconventional flavors.

Method

Participants ($N = 605, M_{age} = 35.2$ years, 55.5% male) on mTurk were randomly assigned to one of four between-subjects conditions (Size: Large, Small; Ratio: Half, Fourth). The Large-Half and Small-Half conditions were equivalent to the Large and Small conditions in Study 1. Participants in the two Large conditions viewed twelve ice cream flavors, while participants in the two Small conditions viewed four flavors. In the Large-Fourth and Small-Fourth conditions, the choice sets were comprised of one-fourth unconventional flavors (i.e., three flavors in the Large-Fourth condition and one flavor in the Small-Fourth condition). The Small conditions were again a subset of the Large conditions as in Study 1. Further, the flavors were identified as unconventional or conventional via the same pretest described above.

We predict that the main effect for choice set size found in Study 1 was not the result of the composition (half conventional vs. half unconventional). Thus, we hypothesize that there will be no significant interaction between choice set size (Large vs. Small) and choice set ratio (Half vs. Fourth) and that we will replicate our finding that participants choose more unconventional choices (across both the Half and Fourth conditions) in large choice sets than in small choice sets. Our dependent measure of interest is again unconventional choice share. In addition to this measure, we also measure choice difficulty.

Results and Discussion

We ran a logistic regression of unconventional choice (1 = chose an unconventional choice, 0 = chose a conventional flavor) on a dummy variable for the Large choice set conditions, a dummy variable for the Fourth ratio conditions, and the interaction between choice set size (Large vs. Small) and ratio (Half vs. Fourth), $b = -0.62, (1) = 1.98, p = 0.16$. As expected, we did find a significant main effect of choice set size (Large vs. Small) controlling for ratio (Half vs. Fourth). Overall, 25.0% of participants in the Large conditions chose an unconventional choice, compared to only 18.0% of participants in the Small conditions, $b = -0.44, (1) = 4.61, p < .05$.

Additionally, we found a significant main effect of ratio: participants were significantly more likely to make an unconventional choice in the Half condition versus the Fourth condition, $b = -1.41, (1) = 23.81, p < 0.001$. These effects hold when controlling for the significant positive effect of choice difficulty ($= 0.21, p < 0.01$) and participant demographics ($= 0.41, p < 0.04; = -1.06, p < 0.001$). As in Study 1, choice difficulty did not mediate our effect.

Overall, Study 2 replicates the findings from Study 1 regarding choice set size. Specifically, we still find that participants are significantly more likely to choose an unconventional choice in the larger choice set than in the smaller choice set. Study 2 also extends the findings of Study 1 by demonstrating that this main effect is not specific to the ratio of unconventional to conventional options available within the choice set.

STUDY 3

While Studies 1 and 2 have shown the main effect of choice set size on the preference for unconventional options, they did so in one product category (ice cream). We seek to replicate this finding over a different product (televisions) and through a different operationalization of conventionality (preference for a compromise option). In their work on unconventional choices, Simonson & Nowlis (2000) operationalize unconventional choice as choice for a non-compromise option. Specifically, because the compromise option is the least extreme option in a choice set, it is more conventional relative to the non-compromise options. Following this set-up, we measure preference for compromise options between small and large choice sets. We hypothesize that individuals will be more likely to choose a compromise option in a smaller choice set relative to a larger choice set.

Method

Participants ($N = 390, M_{age} = 33.3$ years, 53.3% male) on mTurk were randomly assigned to one of two choice set size conditions (Large, Small). Participants in each size condition were then further randomly assigned to either a "2-Group" or "3-Group" option set, creating a total of four between-subjects conditions. The 2-Group and 3-Group conditions are necessary to measure the compromise effect. Specifically, in order to assess whether the compromise effect exists in both choice set size conditions, we have to compare shares for the compromise option when it's in a binary choice set-up (2-Group) to shares for the compromise option when it is in a trinary choice set-up (3-Group). The number of options varied across all conditions. Participants in the Small-2-Group condition viewed two options; participants in the Small-3-Group condition viewed three options; participants in the Large-2-Group condition viewed eight options; and participants in the Large-3-Group condition viewed twelve. The Small conditions represent the traditional compromise effect set-up.

In each condition, participants are asked to imagine they are buying a television that varies in picture quality and price. The televisions vary from lower price/lower quality to middle price/middle quality (compromise options) and to higher price/higher quality. In the 2-Group conditions, participants chose between the middle price/middle quality option(s) and the higher price/higher quality option(s), while in the 3-Group conditions the lower price/lower quality option(s) were added to the set. The compromise effect exists if participants are more likely to choose the middle price/middle quality option(s) in the 3-Group conditions than in the 2-Group conditions. In the Small conditions, there is one television model for each price/quality tier. This option is randomized from the full set of options (represented by the Large-3-Group condition). In the Large conditions, there are four options for each price/quality tier. Thus,

the choice of any of the four middle price/middle quality options is considered a compromise choice.

To measure if participants are less sensitive to the compromise effect (and thus less likely to choose conventional options), we measure the difference in the shift in choice share for the middle price/middle quality option(s) between the 2-Group and 3-Group conditions for the Small choice set and for the Large choice set size separately. We hypothesize that participants in the Small condition will be more likely to choose the compromise option in the 3-Group condition than in the 2-Group condition (e.g., the classic compromise effect) but participants in the Large condition will not be more likely to choose the compromise option. This pattern would support our claim that participants choose conventional options more in smaller choice sets than in larger choice sets.

While our main dependent measure is the difference in the compromise effect between the Large and Small conditions, we also measure choice difficulty and participant demographics (age and gender) as in the previous studies. Further, we also included the NFU Scale in case this individual difference variable moderates the effect of choice set size on the compromise effect. We would expect a possible moderation since individuals who have higher NFU scores are more likely to choose less conventional options overall.

Results and Discussion

We found a marginally significant interaction between choice set size (Large vs. Small) and option set (2-Group vs. 3-Group), $b = 0.88$, $(1) = 3.62$, $p = 0.057$. Simple effect analysis revealed that participants were significantly more likely to choose the compromise option in the 3-Group option set than in the 2-Group option set in the Small condition, $b = 0.65$, $(1) = 4.22$, $p = 0.04$; however, they were directionally less likely to choose the compromise option in the 2-Group option set in the Large condition, $b = -0.24$, $(1) = 0.49$, $p = 0.48$. This significant interaction suggests that the compromise effect is reduced in larger choice sets, which can also be thought of as a reduction in the choice of a conventional option.

Looking at choice difficulty, there is a main effect of choice set size on choice difficulty ratings such that participants in the Large conditions find making a choice more difficult than participants in the Small conditions (3.32 vs. 2.55 , $t(367.443) = -4.69$, $p < 0.001$). However, if we run a logistic regression predicting choice of a compromise option ($1 =$ chose a compromise option, $0 =$ did not choose a compromise option) from a dummy variable for the Large choice set conditions, a dummy variable for the 3-Group option conditions, an interaction between the Large conditions and the 3-Group option conditions, and choice difficulty, we see that choice difficulty has a significant positive effect on the probability of choosing a compromise option ($= 0.27$, $p < 0.001$). This means that greater choice difficulty leads to a higher probability of choosing a compromise option. The opposite pattern that we would expect if choice difficulty was the reason why participants were choosing more conventional options. Yet, even controlling for the significant positive effect of choice difficulty, the interaction between the Large dummy variable and the 3-Group dummy variable is significantly negative ($= -1.00$, $p < 0.05$). This implies that the decrease in the compromise effect is due specifically to the contextual choice set size variable separate from changes in choice difficulty.

We also ran two similar models of the regression described above, also including the NFU Scale. We evaluated two models: one with a three-way interaction between Large choice set size, the 3-Group option set, and the NFU Scale and one with no three-way interaction, just the NFU Scale as an independent measure. The first model found no significant three-way interaction ($p > 0.10$), sug-

gesting that NFU does not moderate the effect of the Large choice set size on the compromise effect. The second model did show a significant negative effect of NFU on choice of the compromise option ($= -0.54$, $p < 0.05$). This implies that individuals with higher NFU are less likely to choose a compromise option overall. However, the interaction between the Large choice set size and 3-Group option set still remains significant and negative ($= -1.03$, $p < 0.05$) even when including the NFU Scale. This suggests that choice set size still significantly reduces the compromise effect even when controlling for individual-level differences in NFU.

Overall, Study 3 has replicated the main effect of choice set size on the preference for unconventional choice options in a different product category and via a different operationalization of conventionality. Further, the finding that larger choice sets reduce the compromise effect is not moderated by NFU or diminished when controlling for either choice difficulty or NFU. This suggests that choice set size has an independent and separable effect that is specific to the number of options available.

GENERAL DISCUSSION AND CONCLUSION

Across three studies we have demonstrated that larger choice sets lead to a greater preference for unconventional items relative to smaller choice sets. We have shown this effect in two product categories (ice cream and televisions) and across two operationalizations of conventionality (an independent pretest and the compromise effect). We also demonstrated that this effect is not attributable to changes in choice difficulty or individual-level differences in NFU or preference for novelty.

In our studies, we only examined two relative choice set sizes (four versus twelve). It is possible that the difference in preferences may be attenuated with smaller or larger choice sets. Further, we were only able to rule out potential mechanisms for the difference in conventional choice share between choice set sizes (choice difficulty, NFU) and we were not able to specifically identify a mechanism for the main effect of choice set size. While we hypothesize that this is the result of a greater reliance on reasons and the preeminence of reasons related to uniqueness, we have not confirmed this empirically. Despite these limitations, this paper still contributes to the literature on choice set size and provides compelling evidence that choice set size significantly affects preference and can explain why consumers experience negative post-choice outcomes. The results of this paper have strong implications for marketers determining which options and how many options they should have in stock.

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Word of Mouth vs. Word of Mouse: The Effect of Communication Channel on Subsequent Reactions to the Brand

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EXTENDED ABSTRACT

With the increasing popularity of the internet, more and more word of mouth is generated online. Consumers not only talk face-to-face to their friends, but also write online reviews, provide comments or text messages to others about their view of a product or a brand. This research examines whether a communicator's own reactions to and behavior towards a favored brand might change as a consequence of discussing it orally vs. in writing.

We propose that oral communication is more likely to invoke the self than written communication. The communications literature suggests that this might occur, because of multiple reasons. First, because oral communication is more involving than written communication, speakers refer to themselves more frequently than writers (Chafe 1982, 1985; Jahandarie 1999). Second, writing often serves to "disembody the written text from the writer" (Rubin 1987, pg. 10). Speech, in contrast, is ephemeral and therefore cannot be separated from the speaker (Jahandarie 1999; Rubin 1987). Third, oral communication is typically more spontaneous than written communication; accordingly, it is more likely to be a truer reflection of the self, rather than being corrected by a consideration of social norms (Berger and Iyengar 2013; Klesse, Levav and Goukens 2015).

These findings suggest that consumers who talk (vs. write) about a brand are more likely to evoke thoughts about the self, as manifested in heightened ego-involvement (Chafe 1985; Jahandarie 1999), increased self-expressiveness (Rubin 1987; Chafe 1982) and a greater inclusion of personal experiences (Chafe 1982; Tannen 1985). We argue that this in turn should strengthen the self-brand connection, which captures the extent to which the brand is integrated into the consumer's self-representation (Escalas 2004). The positive consequences of a strong self-brand connection should therefore also be obtained, such as a greater resistance to an attack on the brand (Cheng, White and Chaplin 2012) and a greater willingness to wait for the brand in cases – e.g., in case of stockout (Sprott, Czellar, and Spangenberg 2009).

Study 1 provided evidence for our predictions, showing that participants reported a greater self-brand connection with a positively-viewed brand (Apple) after discussing it orally than after writing about it. In support of the premise that this effect of communication channel arises because of greater self-activation in the oral case, this effect disappeared if participants, across conditions, were explicitly instructed to focus on the self when discussing the brand. Exactly the same pattern was observed for the frequency of "I" mentions during the communication, which serves as a proxy for self-activation. Finally, willingness to wait for the discussed brand (in stockout situations) also followed this pattern: oral (vs. written) communication had an advantage in the control condition, which disappeared in the self focus condition.

Study 2 examined whether the effect of speech vs. writing will disappear if the discussion is with the reference to a second party's views. Participants in the control condition either talked about their views of a positively-viewed brand (Samsung) to a voice recorder or wrote about it on a piece of paper. In the other-person condition, they were instead asked to think of someone else who uses "Samsung" products, and discuss this person's views of the brand. After participants provided their initial attitudes towards Samsung, they then read a consumer critique of Samsung, and reported their attitudes again. As predicted, in the control condition, talking once again produced

a higher SBC than writing, which also translated into a greater resistance to attack. Both of these differences disappeared, however, when discussing Samsung from another person's perspective. Finally, a protocol analysis of the communication content also provided evidence supportive of our theorizing: participants in the control condition mentioned more self-relevant positive thoughts about the brand during oral than written communication, but this difference disappeared if they discussed someone else's perception of the brand.

Having found good support for our basic premises in these studies (as well as others not reported here), Study 3 investigated when writing about the brand will benefit it more than talking about it. We suggest that a reversal of earlier results will obtain when consumers have an explicit goal of persuading the recipient as to their opinions about the brand. Given such a goal – as opposed to simply sharing thoughts on a brand – consumers might themselves believe that they have done a more persuasive job if given the opportunity to write out their message (even if this does not reflect actual recipient persuasion) because of greater opportunity to refine and structure the message (Berger and Iyengar 2013). This belief should increase their own certainty about their already-favorable attitudes towards the brand (Visser and Mirabile 2004), which in turn is likely to not only increase self-brand connection, but also bring about other benefits such as willingness to wait for the favored brand (Tormala et al. 2006). Study 3 found support for these ideas by manipulating the communication goal: sharing vs. persuasion. Previous results were replicated when participants were simply required to share their views: talking produced a stronger SBC and a higher willingness to wait for the favored brand (in this case, Adidas). However, given a persuasion goal, not only did the SBC difference disappear, but certainty in post-communication attitudes was higher for the writing (vs. talking) condition – in turn, this produced a greater willingness to wait for the brand.

In our final study, we explore whether this link is bi-directional. Because the self-expressive function served by brands with a high SBC is more likely to be fulfilled in the oral rather than the written modality. We predict, therefore that not only does talking vs. writing about a favored brand increase the self-brand connection (which is the central thesis of this research), but also, an enhanced self-brand connection increases the likelihood that consumers will choose to talk rather than write about the brand. Study 4 provided support for this argument.

This research contributes both to the communications literature in highlighting novel consequences of talking vs. writing and also to consumer scholarship by addressing the relatively understudied issue of how the communication channel used for word-of-mouth can influence the consumer's own reactions to a brand. The findings also contain applied implications in terms of informing managers as to when it might be beneficial to encourage consumers to talk (vs. write) about a brand – and also when it might be useful to encourage the reverse.

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Playful Consumption: A Physical Perspective

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EXTENDED ABSTRACT

Playfulness is ubiquitous in consumption, pervading every stage of the consumption process (Grayson 1999; Jantzen et al. 2012). While physically playful consumption has become a widespread phenomenon, existing conceptualizations of play in consumer research are disembodied. In this paper I conceptualize (1) why consumers engage in physically playful consumption and (2) how they do it. This research contributes to the literature on playful consumption and consumer expertise.

Previous research has conceptualized playful consumption as a non-productive, intrinsically motivated, voluntary consumption experience involving an optimal level of arousal and feelings of fun, and anchored at the border between the real and the imaginary (Holt 1995; Holbrook 1999; Kozinets et al. 2004). Two trends have developed in playful consumption. On the one hand, consumers increasingly engage in mental play. For example, consumers revel in the actualization of impossible fantasies in video games (Denegri-Knott and Molesworth 2010) and engage in “screen play” (Kozinets et al. 2004 p. 668). On the other hand, consumers also engage in physical play. Descriptive accounts show that consumers playfully explore their bodies through a wide range of consumption activities, from sports (Coakley and Dunning 2000), to yoga (Ertimur and Coskuner-Balli 2015), DIY (Wolf and McQuitty 2011) and the latest generation of video games (Benford, Magerkuth and Ljungstrand 2005). However, these descriptive accounts have not conceptualized the processes and purposes of physically playful consumption.

The study was conducted in the juggling community. The community members practice as consumers rather than professionals the circus crafts involving the manipulation of objects, a set of highly physical and playful activities (Palacios 1991). The study follows an ethnographic research design based on participant-observation in two London juggling clubs. Over 2015, 11 jugglers were interviewed (200 transcript pages), members’ online discussions were continuously scrutinized (over 100 conversations downloaded) and field notes were taken at 25 juggling gatherings (40 transcript pages).

Physical play emerges as a mode of consumption whereby consumers appropriate material reality. I distinguish four types of physically playful consumption practices allowing consumers to appropriate different aspects of material reality. Each practice is characterized by specific doings, uses of objects and physical meanings. In skill playing, consumers train to develop new physical abilities, using the toy as a tool, and derive feelings of self-improvement from it. Skill playing allows consumers to appropriate their body. In artistic playing, consumers improvise long sequences of movements, viewing the toy as an extension of their body, allowing them to express themselves. Through artistic playing, consumers unite with surrounding objects. In collaborative playing, consumers play physical games with others, using the toy as a communication medium, to gain feelings of mutual incorporation, perceptions of being in physical harmony with others. Consumers thus integrate the bodies of fellow consumers in their inner worlds. In performance playing, consumers present their physical abilities to an audience in a choreography, using the toy as a theatrical property. By defying the rules of gravity, the player produces feelings of magic in the audience. In performance playing, consumers enchant the world, reshaping material reality as they wish. The range of physical play practices consumers can engage in expands overtime as their expertise develops. Beginners start with skill playing as all other forms of play require mastering a number of basic movements. Then, they

can engage in artistic and collaborative playing. In the last step consumers can become performance players.

While in previous research consumers were viewed as playing to escape material reality (Deighton and Grayson 1995), this research indicates that consumers play to connect with material reality and characterizes four ways in which it does. This study also contributes to the literature on consumer expertise. It offers an embodied account of consumer expertise contrasting with existing cognitive ones (von Wallpach and Kreuzer 2013). While cognitive expertise allows consumers to select the experiences which enhance their expertise the most, leading expert consumers to engage in less varied experiences than novices (Clarkson, Janiszewski and Cinelli 2013), physical expertise unlocks new experience opportunities, leading expert consumers to engage in more diverse experiences than novices.

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Toward a Framework for CCT Research on Consumer Emotion

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EXTENDED ABSTRACT

CCT research on consumer emotion dates back to the 1980s, following passionate pleas by interpretive researchers to highlight the emotional, experiential, and expressive aspects of consumer behavior (Belk 1987; Hirschman and Holbrook 1982; Holbrook 1987). Although CCT has made valuable inquiries into emotion, the field has tended to employ different theoretical perspectives of emotion, to situate concepts of emotion at differing levels of analysis, and often to subordinate emotion under parallel theoretical notions, such as, ideology and community. As a result, CCT research on consumer emotion is rather fragmented (Gopaldas 2014; Illouz 2009; Rafferty 2011), having produced a large unconnected array of piecemeal insights. Consequently, there has been a call for more social-, cultural-, and management-related conceptualizations of emotions in marketing and consumer research (Bagozzi, Gopinath, and Nyer 1999; Moisis and Beruchashvili 2010). This article proposes an integrative framework for CCT research on consumer emotion. We develop a framework that captures the distinctions and possible links among the macro-cultural, the meso-market, and the micro-individual level as they relate to emotion. Such integrative framework extends existing theorizations of consumer emotion by establishing important connections among different levels (macro, meso, micro) of analysis.

To develop our framework we collected CCT articles from the *Journal of Consumer Research*; *Journal of Consumer Culture*; *Consumption, Markets, and Culture*; and *Marketing Theory*; along with relevant texts from other journals, books, and edited volumes on consumer emotion, focusing primarily on sociocultural perspectives (Belk and Coon 1993; Belk, Ger, and Askegaard 2003; Beruchashvili and Moisis 2012; Beruchashvili, Moisis, and Gentry 2015; Bonsu, Darmody, and Parmentier 2010; Celsi, Rose, and Leigh 1993; Gopaldas 2014; Jantzen et al. 2012; Kuruoglu and Ger 2015; Otnes and Pleck 2003; Sandlin and Callahan 2009; Siebert 2013, 2014; Thompson 2005). Next, we iteratively went back and forth between landmark emotion research in the social sciences (Hochschild 1979; Illouz 1997; Stearns and Stearns 1985; Stets and Turner 2008) and our collection of CCT work on consumer emotion. From this process, we built up and created common themes, assumptions about emotion, and an overall framework integrating and connecting recent CCT research on consumer emotion along a macro-meso-micro spectrum of analysis.

We resort to the notion of “emotionology” (Stearns and Stearns 1985) to distinguish between the cultural and market elements that shape consumer emotion, and individual emotional experience and expression itself. Although the term in its original formulation is largely limited to social rules regarding emotion, we adapt it to capture the macro and meso levels of analysis. We suggest the label “cultural emotionology” for macro-level ideational resources pertaining to emotion, such as, emotion discourses, values, and norms. In addition, we suggest labeling “marketplace emotionology” the material and symbolic resources related to emotion that result from the use and reworking of cultural resources by actors in market and consumption settings (e.g., brand-centered “emotion cultures,” Beruchashvili et al. 2015) and the market-mediated assemblages formed by resources, concrete emotions, and market actors (e.g., “emotional economies,” Kuruoglu and Ger 2015). At each level, emotionologi-

cal formations may serve as resources and regulating structures for consumers.

Next we describe the main findings emerging from our analysis at the three levels: macro, meso, and individual. The key elements at the macro level of *cultural emotionology* (e.g., emotion ideals, vocabularies, ideologies) usually exist in plural form in societies and are often contradictory, creating tensions at the cultural level that animate much of the dynamism in human emotional activity. However, these elements can also form “emotional regimes” (Jantzen et al. 2012; Reddy 2001) that enforce particular emotional norms, values, and techniques guiding consumers in desirable emotional directions.

The key elements at the meso level of *market emotionology* are market offerings and actors, symbolic marketplace resources, and consumer collectives. These elements become variously assembled in the emotion concepts that prior research has created or applied. For instance, the concepts “emotion culture” (Beruchashvili et al. 2015; Gordon 1989) and “structures of feeling” (Thompson 2005; Williams 1997) were used to reveal how emotional consumer behavior is normatively shaped. We further locate at the meso level, emotional or “affective economies” (Kuruoglu and Ger 2015; Ahmed 2004) and “marketplace sentiments” (Gopaldas 2014). These latter concepts although paying little explicit attention to normative content about emotions, they represent more concrete assemblages that encourage collective thoughts, feelings, and actions. Much research at this level tends to perceive emotions as being collectively evoked in and through the interactions of consumers (and other market actors and actants) in shared consumption settings.

The cultural and marketplace levels provide scripts and resources for individuals as socially situated emotion interpreters to make sense of and (make efforts to) deal with their emotional experiences and expressions. Research at the *micro-individual* level emphasizing emotion as a central element in consumers’ identity projects tends to be based on the premise that emotion and identity are interlinked and broadly governed by similar structures and processes (Beruchashvili and Moisis 2012; Hochschild 1983). Emotions are seen as being orientated or managed toward, motivating, reassuring, or hindering particular identity goals and prescribed consumer positions (and vice versa) within cultural contexts and marketplace structures (Belk et al. 2003; Siebert 2013; Thompson 2005; Thompson and Coskuner-Balli 2007).

Overall the proposed framework helps broadening scholarly debates from specific concepts and dichotomizations between cultural and psychological work to connections among existing concepts at different levels of analysis. By taking such a perspective, researchers will have a more comprehensive view of consumer emotion. The framework further clarifies the different emotionological levels, and the links between the socio-culturally constructed (i.e., emotionology) and the messy realm of the individually experienced.

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The Paradox of Social Television: The Effects of Connectedness and Distraction on Enjoyment

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EXTENDED ABSTRACT

Social television (social TV) - the use of social media to communicate with other viewers while watching television - allows the sharing of experiences with close or distant others. People can share via live-tweeting, posting Facebook status updates, or reading other viewers' comments (Nielsen 2014; Wagner 2013). In this paper, we examine how communicating online with other consumers while watching a television broadcast affects enjoyment of the viewing experience.

Broadcast networks have two major incentives to encourage social TV: (i) increasing engagement and word-of-mouth about the TV programs and (ii) bringing back traditional TV, where viewers are not able to fast-forward the commercials. These motives call broadcasters to action; yet, research on the downstream effects of social TV on viewing experiences shows conflicting results. While some industry research suggests that this behavior can increase program and brand engagement (Nielsen 2015; Russell 2012), other findings suggest that it might be distracting (Pearce 2014).

Our goal is to understand how the nature of TV consumption changes while people are engaging in social TV. Specifically, we examine the effects of social TV on (i) the enjoyment of the content and (ii) the enjoyment of the overall experience. Our theorizing suggests that social TV has both a positive effect on enjoyment via a feeling of social connectedness and a negative effect on enjoyment via distraction.

The positive outcomes of consuming experiences with social others suggest that the benefits may also extend to social TV. Thus, we predict that social TV will enhance the overall enjoyment of the consumption and this effect will be mediated by social connectedness.

Our hypothesis is based on the connections between (i) the felt synchrony with social others induced by viewers' online communication (Sogut, Brunel, and Bickart 2015), (ii) people's preference for social experiences (Caprariello and Reis 2013; Raghunathan and Corfman 2006; Ramanathan and McGill 2007), and (iii) the impact of social connectedness on well-being and positive emotions (Mauss et al. 2011).

Social TV requires multi-tasking as viewers need to use a second screen device (e.g., smartphones, tablets) while watching the program on TV. Thus, we predict that participating in social TV may also lead to distraction, which negatively affects the enjoyment of the content. We also predict that the effect of distraction on content enjoyment will depend on the type of the viewed content. On the one hand, communicating with others requires attentional resources, which may reduce consumers' ability to process the program content. Experiences can be evaluated less favorably when attention is divided (e.g., Green and Brock 2000; Langer 1997). On the other hand, some findings suggest that distraction while watching TV does not necessarily make the experience less enjoyable, especially if the affective component (compared to the informational component) of the viewed content is dominant (Nelson et al. 2009; Shiv and Nowlis 2004) we present a two-component model, which predicts that distraction may decrease subsequent choices for the sampled item. The model asserts that the ultimate pleasure arising from the taste of a

food sample depends on two components, one informational and the other affective. Further, the model proposes that distraction increases (decreases). Therefore, we predict that people will perceive participation in social TV as distracting when the viewed content is predominantly informational, but not if the viewed content is predominantly affective.

In two studies, we examined whether social TV affected overall experience enjoyment and viewed content enjoyment. In Study 1, participants watched a clip from a talent show (high affect), while in Study 2 they watched a clip from a documentary (high information). In both studies, we manipulated whether or not audience members participated in social TV while watching the clips. Lab sessions were randomly assigned to one of two experimental conditions. In the "TV + Social TV" condition participants watched the video while communicating with each other using a chat room interface, and in the "TV only" condition, they watched the video without communicating. In the TV + Social TV sessions, each participant was assigned an anonymous username and was instructed to share at least five posts in the chat room. After viewing the video, participants rated their *enjoyment of the experience* and *enjoyment of the content*. We also measured social connectedness and distraction.

In Study 1, where content was predominantly affective, social TV enhanced experience enjoyment, which was driven by social connectedness. Further, regardless of engaging in communication, all participants enjoyed the clip equally. In other words, participating in social TV did not enhance or diminish the enjoyment of the intrinsically enjoyable *content itself* per se, but rather, enhanced the enjoyment of the *overall experience* for the participants.

In Study 2, where content was predominantly informational, we found that participating in social TV resulted in less enjoyment of the video content. Although social TV increased the felt connection with other audience members, the negative effect of distraction on content enjoyment was stronger than the positive effect of connectedness. For experience enjoyment, the effects of distraction and connectedness balanced each other out, resulting in no difference in overall experience enjoyment between the two conditions.

In two experiments, we find that participating in social TV (vs. TV only) increases social connectedness, which enhances the enjoyment of the overall experience. When social TV is not distracting, the positive effect of feeling connected to social others positively affects the overall experience. When communication leads to distraction (occurring when content is predominantly informational, rather than affective), social TV hinders the enjoyment of the viewed content.

Our work contributes to the literature on experiential and hedonic consumption by providing a theoretical framework that reconciles the paradox of social TV - the tension between connection and distraction. We believe that understanding the effect of social TV on different aspects of enjoyment also has important practical implications for content producers, broadcast networks, and advertisers. Specifically, content producers and advertisers should encourage online conversation among consumers, especially when the program content is emotional. When the content is mainly informational or requiring more attention, it might make more sense to encourage viewers to share their thoughts during the ad breaks rather than dur-

ing the program. Finally, because feeling connected enhances viewing experiences, promotions encouraging online conversation should also highlight the importance of being part of a group or community.

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Multitasking: Perception and Performance

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EXTENDED ABSTRACT

In today's tech-heavy environment, multitasking has become an integral part of our lives (Jumio 2013; Ophir, Nass, and Wagner 2009; Wang and Tchernev 2012). Consumers frequently go back and forth between tabs on their smartphones, messages, and websites. Moreover, nowadays, many workplace environments necessitate working on multiple projects under time pressure that may lead workers to shift back and forth between several tasks that they are engaged in (e.g., Leroy, 2009). In the current paper, we first propose and demonstrate that multitasking is often about people's perceptions. Second, we demonstrate that the mere perception of multitasking improves performance compared to the perception of single-tasking, holding the task constant. Finally, we suggest that the perception of multitasking reduces boredom and increases engagement with the task, which drives this improvement in performance and increase in persistence.

The definition of multitasking, which originated in computer-engineering, is the engagement in two or more tasks simultaneously (Witt and Lambert 1965). However, it is generally accepted that humans cannot really perform more than a single task concurrently. That is, for non-automatic activities that require active attention, people shift back and forth between activities and process only a single task at any given time (Conard and Marsh 2014; Leroy 2009; Pashler 1994). Thus, multitasking is more about perception than actual engagement in multiple tasks concurrently (we limit our attention to non-automatic activities). When engaging in a given activity that requires several distinct tasks, one may construe such activity as either multitasking or single-tasking. This brings up important questions: what factors would make individuals perceive a certain activity as multi- versus single-tasking? Further, holding the actual activity constant, would the mere perception of multitasking impact performance? If so, why?

First, we examine what may be the factors that would prompt individuals to construe a certain activity as either multi- or single-tasking. In two studies, we demonstrate the malleability of people's perception of their activity. For example, in one study (N=80) participants were asked to imagine that they were working on two word-puzzles. In one condition the puzzles were described as being part of a single study while in another condition each puzzle was said to relate to a distinct and different study. Indeed, participants in the latter condition construed such an activity as being more consistent with multitasking than those in the former condition ($p < .001$). In additional studies, we find that participants' perception of multitasking is also influenced by task relatedness, topics, importance, and switching frequency ($p < .05$). Thus, even the simple framing of an activity can make people construe a given activity as either multitasking or single-tasking.

Next, we tested whether the mere perception of multitasking increases persistence and performance. In one study (N=237), participants worked on two types of word-puzzles presented side-by-side. The tasks were framed as part of a single study (single-tasking-framing) or as part of two separate, distinct studies (multi-tasking-framing). Manipulation checks ensured that the framing manipulation worked as intended. We find that participants in the multitasking condition worked significantly longer and performed better compared to those in the single-tasking condition ($p < .001$).

Across 12 studies, we replicated this effect with different tasks, and regardless of whether participants felt they had a choice

of whether to multitask or not. For example, in an additional study, participants (N=162) were asked to transcribe what they heard when watching an educational video. This activity was framed as either a single activity (e.g., transcribing), or as two concurrent activities (listening and typing). Participants in the multitasking-condition transcribed more and performed significantly better on a subsequent quiz relating to the video content ($p < .05$). Additionally, we did not find consistent results that would support that the effect was driven by a change in mind-set (i.e., a productivity mindset Keinan 2007) or overall perceptions of engagement in the task. Furthermore, the perception of multitasking did not seem to heighten the perception of self-efficacy, need for closure, confidence, or control, which could also be advocated as a mechanism driving improvement on task performance (Rotter 1966; Sherer et al. 1982).

In additional studies, we explore other mechanisms for the observed effect. In particular, we test whether it is possible that individuals' belief that multitasking is generally more difficult is causing them to gear up toward working on this supposedly more difficult activity. Such heightened preparedness would ultimately lead individuals to persist longer and perform better. In a study (N=200), we manipulated the degree to which participants would feel they needed to prepare for the study by informing them that the stud(ies) are simple and easy, in addition to our task-perception framing manipulation. Thus, the study was a 2(multitask-framing vs. single-task-framing) \times 2(easy vs. control). Although we replicated the effect in which the perception of multitasking improves performance, we did not find an interaction that would support that the main driver is participants' tendency to get geared towards a more difficult task.

Several additional studies demonstrate that the multitasking framing improves performance because of increased engagement in the task(s). Specifically, participants who felt like they were multitasking reported being less bored when watching a gallery tour or working on puzzles ($p < .05$). We more directly test the mechanism underlying this effect using eye-tracking. By measuring people's pupil dilation as a proxy for arousal (Beatty and Lucero-Wagner 2000), we find that when an activity is framed as multitasking, switching between the tasks increases arousal more so, compared to when the same activity is perceived as a single task.

To summarize, across 22 studies, with 4686 subjects, and employing five different types of tasks, we find that the mere perception of multitasking substantially improves performance. That is, while doing more at the same time might hurt performance, doing the same activity but perceiving it as more, improves it. This research has important implications because consumers have many opportunities to multitask as they navigate between tabs on their web browser, watch television, waiting in line, or shop in stores. In these contexts, consumer's perception of multitasking can increase engagement with a certain marketing activities like watching commercials or a tour.

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Physical Transformations and Visual Practices in the Fitblr Community

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EXTENDED ABSTRACT

The appearance of one's body is a central aspect of self-identity and transforming the body to enact identity projects constitutes a common theme in contemporary consumer culture (Thompson and Hirschman 1995). In Western societies, achieving the cultural ideal of a slender and fit body has become a primary concern (Heisse-Biber 2007) and consumer researchers have examined how consumers' interpretation of sociocultural discourses shape their efforts to exert control over their body (Thompson and Hirschman 1995), how consumers cope with cultural expectations of weight control (St.James, Handelman, and Taylor 2011), and the role of support groups in pursuing weight-loss goals (Moisio and Beruchashvili 2010).

As computer-mediated environments become increasingly popular sites where consumers construct identities (Belk 2013), research seeking to understand consumers' weight-control efforts has turned to the analysis of blogs (Leipämaa-Leskinen 2011) and online communities (Ballantine and Stephenson 2011). These studies largely focus on consumers' discursive practices by analyzing the verbal texts consumers produce and share. We argue that investigating consumers' visual practices is a fruitful avenue to expand our understanding of their weight-related identity projects in online communities, a proposition that is premised on two observations: First, the body is a visible cultural object (Thompson and Hirschman 1995) and visual images play an important role in producing and reproducing meanings associated with specific physical forms and identities (Schroeder and Borgenson 1998). Second, social media is intensifying the visual nature of the Internet environment (Belk 2013), so that new forms of visual objects and practices such as selfies become meaningful ways for consumers to construct and express identities (Iqani and Schroeder 2015). The purpose of this study is thus to investigate consumers' visual practices as they pursue physical transformation projects in a virtual community.

To examine this question we conducted an 18-month qualitative investigation in the *Fitblr* community. *Fitblr* is a virtual fitness and weight-loss community on the social media platform Tumblr. It is loosely structured as an informal network of microbloggers who follow each other's account and who identify themselves through the hashtag "fitblr" (contraction of *fitness* and *Tumblr*) and related hashtags such as "fitspo" and "fitspiration" (contractions of *fitness* and *inspiration*). The *Fitblr* community is largely composed of young women and its multimedia content is highly visual. Data collection entailed content analysis (Gleeson 2011; Fairclough 2003) of 19 blogs over a 2-month period – for a total of 480 posts – as well as depth interviews (McCracken 1988) with 9 bloggers.

Our analysis reveals that bloggers' visual practices and community interaction practices evolve synergistically to form a system of inspiration that shapes and sustains physical transformations projects at the individual and community levels. As bloggers undertake, pursue, and achieve physical transformation goals, these practices correspondingly move from consuming inspiration, to sharing inspiration, and finally becoming a source of inspiration in the community.

Our participants joined the *Fitblr* community by creating a blog on Tumblr dedicated to achieving weight-loss or related physical transformation goals. Bloggers initially *consume inspiration* to develop their blog as a motivational board that helps them visualize their goals and to keep these goals salient amidst the various demands of their everyday lives; reposting visual content from other

blogs is the main visual practice they use to this end. Reposting leads to creating a highly uniform visual landscape in the *Fitblr* community, composed mainly of four types of images: (1) "bodyspo" (body inspiration), which refers to images of ideal bodies or body parts that depict bloggers' physical goals; (2) images of lifestyle activities associated with bloggers' physical transformation projects, namely exercise or food choice; (3) pictures of various products and brands bloggers associate with their physical transformation project; and (4) stylized images of motivational quotes. As they build their motivational board, bloggers begin to interact and create relationships with other members in the community by following other accounts, reposting material, "liking" or commenting on a post.

As bloggers adopt lifestyle activities directed towards their goals and as they grow more comfortable in the community, they often begin to *share inspiration* by posting original content. These posts document the efforts bloggers deploy towards reaching their goals and include post-workout selfies, workout charts and statistics, meals and food diaries. By posting original content, bloggers reveal themselves to the community, thus transforming the nature and intensity of interactions. Indeed, original content attracts a larger base of followers, more reposts, as well as comments and personal messages. This is a source of affirmation for bloggers but it also sometimes experiences as pressure to post new content frequently and to live up to the image they have created on their blog. Others hesitate to post original content in the fear that it might not be embraced if it does not conform to the community's implicit norms.

Finally, bloggers who have transformed their bodies *become inspiration* for the community. These success stories are presented and shared through the visual practice of "before and after" pictures which are reposted by a large audience, conferring a unique status (Moisio and Beruchashvili 2010) to the featured blogger whose "expertise" is sought by other members looking to achieve similar goals. Transformation pictures also lend solidity to the blogger's new identity and becomes a source of motivation to maintain this lifestyle.

Our findings contribute to the literature examining how visual practices contribute to the production and reproduction of identities (Schroeder and Borgenson 1998). Indeed, practices such as reposting content and dominant visual tropes such as "before and after" pictures ultimately create a highly homogeneous taste regime (Arsel and Bean 2013). This study also contributes to our understanding of the "visual culture of the self" (Dinhopl and Gretzel 2016, p.126) and the notion of extended self in digital environments (Belk 2013). We show how participants' transformation goals can be re-negotiated in the community, and how perception that they are successfully progressing towards and achieving their objectives is not only shaped by their own private observation of their body but also by visual practices of sharing pictures that document their progress.

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The Effects of Framing Subscription Benefits as Price Discounts or Time Bonuses on Time Preferences

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EXTENDED ABSTRACT

When consumers make choices about subscriptions, they face an intertemporal decision and have to make choices about a stream of consumption and payments over time. The current paper examines how consumers' time preferences change with changes in the framing of subscriptions' benefits. Subscriptions are attractive to companies because they allow for security in planning and enhance customers' loyalty. Therefore, to induce consumers to choose longer-term, subscriptions, firms might either offer a price discount (e.g., "save 25% off the monthly price when you sign up for a year")—lowering the per-time-unit cost for longer contracts—or offer a bonus time (e.g., "pay for 9 months and get 3 months free")—giving consumers an additional subscription time "for free" rather than lowering the unit price. In this paper, we investigate the different effects of price discounts and bonus time promotions on people's preferences for longer-term subscriptions.

Our research builds on and contributes to the literature on intertemporal discounting (Frederick et al. 2002; Read 2004; Zauberman et al 2009) and specifically, the literature on framing effects in intertemporal decisions (Loewenstein 1988; Loewenstein and Prelec 1992).

Our main contribution results from studying time preferences in the context of subscriptions and from documenting a new kind of preference reversal, where consumers prefer longer-term (vs. short-term) subscriptions when presented with a bonus time (vs. price discount) promotion.

To preliminarily investigate the different impact that promotions' framing may have on consumers' choice for subscriptions and to have a first impression of actual purchase behaviors we conducted a 2x2 (2-months vs. 6-months subscriptions/ bonus time vs. price discount) online controlled experiment (Kohavi et al. 2009) with a major Italian news publisher offering digital subscriptions to their daily newspaper. Randomized allocation of respondents to the 4 conditions ensured external validity of the study. Each condition (in form of a different digital landing page) has reached about 2.5 million impressions and two-sample tests of proportions revealed that in the short-term condition, price discount promotions increase the likelihood of a sale relative to bonus time promotions (.578 vs. .422, $z = 2.303$, $p = .021$) while in the long-term condition we observe a preference reversal as bonus time promotions increase the likelihood of a sale relative to price discount promotions (.546 vs. .454, $z = -1.828$, $p = .068$).

To better investigate this behavioral phenomenon, we conducted 6 survey-based experimental studies that represent data collected from more than 1,500 participants on different platforms, in different countries and in different languages. We focus on different theoretical constructs varying parameters that might be expected

to change the preference reversal pattern that we have found. These include: time of payment (monthly installments vs. upfront lump sum), time at which the free months are offered (beginning vs. end of subscription), size of the base subscription rate (magnitude effect of the monthly fee of 10\$ vs. 50\$ or customization of this value via adaptive surveys), type of service offered (Internet vs. mobile phone) and whether the monthly price reduction is framed as discount or rebate. Results reveal that consumers prefer price discounts to bonus time up to contract durations of approximately 11 months and prefer bonus time over price discounts thereafter. Furthermore, the preference reversal is stable with regard to different methods for the elicitation of individual discount rates (matching-based measures vs. choice-based measures), is not significantly affected by individuals risk aversion and can be found for subjects with lower as well as with higher numeracy. However, teaching the subjects how to translate the overall cost of the bonus time frame into the price discount frame through calculation tasks or added information, leads to elimination of this preference reversal and to stable preferences for offers framed as price discount.

In conclusion, this paper provides empirical evidence of a new impact of promotions' framing on time preferences with implications for optimal contract promotion design. From a managerial perspective our findings suggest that, since monthly discount rates are lower under the *Price Discount* condition for contract durations up to a certain period (of approximately 11 months) and the opposite is true for longer contract durations, firms should offer short-term contract promotions with price discounts and long-term promotions with bonus time.

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Resource Scarcity, Socioeconomic Status and Conformity: The impact of Resource Scarcity on Responses to Social Influence Depends on Childhood Environments.

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EXTENDED ABSTRACT

The economic turmoil of the past years has increased the number of people experiencing financial insecurity (World Health Organization, 2014). Research has shown that resource scarcity can have a significant impact on different aspects of individuals' behavior (e.g. Shah et al. 2012). We focus on the responses to social influence. Social influence can have substantial impact on consumers' decision making (Wood and Hayes, 2012) as it is used as a tool for changing behaviors (e.g. Goldstein et al. 2009). Earlier findings suggest that financial constraints might enhance consumers' sensitivity to social influence (e.g. Drèze and Nunes 2011) but it is not clear how general this phenomenon is. Recent studies have suggested that individuals' responses to resource scarcity can be adaptive. These studies used life-history theory to show that behavior of individuals facing adversities such as resource scarcity depends on their childhood socioeconomic background (Ellis, et. al., 2009). In this paper, we use life-history theory to examine the joint impact of childhood socioeconomic background and current resource scarcity on conformity.

Life-history theory addresses the issue of how organisms make use of limited resources to maximize fitness (Roff, 2002). Life-history strategies vary along a slow-to-fast continuum (Ellis et al., 2009). With regard to psychological reactions, fast strategies are linked with immediate gratification, disregard for future consequences, and opportunism, whereas slow strategies are associated with long-term planning and delaying gratification to increase future payoffs. Previous studies proposed that lower-socioeconomic status (SES) in early-life environments sensitizes people to adopt faster life-history strategies, whereas higher-SES early-life environments sensitize people to adopt slower life-history strategies (Miller et al., 2009). Their findings indicate that the expression of fast and slow strategies is especially likely to emerge in stressful situations, for instance, in situations of resource scarcity (Griskevicius et al., 2013).

We focus on the joint impact of childhood socioeconomic background and current resource scarcity on conformity. In evolutionary literature, conformity is defined as a form of social learning (Boyd and Richerson 1985). According to that literature, individuals have two different ways to acquire information: Individual learning in which humans acquire information through experimentation and trial-and-error, and social learning which involves the acquisition of information by copying others. Individual learning is more costly and time consuming but it is in most cases more accurate and reliable. On the other hand, social learning is less costly but also less accurate and reliable (Boyd and Richerson 1985). Individuals use both types of learning interchangeably depending on which type of strategy is more suitable to the circumstances they live in.

Harsh and unpredictable environments are characterized by increased dangers and mortality. This makes the acquisition of information through individual learning difficult and in many cases dangerous. When information is highly costly to be acquired with individual learning, individuals turn to social learning to acquire information (Boyd and Richerson 1998; Morgan et al 2011). As a result, we expect individuals raised in harsh childhood environments to be sensitized to acquire information through social learning. On the other hand, in less harsh environments, risks and mortality are less salient. In such situations, individual learning can be an adaptively more efficient strategy as it is considered to be more accurate and

might therefore yield better results (Boyd and Richerson 1998; Morgan et al 2011). This can lead people living in those environments to acquire information mostly through individual learning; therefore we expect people raised in less harsh environments to have been sensitized to learn relatively more through individual experience. To summarize, we expect that people who grew up in low-SES backgrounds will be sensitized to use the opinion of others and thus resource scarcity cues will make them more conformist, whereas people coming from high-SES backgrounds will be sensitized to use their own information and resource scarcity cues will not have an impact on their tendencies to conform. We tested these predictions in three studies.

In study 1 participants were assigned to one of two conditions: resource scarcity were they read an article describing the highly uncertain economic climate or the control condition were they read an article describing a man searching for his father in a metro station. Childhood SES was assessed with three questions concerning the economic situation of participants' household in their childhood (Griskevicius et al. 2013). Conformity was assessed by giving a product description accompanied by user ratings (9.25 out of 11), and asking participants to rate the product (higher rates showed more conformity). Resource scarcity cues made participants from poor childhood backgrounds conform more (they rated the product significantly higher than in the control condition), whereas these cues did not influence high-SES people's tendencies to comply.

In the scarcity condition of study 2, participants had to list their monetary expenditures from the past 30 days, whereas in the control condition participants had to describe the weather (Zhou, Vohs and Baumeister 2009). We also tested our hypothesis for negative social influence (we gave part of the sample low products ratings: 2,58 out of 11). We again found that resource scarcity stimulated people from low SES backgrounds to conform more (both when provided with high and low average product ratings), whereas it had no influence on people from high SES backgrounds.

Study three used the same resource scarcity manipulation but assessed conformity in a different way. Specifically, participants were asked whether they would endorse an online survey policy where respondents who do not pay proper attention to the instructions are not paid. They were informed that so far, there was a 70% compliance rate with the punishing policy. We used a different way to assess childhood SES (Hill et al. 2013). Resource scarcity again only stimulated conformity in people from low SES backgrounds but not in people from high SES backgrounds.

Our findings show that whether or not resource scarcity has an impact on people's responses to social influence depends on childhood background. We contribute to the literature by showing that the extend of conformism in some occasions depends on individual differences (and specifically on childhood SES).

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Inking Immortality: Exploring the Relations Between (Tattooed) Bodies, Time, and the Permanence/Change Dialectic

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EXTENDED ABSTRACT

Introduction

Time and bodies are intertwined. Our everyday embodied lives are shaped by temporal frameworks, such as the modern idea of linear clock time (Adam 1995). We experience internal bodily rhythms like the beating heart (Birth 2012), and we carry time on our bodies when we wear wedding rings. The body's surface also captures multiple marks of time, including unintentional temporal indicators such as wrinkles, alongside intentional temporal inscriptions like tattoos (Velliquette, Murray, and Evers 2006). Due to this embodied and temporal existence we are ultimately beings-toward-death (Heidegger 1927/2010). Within many cultures it is understood that time flows forwards from birth to death, and thus that we have a finite lifespan. Throughout history persons have striven to transcend their temporal boundaries and attain permanence for the self/others through various means, such as via placing their faith in religious belief systems, maintaining healthy bodies, and creating symbolic legacies (Bauman 1992; Cave 2012). Yet, the links between bodies and time remain underexplored, particularly from a consumption perspective, as is human (im)mortality. We thus explore the following research questions within the context of tattoo consumption: First, does permanence still matter to people in a transient world? And second, how and why might people endeavour to attain a sense of permanence for themselves/others via tattooing the impermanent body?

Research Design

An ethnographic research design was employed. The first author conducted participant observation at three tattoo studios (*Alfie's Tattoos*; *North West Tattooing*; and *M1 Tattoos*); two tattoo conventions (*Manchester Tattoo Show*; *Liverpool Tattoo Convention*); and three museum/art exhibitions (*Body Worlds*, Amsterdam; *death: the human experience*, Bristol; *Time: Tattoo Art Today*, London). Multiple biographical/elicitation style interviews (Wengraf 2001) were also conducted with 18 tattoo consumers (Appendix 1). The first interview involved participants telling an uninterrupted story of their life followed by prompting for further narratives about their key life events. The second interview involved participants telling the story of their tattoos, with subsequent questions concerning tattooing the past, future tattoo plans, permanence, memory, and ageing. Interviews were audio-recorded and transcribed verbatim. Photographs of participants' tattoos were taken with their permission, and they chose their own pseudonyms. The first author also kept an ongoing tattoo consumption diary which thus incorporates an introspective element (Gould 2012).

Data was analysed/interpreted using a hermeneutic approach (Arnold and Fischer 1994). Each interview was read through and initial interpretations were noted. Next, each transcription was uploaded onto NVivo software and categorised into inductively generated themes (Braun and Clarke 2006) which were related to the cultural context, including cultural notions of time. Narrative analysis was also employed (Sparkes 1999), whereby key narrative features such as plot; sequence; characters; temporal modes; and key life events and turning points were identified within participants' narratives.

Fieldnotes were also analysed using a thematic approach and related to interview themes and the cultural context.

Key Findings

Participants often experienced their bodies as what we term *autobodyographies* (Appendix 2). Namely, supporting extant research (e.g. Shelton and Peters 2006; Velliquette et al. 2006), despite their fragmented lives they often used tattoos to create a sense of temporal linearity on their skin by threading together their past, present, and anticipated future. Their bodies narrated partial and fluid accounts of their biographies, and the dynamic contexts in which they are entangled. Participants were thus seemingly creating a personal *symbolic legacy* on their skin. The concept of a symbolic legacy stems from the Ancient Greeks, who held the dualistic belief that culture did not suffer the same decay as nature (Bauman 1992; Cave 2012). Hence, in contrast to the mortal body, the cultural realm is often considered as an enduring space in which to transcend one's temporal boundaries and attain immortality (*ibid*).

Likewise, participants frequently acquired memorial tattoos to create a symbolic legacy for *others* on their bodies following their physical deaths, and thus to transport that person through time into the future to engender continuing bonds (see Turley and O'Donohoe 2012). Given the transient body represents the locus of our physical mortality (Bauman 1992; Cave 2012), this creation of symbolic legacies for self/others on the skin appears rather paradoxical. However, in the backdrop of a seemingly 'accelerated' and ephemeral cultural world (Bauman 2000; Giddens 1999), perhaps the body provides people with an apparently more predictable, stable, and safer surface on which to attain a sense of permanence for self/others today. Indeed, akin to the practice of refreshing family heirlooms (Türe and Ger 2016), participants also engaged in ongoing tattoo maintenance and repair work (Graham and Thrift 2007), such as regularly moisturising their tattooed skin, to protect their tattoos from the ravages of time and preserve their permanence. This finding indicates the desirability of permanence for many of our participants.

Conclusions

Existing literature observes that we are living within an accelerated and transient world (Bauman 2000; Giddens 1999). It has been suggested that people continuously re/deconstruct multiple identities (Firat and Venkatesh 1995; Gergen 1991); persons partake in ephemeral consumer tribes (Cova and Cova 2001; Maffesoli 1996); and that we have increasingly transient relationships with our possessions in a globalised world (Bardhi, Eckhardt, and Arnould 2012; Figueiredo and Uncles 2015). However, our participants used tattoos to craft symbolic legacies for the self and others on their temporal bodies, and thus to create a sense of symbolic immortality. This paper, therefore, challenges this literature by indicating how permanence, durability, and a sense of temporal continuity remain important for persons living within a seemingly accelerated and transient world. It also contributes to the slowly growing, yet somewhat sparse, literature concerning bodies and time, in addition to death and consumption, within consumer research, thus responding to calls for a more embodied appreciation of time (Toyoki, Schwob, Hietanen, and Johnsen 2013). Future research could further investigate how multiple marks

of time intermingle on the body in narrating people's biographies by drawing on multiple contexts, for example anti-ageing surgeries and scarification. Moreover, future research could further explore death and consumption within diverse contexts, such as health crazes and religion, to importantly engender a more open discussion about this often sequestered feature of the human condition.

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How Consumer Power Affects Recommendations in the Online Environment

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EXTENDED ABSTRACT

Online recommendations exert a strong influence on consumer choice (Chevalier and Mayzlin 2006). Most research on online recommendations has focused on how they affect receivers (Senecal and Nantel 2004). Less work has examined the factors that facilitate or deter consumers from generating recommendations (Berger 2014).

We propose that consumers' perceived power affects their proclivity to post online recommendations and influences recommendation content (e.g. instructions vs. opinions). Consumers who feel powerful are more likely to express their views freely compared to those who lack power (Anderson and Berdahl 2002). Accordingly, we hypothesize that those with high power will generate more online recommendations than those who lack power (**H1**).

Power can be associated with an influence over others (Lammers, Stoker, Rink and Galinsky 2016). Since powerlessness is aversive and, in contrast, high power promotes confidence, optimism and self-importance (Anderson and Galinsky 2006; Rucker, Dubois and Galinsky 2011), people with power strive to maintain their powerful states (Garbinsky, Klesse and Aaker 2014). In offline interactions, power can be identified through status and is relatively stable. In the online environment, consumers have less means to display power. Providing others with recommendations that include instructions is a form of acting directed at gaining influence. We therefore hypothesize that recommendations provided by those with high power will include more instructions to influence others, compared to recommendations provided by those with low power (**H2**). We further hypothesize that the need to influence others will mediate the effect of power on the likelihood to post online recommendations (**H3**). Finally, we predict, the potential influence of a recommendation will moderate the effect of power on the generation of online recommendations such that consumers with high power will generate more recommendations when those have a high potential for influence compared to when the potential for influence is low (**H4**).

We tested these hypotheses in four studies. Study 1 ($N=180$, $Mage=23.08$, 52% females) tested H1 and H2. Participants performed a power manipulation and two other tasks (Galinsky, Gruenfeld and Magee 2003). Then, participants rated the likelihood that they would post an online recommendation to future participants about the tasks they performed. Those willing to recommend, wrote their recommendations. As expected, participants primed with high power (68%; 65 out of 94) were more likely than those primed with low power (51%; 45 out of 86) to post recommendations ($\chi^2(1, N=180) = 5.75, p = .016$). Next we analyzed recommendation content. Recommendations rated as instructions were dummy coded as 1 ("follow instructions!"), and recommendations rated as opinions (e.g. "fun game"), were dummy coded as 0. The recommendations of those primed with high power (vs. those with low power) were more likely to include an instruction as opposed to an expression of opinion ($\chi^2(1, N=110) = 4.98, p = .026$).

Studies 2 and 3 tested our mediation hypothesis (H3). In study 2 ($N=146$, $Mage=37.19$, 55% females) we manipulated power by allocating participants to power roles (Anderson and Berdahl 2002). Participants then indicated the likelihood of posting an online recommendation about a restaurant experience. An ANOVA showed that, as expected, those in the high power role ($M_{high}=3.78$, $SD=1.56$) were more likely to post a recommendation than those in the low

power role ($M_{low}=3.17$, $SD=1.86$; $F(1,145)=4.37, p=.038$). The results of the mediation analysis (PROCESS, model 4) showed that both power (95% CI [.20, 1.06], $B=.63$, $SE=.21, p=.004$) and need to influence (95% CI [.30, .72] $B=.51$, $SE=.10, p=.000$) significantly affected the likelihood to generate online recommendations. Importantly, participants' need to influence mediated the effect of power on the likelihood to recommend (95% CI [.0.11, 0.63]).

Participants ($N=70$, $Mage=31.69$, 51.4% females), who hold high power positions (managers with over 10 employees, $N=32$) or non-managerial positions (Control, $N=38$) participated in Study 3. Participants were asked whether they would post an online recommendation about an excellent hotel they had stayed at, on a site like TripAdvisor.com. As expected, participants' power position predicted the tendency to recommend ($t(70)=2.20, p=.031$). Participants' need to influence was measured using two items: "how important is it was for you to be recognized for your recommendation?" and "how important is it for you to receive as many likes as possible following your recommendation" anchored on a 1-7 scale ($\alpha=.88$). Mediation analysis (PROCESS, model 4) showed that need to influence mediated the effect of power position on the likelihood to recommend (95% CI [.03, .79]).

Study 4 ($N=135$, $Mage=25.54$, 68% females) tested our moderation hypothesis (H4). We manipulated power using a modified dictator game and operationalized the potential to influence by either making participants feel their recommendation is the only rating of the game available (high potential to influence) or that many others have already posted their rating of the game (low potential to influence). An ANOVA revealed no main effects, and as expected, a significant interaction between power and the potential to influence ($F(1, 134)=4.74, p=.031$). Participants with high power were more likely to post recommendations when their potential to influence was high ($M=3.38$, $SD=.27$) than when it was low ($M=2.56$, $SD=.26$, $F(1,134)=4.77, p=.031$). Among participants with low power, there was no significant difference between potential to influence conditions.

Our research offers both theoretical and practical contributions. First, despite the abundance of research on power, little is known about its consequences in the online environment. Second, the power literature has focused mainly on its negative consequences (Zimbardo 1973). We show how power can be harnessed to help others. Last, by demonstrating that consumers' power can boost the quantity, and influence the content of online recommendations, we offer marketers a practical tool to promote their offering.

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When Bigger Isn't Better: How Perceptions of Market Dominance Interact with Existing Brand Images to Impact Brand Favorability

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EXTENDED ABSTRACT

Brands often communicate their dominance through slogans and advertisements. Although business publications often refer to dominant brands as powerful brands, research has not explicitly acknowledged that consumers might perceive power in market dominant brands. This research directly assesses this possibility and demonstrates that communicating dominance can have unintended consequences for consumers' reactions to these communication messages.

Research by Fragale, Overbeck, and Neale (2011) demonstrate that powerful people are perceived to lack warmth. Powerful people are known to behave in ways inconsistent with what is expected from a warm person (Galinsky et al. 2006; Rucker, Dubois, and Galinsky 2011). Therefore, we propose and find in four studies that a message communicating market dominance which is seen as an embodiment of power dilutes the image of a warm brand and hence are negatively evaluated by consumers.

Study 1 investigated our hypothesis using a fictitious soap brand. Participants viewed a description of the brand that positioned it as having a warm brand image. After reading the description, participants viewed an advertisement for the brand that either communicated the brand's dominance over competitors or one that communicated an equal amount of competence (but not dominance). Participants then completed 4-items measuring their attitudes towards the brand. An ANOVA showed that participants evaluated less favorably the warm brand promoted with a market dominant (vs. competent though not market dominant) message ($M = 3.89$ vs. 4.41 , $F(1, 79) = 4.14$, $p < .05$).

Study 2 replicated this effect using a stricter version of the control advertisement, one that communicated only a brand logo and product image. This study also used fictitious brands from three different product categories and explored the mediating role of dilution of the brand image. After viewing a warm brand description, participants viewed either a market dominant or control ad. They completed the same favorability measures from Study 1 as well as 3 items of brands image warmth. An ANOVA revealed a main effect of type of advertisement ($F(1, 164) = 6.23$, $p < .05$) with the market dominant (vs. control) message receiving less favorable brand evaluations ($M = 4.27$ vs. 4.77). This effect was significantly mediated by the warmth of the brand's image (95% CI of the indirect effect = -64 to -20).

Given that market leadership has its benefits (Kamins, Alpert, and Perner 2003) in Study 3 explores a way for marketers of warm brands to communicate market leadership without the negative effect of market dominance. By framing the brand's market dominance as a descriptive norm (e.g. "More people buy Brand X"), marketers can avoid the power associations of a market dominant message. Study 3 used a real brand with a warm image, *Johnson's* baby shampoo. Participants viewed an ad that either communicated either market dominance or descriptive buying norms. They then completed the favorability and brand warmth measures. An ANOVA revealed that participants liked the brand less after viewing the advertisement communicating the brand's dominance over the competition ($M = 5.00$ vs. 5.66 , $F(1, 71) = 4.68$, $p < .05$). Furthermore, we find that this effect was mediated by perceptions of the brand's warmth (95% CI of the indirect effect = $.01$ to 1.06).

Study 4 explored the boundary condition of category warmth. Research by LaBoeuf and Simmons (2010) suggests that attributes shared by a product category allow brands to differentiate on conflicting attributes. We propose that for brands associated with a high-warmth category, advertisements communicating a brand's dominance do not trigger negative consumer attitudes. This study also demonstrated that the negative impact of market dominance occurs only for warm brands and not non-warm brands. The experiment was a 3 (brand: warm brand in warm-neutral category/warm brand in warm category/non-warm brand in warm-neutral category) \times 2 (ad: market dominant/descriptive norms) between subjects design. Participants viewed a fictitious soap brand description for the warm-neutral category and a fictitious greeting card brand for the warm category. Participants then viewed either a market dominant or descriptive norms advertisement and completed ratings of favorability. An ANOVA revealed a significant brand \times ad interaction, ($F(2, 115) = 3.10$, $p < .05$). Planned contrasts revealed that the dominant (vs. descriptive norms) ad triggered less favorable brand evaluations for the warm brand in the warm-neutral soap category ($M = 4.37$ vs. 5.01 , $F(2, 115) = 2.72$, $p < .05$, one-tailed). There was no difference in evaluations of the warm brand in the warm category ($M = 3.93$ vs. 3.46 , $F(2, 115) = 1.65$, *ns*) nor the non-warm brand in the warm-neutral category ($M = 4.51$ vs. 4.11 , $F(2, 115) = 1.37$, *ns*).

The final study replicates the findings of Study 4 by again showing that the negative impact of market dominance occurs only for warm brands and not for non-warm brands. This study used a warm rice brand and ads from Study 2 but also included a non-warm rice brand. Additionally, we theorize that the incongruity between warmth and dominance will be weakened (heightened) for participants that endorse values of self-enhancement less (more) than self-transcendence. After completing brand favorability items, participants completed measures of their endorsement of these values (Schwartz et al. 2001). A score was computed for each participant's endorsement of self-transcendence values relative to self-enhancement values. An ANOVA revealed a significant 3- way interaction ($F(1, 123) = 4.32$, $p < .05$). Consistent with Study 4, participants at the mean level of self-transcendence importance evaluated the warm brand less favorably when viewing the market dominant (vs. control) advertisement ($M = 4.50$ vs. 5.17 , $F(1, 123) = 6.50$, $p < .05$). Participants had equally favorable reactions towards the non-warm brand when viewing either ad ($M = 4.50$ vs. 4.39 , $F(1, 123) = 0.20$, *ns*). Spotlight analysis showed that for participants valuing self-enhancement more than self-transcendence, favorability for the warm brand was lower for those viewing the market dominant (vs. control) ad ($M = 5.38$ and 3.83 , $F(1, 123) = 16.13$, $p < .001$). However, this difference disappeared for those valuing self-transcendence more than self-enhancement ($M = 5.17$ and 4.96 , $F(1, 123) = 0.21$, *ns*).

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Wallowing in Misery: Consumers with Low Self-Esteem Verify Negative Self-Views by Choosing Miserable Products

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EXTENDED ABSTRACT

Miserable products are used to “wallow in misery” (Pollack 2014). Although counter-hedonic consumption exists, it has been relatively neglected by research. When and why do people choose miserable products?

We define wallowing as the perpetuation of negative self-views that can occur after threatening experiences. An example of wallowing would be engaging in miserable activities (eating disgusting food, staying at home) instead of uplifting ones (eating nice food, meeting friends) after a romantic breakup. Most existing theories would predict that threats cause self-gifting to mollify the sting of the threat (Mick and DeMoss 1991) or engage in compensatory consumption to bolster the threatened part of the self (Gao et al. 2009; Rook 1987). Why would consumption be used to cultivate negative self-views rather than to counteract them?

This research tested whether wallowing is a form of self-verification. Self-verification describes the need to be understood and to act in accordance with one’s firmly held self-views (Sedikides and Strube 1997). Self-verifying actions align self-perceptions and environment to create predictability and facilitate relationships. Research demonstrated that engrained negative self-views trigger verification rather than enhancement: People who thought poorly of themselves preferred condescending interaction partners (Swann et al. 1992) and roommates that liked them less (Swann and Pelham 2002).

This project proposes that consumers with low self-esteem use miserable products like disgusting food, or low-tier brands, to self-verify. Low self-esteem consumers perceive miserable products as self-congruent and therefore appealing. We predict that negative self-verification is chronic and persists after threats because failures and setbacks reaffirm engrained negative self-conceptions (Dogson and Wood 1998). Success experiences urge low self-esteem people to update their self-views which should temporarily attenuate the desire for miserable products. We further expect that low self-esteem consumer’s choosing of miserable products is explained by undeservingness – convictions of being unworthy of quality products (Cavanaugh 2014).

STUDY 1A

Study 1a examined whether lower self-esteem is positively associated with choosing miserable products. Participants completed a measure of trait self-esteem (Rosenberg 1989) and then chose among six food product pairs: one miserable and one non-miserable alternative (e.g., canned pulled pork in water vs. pulled pork from the meat counter). Next, we measured our mediator deservingness (Cavanaugh 2014) and trait frugality (Kasser 2005) to exclude money-saving goals as an alternative explanation. A linear regression indicated that self-esteem was negatively associated with choosing miserable products ($\beta = -.274, p = .04$). A mediation analysis revealed a significant indirect relationship between self-esteem and product preferences through deservingness (95% LLCI = .0324; 95% ULCI = .2722). Frugality did not mediate.

STUDY 1B

Study 1b tested if low self-esteem consumers actively seek out miserable products using a within-subjects design. We selected damaged and undamaged versions of eight different food products (e.g.,

a brown vs. a yellow banana). Participants completed the Rosenberg self-esteem scale and then rated eight unique food products (four damaged and four non-damaged) one at a time. A mixed linear regression model revealed the predicted interaction between self-esteem and quality on choice; $\beta = -.395, p < .001$. Consumers’ self-esteem was negatively associated with choosing undamaged products ($\beta = .192, p = .04$) and positively associated with choosing damaged products ($\beta = -.203, p = .06$).

STUDY 2

Study 2 tested whether low self-esteem consumers’ desire for miserable products is chronic. Self-esteem was measured before or after product choice in a 2X2 between-subjects design. The product choice measure contained six alcohol product pairs, one miserable and one non-miserable (e.g., \$6 plastic bottle vs. \$25 glass bottle vodka). Lastly, we measured deservingness, frugality, and self-punishment motivations. We regressed self-esteem, the order dummy, and their interaction on alcohol choice. As expected, the interaction was non-significant ($p = .99$). Instead, low self-esteem consumers chose more miserable alcohol regardless of whether they completed the self-esteem scale before or after product choice ($\beta = -.290, p = .03$). Self-esteem was positively related to frugality ($p = .04$) and therefore frugality cannot explain the aforementioned effect. A parallel mediation model including self-punishment and deservingness indicated a significant indirect effect through deservingness but not self-punishment (95%LLCI = $-.4893$; 95%ULCI = $-.1853$).

STUDY 3

Study 3 tested whether positive feedback that counteracts negative self-views can attenuate low self-esteem consumers’ desire for miserable products. Also, we examined whether low self-esteem consumers verify negative self-views similarly on a chronic basis and after threat. We manipulated task feedback (failure vs. success vs. no feedback) and measured self-esteem in a 3X2 between-subjects design. Participants completed the self-esteem scale. Next, they solved items of the Remote Association Test after which they receive success, failure, or no feedback. Then, participants chose between two types of popcorn for a film-clip watching study: Fresh popcorn and somewhat stale popcorn. On sliders from 0 to 100, participants indicated how much they would like to eat each type. They believed to receive whichever popcorn they rated highest.

We subtracted stale- from fresh-popcorn-liking. Higher values reflected greater preference for fresh over stale popcorn. Next, we regressed this measure on experimental condition (dummy coded to compare the success to each of the other two conditions), self-esteem, and all interactions. As expected, two significant interactions between self-esteem and failure vs. success and control vs. success emerged. Simple effects for participants high and low in self-esteem (1SD above and below the mean) revealed that low self-esteem participants liked stale popcorn more after failure than after success feedback ($\beta = -.331, p = .02$), and after no feedback than after success feedback ($\beta = -.289, p = .02$). Popcorn preferences of high self-esteem participants did not differ between conditions (all $p > .08$).

CONCLUSION

In summary, four studies demonstrated “wallowing in misery” - paradoxical behavior where low self-esteem people pursue actions that cultivate negative self-views. Low self-esteem consumers’ chronic and threat-induced negative self-views led them to choose miserable food. In support of theorizing, these consumers’ sense of un-deservingness explained their choices while alternative accounts like frugality, and self-punishment were ruled out. We detailed when consumers verify (“wallow”) and when they self-enhance in the wake of threat. This work adds to emerging knowledge on consumers’ pursuit of counter-hedonic experiences (Andrade and Cohen 2007).

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The Sociocultural Dynamics of Consumer Entanglement

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EXTENDED ABSTRACT

Okay, you may not agree with Facebook, but everyone is on Facebook: straight, gay, black, white, Jewish, Palestinian, socialist, capitalist. If Karl Marx were alive today he would certainly be on Facebook, because you have to propagate your ideas. I think nobody lives without Facebook today. Especially now, that I will start to work. I have to be back on social networks. Companies always ask for your social network profile. I started to think that recruiters would consider it strange that I don't have a social media network. Until today I think, I'm on Facebook, but I do not want it. But I get it because if I deactivate it, I lose contact with people. (Jane, 24 years, student)

Certain consumption patterns remain in consumers' lives grudgingly, perpetuating their presence even in the cases where consumers want to move away from these patterns. Some consumption entangles and, in extreme cases, entraps consumers. As in the example above, consumer entanglement occurs when a particular consumption pattern is difficult to suppress or escape when so doing constrains the consumer's modes of living, including his or her social relations and other types of consumption. The consumer entanglement phenomenon arises when consumption articulates dependence and dependency relationships, creating benefits and value, but also constraining and limiting.

Loyalty studies attempt to capture the nature and stability of the connections formed between the consumer and previous consumption. Although suggesting different dimensions to the loyalty construct, research focusing on attitudinal and affective aspects has the implicit assumption that repeated consumption is mainly volitional and based on positive commitment (Chaudhuri and Hoolbrok, 2001; Sirdeshmukh et al, 2002; Oliver, 1999). Other studies delineate loyalty as repetitive purchase highlighting economic and cognitive aspects that prevent switching behavior. Lock-in theories provide evidence that consumers tend to decrease their propensity to search for alternatives and give up previous choices after an initial investment – whether economic (Zauberman, 2003) or an investment in related skills acquisition (Johnson et al. 2003; Murray and Haubl 2007).

These explanations, however, do not fully explain consumer entanglement phenomenon. Why don't consumers like Jane abandon their previous consumption when they would like to or could so? What explains consumption continuation in the absence of direct economic, physiological, or cognitive barriers for switching?

The goal of this study is to complement economic and cognitive explanations by examining sociocultural underpinnings of continued patronage. This research investigates what we refer as entanglement dynamics - the sociocultural mechanisms that entangle and entrap consumers in their previous consumption.

The limiting and constraining nature of entanglement is best revealed by consumers' efforts to move away from previous consumption. Based on this premise, we used a multimethod approach incorporating long interviews (McCracken 1988) and observational Netnography (Kozinets, 2002) to investigate consumers' efforts to quit Facebook. Besides Facebook's relevance in contemporary soci-

ety, it presents as a rich context to expand our understanding about consumers' lock-in since the app and alternative social media offers are both costless and intuitive to use. Generally, users maintain profiles on various social networks. Accordingly, learning how to use an alternative app is not a barrier to abandonment.

Instead of dyadic relations between consumers and consumption objects, this paper theorizes continued patronage as complex assemblages, resulting from the dialectic of dependence and dependency between consumers and things (Hodder, 2012). Dependence exists because consumers rely on things to live. Dependency, in turn, arises when a specific consumption becomes a key part on existing assemblage and make a change at this part has important impacts on its stability. Future consumption is limited and constrained by these previous relations, perpetuating certain patterns. The dependence and dependency dialectics frame loyalty as relational and contextual, with overlapping alliances including other people, things and different consumption practices.

Entanglement involves weblike conditions that arise when consumer cannot manage without a specific consumption. We identify four entanglement dynamics: 1) *Centrality* occurs when consumption attains a pivotal role in a crucial domain of consumers' lives; 2) *Pervasiveness* occurs when certain consumption is pervasive and integrative, permeating different domains of consumer's lives. 3) *Others interdependencies* occur when giving up certain consumption significantly affects consumers' ability to relate to other people; and 4) *Things interdependencies* occur when giving up certain consumption significantly affects consumer's ability to relate to other products and perform other consumption activities.

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Which Side is Right?

Enhancing Customer Experience Through Visual Price Dominance

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EXTENDED ABSTRACT

Imagine you want a new T.V. As you point out options that you like to a friend, your friend comments that it's interesting that all the T.V.s you are considering show the price on the right side of the T.V. This research examines how price location impacts price perception and product evaluations, as moderated by engagement.

A survey of 727 prices for six different retailers show that electronics retailers, which tend to offer more engaging products, price information was on the right ($p < .001$). For discount retailers, which tend to offer less engaging products, the price information was shown more on the left ($p < .001$).

STUDY 1: VISUAL FIELD EFFECTS IN THE MARKETPLACE

Pretest

Consistent with our predictions, participants showed greater purchase intention for the product, when the product's price was in the right visual field compared to the left ($p < .05$).

Method

The study was a single three-level factor (visual field location: left, right, control) between design. We featured a promotion for a product (i.e., Arizona iced tea) by posting a large sign on the front of a product cooler. To ensure realism, the price on the promotion represented a discounted price (\$.89; regular price \$.99). During the first promotional week the price was shown on the right side of the sign. In the second promotional week, the price was shown on the left side of the sign.

Results and Discussion

Sales. To assess the effect of visual field location on consumer response, we examined the number of units of the target product that were sold on average in each of the two-hour intervals. While, a price featured in the left visual field led to a non-significant increase in sales ($p > .22$), a price featured in the right visual field led to significantly more sales ($p < .05$).

STUDY 2: EVIDENCE OF VISUAL PRICE DOMINANCE

Method

Sixty-six right-handed students participated in a 2 (engagement: low, high) x 2 (visual field location: left, right) between-subjects design. The level of engagement was manipulated using scenarios adapted from Howard and Kerin (2006) and Suri and colleagues (2012). Half of the participants saw the description of the television and its price in the left visual field while the other half saw the same information in the right visual field. Participants were then asked to first recall the price of the television and recognize the slogan. Response times were measured using DirectRT software.

Results and Discussion

Response latencies. We examined the effect of visual field location and engagement on participant response time using ANOVA. As expected, under low engagement, participants responded faster when the price was located in the left visual field ($p < .01$). Further, under high engagement, participants responded faster when the price was located in the right visual field ($p < .05$).

STUDY 3: HOW PRICE LOCATION AND ENGAGEMENT ACTIVATE THE BRAIN

Method

Ten right-handed people participated in a 2 (engagement: low, high) x 2 (visual field location: left, right) mixed design.

Procedure. Participants were told that as part of a marketing study they would see six prices in a row on the screen in front of them and be asked to remember the location of one of the six prices shown. To assess the relative level of activation in the left versus right hemisphere during the task, we measured the blood flow in the prefrontal cortex at 16 different points across the participant's forehead. To examine asymmetric activation in the prefrontal cortex we used functional near-infrared spectroscopy (fNIR; Ayaz et al., 2012).

Results and Discussion

Location recall. In study 3 we expected that during low engagement (first five trials) we would see a leftward bias in recall of a price's location compared to high engagement (last five trials). Mouse clicks for each trial were coded as to the left (1) or to the right (0) of the actual price location (no participant selected precisely the original location of the price). No significant main effects were observed. The clicks were analyzed via a 2 (location of click: left, right) x 2 (trial timing: first five, last five) within-subjects design. A significant interaction of direction of clicks (left/right) and trial timing (first/last) was observed ($p < .05$). As expected participants showed a leftward bias in recall of the price location under low engagement (first five trials) but not high engagement (last five trials).

Hemispheric activation. As participants grow more engaged in the task activation of the left prefrontal cortex associated with such high engagement will increase. Supporting our prediction, greater oxygenated-hemoglobin concentration changes were observed in the anterior left dorsolateral prefrontal cortex (DLPFC) ($p < .01$).

STUDY 4: VISUAL FIELD EFFECTS ON EVALUATIONS

Method

One hundred five right-handed students participated in a 2 (engagement: low, high) x 2 (visual field location: left, right) between-subjects design. Half of the participants saw this information with the product's price on the left while the other half saw this information with the product's price on the right.

Results and Discussion

Perceived value. As we predicted, under low engagement, consumers viewed the product to offer higher value (Grewal, Monroe, and Krishnan 1998) when its price was located in the right visual field ($p < .05$), and under high engagement, consumers viewed that the product offered higher value when its price was located in the left visual field ($p < .05$).

Monetary sacrifice. As expected, under high engagement, consumers perceived lower monetary sacrifice when the price appeared in the left visual field ($p < .01$).

Using PROCESS Model 8 we show that moderated mediation indicates that the effects of price location were mediated by sacrifice perceptions in the high engagement condition (with a 95% confidence interval excluding zero: = -1.29 to -1.7) but not in low engagement condition (the 95% confidence interval included zero: -.28 to .58).

The Blender Effect: Physical Food State Influences Consumers' Perceptions and Consumption

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EXTENDED ABSTRACT

It is increasingly common to find the same food available in multiple physical states (i.e., solid, liquid) including the raw (i.e., non-mechanically altered) physical state as well as other physical states that represent different degrees of processing (i.e., mechanical alteration). For instance, at a grocery store a consumer might find apples in their raw physical state as a solid (i.e., whole fruit), in a processed physical state as a semi-solid (i.e., applesauce), and in a processed physical state as a liquid (i.e., apple juice). Additionally, companies often place images of foods on packages, and the foods in these images can be in different physical states (e.g., an orange versus a glass of orange juice). Sometimes changing the physical state of a food involves adding ingredients. In this research, we hold the ingredients constant. We ask: would altering the physical state of a food product, a food pictured on a package, or a food on display influence consumers' product perceptions and consumption decisions?

We build on research which shows that consumers mentally categorize foods as healthy or unhealthy (Chernev 2011), and these categories have a graded structure (Barsalou 1983; 1985) so that foods that are more representative of the category would be perceived as healthier than foods that are less representative of the category. We link this work related to categorization with work in the domain of non-food products, which shows that physical product differences influence categorization (Trudel and Argo 2013). We predict that a blender effect will occur such that altering the physical state of a food will influence how representative the food is of the broader evaluative category (healthy or unhealthy) and ultimately healthiness perceptions.

We demonstrate the blender effect in four experimental studies. First, in Study 1A we have participants view equal volumes of food in a raw/solid state (i.e., an apple), a processed/solid state (i.e., apple slices), or a processed/semi-solid (i.e., apple sauce). We show that individuals perceive the food as healthier in the raw physical state (vs. either of the processed states). We also show that this blender effect is mediated by category representativeness. Then, in Study 1B we rule out an alternative explanation related to healthiness perceptions being tied to a specific physical state.

In Study 2 we vary the physical state of the food displayed on a package (rather than the state of the food itself) and examine healthiness perceptions. In addition, we examine whether making the ingredients in the food salient will attenuate the blender effect. That is, we vary both the physical state of the food displayed on the package as well as the ingredient salience. We have participants view a carton of apple juice displaying either an image of apples or an image of a glass of juice. In the ingredient salient conditions, participants are reminded that the apple juice contained 100% juice. No such reminder was given in the ingredient not salient conditions. The results showed that when the ingredients were not made salient, individuals perceived the apple juice as healthier when the carton displayed an image of the food in a raw (vs. processed) physical state. However,

when the ingredients in the apple juice were made salient there was no difference in healthiness perceptions based on the physical state of the food displayed on the package.

In Study 3 we examine the influence of the blender effect on consumption volume. We predict that because individuals perceive foods in less processed physical states as healthier, they should consume a greater volume of the food when the ingredients are displayed in a less (vs. more) processed physical state. Additionally, we examine whether priming individuals to mindfully evaluate the healthiness of the food before consumption would attenuate the effects of physical food state on consumption. Study 3 had a 2 (physical food state: raw vs. processed) x 2 (mindful healthiness evaluation: absent vs. present) between subject design. Participants were shown the ingredients in a new juice smoothie either in the raw/unprocessed physical state or in a processed physical state. Then, they were allowed to consume as much of a sample of the juice as they wanted. The results showed that, as predicted, individuals consumed a greater volume of the juice when the ingredients were displayed in the raw (vs. a processed) physical state. However, mindful healthiness evaluations did not moderate this effect.

The results of our studies demonstrate a blender effect whereby individuals perceive foods as healthier when the foods are displayed in a raw or less processed physical state (vs. a more processed) physical state. This blender effect is driven by perceived category representativeness with foods in their raw state being perceived as more representative of the broader evaluative category (healthy or unhealthy), and is attenuated when the ingredients are made salient.

The findings of our studies have implications for theory and practice. From a theoretical standpoint this is possibly the first research to examine the effects of physical food state on consumers' healthiness perceptions as well as the first to show that the physical state of the food depicted on a package can influence consumers' healthiness perceptions. From a practical standpoint, our findings suggest that managers should take care when deciding the physical state of the food they display on packages, menus etc. as it can have unintended consequences in terms of influencing consumer perceptions.

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The Upside of Randomization: The Influence of Uncategorized Product Display on Consumers' Shopping Evaluation

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EXTENDED ABSTRACT

Although organizing products by category is a common marketing practice and has been shown to increase consumer satisfaction (Mogilner, Rudnick, and Iyengar 2008), presenting products in a randomly arranged set (e.g. flea market and store sales) may also lead to pleasant shopping experiences. The present research demonstrates the positive influence of random product presentation on shopping evaluations.

In this research, we define a categorized set as a group of products that are sorted according to product type. A randomized set is a set of products displayed randomly with no a priori categorization. Accordingly to research on environmental psychology, environmental complexity and unpredictability signals greater amount of information to be processed, which induces feelings of arousal (Berlyne 1971; Mehrabian and Russell 1974). Hence, we propose that consumers would experience greater arousal when browsing a randomized product set than a categorized set. In addition, research has shown that arousal can serve as a magnifier of emotions and evaluations (Reisenzein 1983; Russell and Mehrabian 1976). Because shopping is generally considered a positive activity (Bloch and Richins 1983; Holbrook and Hirschman 1982), we propose that greater arousal elicited by a randomized set will intensify the pleasantness associated with the shopping experience and subsequently result in greater choice satisfaction and more enjoyable shopping experiences. We refer to this effect as the positive product randomization effect.

This randomization effect, however, hinges on two conditions. First, a complex environment could elicit arousal because it signals increased amount of information that one needs to process (Berlyne 1960). Therefore, when individuals have a motivation to screen off unnecessary information and only process important or relevant information, they are less likely to feel aroused even in a complex environment (Mehrabian 1977). We thus propose that when consumers have a priori shopping goal, motivating them to search and selectively focus on a subset of products rather than exploring the choice set, they are less likely to be aroused by a randomized set. In addition, since categorization facilitates product searching and enhance perceived variety when consumers engage in goal-oriented shopping (Hoch et al. 1999; Mogilner et al. 2008), we should observe a positive categorization effect in this condition. The second prerequisite condition is that shopping should be considered as a pleasant experience. If shopping is considered unpleasant, such as when the product options are unattractive, the polarizing effect of arousal (Reisenzein 1983) is expected to result in more negative affective reactions, and subsequently lead to more negative shopping evaluations.

Experiment 1 examined the randomization effect and obtained evidence for arousal being the mediator. Participants firstly browse 64 stationery products arranged in four columns and 16 rows. The products were either sorted into 16 sub-categories or displayed randomly. After browsing, participants rated their feelings of arousal and pleasure. After that, participants saw the same product set again and indicated the products they would like to buy. Then, they rated choice satisfaction and shopping experience. Independent-samples t-tests showed that participants reported greater choice satisfaction when the set was randomized than categorized (6.81 vs. 5.70; $t(69) = 2.61, p < .05$). Similar results were detected on shopping experience (6.53 vs. 5.66; $t(69) = 2.09, p < .05$), arousal (5.50 vs. 4.86; $t(69)$

$= 2.06, p < .05$) and pleasure (6.61 vs. 5.86; $t(69) = 2.60, p < .05$). Mediation analyses revealed that arousal mediates these randomization effects.

Using 54 different chocolates and 64 stationery products, respectively, Experiment 2 and 3 manipulated consumers' ideal point availability and task-oriented shopping motivation to demonstrate that when consumers had target product(s) to purchase, relative to a categorized set, a randomized set reversely decreased choice satisfaction. Experiment 3 further demonstrated that arousal and perceived variety mediated the randomization and categorization effect, respectively.

Experiment 4 then tested that the valence of the stimuli moderated the valence of the impacts of elicited arousal on shopping evaluations. An animal donation scenario was employed and the stimuli valence was manipulated the by using either 40 good-looking endangered animals or 40 creepy-looking ones. ANOVA analysis of stimuli valence and set organization on arousal feeling revealed the main effect of organization ($M_{\text{randomized}} = 6.22$ vs. $M_{\text{categorized}} = 5.65$; $F(1, 139) = 7.43, p < .01$), which did not depend on stimuli valence. However, the valence of the influences of organization on choice satisfaction depends on the stimuli's valence ($F(1, 139) = 7.77, p < .01$). Specifically, for attractive animals, participants reported greater satisfaction when the set was randomized than when it was categorized (7.31 vs. 6.45; $F(1, 139) = 4.90, p < .05$); the effect was reversed for aversive animals (4.16 vs. 4.84; $F(1, 139) = 2.99, p = .09$).

Lastly, based on research findings that visual information is more information-rich and verbal information is less complex (Townsend & Kahn 2014), we propose that the randomization effect would be less likely to occur when the products were only presented verbally. Experiment 5 tested this proposition by employing 48 magazines which are presented either verbally in text or visually in pictures. The results showed that the randomized set elicited arousal, and thus enhance the pleasurable feelings, choice and experience evaluations only in the visual present condition rather than in the verbal condition. Further, in the visual present condition, arousal feeling mediates the positive influences of randomization on choice evaluation and shopping experience.

With five experiments, this research demonstrates the influence of product randomization on arousal feelings and its positive influences on shopping evaluations. Our findings enrich the extant knowledge about the impacts of product display method (Diehl et al. 2015; Kahn and Wansink 2004; Mogilner et al. 2008) on shopping evaluations. Our findings also add to the growing body of literature examining the influence of shopping environment on consumers' evaluative judgments (Kaltcheva and Weitz 2006; Milliman 1986; Muro and Murray 2012; Spangenberg et al. 1996). The findings of this study may have useful marketing implications for store arrangements.

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Topic Controversy and WOM: The Effect of Opinion Extremeness on Sharing

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EXTENDED ABSTRACT

Due to its profound impact on consumers' daily purchasing decisions, word-of-mouth (hereafter WOM) is considered among the most effective marketing communication tools (Arndt 1967; Berger 2014; De Angelis et al. 2012). In particular, proliferation of websites and social media platforms has also increased the pervasiveness of peer-to-peer communications, thus stimulating the interest of marketing scholars in investigating electronic word-of-mouth (hereafter eWOM; Godes & Mayzlin, 2004; Hennig-Thurau et al., 2004; King, Racherla, & Bush, 2014; Sweeney, Soutar, & Mazzarol, 2014), that is any positive or negative statement made by consumers about a product or a company, and available to a multitude of people and institutions via the Internet (Hennig-Thurau et al. 2004). Another phenomenon, strongly characterizing current society, is represented by controversial topics, that is topics on which people tend polarizing opinions (Chen & Berger, 2013). However, to the best of our knowledge, no research has investigated the relationship between WOM and controversial topics, except for a study by Chen and Berger (2013) that shows a curvilinear relationship between the degree of a topic's controversy and WOM tendency to engage in conversations about that topic.

The present research is aimed at investigating how people share, via the Internet, information about topics that are controversial in nature. Our objective is to shed light on what drives people's decision to share their opinions about controversial topics through different online platforms. More specifically, and differently from previous studies, the present research investigates how eWOM is affected by the extremeness of the opinion one holds about a controversial topic, that is how extremeness influences the online platform consumers prefer when sharing information about high controversial topics.

While people might be naturally led to develop extreme opinions about controversial topics, they might not be as much naturally led to share such extreme opinions with others. Indeed, sharing extreme opinions might be more likely to expose the sharer to the risk of social rejection than sharing more moderate opinions (Buss 1990; Hogg, Turner & Davidson 1990). Thus, as a consequence, we argue that individuals' likelihood to share their extreme opinions on controversial topics depends on how severe they perceive the risk to be negatively judged by other people. One factor that might make social disapproval perceived as more or less severe by the sharer of an extreme opinion is the channel he/she uses to communicate his/her opinion. Indeed, we expect that people are likely to share more versus less extreme opinions about controversial topics when sharing via email, whereas we expect such an effect to be less likely to manifest when sharing via post on social network pages. We argue this might happen because sharing an extreme opinion about a relatively highly controversial topic via post on one's social network page might carry a higher risk of social disapproval and rejection for the sharer than sharing the same opinion via email. Our hypotheses are empirically supported by three experiments.

Experiment 1 had the goal to test if individuals show a general tendency to share extreme opinions about high controversial topics. Hundred twenty respondents were recruited online were randomly assigned to one of two conditions. In the "high controversy" condition, participants read a scenario about a hypothetical announce-

ment appeared at a bakery store reporting that the store neglects to prepare cakes for homosexuals. In the "low controversy" condition, the announcement participants read reported that consumers had to book their wedding cake with no less than thirty days before the wedding ($M_{high} = 6.35, SD = 0.92$ vs. $M_{low} = 3.10, SD = 1.60, F(1, 119) = 196.05, p < .001$). WOM likelihood served as dependent variable, level of controversy as independent variable and the opinion extremeness as mediator. Using the PROCESS SPSS macro (Hayes, 2013; model 4), results showed that level of controversy positively affects opinion extremeness ($b = 1.86; t = 5.62; p < .001$) with the marginal effect of level of controversy on WOM likelihood ($b = .67, t = 1.91, p = .06$). The indirect effect of level of controversy on WOM likelihood was significant ($b = .69, 95\% \text{ C.I.} = .31, 1.18$).

Experiment 2 aimed at introducing a boundary condition, whereby we expected to find an interaction between opinion extremeness and type of platform. Hundred one respondents have been randomly assigned to either a condition in which they were told they could access their email account or their Facebook page to share their opinion. Before being exposed to the sharing platform manipulation, respondents read an advertisement about the effectiveness of slimming pills, and were asked to rate the level of controversy of it ($M_{controversy} = 5.19, SD = 1.42$). When regressing WOM likelihood on both opinion extremeness and sharing platform results showed that both factors had a significant and positive effect on WOM, and their interaction was significant ($b = -.71, t = -2.83, p < .01$). Conditional effects of opinion extremeness on WOM likelihood revealed that when prompting respondents to use email for sharing, the effect of opinion extremeness was significant ($b = .62, 95\% \text{ C.I.} = .22, 1.02$) respect the other condition ($b = -.09, 95\% \text{ C.I.} = -.39, .21$).

Experiment 3 aimed at providing convergence with Experiment 2. With the same setting of experiment 2, 119 respondents were randomly assigning to one of two conditions (email vs social networks). We included level of controversy (measured as a single item) as an independent variable in the regression, in addition to sharing platform (manipulated) and opinion extremeness (measured), with WOM likelihood as dependent variable. Procedure (Hayes, 2013) proved the existence of a significant 3-way interaction ($b = -.37, t = 2.42, p = .02$). Analysis of the conditional effects of the two-way interaction between level of controversy and opinion extremeness on WOM likelihood revealed that individuals were more likely to share their highly extreme opinion about a topic perceived to be highly controversial via email ($b = .28, 95\% \text{ C.I.} = .02, .55$), but not via social networks ($b = -.09, 95\% \text{ C.I.} = -.23, .05$).

Findings show the mediating role of the opinion extremeness related to the controversial topics and the moderating role of online platform, thus shedding light on how eWOM about extreme opinions regarding controversial topics depends on the type of communication channel.

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When Having a Trick Up Your Sleeve Is a Bad Thing: Highly Effective Self-Control Strategies Can Be Demotivating

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EXTENDED ABSTRACT

Consumers differ in their dispositional capacity to exercise self-control. Compared to those high in trait self-control, individuals low in trait self-control are more likely to place themselves in a temptation-rich environment (Ent, Baumeister, and Tice 2015; Hofmann, Baumeister, Förster, and Vohs 2012) and to act on impulses triggered by temptations (Baumeister and Heatherton 1996). As a result, low self-control is associated with numerous personal and societal problems, such as binge eating, substance abuse, aggression and crime, weak academic performance, poor psychological adjustment, and poor interpersonal relationships (Baumeister, Heatherton, and Tice 1994; DeWall, Baumeister, Stillman, and Gailliot 2007; Duckworth and Seligman 2005; Gottfredson and Hirschi 1990; Shoda, Mischel, and Peake 1990; Tangney, Baumeister, Boone 2004; Wiebe 2006). Due to their chronic vulnerability to self-control failures, it is crucial to inform consumers low in trait self-control about effective strategies for resisting temptations. As such, companies often seek to convince consumers of the effectiveness of products that serve as strategies to facilitate self-control, ranging from debt consolidation programs to smartphone applications like MyFitnessPal.

Although perceived strategy effectiveness can stimulate preferences and purchases (Chae, Li, and Zhu 2013; Sheth and Talarzyk 1972), it remains less clear how perceived strategy effectiveness might affect consumer self-control. Intuitively, greater perceived strategy effectiveness should boost self-regulatory strength of those low in trait self-control. However, building on prior research on justification-based self-control failure (De Witt Huberts, Evers, and De Ridder 2014; Khan and Dhar 2007), we propose that greater perceived strategy effectiveness can ironically undermine the motivation to exercise self-control among those low in trait self-control who are, ironically, most in need of help, because greater perceived strategy effectiveness reduces anticipated guilt associated with indulgence, thereby increasing their susceptibility to temptations. We conducted four studies to test this theoretical framework.

Evidence from four studies provides converging support for our hypothesis. In study 1a, participants initially learned about a (purportedly) more versus less effective strategy for controlling calorie intake. Next, in an ostensibly unrelated study, participants reported their desire to eat each of three unhealthy food items. The three responses were averaged into a composite measure of self-control (larger values indicate less interest in unhealthy food). Finally, participants completed a series of control measures, in which a trait self-control scale specific to eating (Giner-Sorolla 2001) was embedded. As predicted, greater perceived strategy effectiveness reduced self-control (i.e., increased interest in unhealthy food) in participants low in trait self-control, whereas this effect reversed among those high in trait self-control. We replicated this finding in study 1b by using the domain-general scale (Tangney et al. 2004) to measure chronic self-control as well as addressed alternative explanations.

In study 2, we tested our predictions by using a behavioral measure of self-control. Participants first read about a (purportedly) more versus less effective behavioral strategy for overcoming procrastination. Next, participants performed two tasks within a time window of 10 minutes, which created a procrastination situation. The first of these was to play an enjoyable yet inconsequential computer game (Tetris), whereas the second task was to work on a boring but

consequential writing task for which the top 50% performers would qualify for an opportunity to earn a performance-based bonus payment. We operationalized self-control in terms of the amount of time spent on the writing task (more time spent on the writing task reflects greater self-control). As hypothesized, greater perceived strategy effectiveness reduced self-control (i.e., less time spent on the writing task) in participants low in trait self-control, whereas it had the opposite effect among participants high in trait self-control.

Study 3 sheds light on the psychological process underlying this effect by including a measure of anticipated guilt (adapted from Dahl, Honea, and Manchanda 2003). Participants initially completed the brief self-control scale (Tangney et al. 2004) embedded in other scales. Then, they read about a (purportedly) more versus less effective strategy for becoming more patient. After reading about the strategy, participants completed a filler task. Upon the completion of the filler task, they were asked to make a consequential choice between a smaller immediate payment and a larger payment that was delayed by 8 days. In line with our theorizing, greater perceived strategy effectiveness led to a higher probability of choosing the immediate smaller payment for individuals low in trait self-control, but had no such effect among those high in trait self-control. Critically, the anticipated guilt associated with choosing the smaller immediate payment mediated the effect observed among those low in trait self-control.

In sum, this research shows that providing people who are chronically low in self-control with highly effective self-control strategies may have unintended adverse consequences.

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Planned to Miss: The Use of Two-Method Measurement Design in Experimental Marketing Research

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EXTENDED ABSTRACT

Although people's behavior is shaped by many factors, psychological research typically attempts to isolate the effects of one construct of interest (or sometimes a small number of constructs). In focusing on a key predictor, it is not always clear how to best account for the possibility that other factors may also affect the outcome variable. While statistically controlling for valid covariates in correlational or experimental analyses can yield more accurate estimates and significance tests of focal effects, including unnecessary covariates can also be problematic, and can even be misused.

In this paper, we present a two-step method using lasso regression (Belloni, Chernozhukov, & Hansen 2014) as a practical solution to the problem of principled variable selection for covariates, drawing on recent advances in statistics and econometrics. We apply this method to four datasets drawn from recent literature to illustrate double-lasso variable selection in both correlational analyses and experimental designs.

THE COVARIATE SELECTION PROBLEM

Analyses that fail to take into account valid predictors of the dependent variable can suffer from multiple problems. In correlational analyses, omitted variables that predict the dependent variable and are correlated with the focal independent variable(s) can cause bias in estimated parameters (Darlington, 1990; Mauro, 1990). When valid covariates are excluded, the estimated coefficient of interest may either be artificially strong (when the covariate is a confound), or may be artificially weak (a suppression effect; MacKinnon, Krull, & Lockwood, 2000; Thompson, 2006).

A common way of avoiding this problem is to use experimental manipulations as independent variables. When randomization is successful, the experimental independent variable should be uncorrelated with any omitted variables, precluding bias in estimating the effect of the independent experimental variable. However, in practice, attempted random assignment may not always yield the desired independence (Darlington, 1990; Zhou & Fishbach, 2016), and formal tests are rarely conducted to confirm randomization (Wilkinson, 1999). Even when randomization is successful, failure to statistically control for valid predictors of the dependent variable reduces the statistical power of the experiment (Darlington, 1990; Judd, McClelland, & Ryan, 2011), exacerbating the already typically low likelihood of detecting a true effect of the independent variable (Rossi, 1990).

Given these benefits of controlling for covariates, it may seem surprising that the practice is not consistently applied in the literature. The ad hoc practices related to including covariates are likely attributable to several factors. As a practical concern, researchers may rely on rules of thumb (e.g., Green, 1991) and conclude that their sample size is too small to support including more predictors. In the extreme case when the dataset has more potential covariates than participants, including all variables in a regression is not possible.

Furthermore, it is not always clear how to go about selecting covariates and discussions of best practices in psychological research provide little guidance on this issue (Cumming, 2014; Wilkinson, 1999). Automatically controlling for a standard set of variables, such as demographics, is not recommended (Meehl, 1971). Automated methods, particularly stepwise regression, are widely recognized to perform poorly (i.e., over-fitting the data, selecting non-optimal

models, inflating R^2 ; Freedman, 1983; Thompson, 1995; Thompson, 2006) and are rarely used.

In fact, recent work on research integrity has cautioned that the decision of whether or not to control for covariates can contribute to the problem of researcher degrees of freedom and false positives. Simmons, Nelson, and Simonsohn (2011) provide an elegant example of how selective reporting of only those analyses including controls that contribute to a significant focal result can lead to spurious findings. In fact, Simonsohn, Nelson, and Simmons (2014) use presence of covariate controls as a suspicious characteristic to distinguish between studies more or less likely to have been "p-hacked", and report evidence supporting this suspicion. Thus, some researchers may feel that it is simpler and more conservative to report main effects without covariates. Even when controlling for covariates could be beneficial, the lack of established principled methods for doing so may discourage researchers from doing such analyses.

DOUBLE-LASSO VARIABLE SELECTION

We propose that recently developed methods based on lasso regression (e.g. Tibshirani, 1996) provide a useful solution to these problems. We describe a "double-lasso" approach (Belloni et al., 2014) that can help researchers select variables for inclusion in analyses in a principled manner that avoids inflated Type I errors. The goal is to identify covariates for inclusion in two steps, finding those that predict the dependent variable and those that predict the independent variable. The second step is important, because exclusion of a covariate that is a modest predictor of the dependent variable but a strong predictor of the independent variable can create a substantial omitted variable bias. In experimental data, the second step also serves as a test of randomization. While we recommend using lasso regression, calibrated to avoid over-fitting, in these variable selection steps, we also discuss similarly-performing alternative methods. The variables selected in either step are then included in the regression of interest.

A lasso regression minimizes the sum of squared errors in the regression equation with an additional penalty term based on the absolute magnitude of the coefficients in the regression. The penalty term results in the lasso regression shrinking the estimated regression coefficients towards zero and potentially setting coefficients for some variables exactly to zero, both of which help reduce over-fitting. By setting some coefficients to zero, the lasso performs variable selection, and can be used even when the number of observations is small relative to the number of predictors (James, Witten, Hastie, & Tibshirani, 2013).

However, directly using lasso regression can be problematic. Those lasso-estimated coefficients that are actually non-zero are typically underestimated, and lasso may mistakenly exclude variables with non-zero coefficients, particularly variables with moderate effects. Each of these phenomena generally causes significant regularization bias that adversely affects estimation and inference about the coefficient of interest. The omission of covariates with moderate but non-zero coefficients is especially problematic and results in omitted variable bias when these covariates are relevant predictors of the focal variable. In order to overcome such biases, we recommend using the "double-lasso" variable selection procedure (Belloni, et al., 2014), which was explicitly designed to alleviate both sources of bias, as follows:

- Step 1:** Fit a lasso regression predicting the dependent variable, and keeping track of the predictors with non-zero estimated coefficients.
- Step 2:** Fit a lasso regression predicting the focal independent variable (or variables), keeping track of the predictors with non-zero estimated coefficients. If the independent variable is an effectively randomized treatment, no covariates should be selected in this step.
- Step 3:** Fit a linear regression of the dependent variable on the focal independent variable, including the covariates selected as predictors in either of the first two steps. This regression could also include a small set of additional covariates identified a priori as necessary. Interpret and report the coefficient estimates and significance tests on the focal variable(s) as the final results.

While implementation is fairly straightforward and extends easily to multiple focal variables by repeating Step 2 for each, the choice of the tuning parameter λ is very important for successfully avoiding over-fitting. Dedicated code for this procedure is available for use with STATA. We also provide details and examples for how to apply this method in both STATA and in the R statistical package, and how to closely approximate the results using modified forward-selection in SPSS (Kozbur, 2015).

SIMULATION RESULTS

We ran a simple simulation to illustrate the practical benefits of double-lasso variable selection. We generated 10,000 datasets from eight known sets of parameters, varying the number of available covariates and the sample size. We compare the double-lasso procedure to five alternatives: regression including no covariates (“none”), including all the covariates when possible (“all”), including all covariates selected in a step-wise regression (“stepwise”), choosing covariates to maximize the chances of the independent variable being significant (“p-hacking”) and, as a baseline, using the correct variables (“true”).

On average, the double-lasso selected close to the right number of covariates (2.6 vs. 2 actual), and far fewer than stepwise (5.5) or p-hacking (4.9). The average error in estimating the coefficient of the dependent variable in the double-lasso was very close to the true baseline (RMSE=.261 vs. .246), lower than including no covariates (RMSE=.356) or all covariates (RMSE=.383) and much lower than p-hacking (RMSE=.496). The significance test for the focal independent variable was well calibrated in the double lasso, rejecting the null hypothesis 5.4% of the time, similar to “none” and “all” (5.3% and 5.6%, respectively) and much better than “stepwise” (11.8%) or p-hacking (29.8%). Perhaps most importantly, using the double-lasso yielded substantial benefits in statistical power compared to those other methods that also did not over-reject (.579 vs. .626 for the “true” baseline, compared to .323 for “none” and .396 for “all”).

We also tested two procedures that roughly approximate the double-lasso. Two-step multiple regression (including all potential covariates, and then re-running the regression removing non-significant covariates) provides reasonable solutions, but underperforms the double-lasso and is infeasible in settings with more available covariates than observations. Double-forward regression (using forward regression to do both steps, with modified p-value cutoffs) yields results quite similar to the double lasso.

Notably, the double-lasso performs well even in demanding situations. For example, with a sample size of 60, it is impossible to include 120 covariates in a standard regression, and researchers in this situation might therefore not include any covariates. However,

double-lasso variable selection identifies covariates and improves on the no-covariate model in this situation, with both lower error (RMSE=.276 vs. .390) and higher statistical power (.422 vs. .261). Next, we illustrate the proposed variable selection method by using it to analyze four datasets discussed in the literature.

ANALYSIS 1: CORRELATIONAL ANALYSIS OF PARENTS' LIFE SATISFACTION

Nelson, Kushlev, English, Dunn, and Lyubormirsky (2013) concluded, based on analyses of three datasets, that parents report relatively higher levels of life satisfaction, happiness, and meaning in life than do nonparents, contrary to some prior research. Their analyses were based on mean comparisons (t-tests) and correlations, without including any covariates as statistical controls. These conclusions were criticized by Bhargava, Kassam, and Loewenstein (2014), who re-analyzed the data and found that the satisfaction and happiness were not higher for parents, controlling for demographics.

In Study 1, Bhargava et al. (2014) reported a significant positive relationship between parental status and life satisfaction in the World Values Survey data without any controls ($b=0.224$, $p<.001$), similar to Nelson et al. (2013). This suggests that parents are more satisfied with their lives than non-parents, on average. However, they also find that the relationship is instead negative when controlling for marital status, age and gender ($b=-0.144$, $p=.04$), and is non-significant when controlling for income as well ($b=-0.065$, $p=.34$).

Thus, whether the relationship between life satisfaction and parenthood was significantly positive, non-significant or significantly negative depended on whether and which covariates were included. One important consideration is whether the potential covariates should be considered controls, on theoretical and logical grounds (e.g. as opposed to being analyzed as potential mediators). Assuming that the variables are valid potential controls, it is not clear which covariates should be included and what conclusion should be drawn. In fact, the lack of difference found by Bhargava et al. (2014) could potentially even be spurious, a result of multiple testing of many potential covariates. The double-lasso addresses this concern by identifying whether there is sufficient empirical justification for including the published covariates and potentially identifying other covariates.

To be comprehensive and test the ability of the method to handle many potential covariates, we began with 9 demographic variables, created dummy codes from the categorical variables and computed powers of the variables and interactions, yielding a total of 524 potential covariates. Using the procedure described above, we then identified a subset of 17 covariates for which there was sufficient empirical support to be included in the final test. These were covariates that were either strong predictors of life satisfaction or of being a parent.

In particular, our analysis using double-lasso variable selection confirms that there is sufficient evidence to include the variables identified by Bhargava et al. (2014) (age, gender, marital status and income) as covariates, as well as several other variables and interactions. In the resulting model, we find a significant negative relationship between parental status and life satisfaction ($b=-0.196$, $p=.006$), controlling for the identified covariates. Note that it is important for the results to conduct both variable selection steps. If we only use covariates identified as predictors of the dependent variable (life satisfaction) and leave out those identified as predictors of being a parent, we instead find a weaker negative relationship between parental status and life satisfaction ($b=-0.127$, $p=.051$).

While this analysis tells us which potential covariates have empirical support for inclusion, it cannot determine which variables make logical sense or are theoretically justified to include. As an

example, one potential concern with this analysis is that parenthood might causally impact some of the variables, particularly income and employment status. When we re-run the regression excluding these variables as potential covariates, we still find a significant negative relationship between parental status and satisfaction ($b=-.221$, $p=.002$), controlling only for marital status, age, gender and interactions of those covariates.

Nelson et al. (2013) and Bhargava et al. (2014) also debated whether demographics moderated the effect of parenthood on life satisfaction, with the latter paper arguing that evidence of such moderation was weak. In separate analyses, we find that marital status ($b=.362$, $p=.015$) and age ($b_{age}=3.281$, $p=.009$; $b_{age-squared}=-3.107$, $p=.045$) moderates the effect of being a parent, controlling for selected covariates, but gender does not.

Overall, our findings parallel those of Bhargava et al. (2014). The higher self-reported life satisfaction of parents may be explained primarily by the differing demographic characteristics of parents vs. nonparents, disguising lower life-satisfaction among parents, all else equal.

ANALYSIS 2: MEDIATION ANALYSIS OF CONSERVATIVE HAPPINESS

Next, we look at how double-lasso regression can be used to inform variable selection when conducting a mediation analysis. Napier and Jost (2008) report that conservatives demonstrate higher levels of subjective well-being than liberals do. Using large secondary data sets, they identify rationalization of inequality as a mediator of this difference, in accordance with system-justification theory. However, a potential concern is that the mediation result may be spurious, if the mediator is merely a proxy for other factors that relate to political orientation and subjective well-being. While the paper reports mediations including selected demographic controls, we can use lasso regression to test whether inclusion of the covariates is supported by the data.

We reanalyzed the 1,192 participants in the 2000 American National Election Survey who had completed the measures analyzed in Study 1 of Napier and Jost (2008). We confirmed that conservatives were happier ($b=.282$, $t(1190)=4.70$, $p<.001$), and the difference was partially mediated by the rationalization of inequality scale (indirect $b=.062$, bootstrap CI=[.0004,.1246], $p=.049$, Preacher & Hayes, 2004).

The dataset also includes a large number of demographic variables that could be potentially confounding the mediation result. We chose 35 demographic variables, including all the variables used in the paper, and created dummy codes for all categorical variables. We conducted a double-lasso analysis to test the resulting 141 demographic variables for inclusion, and identified four covariates (church attendance and dummy codes for employment, being married and African-American ethnicity). Controlling for these covariates, the effect of political orientation on happiness is only marginally significant. While the coefficient of political orientation decreases when rationalization of inequality is included, the mediation is not significant (indirect $b=.045$, bootstrap CI=[-.011,.102], $p=.116$). This suggests that the proposed mediation in the original study is sensitive to the inclusion of a more complete set of covariates, which are identifiable using the double-lasso procedure.

ANALYSIS 3: SPURIOUS EXPERIMENT ON CHRONOLOGICAL REJUVENATION

While controlling for covariates can be helpful, as in the prior analyses, Simmons et al. (2011) have shown that opportunistically controlling for covariates can contribute to spurious findings. The

potential for controls to distort the primary findings is a particular concern in experimental studies, where successful randomization addresses issues of confounding. We re-analyzed the data from Study 2 of their paper to test whether using the double-lasso would reduce the likelihood of including spurious covariates.

In Study 2, Simmons et al. (2011) present an intentionally spurious finding, reporting that a randomized experimental intervention (having people listen to “When I’m Sixty Four” by the Beatles vs. a control song) had a significant effect on the participant’s age, controlling for father’s age ($M=20.1$ vs. 21.5 years old, $b=-521.85$, $t(17)=2.22$, $p=.040$). The covariate was also significant in the regression ($b=98.34$, $t(17)=3.86$, $p=.001$).

We identified nine potential covariates in the dataset. Dummy-coding a categorical variable yielded 10 variables. The double-lasso takes into account not only the multiple comparisons, but also the small sample size ($N=20$), setting a higher bar for covariates to be included. As a result, the double-lasso analysis revealed insufficient empirical support to include any of the potential covariates in the regression. The resulting single-variable regression accurately revealed no significant effect of the experimental manipulation ($b=-305.30$, $t(18)=1.00$, $p=.329$). Simply using a principled variable-selection method eliminated the spurious finding.

ANALYSIS 4: SUGGESTED DEFAULTS EXPERIMENT IN DONATION

In the last analysis, we demonstrate that the double-lasso method can be used to identify valid covariates in a randomized experiment, testing whether randomization was successful, and increasing the statistical power to detect a result. Goswami and Urminsky (2016) conducted a field experiment on the effect of recommended amounts in donation appeals. Each appeal letter included three donation amounts (low, medium and high) that were based on the recipient’s most recent donation amount. In the four focal conditions, appeal letters were randomly assigned to include a recommendation to give the low amount, medium amount, high amount or to not include any recommended amount.

One of the hypotheses tested was a “scale-back” effect, in which donors would anchor on the recommended amount and give less when the low amount was recommended, compared to the control condition with no recommendation. People who chose to donate gave less in the low-recommendation condition (vs. control), but the difference was not significant ($M=\$162$ vs. $\$283$, $t(46)=1.38$, $p=.175$). Ten potential covariates were available, to which we added non-linear transformations and interactions, for a total of 196 potential covariates. There was a strong a priori rationale for including one of the potential covariates, the prior amount donated, since the choice options in the appeal letter actually differed depending on the most recent donation.

We used a double-lasso regression to identify which covariates had empirical support for inclusion. First, none of the covariates had a significant relationship with experimental condition. While is expected since the conditions were randomly generated, it can be problematic to simply assume effective random assignment (Darlington, 1990). Thus, this step provides a valuable tool for validating the effectiveness of randomization.

Based on the relationship to amount donated, three covariates were identified (most recent donation amount and two interactions) in the lasso step predicting donation amount. As noted above, no covariates were selected in the step predicting experimental condition, revealing no evidence of failed randomization based on the covariates. A linear regression including the identified covariates (as well as orthogonal experimental conditions), confirmed that there was a

significant effect of the low recommendation condition on log donation amount relative to control ($b=-.365$, $t(67)=3.03$, $p=.004$). This analysis demonstrates how double-lasso regression can be used to identify valid covariates, increasing the power of experimental tests.

CONCLUDING REMARKS

The simulation and re-analyses demonstrate the potential benefits of using a principled variable selection method, such as the double-lasso, for better identifying which covariates to include and not include in analyses across a range of situations. It is important to emphasize that the analytic method presented here cannot determine either the role that selected variables should play, or how their effects on the relationship of interest should be interpreted. A confound, a manipulation check and a mediator may all have similar statistical relationships in the data (MacKinnon, Krull, & Lockwood, 2000; Zhao, Lynch, & Chen, 2010), and these distinctions should typically be made on theoretical grounds.

However, either including all covariates or ignoring covariates entirely, either because of the conceptual difficulty of identifying the theoretical role of the variable or because of the potential for covariates to be used improperly (i.e., in p-hacking), is no solution. Failing to control for valid covariates can yield biased parameter estimates in correlational analyses or in imperfectly randomized experiments and contributes to underpowered analyses even in effectively randomized experiments. As demonstrated in the analyses, double lasso variable selection can be useful as a principled method to identify covariates in analyses of correlations, moderation, mediation and experimental interventions, as well as to test for the effectiveness of randomization. While variable selection methods are no substitute for thinking about what the variables mean, the approach presented here can provide an empirical basis for determining which variables to think hard about.

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Love Food, Hate the Brand That I Waste: The Effects of Product Waste on Brand Evaluations

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EXTENDED ABSTRACT

Product waste involves a huge loss of resources and of ‘unused utility’: throwing away of functioning appliances, unused products, and edible foods. Wasting is not a carefree activity for consumers. Consumers follow complex procedures in managing the residual value of discarded food items to lessen anxieties about wastage (Evans, 2012; Graham-Rowe et al., 2014; Parizeau et al., 2015). Moreover, a distaste for waste affects consumers’ choices, such as favoring options with less unused utility (Bolton and Alba, 2012) or persevering in a failing project when stopping would involve waste (Arkes, 1996). The current research provides insights into this contradiction between wasting a lot and not wanting to waste, and reveals the consequences of waste for brand evaluations.

Waste can be understood as the result of not using a product to its full capacity. Whereas both throwing away a food container that still holds leftovers and throwing away an emptied food container would lead to the generation of waste, there is an important difference in the unused utility that is wasted, in this example in the form of uneaten food. This salient unused utility is aversive for consumers (Bolton and Alba, 2012). According to cognitive dissonance theory (Festinger, 1957), the occurrence of “nonfitting” relations among cognitive elements (which could entail attitudes, beliefs, and behaviors) is unpleasant and leads to psychological discomfort (also termed dissonance). Thus, consumers would like to solve this dissonance in the current waste situation. Because attitudes can be altered more easily than previously displayed behaviors, attitude change is a common way in which people reduce dissonance (Galinsky et al., 2008; Simon et al., 1995; Starzyk et al., 2009). Therefore, we expect that wasting a product with left-over utility would generate cognitive dissonance, and that this dissonance would be solved by decreasing evaluations of the wasted brand.

Importantly, when a product with left-over utility is discarded, the left-over utility is not necessarily wasted. Different disposition behaviors are possible: throwing it away, giving it away, trading it, and selling it (Jacoby et al., 1977). If unused utility can be transferred to another person, the level of psychological discomfort should be lower than if unused utility is lost. Thus, we expect that wasting a product with left-over utility leads to more cognitive dissonance and more decreased brand evaluations than other ways of disposing a product.

Finally, the predicted effect should depend on brand salience. Dissonance reduction through brand evaluations should be less likely when the brand itself is not salient when wasting the product (i.e., when the brand is not visible, and there is thus no reminder of the brand name).

We tested our hypotheses in four experiments. The first three experiments were scenario studies. Experiment 1 examined the effect of different ways of disposing products on dissonance feelings. Results showed that wasting a product (irrespective of whether it was thrown away or recycled) lead to more dissonance than transferring utility to another person (irrespective of whether the product was used in its original intended purpose). Experiment 2 tested the effects of wasting on brand evaluations. Participants imagined that they had purchased a drink they could not consume entirely, and that they either threw the remaining product in the bin (waste condition) or gave it to a friend (no-waste condition). Brand evaluations were lower in

the waste condition than in the no-waste condition. Experiment 3 ruled out alternative explanations (transfer of disgust, cf. Morales and Fitzsimons, 2007, and attribution of waste to the brand).

Experiment 4 investigated waste in a situation with real product consumption, to generalize our results beyond imagined situations. It also tested the moderating effect of brand salience. Participants prepared and ate a salad in the lab. In the brand-salient condition, product containers with the same brand name were placed next to bowls with ingredients, whereas in the brand-not-salient condition only unlabeled bowls were provided. In both conditions, participants were aware of the brand through the instructions. The amount of ingredients provided ensured that there were leftover ingredients. As dissonance is more likely when people believe that they freely choose their behavior (Harmon-Jones, 2000), in the waste condition participants could ask for sandwich bags to take leftover ingredients home or put leftover ingredients in a bin (only six participants asked for bags). In the no-waste condition, participants could take leftover ingredients home or leave these on the table for future participants (none took ingredients home). All participants then evaluated the brand.

Our results showed the expected waste x salience interaction effect ($F(1, 120) = 5.32, p = .023$). When the brand was not salient, wasting did not affect brand evaluations ($p = .156$). In contrast, when brand was salient, brand evaluations were marginally higher when ingredients were left on the table ($M = 5.19$) than when these were wasted ($M = 4.75, p = .069$). Mediation analyses showed that dissonance was a mediator when salience was high but not when salience was low.

Our research shows that consumers can reduce dissonance from wasting a product with unused utility by decreasing their brand evaluations. This was found both in scenario studies and in a food consumption context. Results furthermore reveal that brand devaluation does not occur when the brand is not salient at the moment of wasting. This provides new insights to literature on consumer disposition behavior that help clarify the paradox in which consumers both waste products and do not want to waste. It also has important managerial implications. The realization that brand evaluations suffer when consumers waste products with unused utility could inspire companies to spend additional efforts on preventing this. Companies can do so by ensuring that products do not contain excess utility beyond what consumers need (e.g., small package sizes), helping consumers to use all product utility (e.g., easy storage of partially used products), and providing mechanisms for the collection of products with remaining utility (e.g., collection points for appliances).

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Planning to Fill The Gap: The Efficacy of Forming Implementation Intentions in Healthy Eating

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EXTENDED ABSTRACT

Healthy eating is becoming an increasingly important behavior since obesity is a major public health concern and has become more widespread in the past five years (OECD, 2014). Our role as consumer researchers is to develop, test and perfect the instruments which are used to design social policies aimed at increasing healthy eating. The main goal of this research is to study the effectiveness that forming implementation intentions has on healthy eating through a meta-analytic review.

Implementation intentions are action plans subordinate to goal intentions that specify the “when, where, and how” of responses leading to goal attainment. They have the structure of “When situation x arises, I will perform response y !” and thus link anticipated scenarios with goal-directed responses. Implementation intentions delegate the control of goal-directed responses to anticipated situational cues which (when actually encountered) elicit these responses automatically. Because implementation intentions imply the selection of a suitable response applicable to a future situation (i.e., a good opportunity), it is assumed that the mental representation of this situation becomes highly activated and thus more easily accessible (Gollwitzer, 1999).

In particular, this review has two research objectives related to the type of intended behavior. Our first objective is to test the effect of using the intervention for promoting healthy behaviors versus its effect on decreasing unwanted behaviors. Past evidence shows that the effect-size seems to be lower when the intervention aims at reducing unhealthy behaviors (e.g. Adriaanse, Vinkers, De Ridder, Hox & De Wit, 2010; Verplanken & Faes, 1999) it was investigated whether the quality of the outcome measures and the quality of the control conditions that are used in these studies influence implementation intentions’ effectiveness. Methods: Twenty three empirical studies investigating the effect of implementation intentions on eating behavior were included. In assessing the empirical evidence, a distinction was made between studies that aim to increase healthy eating (i.e., eating more fruits, but the results are still inconclusive due to limited sample sizes of previous meta-analyses. Second, it will test the efficacy of implementation intentions in different eating domains since past evidence is not conclusive in this respect. In healthy eating, the average effect of forming implementation intentions is small to medium (Adriaanse, van Oosten, de Ridder, de Wit & Evers, 2011). However, in recent years there has been a substantial increase in research focused on specific healthy eating domains with mixed results (Hagger & Luszczynska, 2014).

The literature search and data extraction were performed in February 2015. We searched for studies published in the Web of Science (Core Collection) and MEDLINE (1990 - December 2014). Application of the inclusion criteria resulted in 71 relevant articles describing 80 empirical studies, involving 15,944 participants. This study represents the largest meta-analysis performed in the healthy diet domain pertaining to the efficacy of forming implementation intentions.

Our findings show that the overall effect of the intervention is small to medium ($d = .34$). Compared with other behaviors, the effect that implementation intentions have on achieving a healthy-diet goal is lower (Gollwitzer & Sheeran, 2006). These differences confirm the hypothesis, “the effect of implementation intentions varies across

different types of health-related behaviors” (Bélanger-Gravel, Godin, & Amireault, 2013: 45). Coherent with previous research, this meta-analysis shows significant differences between reducing ($d = .23$) or promoting ($d = .42$) a certain behavior. Therefore, it could act as a moderator variable.

However, the study of other moderator variables resulted in unexpected findings. When testing the efficacy of implementation intentions in different eating domains, values of d were calculated for different healthy eating behaviors in order to search for moderator effects. The meta-analysis showed that the efficacy of the interventions is similar when it is used to reduce fat intake ($d = .36$), increase fruit consumption ($d = .45$) or promote healthy snacking ($d = .44$). However, when the individual forms implementation intentions to diminish unhealthy snacking, the effect-size is $.14$, significantly smaller than the effect found for fat intake. Being that both are unwanted behaviors, the efficacy of implementation intentions should be similar. It leads us to conclude that future researchers cannot assume that forming implementation intentions in all cases is more efficient at promoting healthy behaviors than at decreasing unwanted behaviors.

Our results suggest the possible moderating effect of a new variable unused in previous meta-analysis, goal complexity. Although some authors had pointed out their possible influence on the intervention (e. g. Luszczynska, Scholz, & Sutton, 2007). We define complex goals as those in which the course of action to achieve the goal is unclear due to there being more than one alternative and each course of action having a different degree of effectiveness (De Vet, 2007).

The contribution of this work to the theory of implementation intentions is that it clarifies the moderation role of the type of intended behavior, promoting versus decreasing, adding the mediator role of a new variable, goal complexity. Although by itself goal complexity does not have a moderating role, it seems that along with the type of intended behavior, it sheds light on the actual role of implementation intentions in different types of healthy eating behaviors. The effect-sizes show that on one hand, the intervention is significantly more efficient when used for complex goals, aims to decrease a behavior ($d = .35$), and is also more efficient in simple goals that promote behaviors ($d = .45$). On the other hand, implementation intentions are less efficient for complex goals promoting a behavior ($d = .17$) and simple goals decreasing a behavior ($d = .14$).

Our findings imply that future researchers cannot assume that forming implementation intentions in all cases is more efficient at promoting healthy behaviors than at decreasing unwanted behaviors. This opens up a new line of research to help understand and improve the performance of implementation intentions since there is literature which discusses the role of each variable separately, but not jointly.

From the Transformative Consumer Research perspective, it is important to do practical research that can be used to increase the wellbeing of consumer citizens (Mick, 2006; Ozanne et al., 2011). In this vein, the ultimate purpose of our research is to help policy makers design interventions intended to help people achieve their goals of healthy eating. Implementation intentions will be reasonably helpful when used for reducing fat intake or increasing the consumption of fruit, vegetables or healthy snacks. However, for other behaviors, such as diminishing unhealthy snacking or promoting a global healthy diet, the intervention would not be suitable.

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How and Why Wearing Sunglasses Makes for Cool Consumers

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EXTENDED ABSTRACT

The question of how cool becomes active in directing thought and action has received little theoretical analysis and empirical attention. Critical to understanding what drives cool, then, is identifying which aspects of our day-to-day consumer experiences mentally activate cool and affect how people think and act with respect to coolness. We posit that using a symbolically cool product may activate cool, thus making the source of activation a consumer's own actions. We rely on sunglasses to study this issue.

Study 1 surveyed consumers regarding the behaviors and products they consider cool. We found that sunglasses were the most commonly listed "cool product" and were rated cooler than other fashion accessories and garments (e.g., scarves and jeans). In terms of cool behaviors, factor analysis established two dimensions: emotional composure (e.g., calmness under pressure) and nonconformity (e.g., slacking at school). These findings prompted us subsequently to manipulate cool activation using sunglasses, and to measure cool activation using emotional composure and academic underachievement.

Our first experiment, however, tested whether consumers wearing sunglasses pay more attention to people and brands that are cool over those that are neutral with respect to coolness. This study provides a strong test of cool activation because attention is less controllable than behavior, and because attention to cool stimuli is less subject to alternative explanations than behavioral measures. Attentional bias was examined in a dot probe task (MacLeod et al. 1986), which presents pairs of images simultaneously on a computer monitor. After the images disappear, a dot appears in place of one of the images and participants indicate whether the dot is on the right or left. If participants attend more to one image over the other, they will be faster to detect the dot when the dot replaces that image. Thus, response times should be faster when the dot replaces a cool image (e.g., Johnny Depp or Harley-Davidson) versus a neutral image (e.g., Mickey Mouse or Volvo). The results confirmed that people wearing sunglasses exhibited a greater attention bias to cool images compared to people in a control condition, for whom the sunglasses were visible on the desk but were not worn during the task ($F(1,170) = 3.89, p = .05$; note: Satterthwaite adjusted df). In addition, people wearing sunglasses exhibited a greater attentional bias on trials where cool images were present compared to control trials where cool images were absent ($F(1,95) = 3.28, p = .07$). These findings suggest that wearing sunglasses guides attention toward perceptual input that is cool.

Study 3 tested whether consumers wearing sunglasses underperform academically and exhibit emotional composure, hallmarks of cool behavior. Again under the guise of product evaluation, half were instructed to wear sunglasses throughout the study and half simply saw the sunglasses on their desk. Participants completed an "English language ability test" in which they received 5 minutes to generate as many words as possible from a set of scrambled letters (Dewall et al. 2011). Next, they were randomly assigned to receive positive or negative performance feedback and subsequently completed measures of shame, guilt and pride (Tangney and Dearing 2002). Compared to control participants, those who wore sunglasses performed worse on the test ($t(99) = -1.96, p = .05$), consistent with the notion that cool kids reject achievement norms and slack at school. They also maintained their composure, expressing less intense feelings of shame (F

(1, 97) = 8.92, $p < .004$), guilt ($F(1, 97) = 6.64, p = .01$), and pride ($F(1, 97) = 25.10, p < .001$) in response to performance-related feedback. Importantly, performance did not predict emotions; rather, and as predicted, wearing sunglasses produced two independent effects: academic underperformance and emotional composure.

Study 4 tested whether these behavioral effects depend on the perception that sunglasses are cool. Participants were randomly assigned to sunglasses or control conditions before viewing a web-blog and advertisement that portrayed sunglasses either as cool or healthy (i.e., for UV-protection). Next, they completed a so-called filler task, a math matrices task (Gino et al. 2010), before answering questions about the website. Performance on the filler task was our dependent variable. As predicted, fewer matrices were solved in the sunglasses condition than the control condition but only when sunglasses were portrayed as cool ($F(1, 162) = 10.76, p = .001$) and not healthy ($F < 1$). Thus, as predicted, sunglasses' symbolic meaning is critical to obtaining effects on cool behavior. Moreover, because wearing sunglasses did not affect performance in the healthy condition, we rule out the possibility that sunglasses impair performance through cognitive load or distraction.

Study 5 teased apart three completing underlying mechanisms – stereotype/construct activation, implicit self-perceptions, and explicit self-perceptions – by testing moderation by self-awareness and mediation by self-perceptions. Participants were assigned to the sunglasses or control condition. Self-awareness was manipulated in a "me/not me" self-description task (Markus 1977) in which participants indicated whether a series of personality and behavioral traits describes them ("me") or not ("not me"). The low self-awareness condition was instructed to respond to items quickly, while the high self-awareness condition was instructed to respond accurately. Thus, self-perception was based on accessibility (introspection) in the low (high) self-awareness condition. All accounts make similar predictions under low self-awareness, predicting cool traits are more accessible in the sunglasses (vs. control) condition. Critically, predictions vary under high self-awareness. The explicit self-view account predicts that people wearing sunglasses continue to perceive cool traits as self-descriptive and to underperform academically. That is, a process whereby people consciously infer they possess cool traits and thus behave cooler would not be weakened by self-awareness (Bem 1972). Conversely, the two accessibility-based accounts predict that high self-awareness attenuates the effect of wearing (vs. not wearing) sunglasses, consistent with the notion that self-awareness undermines accessibility effects (Wheeler et al. 2008). The accessibility-based accounts can, however, be teased apart. Stereotype/construct activation implies a direct effect but implicit self-perception is indirect, with self-perception mediating behavior. Our findings supported the implicit self-perception account: people wearing sunglasses automatically internalize self-perceptions associated with coolness, and this drives cool behavior.

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The Insidious Effects of Smiles on Social Judgments

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EXTENDED ABSTRACT

Smiles are widely used as a marketing tool to produce positive impressions. Sales assistants, restaurant servers, and store cashiers are often trained to smile when they interact with customers (Hennig-Thurau et al. 2006), probably because smiles positively influence interpersonal judgments in a myriad of ways. People who smile are perceived to be kinder, more sociable, more honest (Thornton 1943), more pleasant (Mueser et al. 1984), more carefree (Deutsch, LeBaron, and Fryer 1987), and more polite (Bugental 1986) than people who do not.

Such associations may lead one to believe that smiles always convey positive information and hence, the bigger the smile, the better. Indeed, research has documented that people deliberately intensify positive emotional displays to receive favorable social feedback (Andrade and Ho 2009). In this research, however, we caution that bigger and broader smiles sometimes bring forth undesirable consequences. Well-intended broad smiles are not always beneficial, and can even have a boomerang effect on consumers' judgments and behaviors.

THEORY AND HYPOTHESES

We integrate research in two areas – the stereotype content model (SCM) and the social-functional perspective on emotion – to develop our framework and hypotheses. The SCM proposes that interpersonal judgments are captured by two fundamental dimensions of social perception—warmth and competence—that likely reflect evolutionary pressures (Fiske 2002). In order to survive and reproduce, social animals must quickly determine others' intentions (e.g., to help or harm), and their ability to act on them. Warmth judgments reflect the first of the two dimensions, and typically include evaluations of kindness, friendliness, trustworthiness, and helpfulness (Aaker et al. 2010). Competence judgments relate to evaluations of the target's capability of carrying out his/her intentions, and include perceptions of effectiveness, intelligence, power, and skillfulness (Hoegg and Lewis 2011).

The social-functional perspective on emotion asserts that emotions have evolved to help facilitate social interactions by signaling important information about the expresser (Fridlund 1992; Keltner and Haidt 1999). People are able to make quick and spontaneous inferences from facial expressions to understand the expresser's internal emotional states and social intentions (Fridlund 1994; van Kleef et al. 2004). Smiles, in particular, are believed to have evolved to assist group living by facilitating cooperation among unrelated individuals (Owren and Bachorowski 2001). Smiles communicate positive intent, agreement, or assent, and are often used to encourage and support social interactions (Abe Beetham and Izard 2002).

Not only do facial expressions convey the expresser's emotions and intentions, but also the intensity of those feelings, with more intense facial expressions connoting more intense emotions and desires (Ekman, Friesen, and Ancoli 1980). Broad versus slight smiles may have different social consequences. Women with the most intense smiles in photographs are more likely to be married by age 27 (Harker and Keltner 2001) and people with more intense smiles in photos are less likely to divorce later in life (Hertenstein et al. 2009). This may be because, compared to slight smiles, broad smiles

deliver stronger signals that the expresser desires to make social connections, which increase the perception that the expresser is friendly and approachable. Hence, we propose that broad (vs. slight) smiles enhance warmth perceptions.

On the flip side, broad smiles may also signal that the individual is less competent. Research has connected broad smiles with reduced aggression, performance, and dominance—traits that help one achieve status and power (Dabbs 1997; Kraus and Chen 2013; Mazur and Booth 1998). For example, Dabbs (1997) found a negative relationship between smile intensity and dominance, which they define as “a quality that helps one win whatever one wants to win” (p. 46). These findings are in line with the competition hypothesis of smiling and laughter, which proposes that smiles function to implement social hierarchies and signal low motivation to compete for status (Mehu and Dunbar 2008). For instance, bared-teeth display in chimpanzees is often an indicator of submission and acceptance of subordinate status (de Waal and Luttrell 1985). Thus, a broad smile may suggest that the individual is content with the current situation (Fridlund 1994) and unmotivated to change or improve the status quo (Bodenhausen, Kramer, and Süsser 1994). Consequently, we hypothesize:

Hypothesis 1: Compared to a slight smile, a broad smile will lead to higher perceptions of the marketer's warmth, but lower perceptions of the marketer's competence.

We also propose a boundary condition—perceived consumption risk, or the magnitude and/or probability of experiencing adverse consequences after purchasing a product or service (Ogletorpe and Monroe 1987). When perceived risk is high, consumers are motivated to adopt strategies that help reduce the risk to a manageable level (Dowling and Staelin 1994). For example, high risk leads consumers to rely on familiar or well-known brands (Erdem 1998) and corporate reputations that signal product functionality and performance (Gürhan-Canli and Batra 2004). Similarly, we propose that when perceived risk is high, consumers should focus more on perceptions of competence (rather than warmth), because this trait reduces risk and increases consumer confidence that the marketer can successfully deliver the outcome.

On the other hand, when perceived risk is low, negative consequences of consumption are minimal (Ogletorpe and Monroe 1987) and consumers are less concerned about product or service failure (Gürhan-Canli and Batra 2004). Instead, they tend to focus on having a positive and satisfying consumption experience, which is largely dependent on employee helpfulness and friendliness (Surprenant and Solomon 1987; Tsai and Huang 2002). Taken together, we propose:

Hypothesis 2: The effect of smile intensity on social judgments is moderated by the risk level of the consumption context such that (a) a broad (vs. slight) smile is more likely to enhance warmth perceptions when consumption risk is low (vs. high); (b) a broad (vs. slight) smile is more likely to undermine competence perceptions when consumption risk is high (vs. low).

Research suggests warmth and competence perceptions are important predictors of consumers' behavioral responses (Aaker et al. 2010; Cuddy et al. 2007). As discussed above, consumers are likely to focus on the marketer's competence when perceived risk is high. Thus, compared to a slight smile, a broad smile, which signals lower competence, is expected to decrease consumers' intentions to purchase or use the product or service in a high-risk context. In contrast, low perceived risk is predicted to shift consumers' focus to warmth. Thus a broad (vs. slight) smile should increase consumers' behavioral intentions through enhanced warmth perceptions in a low-risk context.

Hypothesis 3: Compared to a slight smile, a broad smile will lead to more favorable consumer behavioral responses through warmth perceptions when consumption risk is low, but less favorable consumer behavioral responses through competence perceptions when consumption risk is high.

STUDY 1

Stimulus

We used photos of slight and broad smiles from a validated set of affective stimuli – the Montreal Set of Facial Displays of Emotion (MSFDE) created by Beaupré and Hess (2006). The MSFDE consists of digitally-morphed photos of facial expressions displaying different emotions at five levels of intensity. We selected two photographs from the MSFDE, with level 2 (slight) and level 5 (broad) smiles of the same displayer. Smiles in the two selected photos vary on the level of zygomatic major muscle movement, producing more or less intense smiles. The two photos are consistent in other appearance cues, such as head orientation (Farroni, Menon, and Johnson 2006), brow position (Sekunova and Barton 2008), and gaze direction (Adams and Kleck 2003).

Participants and Procedure

We recruited 123 individuals from Mturk ($M_{age} = 31.28$, ranging from 18 to 65; 55 females). Participants were shown one of the two photos and asked to report warmth and competence perceptions of the target (warmth: warm, kind, friendly, sincere; $\alpha = .94$; competence: competent, intelligent, capable, skillful; $\alpha = .93$; 1 = not at all, 7 = very much so; Aaker et al. 2010; Cuddy Fiske and Glick 2007). Next, we collected data on two confound checks. Prior research suggests that smiles may vary in authenticity—the degree to which the smile is consistent with the expresser's internal feelings (Hennig-Thurau et al. 2006), and that smiles may influence the perceived attractiveness of the target (Mueser et al. 1984). To ensure our smile intensity manipulation did not inadvertently affect these variables, we asked participants to report smile authenticity and attractiveness of the target (Gorn et al. 2008; Mueser et al. 1984). Finally, participants responded to additional questions including a manipulation check of smile strength (1 = displays no smile, 7 = displays a broad smile; Barger and Grandey 2006) and demographics.

Results

We first conducted analyses on the manipulation and confound checks. Independent sample t-test showed that ratings of smile intensity were significantly higher when the target displayed a broad rather than a slight smile ($M_{broad} = 5.28$, $M_{slight} = 4.61$, $t = 2.60$, $p = .01$). Ratings of perceived authenticity did not differ across the two conditions.

A 2 (smile intensity) \times 2 (social judgment) repeated-measures ANOVA revealed a significant interaction $F(1, 121) = 26.90$, $p < .001$. Planned contrasts showed that broad smiles elicited higher ratings of warmth ($M_{broad} = 5.28$, $M_{slight} = 4.53$; $F(1, 121) = 23.28$, $p < .001$), but lower ratings of competence ($M_{broad} = 4.43$, $M_{slight} = 4.83$; $F(1, 121) = 6.29$, $p = .01$). The same pattern of results was observed when we included smile authenticity and perceived attractiveness as covariates in the analysis, and the effects of covariates were not significant.

STUDY 2

Stimulus

We purchased and downloaded two stock photos from istock.com showing the same woman displaying a slight and a broad smile. We examined the zygomatic major movement in the two photos to ensure that the two smiles differed on intensity levels and were comparable to the level 2 and level 5 smiles in the MSFDE. In addition, we assessed and ensured the two photos were equivalent on other facial cues (e.g., head orientation, gaze direction). Participants were told the woman is a nutritionist. To manipulate consumption risk, the high-risk condition included a statement emphasizing the magnitude and probability of experiencing adverse consequences from nutrition coaching, "misleading advice or inappropriate dietary adjustment from a nutritionist could lead to serious health-related issues." This statement was omitted in the low-risk condition. A pretest ($N=51$) showed that the participants in the high (vs. low) risk condition, perceived the nutrition coaching service to be significantly riskier ($M_{high} = 4.08$, $M_{low} = 3.38$, $t = 2.24$, $p < .05$).

Participants and Procedure

Two-hundred and eighty-one participants ($M_{age} = 36.29$, ranging from 18 to 78; 155 females) were recruited from Mturk. Participants were randomly assigned to read the high or low-risk version of the nutrition coaching manipulation. Subsequently, they were asked to provide their zip codes so that they could ostensibly be matched with a local nutritionist. After a brief delay, participants were informed that the nutritionist they were matched with is trying to attract new customers. They viewed the nutritionist ad and reported their social judgments as well as intentions to use her services. Warmth and competence perceptions were measured using the same scales as study 1 (warmth: $\alpha = .94$; competence: $\alpha = .96$). Consumption intention was measured using a four-item scale (e.g., I am interested in the coaching program by this nutritionist; It is likely for me to pay for the coaching program offered by this nutritionist; 1 = "strongly disagree" 7 = "strongly agree"; $\alpha = .96$; Dodds, Monroe, and Grewal 1991). Participants were asked if they would like to sign up for a special promotion package of the coaching program by leaving contact information. Sign-up behavior (present, absent) was used as a behavioral measure of consumption likelihood. Finally, we collected confound checks on perceived persuasive intent, perceived appropriateness of the persuasive attempt, smile authenticity, and target attractiveness.

Results

Social judgments

A 2 (smile intensity) \times 2 (consumption risk) \times 2 (social judgment) mixed ANOVA revealed a three-way interaction $F(1, 277) = 3.93$, $p = .05$, which persisted after controlling for potential confounds. In the low-risk condition, the interaction between smile intensity and social judgments was significant ($F(1, 277) = 6.29$, $p < .01$). Judgments of warmth were greater in the broad smile condition

than the slight smile condition ($M_{broad} = 5.35$, $M_{slight} = 4.70$; $F(1, 277) = 7.31$, $p < .01$). However, smile intensity did not impact perceptions of competence ($M_{broad} = 4.64$, $M_{slight} = 4.43$; $p.n.s.$). The interaction between smile intensity and social judgments was also significant in the high-risk condition, ($F(1, 277) = 25.32$, $p < .01$). However, competence was lower in the broad smile condition than the slight smile condition ($M_{broad} = 4.40$, $M_{slight} = 5.08$; $F(1, 277) = 6.95$, $p < .01$) and smile intensity had no effect on warmth perceptions ($M_{broad} = 5.08$, $M_{slight} = 4.82$; $p.n.s.$).

Consumer responses

A 2 (smile intensity) \times 2 (risk level) between-subjects ANOVA revealed a two-way interaction on behavioral intention ($F(1, 277) = 15.01$, $p < .01$). In the low-risk condition, participants reported more favorable behavioral intentions in the broad smile condition ($M_{broad} = 3.75$, $M_{slight} = 3.28$; $F(1, 277) = 3.28$, $p = .07$). The opposite was true for the high-risk condition ($M_{broad} = 3.35$, $M_{slight} = 4.37$; $F(1, 277) = 12.99$, $p < .01$). Inclusion of covariates did not change the results ($F(1, 277) = 12.07$, $p < .01$).

Next, we analyzed the behavioral measure. A binary logistic regression was conducted that included smile intensity, risk, and their interaction as predictors. The smile intensity \times risk interaction was significant ($\chi^2(1) = 6.84$, $p = .01$). Participants in the low-risk condition were more likely to sign up for the nutrition coaching program if the nutritionist displayed a broad smile ($M_{broad} = 32.9\%$, $M_{slight} = 19.2\%$; $\chi^2(1) = 3.60$, $p = .05$); those in the high-risk condition were more likely to sign up if the nutritionist displayed a slight smile ($M_{broad} = 17.9\%$, $M_{slight} = 31.8\%$; $\chi^2(1) = 3.28$, $p = .07$). The interaction effect remained significant after including potential confounds as covariates.

Moderated mediation

A moderated mediation analysis (5,000 resamples; Hayes 2013) showed that, in the low-risk condition, the indirect effect of smile intensity on purchase intention through warmth perceptions was significant (efficient = .20, 95% [CI]: .07, .42), but the indirect effect through competence perceptions was not significant (efficient = .08, 95% CI: -.02, .22). In the high-risk condition, the indirect effect of the interaction on behavioral intentions through competence perceptions was significant (efficient = -.48, 95% CI: -.80, -.22), but the indirect effect through warmth perceptions was not (efficient = .15, 95% CI = -.14, .50).

Participants' sign up behavior showed similar effects. In the low-risk condition, the indirect effect of smile intensity through warmth perceptions was significant (efficient = .18, 95% [CI]: .00, .52), while the indirect effect through competence perceptions was not (efficient = .07, 95% CI: -.05, .34). In the high-risk condition, the indirect effect through competence perceptions was significant (efficient = -.24, 95% CI: -.57, -.04), but the indirect effect through warmth perceptions was not (efficient = .07, 95% CI = -.01, .29).

STUDY 3

To take our investigation out of the lab into a field setting, we collected data from Kickstarter.com, one of the world's largest crowdfunding platforms for creative projects. Many project creators on Kickstarter.com provide profile photos featuring themselves, which allow us to code the smile intensity level displayed in these photos. We collected publicly available panel data on projects in the "Technology" category, which had the largest number of projects (i.e., 924 projects) at the time of data collection (November 2014). A total of 393 projects included a clear headshot of a smiling creator.

Measurements

Smile Intensity

For each profile photo of the project creator, two coders independently classified the facial expression into one of three categories: 0 = no smile, 1 = slight smile, and 2 = broad smile (Cupchik and Poulos 1984). As part of the training process, coders examined sample photos from the MSFDE (Beaupré and Hess 2006). The inter-coder reliability was .87 and differences in coding were resolved by a third coder.

Backer Behavior Driven by Competence Perceptions

Research on crowdsourcing identifies the desire to collect rewards as one of the primary motivations of backers (Cholakova and Clarysse 2015; Gerber and Hui 2013). When a Kickstarter creator is perceived as competent, backers have greater confidence that the creator will be able to successfully complete the project and deliver what is promised. As such, we anticipate that a slight smile, which leads to greater perceived competence than a broad smile, will lead backers to contribute more money to the project, hence increasing total pledged amount to the project and average pledged amount per backer.

Backer Behavior Driven by Warmth Perceptions

The desire to help others is another important motivation for backers to support crowdfunding projects (Gerber and Hui 2013). People's intention to provide help or social support to others is determined by a variety of factors (Becker and Asbrock 2012), including warmth (Cuddy et al. 2007). People tend to like and feel positive emotions toward individuals perceived as warm and friendly (Fiske et al. 2002), and are more likely to extend help or assistance to these individuals (Cuddy et al. 2007).

Consumers tend to balance the desire to help others with the desire to protect self-interest, and hence helping behavior is more likely to be observed when the cost associated with helping is relatively low (Wagner and Wheeler 1969). In Kickstarter, visitors can support a project by liking the project page on Facebook, which is a low cost way of helping the creator. Hence, we predict that a broad (vs. slight) smile in the profile photo, which elicits warmth perceptions, should be positively related to the number of shares a project receives on Facebook.

Backer Behavior Driven by Both Competence and Warmth Perceptions

Project creators on Kickstarter can set multiple reward categories, providing different rewards for backers pledging different amounts. On Kickstarter, an average required contribution for the first reward category is \$7.97. The average required contributions for the second and third category are \$27.1 and \$98.6, respectively. Based on these statistics, we classified pledges lower than \$25 as small contributions, pledges between \$25 and \$100 as medium contributions, and pledges higher than \$100 as large contributions. As discussed earlier, a broad (vs. slight) smile is more likely to elicit low cost forms of helping behavior, and thus project creators wearing a broad (vs. slight) smile should receive a greater number of small-scale contributions as an indicator of social support. In contrast, compared to a slight smile, a broad smile may undermine the perceived competence of the project creator, which may lead to fewer large-scale contributions, which are likely viewed as investment on promising projects.

Results

Backer Behavior Driven by Competence Perceptions

When the creator displayed a broad (vs. slight) smile in the photo, the total amount pledged by backers plunged by more than 50% ($M_{broad} = \$10947.72$, $M_{slight} = \$24519.93$, $t = -2.01$, $p = .05$), and average contributions per backer was reduced by more than 30% ($M_{broad} = \$96.12$, $M_{slight} = \$156.14$, $t = -2.19$, $p = .03$).

Backer Behavior Driven by Warmth Perceptions. On the other hand, smile intensity positively predicts number of Facebook shares. A project page with a profile photo featuring a broad (vs. slight) smile received nearly twice as many Facebook shares ($M_{broad} = 414.44$, $M_{slight} = 220.78$, $t = 1.87$, $p = .06$).

Backer Behavior Driven by Both Competence and Warmth Perceptions

A 2 (smile intensity) \times 2 (size of contribution) repeated-measures ANOVA revealed a significant two-way interaction ($F(1, 200) = 7.41$, $p < .01$). The number of small-scale contributions was significantly greater in the broad smile condition than in the slight smile condition ($M_{broad} = 68.25$, $M_{slight} = 32.90$; $F(1, 200) = 3.79$, $p = .05$). The opposite pattern was found for the number of large-scale contributions—broad smiles led to significantly lower number of large contributions than slight smiles ($M_{broad} = 16.86$, $M_{slight} = 51.45$; $F(1, 200) = 5.14$, $p = .02$).

Robustness checks

Given the correlational nature of this data, we took extra caution to rule out the possibility that the observed effects might be caused by factors other than smile intensity. To this end, we examined and ruled out the possibility that the results were due to, and (with the exception of funding goal) did not interact with, these control variables: creator gender, total funding goal, creator's entrepreneurial experience (whether the entrepreneur was an experienced or first-time project creator on Kickstarter.com), whether the project was promoted by Kickstarter as "staff pick," and whether the project had a video demonstration.

GENERAL DISCUSSION

Marketers routinely use facial expressions as a persuasion tool to engage customers, but little is known about how varying intensity levels of the same emotion expression can lead to differences in social judgments. Three studies revealed that brief exposures to facial expressions in still images are sufficient for consumers to form a preliminary impression of the marketer, and that, contrary to intuition, broader smiles do not always lead to more positive interpersonal judgments. Specifically, greater smile intensity enhances perceptions of warmth, but undermines perceptions of competence. This effect is bounded by level of consumption risk. The results of this research demonstrate that when it comes to smiles, bigger isn't always better.

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Drawn to the Light: Loneliness Predicts a Preference for Products in Brightness But Not Darkness

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EXTENDED ABSTRACT

Today's consumers are lonelier than ever. Between 1985 and 2004, the number of people who said there was no one with whom they discussed important matters tripled, to 24.6 percent (McPherson, Smith-Lovin, & Brashears, 2006). As the size of this segment of consumers grows, more research is called for to understand the impact of loneliness on consumption. Recent research has begun to address this gap. For example, it has demonstrated that loneliness can contribute to materialism (Pieters, 2013), willingness to try an illegal drug (Mead, Baumeister, Stillman, Rawn, & Vohs, 2011), choice of an unappealing item favored by a peer (Mead et al., 2011), and preference between minority- or majority-endorsed products (Wang, Zhu, & Shiv, 2012). There is also evidence that loneliness and related negative states such as hopelessness can literally translate common metaphors for these states into sensory perceptions and, accordingly, elicit preferences for warmer food (Zhong & Leonardelli, 2008) and brighter light (Dong, Huang, & Zhong, 2015) perhaps to compensate for the negative states. In this paper we extend research on the product preferences of lonely people by examining the extent to which darkness, a metaphor often linked to loneliness, might also influence lonely people's preferences for products presented with dark or bright ambient lighting. In testing this proposition, we draw upon three theoretical frameworks, semantic network models of emotion (Bower, 1981; Ingram, 1984), conceptual metaphor theory (Lakoff & Johnson, 1980), and self-product congruency theory (Sirgy, 1982).

Everyday metaphors and literary references suggest a close association between loneliness and the concept of darkness. Phrases such as "left in the dark" and "in the shadows" are often used to communicate social exclusion and isolation, states which are conceptually linked to loneliness. In Robert Frost's poem "Acquainted with the Night", the night (a time of darkness) is used as a metaphor for loneliness and depression. From a more concrete perspective, being in darkness literally means that people cannot see their surroundings nor if anyone else is nearby, which can be analogous to feeling alone and socially isolated. Semantic network models of emotion (Bower, 1981; Ingram, 1984) suggest that we store information about emotions in organized nodes that encapsulate the beliefs and antecedents associated with a particular emotion, and that emotions and their semantic nodes are dynamically and bidirectionally linked. Thus, experiencing an emotion activates the associated node and its information, and activating the nodal information can elicit the associated emotion (Niedenthal, Winkielman, Mondillon, & Vermeulen, 2009). Importantly, the processing of this information occurs via an automatic and non-conscious rather than a conscious route (Bower, 1981). From this perspective, the emotional experience of loneliness may be represented psychologically by darkness and the absence of light, and darkness itself may in turn activate feelings of loneliness.

Conceptual metaphor theory (Lakoff & Johnson, 1980) provides further explanation as to how darkness and feelings of loneliness may become metaphorically linked. This theory suggests that our understanding of higher level, abstract concepts is informed by our lower level more concrete experiences in the world, such that the easily grasped lower concepts (e.g., darkness) are used to gain a better understanding of higher level concepts (e.g., loneliness) for which we may have less experiential knowledge. Research applying this theory found that induced hopelessness, an emotional state that

is strongly associated with loneliness (Chang, Sanna, Hirsch, & Jelic, 2010), resulted in an increased desire for a brighter room (Dong et al., 2015).

The literal translation of the metaphors associated with negative states into metaphorically-linked perceptual changes illustrated in this and other research implies that feelings of loneliness evoke conceptual metaphors that may influence consumers' preferences for products that metaphorically reflect loneliness. Following this logic, products that have a dark ambient lighting may be viewed by lonely people as being consistent with their own emotional state, which could have the effect of heightening awareness of feeling lonely, a state which is unpleasant to most people (Hawley & Cacioppo, 2010). This proposition is consistent with self-product congruency theory (Sirgy, 1982), which states that products serve as cues that activate self-schemas about actual self-image, and ideal self-image. Products that are congruent with actual self-image reflect self-congruity, and products that are congruent with ideal self-image reflect ideal-congruity.

According to this theory either form of self-product congruity can motivate preferences for a product, but the nature of the product preference depends also on how both the self and the product are evaluated. Sirgy (1985) proposes that the self-esteem motive (a need to act in ways that enhance self-esteem) and the self-consistency motive (a need to act in ways consistent with self-image) are key for understanding how self-product congruity influences product preferences when self-image is negative or positive. For someone who is lonely, actual self-image would be negative (Jones, Freemon, & Goswick, 1981), and a product that has dark ambient lighting, and thus evokes the conceptual metaphor of loneliness, would also be viewed as negative. This negative self-congruity would result in a product preference conflict because motivation to enhance self-esteem would promote product avoidance, whereas motivation to maintain self-consistency would promote product approach. However, we argue that because loneliness is associated with low self-esteem (McWhirter, 1997; Olmstead, Guy, O'Mally, & Bentler, 1991), the self-enhancement motive will outweigh the self-consistency motive and a product associated with darkness will be avoided because it evokes negative self-referent feelings. Sigly (1985) has also demonstrated that people who are low in self-esteem tend to be more influenced by ideal-congruity in their product preferences, as products that activate ideal self-schemas offer the promise of seeing oneself in a positive light and are therefore self-enhancing. If we consider that lightness is the absence of darkness, then products presented with bright ambient light may be similarly viewed as metaphorically reflecting the absence of loneliness, and therefore be viewed as desirable by lonely people. Taken together, this theory and research provides support for the proposition that when lonely people are presented with the choice of a product with either dark versus bright ambient lighting, they will show a preference for the product with bright ambient lighting because of a congruity between their ideal self-image and the product (Sirgy, 1985).

Across five studies employing several different product types we tested whether chronic (Study 1) and situational (Study 2) loneliness would be linked to a preference for products that were presented with bright versus dark ambient lighting. In Studies 1 & 2 we also tested the effect of loneliness on preference for products with dark and light colours to rule out the possibility that the effects were due

to the darkness or lightness of the product itself rather than the background lighting. Study 3 replicated the results from the first two experiments and further tested whether negative feelings towards products with dark ambient lighting explained non-preference for these products. Consistent with the automatic processing of emotional information suggested by semantic network models of emotion (Bower, 1981; Niedenthal et al., 2009), in Study 4 we asked participants to consciously think and write about the product presented with dark ambient lighting. We expected that doing so would eliminate the effects of loneliness on product preference through negative emotions proposed and tested in Study 3. Finally, in Study 5 we tested the proposition that the effects of loneliness on product preference would only be present for products that were personally relevant for the individual, and that she/he would personally use rather than purchase for someone else.

STUDY 1

The goal of Study 1 was to test the effects of chronic loneliness on preferences for products presented with either dark or bright ambient lighting. We also tested the effect of loneliness on product color preferences to demonstrate that the loneliness is psychologically represented as darkness (e.g., a product in dark ambient lighting) rather than simply to a product having a dark colour.

Methods

Undergraduates at a Canadian liberal arts university voluntarily participated in exchange for three dollars. After completing personality filler questions, participants were told to think about the product as if they were shopping for themselves, and then were presented two different IKEA product pairs in a counterbalanced order: one pair with a desk in bright or dark ambient lighting, and one with a shelving unit of dark or light colour. Participants indicated their product preference across three items rated on a 7-point scale (1=not at all; 7=very much): 1) How do you like the product? 2) How interested are you in the product? 3) How likely are you to get this product in the future? Participants completed the 20-item revised UCLA loneliness scale (Russell, 1996).

Results and Discussion

Regression analysis predicting product preference for the desk from chronic loneliness found significant main and interaction effects as a function of bright versus dark ambient lighting. Spotlight analysis at 1 standard deviation above and below the mean of loneliness scores revealed that lonely participants reported higher product preference for the desk with a bright background. Regression analysis predicting product preference for the shelf from chronic loneliness found no significant main or interaction effects as a function of product color. Together these findings indicate that the lonely participants preferred a product with bright versus dark ambient lighting, but the colour of the product had no effect on their preferences.

STUDY 2

The goal of Study 2 was to replicate the findings from Study 1 using a measure of situational loneliness.

Methods

Participants recruited via Mechanical Turk participated in an online experiment in exchange for 75 cents. Participants were randomized to either a loneliness or non-loneliness condition, and first completed personality filler questions as in Study 1. Those in the loneliness condition wrote an essay about a time in which they felt socially isolated, whereas those in the non-lonely condition wrote an essay about a time that they felt a sense of social belonging. A

self-perception scale, which included two items assessing state loneliness, served as a manipulation check. Participants were presented the product pairs (desk and shelf; Figures 1a and 1b) and rated their product preferences as in Study 1.

Results and Discussion

Participants in the loneliness condition reported significantly higher levels of loneliness than those in the non-lonely condition. Results of the 2X2 ANOVA revealed a significant interaction between loneliness and ambient lighting, with pairwise comparisons indicating that lonely participants reported significantly higher preference for the desk with bright ambient lighting. The ANOVA on product colour revealed nonsignificant main and interaction effects. Overall, the results are consistent with those in Study 1 in that lonely participants prefer a product with bright ambient lighting.

STUDY 3

The goals of Study 3 were to replicate the results from the first two experiments and further test whether negative feelings towards products with dark ambient lighting explained lonely participants non-preference for these products, as Middlestandt (1990) found that ambient background colour conveys emotion.

Methods

Participants recruited via Mechanical Turk participated in an online experiment in exchange for \$1.30. Participants were randomized to either a loneliness or non-loneliness condition, and completed the same filler questions, writing task, and manipulation check as in Study 2. They were then presented the images of the desk as in Study 1 and asked to rate their current level of negative emotion associated with the desk (1=not at all; 7=very much). Participants then rated their product preferences as in Study 1.

Results and Discussion

Participants in the lonely condition reported significantly higher levels of loneliness than those in the non-lonely condition. Consistent with Study 2, the 2X2 ANOVA and pairwise comparisons revealed a significant interaction between loneliness and ambient lighting, with lonely participants reporting significantly higher preference for the desk with bright ambient lighting. A bootstrap analysis of the indirect effects of loneliness on product preference via negative affect for the lonely participants was significant indicating that higher levels of negative affect for the desk presented with dark ambient lighting explained their lower preference ratings.

STUDY 4

The goal of Study 4 was to test the proposition that the link from loneliness to negative affect to product preference demonstrated in Study 2 reflected an automatic, unconscious process rather than a conscious one.

Method

Participants recruited via Mechanical Turk participated in an online experiment in exchange for \$1.50. Participants were randomized to either a loneliness or non-loneliness condition and completed filler questions, a writing task, and manipulation check questions as in Study 2. They were then presented the image of the desk in dark or bright ambient lighting. To engage participants in a conscious information processing route, participants were asked to write down any thought that came to mind when seeing the product image. They then completed a measure of negative affect associated with the product and rated their preference for the product as in Study 3.

Results and Discussion

Participants in the loneliness condition reported significantly higher levels of loneliness than those in the non-lonely condition. A 2X2 ANOVA revealed no significant or interaction effects of loneliness and ambient lighting on product preference after participants deliberated over the product. The ANOVA on negative affect as a function of loneliness and ambient lighting was also non-significant. Together these results indicated that negative mood was not associated the product on a dark ambient background after engaging in conscious information processing of the product image.

STUDY 5

The goals of Study 5 were to replicate the findings regarding loneliness and product preference from Studies 1 to 3, and to test the moderating effect of product authorship. The study employed loneliness (continuous) by authorship (for self vs. for other) by ambient lighting (dark vs. bright) between-subjects design, where loneliness was measured and authorship and ambient lighting were manipulated.

Method

Undergraduates at a Canadian liberal arts university voluntarily participated in exchange for three dollars. After completing filler questions about personality and lifestyle, participants were presented an image of a pair of gender neutral T-shirts, one with a dark ambient lighting and one with bright ambient lighting. They were told to imagine that they were shopping for the product either for themselves or for others, and then rated their emotional perceptions (socially isolated, pure, extroverted, warm, sophisticated) of the featured product on a 7-point scale (1=not at all; 7=very much). Participants then completed the 20-item revised UCLA loneliness scale (Russell, 1996).

Results and Discussion

The regression analysis with product preference toward the t-shirt as the dependent variable and loneliness (mean-centered), authorship (0=for self; 1=for others), ambient lighting (0=bright; 1=dark), and all their interactions as predictors revealed a marginally significant main effect of authorship, a significant two-way interaction between authorship and loneliness, and a significant three-way interaction. A simple slope analyses of the effects of loneliness on product preference toward the t-shirt as a function of product ambient lighting indicated that when shopping for self, lonely (vs. non-lonely) participants reported higher product preference toward the t-shirt when it was in bright versus dark ambient lighting. However, shopping for others, the product preferences of lonely participants was the same as non-lonely participants for both dark and bright ambient lighting.

Spotlight analyses at 1 standard deviation above and below the mean of loneliness scores revealed that when shopping for self, lonely participants reported higher product preference toward the t-shirt when the product ambient lighting was bright than when it was dark, whereas non-lonely participants' product preference was not impacted by product ambient lighting. When shopping for others, both lonely participants and non-lonely participants showed equal levels of product preference when the product ambient lighting was bright and dark. Overall, the results revealed that the effects of loneliness on product preference were only present for products that participants would personally use rather than purchase for someone else.

GENERAL DISCUSSION

Our findings extend and advance research on the product preferences of lonely people and

the metaphorical mapping of loneliness by demonstrating for the first time that loneliness, whether chronic or situational, is associated with a preference for products presented with bright rather than dark ambient lighting. Importantly, our findings suggest that negative feelings towards a product in dark ambient lighting explains why lonely people do not prefer products presented in dark ambient lighting. We also provide supportive evidence that the activation of the metaphoric link between loneliness and product preference through negative mood reflects an unconscious information processing route rather than a conscious one. Our findings also suggest that the effects of loneliness on product preference occurs only when the product has self-referent salience, supporting the notion that lonely people's preferences for products with bright but not dark ambient lighting reflect congruity between the ideal self and the product, and helps them avoid a state of motivational conflict (Sirgy, 1985). This is consistent with the notion that by avoiding products associated with a threatened aspect of identity, lonely people are able to view the self more positively (White, Argo, & Sengupta, 2012).

The current research should be considered in the context of several limitations and strengths. First, although we presented two different products in ambient lighting, it is unknown if the effects found will generalize to other product types and classes; they could be particular to desks/furniture. Future research is needed to address this issue. Second, the effects of product authorship on preferences were only tested for one product, a clothing item, as it was expected that preferences for clothing may more readily activate ideal-product congruity. Further research is needed to understand if this effect generalizes to other products. Despite these limitations, replicating the results across several studies with both chronic and situational loneliness and with large community and student samples are clear strengths of the research. Ruling out the competing hypotheses of product colour in Studies 1 and 2 also provides additional support for the hypotheses that the effects were due to the ambient lighting. Testing and ruling out the alternative hypothesis that the effects found were due to depression rather than loneliness is another clear strength of this research.

Our research provides novel insights into the meaning of background color in marketing that has important implications for marketing practice. Product ambient colors can be manipulated by 1) displaying a product in a bright (versus a dim) place in a retail setting, and 2) by featuring a product in an advertisement with bright or dim background color. Our research suggests that advertisement or retailing display featuring a product in a bright ambient lighting can be more effective if marketers consider the target segments' loneliness orientations. Marketing practitioners normally consider that white background color signifies cleanliness and purity, and black background color is positively associated with authority, prestige and exclusivity (Gorn, Chattopadhyay, Yi, & Dahl, 1997). Thus, in general, dark background color is used to denote cool sophistication and a powerful sense of extreme luxury or expense. Our research offers a caveat in using dark background color for advertisement or retailing product display. Because our findings indicate that lonely consumers prefer a product in a bright rather than dark background because the dark background activates negative feelings towards the product, they may not view products presented with dark ambient lighting as desirably as would non-lonely consumers. Accordingly, marketers need to be cautious in presenting products with a dark ambient background color as it may not have the intended effects on consumer preferences if their targeted market segment includes a substantial portion of lonely consumers.

Does Priming a Sense of Powerfulness Encourage Consumers to Buy Healthy Foods?

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EXTENDED ABSTRACT

Growing concerns about obesity and the associated health conditions including type II diabetes behoove researchers to study how consumers make food-related decisions. This research aims to further explore what factors influence individuals' perception and choices when they make decisions on what types of food to purchase and consume. We investigate how sense of power and message framing jointly influence individuals' willingness to engage in healthy eating and healthy food consumption in an effort to have an impact on the growing obesity epidemic.

In general, high power increases the processing fluency, directs consumers' attention to an option's positive features, and leads to a higher level of construal and a tendency to see "big picture. On the other hand, low power concentrates on the lower level of construal and shorter psychological distance (e.g. Magee Milliken, & Lurie, 2010). Healthy eating focuses on the long-term benefits of the food consumption, while indulgent eating focuses on the immediate benefits of food. As a result, we can infer that high power individuals are more likely to consume healthy food than indulgent food, while low power individuals are more likely to consume indulgent food than healthy food.

Recent research on message framing finds that an assertive (non-assertive) message is more effective in communications involving hedonic (utilitarian) products, (Kronrod, Grinstein, & Wathieu, 2012). Previous research also indicates that imperative and forceful messages tend to be perceived as a threat to personal freedom and foster reactance toward the message (Quick & Considine, 2008).

Healthy food consumption, which requires effort to comply, is normally easier for high power individuals. Tasty food consumption, which brings instant joy, is more preferred by low power people. This is because of the matched construal level between food types and power levels as we stated earlier. We suggest that when the food is promoted with an assertive tone, it can backfire because it raises reactance for people. When the reactance is activated, the consumption pattern will be reversed. However, when construal level of the product type and the individual's power states are inconsistent, assertive messages could be more motivating than baseline non-assertive messages. Therefore, we propose:

Hypothesis 1A: High power individuals will exhibit higher purchase intention toward healthy (tasty) food when the message is non-assertive (assertive); low power individuals will exhibit higher purchase intention toward healthy (tasty) food when the message is assertive (non-assertive).

Hypothesis 1B: The reactance/motivation elicited by the assertiveness of the message is the underlying mechanism.

STUDY 1

We proposed a one way (Assertive vs. Non-assertive) between subject design. 91 American undergraduate participants ($M_{age} = 20.6$, 53.1% Male) participated for partial course credit. At the beginning of the lab session, we measure participants' chronic sense of power (Anderson, John, & Keltner, 2012). Then, participants were presented

with a print ad about chocolate. We manipulate the assertiveness of the message at the bottom of the ad by saying "You must try our chocolate" or "it's worth trying our chocolate". Then we ask participants to report their purchase intention. The spotlight analysis results showed that there is significant interaction effect of chronic power and message assertiveness on purchase intention. For one standard deviation above (below) the mean on chronic power, in other words, high (low) power participants, they were more likely to purchase the chocolate truffle product when the message is assertive (non-assertive).

STUDY 2

We proposed 3(Powerful vs. Powerless vs. Control) x 2(Assertive vs. Non-assertive) between subject design. 244 American undergraduate participants ($M_{age} = 21.1$, 56.3% Male) participated for partial course credit. We manipulated sense of power by using headlines of "we all feel powerful in the morning" or "we all feel powerless in the morning" (Adapted from Dubois et al., 2012). In the control condition, we do not have headline. We manipulate the assertiveness of the message as in study 1. Then we ask participants to report their purchase intention and the motivation/reactance. For participants primed with powerfulness, the non-assertive message is preferred for healthy food consumption ($p < .01$). For participants primed with powerlessness, the assertive message is more preferred for healthy food consumption ($p = .19$). For control condition, the pattern resembled low power condition. The effect in high power group is partially significantly mediated by motivation/reactance to buy products from the brand.

STUDY 3

A 2(Powerfulness vs. Powerlessness) x 2(Assertive vs. Non-assertive) x 2(chocolate vs. salad) between subject design was adopted. 231 North American adult participants ($M_{age} = 28.3$, 60.5% Male) from Amazon Mechanical Turk participated and financially compensated for \$.60. Study 3 adopted same design and similar stimuli with study 2, only replaced cereal picture with chocolate truffles and salad pictures. We also included several potential process measures from previous literature and alternative explanations including information process fluency measures, message compatibility, ad perception, and ad evaluation. The results showed that when manipulated with powerfulness (powerless) feeling, participants were more likely to purchase the chocolate (salad) when the ad presented with assertive message, and were more likely to purchase salad (chocolate) when presented with non-assertive message. The mediation analysis results show that motivation/reactance to buy from advertised brand significantly mediate the moderation effect.

Study 4. We propose a 2(High vs. Low) x 2(Assertive vs. Non-Assertive) x 2(Positioning: Tasty vs. Healthy) between-subject design. 244 American undergraduate participants ($M_{age} = 21.9$, 58.2% Male) participated for partial course credit. We used a pretested role-imaging task in an educational context (Garbinsky, Klesse, & Aaker, 2014) to manipulate participants' sense of power. Half of the participants were presented with the tasty (healthy) version of a yogurt where we added a headline saying "Sander's Mixed Berries Yogurt, The Tastiest (Healthiest) Yogurt!" The rest of the design was the same as study 3. Results showed that when the product was positioned as tasty, participants primed with high (low) power were

more likely to purchase the yogurt if it were assertive (non-assertive) message. When the product was positioned as healthy, the pattern reversed. Motivation to eat, and motivation to buy are significant mediators.

Across four studies, we showed that under high (low) power, individuals are more likely to consume healthy (tasty) food when the message is non-assertive and tasty (healthy) food when the message is assertive.

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Politicized Purchasing: Consumer Responses to Divisive Corporate Political Activity

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EXTENDED ABSTRACT

In the 2010 Citizen's United decision, the Supreme Court of the United States (SCOTUS) ruled companies can spend unlimited amounts of money on political causes. Consequently, companies have been making donations to causes that are not directly related to their financial performance. For example, Amazon, Chick-Fil-A, and Target have used resources to influence the debate over same-sex marriage, policy ostensibly unrelated to firm performance. More importantly, the position companies take on divisive issues has the potential to communicate to consumers that these companies have an underlying political orientation, which may or may not be in line with that of consumers.

The present research addresses this emerging issue by examining how divisive firm political involvement can alter consumer preferences. We find that consumers respond negatively when companies support causes that are inconsistent with the consumer's political orientation across three different public policy contexts. In addition, we demonstrate that perceived value overlap is the underlying mediator explaining consumer responses to divisive firm political involvement.

In the present research, we make three main contributions. First, we demonstrate that consumers typically respond negatively to firm political involvement implying a political orientation inconsistent with their own, but rarely respond positively to firm political involvement consistent with their own political values. Second, we demonstrate that divisive firm political involvement can affect product evaluations, such as perceived taste and quality of a cupcake, through perceived value overlap with the firm. Third, we offer practical implications for policy makers, practitioners, and consumer advocacy groups looking to better understand divisive firm political involvement.

THEORETICAL DEVELOPMENT

Corporate political activity (CPA) is consistently associated with positive financial implications for firms. However, if a company engages in political activity that cannot be directly tied to firm financial interest, it is likely that such activities will convey to consumers that the firm holds a particular political orientation. This adoption of an identifiable political orientation represents a paradigm shift in the influence, purpose, and nature of interaction between the public and private sectors. While firms historically engaged in firm political involvement exclusively for self-interest, firms now routinely donate to causes outside their obvious interests. Importantly, these forms of "political signaling" could also allow consumers to determine preferences based on the perceived political orientation of the company, supporting firms with similar political values and/or punishing firms that differ. Despite this, no studies have explored how this new wave of CPA affects consumer behavior, or why these effects may occur.

STUDY 1

270 participants read a news story detailing a fictional firm donating \$500,000 to fight immigration reform (conservative condition), or support immigration reform (liberal condition). Participants in two additional conditions read that the firm was uninterested in joining the immigration debate (not interested condition) or moving

offices (control condition). After reading the news story, participants responded to a manipulation check by indicating their impression of the political orientation of the firm as well as their brand attitudes and purchase intentions toward the firm. Lastly, participants indicated their political orientation.

Analyses revealed the liberal (conservative) condition was seen as significantly more liberal (conservative) than the control and conservative (liberal) conditions, providing support for a firm's ability to adopt a political orientation identifiable to consumers. Moderated regression analyses further demonstrate that consumers respond negatively when a company adopts a political orientation that is at odds with the consumers' political orientation, and limited support for a positive effect among very liberal consumers when a company is engaged in liberal CPA. Next, Study 2 tests for generalizability within a different policy domain (abortion).

STUDY 2

301 participants read a news story detailing a fictional firm donating \$500,000 to support a policy limiting abortion rights (conservative condition) or opposing a policy limiting abortion rights (liberal condition). Participants then responded to the same items as Study 1. Results again indicated support for our manipulation check. Moderated regression analyses next found mostly negative effects for both conditions relative to the control and limited positive effects within the liberal condition for very liberal consumers. Next, Study 3A/3B tests the generalizability of this pattern with a different form of divisive firm political involvement (politically motivated business policies) in a third policy context (gay marriage).

STUDY 3A/3B

In Study 3A (n = 320) and Study 3B (n = 327), participants viewed a fictional bakery's website detailing their policy toward serving LGBT weddings. Study 3A and 3B were run as identical studies before and after the SCOTUS decided *Obergefell v. Hodges* (2015) legalizing gay marriage. The bakery indicated they "proudly serve traditional marriages between women and men" (conservative condition), "proudly serve marriages for customers of all sexual orientations" (liberal condition), or made no mention of LGBT marriage. Moderated regression analyses yielded a significant interaction term for each interaction on brand attitudes, purchase intentions, boycotting likelihood, positive word-of-mouth intentions, the dependent variables, and value overlap, the proposed mediator. Analyses of consumer reaction pre- v. post-SCOTUS suggests a reactive nature to consumers after the decision, with reactance driving significant changes to brand attitudes after the decision.

Next, we examined value overlap, the proposed mediator. Results revealed a significant indirect effect of the interaction on brand attitudes, purchase intentions, boycott likelihood, and positive word of mouth intentions through value overlap for both conditions, providing support for value overlap as the mediator. Study 4 tested whether this pattern extended to evaluations of an actual product.

STUDY 4

180 participants were assigned to one of the three conditions described in Study 3. Consistent with Study 3A/3B, results revealed a significant indirect effect of each interaction term on each dependent variable through identification with the bakery. Finally, results suggest the interactive effect of consumers' political orientation and the CPA related to gay marriage predicts

perceived quality and taste of a cupcake, through value overlap, the mediator.

Study 4 provides strong support as both a replication of earlier results as well as our model's ability to predict downstream consequences on actual product evaluations. Together, Studies 1-4 strongly support of our conceptualization of divisive firm political involvement, and how it affects consumers.

The Bright Side to Cuing Consumerism: Consumer Primes Make Individuals with Low Childhood Socioeconomic Status More Prosocial

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EXTENDED ABSTRACT

There is no shortage of research detailing the dark side of cuing consumerism. Advertisements for and images of luxury consumer goods, descriptions of people shopping, and consumer terminology have all been shown to activate a proself orientation that ultimately undermines personal and social wellbeing. For example, after being exposed to consumer primes, people become more competitive, more solitary, more selfish, more likely to give up on difficult tasks, more dissatisfied with their appearance, and less interested in social relationships—including getting married and having children (Ashikali and Dittmar 2012; Bauer et al. 2012; Ku, Dittmar, and Banerjee 2014; Li et al. 2015).

Importantly, this literature assumes that consumer cues mean the same thing to everyone and consequently, affect everyone the same way. Here, we question this assumption. We draw on a growing body of research that demonstrates people's childhood social and economic environment can shape cognition in important and persistent ways and hypothesize that childhood socioeconomic status (SES) influences how people respond to consumer primes (e.g., Laran and Salerno 2013; Mittal and Griskevicius 2014). Specifically, because consumers with low childhood SES grow up with economic and social constraints that limit personal choice and instead, require mutual acts of interdependence (e.g., relying on, paying attention to, and trusting other people; Adams, Bruckmüller, and Decker 2012; Snibbe and Markus 2005; Stephens, Fryberg, and Markus 2011; Stephens, Markus, and Townsend 2007), we predict that individuals with low childhood SES will become more prosocial in response to consumer primes. Through testing this hypothesis, we offer a more nuanced understanding of the effects of consumer primes and provide one way to reconcile the budding controversy surrounding the replicability of these findings—particularly those of Bauer and colleagues (2012) (Francis 2014; Klein et al. 2016).

Four experiments provide support for our hypothesis.

Experiment 1 provides initial support for our premise by demonstrating that MTurk participants ($N = 79$) become less trusting and more competitive (as indicated by increased jealousy) after being exposed to brand logos. While we suspect this effect was driven by the lower childhood SES of our MTurk sample (an assumption that is confirmed by a post-test with 200 MTurk workers), we do not measure or test for the role of childhood SES. The remaining studies address this limitation

In **experiment 2**, American participants recruited from Prolific Academic ($N = 108$) were randomly assigned to a consumer or a control condition in a between-subjects main-effect design, wherein they either viewed advertisements (consumer) or shapes (control). Then, all participants completed the same jealousy task used in study 1, a five-item measure of competitive orientation (Roux, Goldsmith, and Bonezzi 2015; Ryckman et al. 1990), and a three-item measure of childhood SES (Griskevicius et al. 2011, 2013). Analyses revealed a main effect of condition, such that participants in the consumer condition were less competitive and less jealous. Importantly, these effects were moderated by childhood SES. When childhood SES was low (-1 SD) or at the mean, being exposed to the consumer prime made participants more prosocial. When childhood SES was high ($+1$ SD), the effect was not signifi-

cant. Mediation analysis also revealed that a decrease in competitive orientation fully mediated the effect of the consumer prime \times childhood SES on jealousy, thus providing initial evidence for our proposed mechanism—the activation of a prosocial orientation.

In **experiment 3**, American MTurk workers ($N = 136$) were randomly assigned to a consumer or a control condition in a between-subjects main-effect design, wherein they either viewed images of brand logos (consumer) or vegetables (control). Participants then completed the Triple-Dominance Measure, designed to assess whether people are prosocial or proself (Van Lange, Otten, De Bruin, & Joireman, 1997). Analyses revealed a main effect of condition, such that participants in the consumer condition were more likely to be prosocial (vs. proself). Furthermore, this effect was moderated by childhood SES. When childhood SES was low (-1 SD) or at the mean, being exposed to the consumer prime made participants more prosocial. When childhood SES was high ($+1$ SD), the effect was not significant.

In **experiment 4**, undergraduate business students ($N = 94$) were randomly assigned to a consumer or a control condition in a between-subjects main-effect design. The procedure, manipulation, and dependent measures were the same as those of experiment 2, with the exception of our measure of childhood SES. Instead of asking participants to report their perceived childhood SES, we asked participants to indicate their household family income when they were growing up (Griskevicius et al. 2013; Mittal and Griskevicius 2014). Analysis revealed a significant interaction of condition and childhood family income on jealousy and competitive orientation. When childhood family income was low, participants in the consumer condition were less jealous and less competitive than those in the control condition. When childhood family income was high, participants in the consumer condition were more competitive and more jealous than those in the control condition. Mediation analysis also revealed that competitive orientation fully mediated the effect of the consumer prime \times childhood SES on jealousy.

DISCUSSION

Although prior work has consistently shown that consumer primes result in more proself and less prosocial outcomes, the results of four experiments suggest these effects may be limited to individuals who grew up relatively wealthy. In particular, consistent with prior work demonstrating that childhood SES can shape cognition in important ways, our findings suggest that low childhood SES consumers may have different models of responding to consumer primes. Rather than becoming more proself after being exposed to consumer primes, in four experiments we find that low childhood SES individuals become more prosocial.

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Direct and Indirect Signals of Demand in Retail Displays

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EXTENDED ABSTRACT

Consumers use scarcity cues as signals of quality and popularity to guide their consumption decisions (Caminal and Vives 1996; Jeong and Kwon 2012; Van Herpen, Pieters, and Zeelenberg 2009; Verhallen 1982). A well-documented scarcity cue is that of empty shelf space, which provides a visual signal of product demand, leading consumers to infer that a product's limited availability is a *direct* result of prior consumers' purchases (Van Herpen, Pieters, and Zeelenberg 2009; Van Herpen, Pieters, and Zeelenberg 2014). However, not all retail display strategies allow for the observation of direct signals of demand. Without direct signals of demand, it is not clear how uncertain consumers react to and utilize product displays as a source of information.

We investigate this question by exploring how consumers interpret product availability in an efficient assortment retail environment characterized by demand-based shelf allocations (Jenkins and Kornfeld 2003; Kurt Salmon Associates 1993) and fully-stocked shelves (Convenience Store Decisions Staff 2011; Flick 2012) which do not allow for the observation of direct signals of demand. We propose that when examining the aisle of an efficient assortment retailer, consumers will use allocation quantity as a cue of consumer demand. Efficient assortment retailers allocate more shelf space to popular products (Broniarczyk, Hoyer, and McAlister 1998; Curhan 1973; Kurt Salmon Associates 1993), and we expect that consumers will infer those highly available products displayed to be high in popularity. In this manner, we believe that consumers will interpret retailer product allocation quantities as an *indirect* signal of consumer demand by basing their assumptions on retailers' experience and sales expectations.

Overall we show that retailer inventory strategies dictate whether consumers can observe direct or indirect signals of demand from product displays, which ultimately lead to contrasting interpretations of product popularity from displayed product availability, impacting product choice. This work contributes to a growing understanding of consumer inferences from product displays and serves to inform both retailers and marketers about the consequences and compatibility of their inventory and signaling strategies.

To examine how retail environment impacts consumer choice, 197 Mturk participants viewed one of two displays of masked pasta sauce brands and select which sauce brand they would choose to purchase. The direct signal of demand display condition featured a shelf containing two brands with an equal number of potential shelf facings, yet one brand exhibited empty space, where a few jars had been removed, creating a cue of scarcity. The indirect signal of demand display condition featured a fully-stocked shelf of two sauce brands with one of the brands having a greater number of facings than the other; this condition is consistent with an efficient assortment inventory strategy. Across both conditions, we refer to the brand with the highest number of facings as being more available and the brand with the least number of facings as less available. Results featured a main effect of display condition on brand choice ($\chi^2(1) = 7.03, p < .01$); consumers in the direct signal condition were more likely (61%) to choose the less available brand while those in the indirect signal condition preferred (58%) the more available brand.

To further the generalizability of our effect of retail environment on choice, we conducted a study where participants made a real choice from an assortment of sodas. 78 business students filled

out a short survey and were invited to select a free soda from an assortment of two brands of strawberry Japanese Ramune soda. The focal product was chosen under the assumption that subjects would not have prior brand associations; the two soda brands had similar bottles and colors to deter the potential for either brand garnering extra attention (Janiszewski 1998). Students chose from either a soda display arranged with a direct signal of demand (empty space) or an indirect signal of demand (fully-stocked but with disparate allocation quantities). Complementing the results of study 1, display condition significantly affected soda brand choice ($\chi^2(1) = 5.23, p < .05$); participants in the indirect signal condition were more likely (67%) to choose the most available brand, while participants in the direct signal condition were more likely (60%) to choose the least available brand.

We then performed a mediation study to show that the information consumers were gaining from product availability in our conditions was indeed informative of product demand and driving choice. Using the same stimuli as study 1, 124 Mturk participants saw a product display exhibiting either a direct or indirect signal of demand; participants then specified how popular they believed each sauce to be and indicated their preferred choice. A main effect of choice between display conditions was confirmed ($\chi^2(1) = 16.86, p < .01$) as well as significant differences in perceived popularity of the more ($F(1,116) = 35.81, p < .01$) and less ($F(1,116) = 5.78, p < .05$) available brands between display conditions. A mediation analysis showed that popularity ratings of more available and less available brands successfully mediated the link between display condition and product choice; consumers in the indirect signal condition perceived the more available brand to have high popularity which induced choice of that brand while consumers in the direct signal condition perceived the less available brand to have high popularity, driving choice of the less available brand.

Lastly, we tested the strength of direct versus indirect signals of demand. 114 undergraduates viewed a display of pasta sauces containing either an indirect signal of demand or mixed signals of demand. The mixed signals of demand condition contained both a direct demand cue of empty shelf space and an indirect demand cue of disparate allocation quantities; cues were arranged in opposition to each other to test the strength between the two signals. Display condition had a significant effect on brand choice ($\chi^2(1) = 7.03, p < .01$). Participants in the indirect signal condition chose the more available brand more often (66%). In the mixed signals condition, participants were more likely to choose the less available brand (59%); this result illuminates consumers' tendency to defect to direct signals over indirect signals of demand.

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Anecdotal versus Statistical Evidence in Risk Communication Messages: The Moderating Effects of Comparative Optimism and Message Framing

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EXTENDED ABSTRACT

Social marketing messages often seek to persuade individuals to cease or reduce risky behavior, for instance, speeding or smoking (Lee and Kotler 2011). The present study focused on the relative effectiveness of two different evidence types that social marketing messages may use to support their appeals, that is, anecdotal evidence and statistical evidence. Both evidence types appear regularly in risk communication messages. With regard to the relevant question of which evidence type is more effective, the literature reports contradictory findings (e.g., Allen and Preiss 1997, De Wit, Das, and Vet 2008, Greene and Brinn 2003). Thus it seems relevant to search for conditions under which one of the evidence types may have a persuasive advantage—potentially leading to recommendations when to use anecdotal evidence and when to use statistical evidence.

This research examines the moderating effects of message framing and comparative optimism. Previous research shows that an important driver of risky behavior is comparative optimism (Weinstein and Klein 1996): Some individuals perceive themselves, compared to others who show the same risky behavior, to have a lower risk of experiencing certain negative life events (Armor and Taylor 1998). However, previous research suggests that these individuals are challenging to reach and that statistical evidence may not be effective in persuading this important target group (Czerwinka and Praxmarer-Carus 2014).

The present study compares the persuasiveness of positively and negatively framed anecdotal and statistical evidence in risk communication messages and takes comparative optimism as a potential moderating variable into account. Based on prior research (e.g. White, MacDonnel, and Dahl 2011) it was predicted, that the combination of anecdotal evidence and negative message framing as well as the combination of statistical evidence and positive message framing should be easier to process and thus be more persuasive compared to positively framed anecdotal and negatively framed statistical evidence.

Furthermore, it was predicted that this effect would depend on comparative optimism. Based on prior research (e.g. Schwarz 2004), the persuasive advantage of negatively framed anecdotal and positively framed statistical evidence was expected to increase with increasing comparative optimism. Finally, it was proposed that, as comparative optimism increases, the persuasive advantage of negatively framed anecdotal evidence over positively framed statistical evidence should increase. This effect was not expected to occur among non-optimistic individuals.

Hypothesis 1: Message framing and evidence type interact, such that

- a. *Negatively framed anecdotal evidence leads to higher compliance with risk communication messages than positively framed anecdotal evidence.*
- b. *Negatively framed statistical evidence leads to lower compliance with risk communication messages than positively framed statistical evidence.*

Hypothesis 2: Comparative optimism, message framing and evidence type interact:

- a. *When comparative optimism increases, the persuasive advantage of negatively framed anecdotal evidence over negatively framed statistical evidence increases.*
- b. *When comparative optimism increases, the persuasive advantage of positively framed statistical evidence over positively framed anecdotal evidence increases.*
- c. *When comparative optimism increases, the persuasive advantage of negatively framed anecdotal evidence over positively framed statistical evidence increases.*

A study in the context of smartphone usage while driving (N=401) was conducted online. The study used a 2 (evidence type) x 2 (message framing) between subjects design. Before participants saw one of the messages, comparative optimism was measured as the difference between the personal risk assessment and the risk assessment for a similar other. Respondents indicated their intention to reduce their smartphone usage while driving on a 7-point likelihood scale. A regression-analysis following the procedure for moderated moderation by Hayes (2013) was conducted to test the proposed interaction between evidence type and message framing as well as the moderating effect of comparative optimism. In line with hypothesis 1, results showed a significant interaction effect between evidence type and message framing [$b = 3.12, t(391) = 2.897, p = .004$].

In addition, the three-way interaction between evidence type, message framing and comparative optimism was significant [$b = .65, t(391) = 3.203, p = .002$]. Results showed that the conditional effect of the interaction between evidence type and message framing differs depending on comparative optimism. Table 1 reports the estimated values of behavioral intention for two groups: individuals high in comparative optimism and individuals low in comparative optimism (mean +/-1sd).

Further analysis of these estimated values supported the assumption, that negatively framed anecdotal evidence and positively framed statistical evidence is especially persuasive for the highly optimistic target group (hypotheses 2a and 2b). Differences between these estimated values indicated the proposed pattern: the persuasive advantage of negatively framed anecdotal over positively framed statistical evidence increased with increasing optimism (hypothesis 2c).

The current study contributes to previous research on the effectiveness of anecdotal and statistical evidence as it sheds light on conditions for the persuasive effect of the two evidence types. In addition, this research advances knowledge on information processing as it shows the influence of comparative optimism on information processing. Findings suggest that social marketers should use negatively framed anecdotal evidence in their risk communication messages, when the target group is highly optimistic. This may particularly be the case for risky behaviors individuals perceive as highly controllable by taking preventable actions (Weinstein 1984), such as speeding, smoking, binge drinking, sexually transmitted diseases and the like.

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Consumption Skill Acquisition in Ski Schools: Towards a Theory of Embodied Learning

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EXTENDED ABSTRACT

Consumption skills are vital prerequisites for realizing identity projects, community membership, and value co-creation. Consumer researchers have repeatedly acknowledged the benefits of skills—the bodily capacity to do something well—and the importance of skill acquisition to consumers with regard to experiences, identity construction, or status (e.g., Arnould and Price 1993; Golding, Shankar, and Canniford 2012; Tumbat and Belk 2011).

However, while many studies in consumer research find that consumption skill level is variable and can be acquired over time, no systematic study has focused on how consumers acquire skills in dedicated learning settings. Most studies assume that skills ‘automatically’ increase with experience, or that consumers acquire skills through trial-and-error. Hence a broad range of market offerings remains understudied that seek to teach consumers new skills through dedicated exercises and various forms of instruction.

In this paper, we review how existing studies conceptualize skill acquisition and find a number of quite different acquisition modes described in the consumer research literature. We complement existing research with an exploration of how consumption schools enable and facilitate consumption skill acquisition through different schooling practices. Focusing on the context of ski schooling, we find that none of the different skill acquisition modes described in the literature dominates, but rather that instructors alternate between schooling practices that entail a variety of different acquisition modes. We systematize these modes and compare them to prior literature in order to lay the foundation for a more systematic theory of embodied learning.

Bodily skills form the bedrock on any human activity (Merleau-Ponty 1962) and thus appear in many different contexts and range from basic and ubiquitous to highly specialized and difficult. We discuss skill acquisition using a tri-part scheme that acknowledges the interconnected domains of 1) bodily or muscle movements, 2) the conscious state of skillful coping, and 3) the socially assembled (learning) situation. Being skilled means to experience one’s bodily doing as suitable to deal with the practical demands of the situation at hand, and hence restricting the analysis to either domain would lead to an impoverished understanding of the phenomenon.

1. *Bodily or muscle movements:* Developmental psychologists (Burton, Brown, and Fisher 1984), sport scientists (Duesund and Jespersen 2004), and consumer researchers presenting both experimental (Murray and Häubl 2007) and cultural studies (Joy and Sherry 2003) agree that at the core of skill acquisition or bodily learning we find a basic mechanism of repetitive sequential learning. The more a body or its muscles repeat a certain movement, the better they ‘remember it’ and the movement then becomes refined.
2. *The conscious state of skillful coping:* Following the lead of Joy and Sherry (2003), we draw on the phenomenology of embodiment (Merleau-Ponty 1962) to conceptualize skill and skill acquisition. In doing so, we seek to understand possessing skill as being tied to an experience of being skilled at something. We neither look at the body as a kinetic machine that is functionally or ontologically independent from conscious experience or merely executing

commands; nor do we conceive of the conscious mind as independent from, or prior to, the moving body.

3. *The socially assembled (learning) situation:* Skillful conduct requires a socio-material assemblage organized towards affording the activity (e.g., Canniford and Shankar 2013; Hill, Canniford and Mol 2014). The assemblage enwrapping the situated body must allow details of body movement to recede into the background of experience to give the practitioner a sense of skill and control. The learning situation is arranged so that focus is directed towards details that require control and change—such as the shoulder rotation in skiing—and away from other that can block progress—such as the fear of falling.

To explore modes of skill acquisition in an empirical and systematic manner we conducted a video-based ethnographic study in several ski schools. Our data base encompasses 18 hours of video from observations of different classes in two ski schools, 16 interviews with instructors and experts in the ski industry, and 16 informal interviews with skiers. In several rounds of moving between explanations of bodily movement by skill instructors, to consumers’ descriptions of critical learning moments, to situational examples from our video material, a recurrent set of modes of skill acquisition emerged.

We find that skill acquisition in ski schools happens primarily in carefully assembled learning situations which combine a number of socio-material resources such as space, ski equipment, social roles and norms, verbal instructions, gestures, and interaction orders. We identify six types of skill acquisition modes that represent different constellations of bodily movements, conscious focus, and the social structure of the learning situation, in particular the relation between the instructor’s and learners’ doings. We organize these practices into two groups:

I. Learning by Doing in which skill acquisition and refinement happens (consciously or pre-consciously) over the course of performing the aspired practice: Repetition, Reflection and Emulation.

II. Forms of Training, understood by us as learning practices in which learners do something else than performing the activity they eventually seek to learn: Demonstration, Instruction, and Exercise.

Three key implications stand out. First, the sensory-motor system, conscious experience and social assemblage are structurally coupled but separate in that none has full control over the other. Since skillful coping requires the three to be in a state of smooth alignment (Woermann and Rokka 2015), teaching a skill requires well-placed interventions into the learner’s performance. Second, consciousness functions as a pivot between the situational assemblage (including the task at hand, the spatial, and material setting, and the interaction with the teacher) and the learner’s motor system. The ski instructor cannot teach consumers’ bodies directly, but must work via their conscious experience. Third, this means that an adequate understanding of consumption skill acquisition must pay special attention to consumer experience and particularly emotional states such as fear, failure, and frustration. Overall, we encourage consumer researchers to pay particular attention to the powerful interactive forms of skill acquisition which seem to be instrumental for acquiring skills, and, ultimately, for gaining access to abundant rewarding consumption experiences.

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Mental Traveling Along Social and Temporal Distances: The Influence of Cultural Syndromes on Construal Level

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EXTENDED ABSTRACT

A formulation of the way people construe the implications of events is provided by Trope and Liberman (2010). This formulation, known as construal level theory, specifies the manner in which an event's psychological distance (which can be temporal, social, spatial, or uncertainty) affects the abstractness of the constructs that are typically applied to it. People are assumed to construe the world from an egocentric reference point that includes oneself and one's immediate surroundings and to perceive the distance of objects and events in relation to this point. Thus, psychologically distal events and objects are represented in terms of more general features, whereas psychologically proximal stimuli are construed in terms of more concrete, situation-specific features.

However, the impact of cultural orientation on the nature of these construals has seldom been investigated and moreover has had inconsistent implications. Some studies suggest that individualists (Westerners) think more abstractly than collectivists (Easterners) (e.g., Cousins 1989), whereas others suggest the opposite (e.g., Spassova and Lee 2013).

We provide an integrated framework in examining the antecedents of construal level that implies interactive effects of general cultural orientations (e.g., individualism/collectivism and short/long-term orientation) and psychological distance on construal level.

People are mental travelers along social and temporal distance, and can imagine themselves at different points along these dimensions (e.g., Kross and Grossmann 2012). Specifically, it is possible that when estimating egocentric distance, people actually mentally travel away from themselves in the here and now and stop when they feel that they have reached far enough (Liberman and Forster 2009). Individual differences, however, in the flexibility of perspective shifting may exist.

When making decisions for others or predicting others' decisions (a socially distant situation), persons may construe the decision-related events more concretely if they shift flexibly into the others' positions (thus perceiving them as socially closer) than if they are less flexible to shift perspective. When making decisions for selves, however, flexible persons traveling into others' positions may view themselves from a distance and construe the decision-related events more abstractly than persons without this disposition.

Individual differences of flexibility of shifting can also exist along a temporal dimension. People who shift flexibly in to the future context should construe future events more concretely than inflexible individuals. Also, flexible people who shift to a future time point may view present events from a temporal distance and construe them more abstractly than those who view present events from the perspective of the present (i.e., inflexible travelers).

Previous research has examined how cultural orientation shapes individuals' tendency to shift perspective along social and temporal dimensions (Lastovicka et al. 1999; Oyserman, Coon and Kemmelmeier 2002). Specifically, members of a collectivist culture may tend to adopt the perspective of another in order to understand social environment and maintain interpersonal harmony, and thus, cultivate a tendency to shift to others' positions. Individualists, on the other hand, are more likely to take a self-centered perspective, and thus, travel inflexibly to others' positions. Moreover, representatives of a long-term orientation (LTO) culture may be disposed to project

themselves into the future when making decisions, developing a flexible shifting along temporal dimension. Comparatively, members of a short-term orientation (STO) culture may attach more importance to here and now, and shift inflexibly when projecting themselves into future (Bearden, Money, and Nevins 2006).

These considerations suggest that collectivists will construe events more concretely than individualists do when the events pertain to others, but will construe them more abstractly than individualists do when the events concern themselves. Similarly, persons with a long-term temporal orientation should construe events more concretely than those with a short-term orientation when the events occur in the future but more abstractly than the latter individuals when the events occur in the present.

Experiment 1 investigated the interactive effects of individuals' temporal orientation (short- vs. long-term orientation) and temporal distance. We first primed short- vs. long-term orientation by a writing task in which they wrote either experience that focused on treasuring here and now (short-term orientation condition), or planning for the future (long-term orientation condition; Kopalle, Lehmann, and Farley 2010). We then described an apartment with desirable abstract but negative concrete features and asked participants either to report intention to move into it now or 1 year later. As expected, long-term orientation participants evaluated the apartment more favorably than short-term orientation participants when they made decision for immediate, but less favorably than short-term orientation participants for moving intention of future.

Experiment 2 investigated the interactive effects of individuals' social orientation (individualism/collectivism) and social distance. We first primed individualism/collectivism following Gardner, Gabriel and Lee's (1999) Pronouns Circle Task. We then described the same apartment as in experiment 1 and asked participants either to evaluate it for themselves or to predict a stranger's reactions to it. As expected, collectivists evaluated the apartment more favorably than individualists when they made decision for themselves, but less favorably than individualists when they predicted the reactions of a stranger.

The effects of temporal and social orientations on construal level that I observed in Studies 1 and 2 were specific to the dimension to which these orientations directly pertained. According to my conceptualization, however both social orientation and temporal orientation influence determine the flexibility of perspective taking along dimensions to which they are not directly related. That is, temporal orientation should influence the abstractness of concepts applied along a social dimension in much the same way it influences concepts applied along a temporal dimension. Correspondingly, social orientation should also influence the abstractness of construals along both social and temporal dimensions. Studies 3 and 4 investigated these possibilities, and the results echoed to our conceptualization and results of study 1 and 2. Across the four studies, bootstrapping analyses were performed using process Model 14 (Hayes 2009) confirmed the mediation role of perspective flexibility,

The present research reconciles the mixed findings of previous research on the effects of cultural orientation on construal level. Moreover, it provides preliminary evidence that CLT may not be universal across cultures.

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Preference Gap Matters: When Scarcity Polarizes versus Converges Preferences

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EXTENDED ABSTRACT

Previous research suggests that scarcity polarizes preference (Zhu and Ratner 2015), consequently increasing consumers' liking of the already more-preferred alternative and decreasing the liking of the less-preferred alternative. But, what if a priori the customer does not have a strong preference for one option over the other? Will scarcity polarize, or alternatively converge, the consumer's preference towards the two similarly preferred options?

The goal of the present research is to examine when and why scarcity might converge versus polarize consumer preferences.

Scarcity has become a widespread marketing strategy. Extant literature on scarcity has focused on scarce supply of a single item and how object-specific scarcity increases desirability of the particular item (Amoldoss and Jain 2005). Yet, our understanding of how consumers make choices among a set of items which are all scarce or abundant remains limited. In a notable exception, Zhu and Ratner (2015) show that overall scarcity of items increases the attractiveness of the a priori most-preferred item but decreases the attractiveness of the less-preferred items, leading consumers to choose more of the favorite item. However, Zhu and Ratner employed choice sets in which consumers have rather strong preferences for one option over the others. In the current work, we extend our investigation to situations where individual do not have a priori more-preferred choice alternative.

Consumers are faced with numerous choices. Sometimes they have a strong preference for one option over the other, but other times their prior preference gap among the choice alternatives is small. The primary objective of this research is to examine whether the impact of scarcity on preference within a choice set is affected by the extent to which consumers prefer one choice alternative over another. Building on several streams of research suggesting a possible connection between scarcity and attention narrowing (Cialdini 2009; Mullainathan and Shafir 2013), we predict that while scarcity polarizes preferences when consumers' prior preference gap is large, scarcity converges preferences when consumers' prior preference gap is small. Further, we explore whether the preference convergence arising from scarcity leads to negative downstream consequences, such as increased decision difficulty and decreased decision satisfaction.

We also explore the underlying process from scarcity to preference polarization and preference convergence. Prior research has theorized a connection between scarcity and attention narrowing (Cialdini 2009; Mullainathan and Shafir 2013). Building on findings that consumers have the propensity to reduce the processing strain by basing their choice on the most important attributes (Tversky, Sattath, and Slovic 1988), we suggest that consumers faced with narrowed attentional focus induced by scarcity are even more likely to selectively attend to cues that have high information value at the expense of cues that have limited information value when making decisions (Mandler 1975; Mano 1992, 1994; Paulhus and Lim 1994). The disproportionate attention given to primary (vs. secondary) attributes subsequently leads to either preference polarization or preference convergence, depending on the size of prior preference gap.

Study 1 supports our hypothesis that scarcity converges preference when the initial preference gap for options is small. Participants were asked to choose between two similarly liked candies that were customized for each participant based on their initial likings towards six types of candies. Participants were told that we had either limited

quantities (scarcity condition) or large quantities (abundance condition) of each type of candy. As expected, when consumers have close prior preferences towards the options, scarce versus abundant supply of each alternative reduces the discrepancy between the likings of the choice alternatives, subsequently increasing perceived decision difficulty.

In study 2, we employed an incentive-compatible test to investigate whether scarcity leads to preference convergence and preference polarization respectively, when the prior preference gap is small versus large. Participants were presented with four pairs of gift cards with four different levels of initial preference gaps. Each pair of gift cards was customized for each participant based on their initial likings towards gift cards from eight different apparel retailers. Participants were told only a few (scarcity) or many (abundance) gift cards from each store are remaining. After choosing a gift card from each of the four pairs, participants were asked to rate their likings towards the gift cards again. The results show that compared to abundance, scarcity leads to preference polarization when the initial preference gap is large; more importantly, we find that with the initial preference gap declining, preference polarization attenuates and ultimately reversed. As preference convergence emerges, consumers experience lower satisfaction when making the decision.

Study 3 directly tests the premise that scarcity leads to a narrowed attentional focus on primary versus secondary attributes. Participants were asked to imagine that they were looking for a new apartment and had narrowed down to two options. After the scarcity manipulation, participants were informed that they had access to information of the two apartments on two attributes and they could check on the information only when they hover their mouse on the attribute of interest. As predicted, we find consumers under the constraint of scarcity devoted a larger share of their time checking on information of the primary (vs. secondary) attribute.

Study 4 further examines the attention-narrowing process, demonstrating that preference convergence triggered by scarcity can be attenuated by experimentally expanding participants' attention on other attributes. Attention expansion was manipulated by presenting the participants with unrelated examples of how people compare multiple attributes to make a decision. Adopting similar protocol of study 2, participants were presented with two customized pairs of gift cards with large and small initial preference gaps. Results show that when participants are primed to allocate their attention more evenly on primary vs. secondary attributes when making choices, preference convergence effect attenuates, which in turn leads to lower decision difficulty.

To summarize, we find scarcity polarizes or converges preferences, depending on the size of prior preference gap towards options. Preference convergence arising from scarcity consequently increases decision difficulty and decreases decision satisfaction. Process evidence show that scarcity narrows consumers' attention on primary (vs. secondary) attribute, leading to these effects.

Hypothesis 1A: When consumers have small prior preference gap towards the options in the choice set, scarcity converges preferences, decreasing the discrepancy between the liking of the choice alternatives.

Hypothesis 1B: When consumers have large prior preference gap towards the options in the choice set, scarcity polarizes preferences, broadening the discrepancy between the liking of the choice alternatives.

Hypothesis 2: Overall scarcity versus overall abundance of options contained in a choice set narrows consumers' attention on primary versus secondary attributes of the choice alternatives.

Hypothesis 3: The impact of scarcity on preference within a choice set will be attenuated when consumers broaden their attention to secondary attributes of the choice alternatives.

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Disfluency Effects on Inference and Evaluation

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EXTENDED ABSTRACT

Prior research shows that fluency leads to positive consequence, while disfluency leads to negative consequence (Schwarz, Bless, Strack, Klumpp, Rittenauer-Schatka and Simons 1991; Reber, Winkielman and Schwarz 1998; Reber and Schwarz 1999; Winkielman and Fazendeiro 2003; Reber, Schwarz and Winkielman 2004; Unkelbach 2006, 2007; Novemsky, Dhar, Schwarz and Simonson 2007; Song and Schwarz 2008; Tsai and McGill 2011). For example, disfluency can lead to disliking (Reber et al. 1998).

Our research confirms prior research by showing that compared to normal information which is easy to process, difficult-to-process information lead to unfavorable evaluation and reduced purchases.

Although Consumers are usually insensitive to missing information by focusing on given information to form judgment and make decision (e.g. Sanbonmatsu, Kardes, and Sansone 1991), our research suggest that disfluency increases the sensitivity to incompleteness by encouraging individuals to question their first impressions during problem solving (Alter et al. 2007; Song and Schwarz 2008). This sensitivity to incompleteness contributes to disliking of disfluency.

In Study 1, we showed that difficult-to-read contrast color led to lower perceived information sufficiency, contributing to lower product evaluation and purchase intention.

Despite the negative consequence of disfluency, prior research shows that disfluency may be neglected or even valued under some circumstances (Galak and Nelson 2010; Deval, Mantel, Kardes and Posavac 2012).

Prior research demonstrates that the negative consequence of disfluency can be reduced or eliminated through debiasing technique, such as making consumers attribute the processing difficulty to the disfluency itself rather than the information or the product (Schwarz et al. 1991; Novemsky et al. 2007). Explicitly warning people of the difficulty (a debiasing technique) undermines the informational value of the disfluent experience, leading to a similar consequence as in the normal condition (Novemsky et al. 2007). Yet, only a limited number of literatures looks at conditions when debiasing techniques do not function or even backfire (Sanna and Schwarz 2003, 2006; Sanna, Schwarz and Stocker 2002). And hardly has any literature looked at how personal traits function on debiasing techniques. In the present research, we explore how individual traits influence how people attribute processing difficulty. Specially, we study how need for cognitive closure (Kruglanski and Webster 1996) and consistently time pressure (Heaton and Kruglanski 1991) influence consumers' evaluation based on warning of disfluency.

Our research shows that when brand information has been known, highs would base their evaluation on this earliest judgmental cue by neglecting the disfluency of the product information. When they are warned of the disfluency, their attention would be transferred to disfluency by using it as the primary judgment cue. Lows would avoid the influence of disfluency on evaluation when warned, since they have consider the product information at the first place.

In Study 2, Study 3a and Study 3b, we explored the role of explicit warning of disfluency based on need for cognitive closure (NFCC). In all 3 studies, disfluency was manipulated via easy-to-read font versus hard-to-read font.

Study 2 shows that when brand information had been known, consumers high and low in NFCC would differ in attribution based on warning. Consumers low in NFCC would adjust evaluation as more favorable after being warned. Consumers high in NFCC would form even more moderate evaluation when warned, as warning transferred their attention from brand to disfluency. Study 3 manipulated NFCC through high or low time pressure, and the results confirmed the findings in Study 2. In Study 3b, we deleted information about the brand, and found that when no brand information is shown, the difference between participants would disappear, such that all participants would adjust evaluation to higher when warned of disfluency. Different responses to warning of disfluency of participants high and low in NFCC or under time pressure, is based on whether brand has been known prior to disfluent information.

Nevertheless, warning of disfluency has no function on sensitivity to incompleteness. We believe that is because sensitivity to incompleteness is an implicit cognition. When a cognition (i.e. sensitivity to incompleteness), is implicit however, explicit warning may not function on correct attribution at all, since it's hard for individuals to adjust the deeply rotted implicit attitude (e.g. Forehand and Perkins 2005). When warned of disfluency, participants may realize disfluency impacts their evaluation so that they can adjust evaluation accordingly, but may not be able to adjust their sensitivity to incompleteness due to its implicitness.

In Study 4, a response latency task was used to further test disfluency's influence on sensitivity to incompleteness. Disfluency was manipulated via easy-to-read versus hard-to-read word-background contrast color. When the information was easy to read, participants responded more slowly to previously absent information than to previously present information, indicating an insensitivity to incompleteness in normal cases. When the information was hard to read, however, the difference disappeared. Participants responded equally fast to both present and absent information, indicating an increased sensitivity to incompleteness. Study 4 confirms findings of former studies, such that disfluency increases sensitivity to information incompleteness, attributing to unfavorable evaluation. This sensitivity is an implicit cognition.

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The Effect of Self-Target Comparison in Perspective Taking on Judgment of Dishonesty

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EXTENDED ABSTRACT

The act of lying occurs when people provide others with false information (Burgoon et al. 1999), which, at times, involves self- or other-benefiting dishonesty (Argo and Shiv 2012). Recent research suggests that people in general, consumers, and marketers alike, lie without deeming themselves dishonest, as long as the lie is small enough (Mazar, Amir, and Ariely 2008). People assume that small lies are perceived inconsequential and sometimes unintentional; thus, they can distance themselves from otherwise severe condemnations (Shu, Gino, and Bazerman 2011). In effect, people can then manage or maintain an honest self-concept despite having told a lie. In the present research, we examine an intriguing question through the lens of “perspective taking.” If consumers and marketers both lie, how do consumers judge marketers’ act of lying? More specifically, do consumers apply the rule of reciprocity and tolerate dishonesty to some extent? Or do they dissociate themselves from marketers regardless of potentially similar acts of dishonesty?

In four studies, we explore the effects of self-target assimilation and contrast in perspective taking and their effects on social judgments of a dishonest target. Study 1 used a measurement-of-mediation approach to investigate the effects of self-target assimilation and contrast on observers or buyers’ attitudes toward a dishonest seller. Study 2 manipulated assimilation and contrast directly and categorized a car salesperson’s dishonesty as ambiguous (vs. blatant). Study 3 replicated the differential effects of assimilation and contrast in a different context (i.e., covert marketing). Finally, study 4 revealed the role of self-anchoring in self-target contrast by measuring the degree of perspective-takers’ vicarious honesty.

The findings contribute to the literature in three ways. Foremost, this research introduces a novel concept, self-target comparison, to the perspective taking literature; and empirically demonstrates the differential effects of two distinct underlying mechanisms: self-target assimilation and contrast. Ku, Wang, and Galinsky (2015) conclude that previous studies mainly rely on “self-other overlap” to explain the perspective taking effects under circumstances where perceivers’ self-concepts are accessible (e.g., Ames, Jenkins, Banaji, and Mitchell 2008; Davis, Conklin, Smith, and Luce 1996). The present research suggests that perspective-takers project themselves acting similarly (e.g., lie) or differently (e.g., do not lie) when compared to a dishonest seller in marketplace exchanges. We conceptualize this mechanism with parsimonious terms of assimilation and contrast. Both concepts refer to perspective takers’ cognitive activities to consider resembling or diverging from the dishonest target’s actions. In particular, we argue that “self-other overlap” is a metaphorical term describing perspective takers’ mental processes of associating with the target’s prototypical traits (e.g., race, age, profession) at a subconscious level. By contrast, we argue that self-target assimilation or contrast is a context-specific mental projection of how the perspective taker would consciously act given a particular situation. Acknowledging that perspective-takers do not necessarily “merge” self-descriptive traits (positive or negative) with the target’s, will open up new avenues of research.

Another important implication is that we distinguish “elaborative-” from “intuitive-” perspective taking. We noticed that the perspective taking manipulations in some study designs encourage participants to engage in an automatic, less thoughtful, and pro-target

process. A classic example is when researchers ask participants to take the perspective of another person by asking them to “put yourself in his or her shoes.” We argue that while these instructions encourage participants to take the target’s perspective, the semantics of such instructions may prime perspective-takers to align their stances with the target’s (i.e., assimilation) intuitively. By contrast, when the perspective taking manipulation encourages participants to engage in more elaborative thinking, new findings may emerge. For instance, Trötschel et al. (2011, p. 775) asked participants during personal negotiations to “focus on other party’s perspective, such as the other party’s intention and interests in the negotiation.” Perspective-takers were more likely to exchange concessions on low- vs. high-preference issues by identifying the potential of integrative gains (i.e., mutually-beneficial).

In line with these recent findings, this work provides further evidence of the effects that result with more elaborative reasoning, when participants were asked to think about acting similarly or differently compared to the dishonest target (study 2). In particular, study 3 shows that when the degree of taking the target’s perspective was held constant, contrast and assimilation caused different attitudinal responses towards the dishonest seller. In study 4, when perspective takers thought of a particular dollar amount to tell the buyer, those who indicated they would act dishonestly (vs. honestly) appeared to have a more positive attitude towards the seller. In essence, these results together suggest that perspective taking may involve a deeper, more effortful, and more deliberate type of processing. We argue that this process in perspective- taking is different from favoring the target based on easy-to-access heuristics, which appears to be largely influenced by research designs in the literature (see more examples in Hoever, Knippenberg, van Ginkel, and Barkema 2012).

Last, this research provides an unconventional approach to examining how consumers react to marketplace dishonesty. Most studies in the literature suggest that consumers naturally guard themselves against deceptive practices in the market (e.g., Darke and Ritchie 2007). The present research shows a less intuitive type of response - when consumers consider acting similar to (vs. dissimilar to) a dishonest seller, they are more inclined to react less negatively. However, this effect appears to be salient only when the sellers’ dishonesty is ambiguous (vs. blatant). Further, if primed to think about honesty, perspective-takers are more likely to experience the contrast effect. As a result, they apply a harsher evaluative standard when judging a dishonest seller. Together, the results from four studies suggest that consumers tend to follow the rule of reciprocity and tolerate dishonesty, but only to a limited extent.

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Sweet or Sweat, Which Should Come First: The Sequence Effect of Justification

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EXTENDED ABSTRACT

People are around of vices and virtues. When we plan our meals, we constantly hesitate about whether to eat something tasty but unhealthy, like fried chips, or something healthy but tasteless, like a green salad. When we plan our schedule, we are constantly torn by whether to work or to play. Most of previous research explored what determines the choice between a vice and a virtue. In this case, choosing one option means giving up the other one. For instance, researchers find that when consumers decide which to give up, they value the vice item more than the virtue one, whereas when they choose which to acquire they value the virtue one more (Dhar & Wertenbroch, 2000).

Some other research offered participants a chance to have both a virtue and a vice simultaneously to explore how it is different from a single choice. Fishbach and Zhang (2008) demonstrate that when vice and virtue are presented together in one picture and seem to complement each other, the vice is preferred over the virtue; while when they are presented apart and seem compete with each other, the preference is reversed. Besides, researchers try to bundle vice and virtue together to examine consumer's preference. They suggest that people like the bundle with 75% virtue and 25% vice most in that the virtue part can help them justify the guilt of consuming the vice (Liu, Haws, Lambertson, Campbell, & Fitzsimons, 2015).

However, if we adopt a dynamic point of view, all these choices compose a series of vices and virtues. For instance, we may intend to go shopping online for the first one hour and then read papers after that; or vice versa. Therefore, we not only choose content of options, but also their sequence. The current research proposes that the sequence of consuming can exert great influence on consumer experiences. Existent evidence about how sequence matters includes that when the last chocolate is emphasized, it is more enjoyable and tastes better than the previously eaten chocolates (O'Brien & Ellsworth, 2012). Also, sequential evaluation of calories in a vice or a virtue can lead to different calorie estimations (Chernev, 2011).

Nevertheless, why does the sequence of consuming vice and virtue influence consumer experiences? Previous research illustrates that, inherently, it is more difficult to justify vice goods or activities compared with virtue ones. Okada (2005) shows that the vice is preferred over the virtue when either is presented separately, but the virtue is preferred over the vice when the two are presented jointly. This finding demonstrates that when people are reminded that there is a virtue, it is hard for them to justify choosing a vice. In addition, it has been confirmed that people love having fun, and they are more likely to have fun if the situation allows them to justify it. For example, Kivetz and Simonson (2002) find that after people exert effort to acquire vice goods, they feel that they have earned the right to indulge.

Based on these findings, the current research hypothesized that consuming or doing things in the sequence of vice-virtue (vice first and then virtue) leads to better experience than that in a reversed sequence. In particular, if individuals consume or do something vicious first, the guilt increases. And then if they consume or do something virtue, the subsequent virtue can help justify the guilt, which in turn leads to a better overall experience. However, if they try in a reversed sequence, the preceding virtue is not able to justify the latter vice,

which in turn lowers the overall experience. Four studies were conducted to test the hypothesis as well as the underlying mechanism.

Study 1 (N=101) adopted a two-cell scenario-based between-subject design. The results showed that the willingness to pay (WTP) for the entire meal containing the same vice (e.g. cheesecake) and virtue (e.g. green salad) food was significantly higher in the vice-virtue condition than that in the virtue-vice condition ($t(99) = 2.63, p = .01$). Besides, WTP for the vice didn't differ between the two conditions ($t(99) = 1.24, p = .22$), but WTP for the virtue was significantly higher in vice-virtue condition ($t(99) = 4.00, p = .00$), which means that the sequence effect of justification is mainly driven by the virtue part. These results suggest that the virtue induces greater positive value when consuming after a vice, which can help justify guilt induced by the vice part.

Study 2 (N=69) used similar materials and procedure as in study 1, with three differences. First, we introduced satisfaction and taste as different measurements of subjective experience. Second, we measured guilt. Third, we asked a different set of participants to indicate their preference of eating sequence (N=38). The last change was introduced to rule out the alternative explanation that the results were affected by eating habits. It replicated the basic effect as well as the contribution of each part (virtue vs. vice food) to the overall experience ($p s < .05$). In addition, having a vice then a virtue induced significantly less guilt than that in the virtue first condition ($t(67) = -2.48, p = .02$), which means the latter virtue can better justify the guilt induced by the preceding vice, but the magic power of virtue disappeared in the reversed sequence. Study 2 also suggested that there was no dominated preference of eating sequence ($\chi^2(1, N = 38) = .42, p = .52$).

Study 3 (N=105) adopted a 2 (sequence: vice-virtue vs. virtue-vice) \times 2 (viciousness: strong vice vs. weak vice) between-subjects design. The strong vice condition is similar to study 1 and study 2, while in the weak vice condition, we adopted similar manipulation from Chernev and Gal (2010) to reduce the viciousness of the vice food. By framing the vice part into a weak vice, there should be no need to justify guilt in either sequence, which in turn eliminates the sequence effect of justification on the overall experience. The data supported our induction. It replicated the sequence effect in the strong vice condition, where participants in the vice-virtue condition indicated higher WTP for the meal than those in the virtue-vice condition ($t(46) = 2.54, p = .01$). While in the weak vice condition, where the vice food was no longer vicious and didn't need to be justified anymore, there was no difference in WTP between different sequences ($t(54) = .13, p = .90$). In addition, such results help to rule out the alternative explanation that it is the recency effect of the virtue that enhances the subsequent measured experience. If so, in the weak vice condition, WTP won't be similar between reversed sequences.

Study 4 (N=313) employed similar design as study 3 but generalized the situation to daily activities. Participants were asked to imagine that a student was required to complete an urgent homework, which means study is a virtuous activity. Given time was limited, any other activities can undermine goal fulfillment of completing the urgent homework, which meets the definition of vices. In such a case, workout can be a vicious activity. We framed workout

as either a strong vice by emphasizing its hedonic value, or a weak vice by emphasizing its utilitarian function. The measurement of the overall experience in this study was how much the person suffered after workout and study (reverse coded). The results suggested that if workout was framed as a strong vice, participants predicted that the student who went to gym first suffered less, compared to the students who did homework first ($t(154) = -2.57, p = .01$). However, if workout was framed as a weak vice, then there was no sequence effect of justification ($t(155) = 1.29, p = .20$).

Our research suggests that if individuals have to or want to have both vice and virtue, they should have the virtue after the vice. Such a specific sequence can better justify their guilt and in turn improve their experience.

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When Diversity in Advertising Leads to Activism vs. Aversion

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EXTENDED ABSTRACT

The purpose of our research is to understand not only how consumers respond to diversity in advertising, but also to examine why consumers respond differently to ads portraying diversity in a subtle manner relative to ads that make stronger statements regarding their stance on diversity. We wish to extend prior research by examining consumers' responses to other traditionally excluded groups (i.e., interracial couples, overweight women) and provide a more systematic examination of when increased diversity in advertising may lead to positive or negative consequences for the promoted brand. We suggest that consumers respond negatively to certain portrayals of diversity not necessarily because of overt prejudice (as shown in prior research), but because such portrayals go against their schemas or expectations.

STUDY PROCEDURE OVERVIEW

A similar procedure was used for all our studies. Participants recruited through Amazon's Mechanical Turk were asked to view an ad that targeted a consumer group (families in Studies 1 and 3, women in Study 2) and randomly assigned to view an either more or less diverse ad. Next, participants used seven-point scales to rate their interest in purchasing (1=low, 7=high), opinion of (1=very bad, 7=very good), and liking (1=dislike very much, 7=like very much) for the advertised brand. Then participants completed Paharia et al.'s (2015) Purchase Activism Scale which measured the extent to which participants were willing to purchase the advertised brand because it aligned with their personal beliefs (e.g., "The product embodies the ideals I live by.") In Studies 2 and 3, participants also rated the extent to which viewing the ad made them feel disgusted, angry, revolted, irritated, accepting, affectionate, happy, and pleased (last 4 items reverse-scored; Bhat et al. 1998). Participants also provided their gender, age and race, which had no significant effects on our results (with the exception of gender in Study 2).

STUDY 1: INTERRACIAL PARENTS

Method

Study 1 had a 2(Target consumer: Parents (target) vs. Non-parents (nontarget) x 2(Ad diversity: Interracial vs. white parents) between-subjects design ($N=90$). In Study 1, the more diverse ad featured a family with an African American father, white mother, and biracial child while the less diverse ad featured a family with white, heterosexual parents and a white child. The promoted brand Cheerios was positioned as offering "convenient breakfasts for busy families." Parental status was determined by asking participants to indicate whether or not they had children at the end of the study.

Results

We conducted a 2(Target consumer: Parents vs. Non-parents) x 2(Ad diversity: Interracial vs. white parents) ANOVA on our dependent variables with modern racism as a covariate.

Brand evaluations ($\alpha=.86$)

Analysis revealed only a main effect of ad diversity ($F(1, 85)=5.79, p<.05$), where the more diverse ad elicited more favorable evaluations overall. Further contrasts indicated that parents evalu-

ated Cheerios more favorably after viewing the ad containing interracial parents ($M=4.90$) relative to the one containing white parents ($M=4.14; F(1, 85)=5.79, p=.05$). However, ad diversity had a weaker effect on non-parents' evaluations ($M_{Interracial}=4.73$ vs. $M_{White}=4.38; F(1, 85)=1.85, NS$).

Purchase activism ($\alpha=.89$)

Analyses yielded only a main effect ad diversity ($F(1, 85)=6.47, p<.05$). Further contrasts found that parents indicated greater purchase activism after viewing the more diverse interracial parents ad ($M=2.52$) relative to the white parents ad ($M=1.66; F(1, 85)=4.86, p<.05$) while this effect was weaker for non-parents ($M_{Interracial}=2.34$ vs. $M_{White}=2.02; F(1, 85)=1.55, NS$).

STUDY 2: OVERWEIGHT FEMALE MODELS

Method

Study 2 had a 2(Target consumer: Female (target) vs. Male (nontarget)) x 2(Ad diversity: Overweight vs. Thin Model) between-subjects design ($N=117$). Participants viewed a print ad promoting Dasani water that featured either a thin or overweight female.

Results

We tested our predictions by conducting a 2(Target consumer: Female vs. Male) x 2(Ad diversity: Overweight vs. Thin Model) ANOVA on each dependent variable with antifat attitudes and BMI as covariates.

Brand evaluations ($\alpha=.91$)

Analysis revealed a only a significant two-way interaction ($F(1, 111)=4.83, p<.05$). For female participants, the overweight model ad ($M=3.79$) garnered less favorable evaluations relative to the thin model ad ($M=4.47, F(1, 111)=4.39, p<.05$). However, this was not the case for male participants ($M_{Overweight}=4.33$ vs. $M_{Thin}=4.00; F(1, 111)=2.29, NS$).

Negative emotions ($\alpha=.85$)

Analysis revealed a significant two-way interaction ($F(1, 111)=5.82, p<.05$). Contrasts indicated that the overweight model ($M=3.79$) elicited more negative emotions from female participants compared to the thin model ($M=2.05; F(1, 111)=6.34, p<.05$). However, this was not the case for male participants ($M_{Overweight}=2.93$ vs. $M_{Thin}=3.27; F(1, 111)=1.24, NS$).

STUDY 3: GAY PARENTS

Method

Study 3 had a 2(Consumer target: Parents vs. Non-parents) x 2(Ad diversity: Gay vs. Straight Parents) by 2(Schema activation: Busy vs. Wholesome families) between-subjects design. Participants ($N=173$) viewed a Cheerios ad that featured an image of either a nontraditional family with white, homosexual parents (two fathers) or a traditional family with white, heterosexual parents (one father and mother). We positioned Cheerios as offering "convenient breakfasts for busy families" (activating the "busy family" schema) or a "wholesome breakfasts for wholesome families" (activating the

“wholesome family” schema). Again, we asked participants to indicate whether or not they had children to determine parental status.

Results

We conducted a 2(Consumer target: Parents vs. Non-Parents) x 2(Ad diversity: Gay Parents vs. Straight Parents) by 2(Schema: Busy vs. Wholesome Families) ANOVA on each of our dependent variables. Prejudice toward homosexuals was also included as a covariate for all analyses.

Brand evaluations ($\alpha=.75$)

Analysis revealed only a significant three-way interaction ($F(1, 164)=11.93, p<.01$). We first examined contrasts for parents. When the “busy families” schema was activated, the ad featuring gay parents ($M=5.23$) was more persuasive for parents than the ad featuring straight parents ($M=4.26, F(1, 164)=3.15, p<.01$). In contrast, when the “wholesome families” schema was activated, the gay parent ad ($M=4.01$) was less persuasive for parents than the heterosexual parent ad ($M=4.76, F(1, 164)=4.72, p<.05$). However, we found a different pattern of effects for non-parents. Whether gay or straight parents were depicted did not affect non-parents’ brand evaluations in the “busy family” conditions ($M_{Gay}=4.68$ vs. $M_{Straight}=4.50; F(1, 164)=.03, NS$). Interestingly, in the “wholesome family” conditions, non-parents actually responded more favorably to the gay parents ($M=4.73$) relative to straight parents ad ($M=4.15, F(1, 164)=3.04, p<.05$).

Purchase activism ($\alpha=.86$)

Analyses found a main effect of ad diversity ($F(1, 164)=16.18, p<.01$), which was qualified by a three-way interaction ($F(1, 164)=3.62, p=.05$). For parents viewing the “busy families” ads, the portrayal of gay parents ($M=3.01$) garnered higher ratings on purchase activism relative to the portrayal of straight parents ($M=1.81; F(1, 164)=4.00, p<.01$). However, when viewing the “wholesome families” ads, portraying gay ($M=2.28$) versus straight parents ($M=2.36$) did not elicit different levels of purchase activism from parents ($F(1, 164)=.02, NS$). For non-parents, the gay parents ad elicited higher levels of purchase activism compared to the straight parents for both the “busy families” ($M_{Gay}=2.84$ vs. $M_{Straight}=1.97, F(1, 164)=5.13, p<.05$) and “wholesome families” ads ($M_{Gay}=2.96$ vs. $M_{Straight}=1.96; F(1, 164)=5.75, p<.05$).

Negative emotions ($\alpha=.84$)

Analysis yielded the following effects: schema ($F(1, 164)=8.18, p<.01$), target consumer by ad diversity interaction ($F(1, 164)=4.10, p<.05$), and target consumer by schema ($F(1, 164)=9.08, p<.01$). These lower order effects were qualified by a significant three-way interaction ($F(1, 164)=9.44, p<.01$). Examining the responses of parents first, we found that ad diversity had no effect on the negative emotions of parents in the “busy family” conditions ($M_{Gay}=2.28$ vs. $M_{Straight}=1.93; F(1, 164)=1.07, NS$). However, in the “wholesome family” conditions, the portrayal of gay parents ($M=3.87$) elicited more negative emotions from parents compared to the portrayal of straight parents ($M=2.64; F(1, 164)=7.67, p<.01$). In contrast, for non-parents, ad diversity had no effect on negative emotions in either the “busy family” conditions ($M_{Gay}=2.56$ vs. $M_{Straight}=2.65; F(1, 164)=.01, NS$) or the “wholesome family” conditions ($M_{Gay}=2.34$ vs. $M_{Straight}=2.82; F(1, 164)=2.23, p>.15$).

Taken together, our findings suggest that promoting diversity and inclusiveness can be an effective way for brands to garner support from consumers. However, marketers must have a good understanding of how the portrayal of diverse groups relates to consumers’ schemas.

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Consumer Donations: the Roles of Implicit Theories and Appeal Types

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EXTENDED ABSTRACT

Giving USA 2015 reports show that Americans contributed 358.38 billion dollars to charities in 2014. Existing literature has examined the impact of sympathy and empathy (Rick, Cryder, and Loewenstein 2008), guilt (Strahilevitz and Myers 1998), happiness (Liu and Aaker 2008), social identity (Aaker and Akutsu 2009), and awareness about one's mortality (Cai and Wyer Jr 2015) on prosocial behavior. However, studies linking personality traits to charitable donations have been limited. The current research suggests that an individual's implicit theory may affect that person's likelihood to donate money to charities.

Entity theorists believe that characteristics are definite and unchangeable; whereas incremental theorists perceive them in a more dynamic and flexible way (Plaks, Grant, and Dweck 2005). When analyzing others' behaviors, entity theorists focus their attention on personal and psychological traits without taking situational factors into account. However, incremental theorists interpret others' actions based on changing situations (Levy, Stroessner, and Dweck, 1998). The primary focus of the current article is to understand how entity and incremental theorists differ in terms of their donations to charities, especially to those that fight health problems caused by personality traits, as in lifestyle diseases such as obesity, versus charities that fight health problems which mostly occur due to situational factors such as cancer. We expect that entity theorists would be more likely to donate to a cancer (vs. obesity) charity that helps those who suffer due to inevitable/situational (vs. controllable/personality) factors for which they cannot (vs. can) be held responsible. However, since incremental theorists usually take both situational and personality factors into account and do not judge others based on their personality traits only, they would be equally likely to donate to both charity types.

Research has shown that charities may use two types of appeals (White and Peloza 2009). A self-benefit appeal emphasizes how people's donation will enhance their own life and make them feel that they are good citizens, while an other-benefit appeal emphasizes how their donation will enhance the lives of those who suffer. Current research explores under which conditions these appeals are more effective for each type of implicit theorists. For cancer charities that fight health problems which occur due to situational factors, we show that incremental theorists are more persuaded by other-benefit (vs. self-benefits) appeals. For obesity charities that fight problems caused by controllable factors/personality traits, incremental theorists are more persuaded by self-benefit (vs. other-benefits) appeals. However, results show that entity theorists are more persuaded by the cancer (vs. obesity) charity ads, regardless of appeal type.

In our first study, implicit theory was manipulated by presenting participants with three proverbs that either supported entity (You cannot teach an old dog new tricks) or incremental theory (It is never too late to learn; Poon and Koehler 2006). Participants were then presented with one of the two charity ads fighting against obesity or cancer and were asked to indicate their likelihood to donate money and recommend the charity to others. The results revealed that entity theorists were significantly more likely to donate to the cancer (vs. obesity) charity; however charity type did not impact incremental theorists' donation likelihood.

In Study 2, we sought to examine what would influence incremental theorists to donate more to charities via self-benefit versus

other-benefit appeals. Implicit theory was manipulated by presenting articles emphasizing change versus no change (Levy et al. 1998) followed by an ad for a cancer charity. In the self-benefit (vs. other-benefit) condition, the ad ended with the tagline "Just imagine how your donation will enhance your life and make you feel (vs. enhance lives of those affected by cancer)." We found that incremental theorists were more likely to donate when the ad used other-benefit (vs. self-benefit) appeals. However, appeal type did not impact the donation likelihood for entity theorists.

Study 3, with a 2 (implicit theory: entity vs. incremental) x 2 (charity type: obesity vs. cancer) x 2 (appeal type: self-benefit vs. other-benefit) between-subjects design, not only showed differential effects of charity and appeal types, but also examined their subsequent outcomes on additional measures. After implicit theory manipulations (as in Study 1), participants evaluated the charity ad, indicated attitudes towards the charity, and likelihood of donating money to the charity, recommending it to others, and finding more about the charity. The results revealed that incremental theorists had more positive attitudes towards the ad if the obesity charity used self-benefit (vs. other-benefit) appeals. However, they had more positive attitudes towards the ad if the cancer charity used other-benefit (vs. self-benefit) appeals. Also, they preferred other-benefit appeals more if a cancer (vs. obesity) charity was using them. A similar pattern was observed with attitudes towards the charity if the obesity charity used self-benefit (vs. other-benefit) appeals, and if the cancer charity used other-benefit (vs. self-benefit) appeals. Moreover, incremental theorists' donation likelihood was greater if the obesity charity used self-benefit (vs. other-benefit) appeals, and if the cancer charity used other-benefit (vs. self-benefit) appeals. On the other hand, entity theorists had more positive attitudes towards a cancer (vs. obesity) charity ad, had more positive attitudes towards a cancer (vs. obesity) charity and were more likely to donate to a cancer (vs. obesity) charity, regardless of appeal type.

Current research contributes to literatures on donations, implicit theory, and advertising by suggesting that entity theorists are more likely to donate to cancer charities (situational factors) regardless of the benefit appeals used in ads, whereas incremental theorists prefer other-benefit appeals in this case. Conversely, obesity charities (personality traits) may benefit more from using self-benefit appeals since incremental theorists are more likely to be persuaded and entity theorists would be indifferent. In future, we aim to explore processes for these effects, such as whether consumers believe that it would be too selfish (irritating) to use self-benefit appeals that stress how good the giver would feel after donating to a cancer charity.

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As Many As 9, but As Few As 11: On a Hypothesis Testing Process of Evaluating Inevaluable Quantities

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EXTENDED ABSTRACT

Numerous research has documented that people are insensitive to the magnitude of numbers. Consequently, they usually provide indistinguishable evaluations toward objectively close quantities. For example, consumers' evaluation of the speed of a 3D printer that prints 11 mm/s does not differ from that of 9 mm/s. Research has also suggested that such quantities can indeed be distinguished when proper reference point is offered. For example, Thomas and Morwitz (2005) show that a product rating of 2.99 is perceived as significantly lower than 3.00 when both numbers are compared to 4.00.

In the present research, we find a new context in which evaluations between close pair of numbers are distinguishable, namely, when the communicator of the numerical information conveys whether this number is supposed to be considered as large or small. Such context is 1) free of reference points, 2) leads to reversed evaluations between the numbers, and 3) is an extremely common situation in which the numbers are presented in everyday life – we examined 868 articles in the New York Times and found that 48.6% of the total of 6,421 numbers that appear in these articles are presented in such a context.

In such contexts, an objectively smaller number consists of large digits (e.g., 98) can be judged to be larger than an objectively larger number consists of small digits (e.g., 112), an effect we call “the digit paradox.” We argue that recipients evaluate the focal number by drawing on the communicator's position and validate that position against the magnitude of the *individual digits* of the number; large/small digits extend greater support for the position that the number is large/small.

In study 1, 222 undergrad students read a short article about 3D printer, in which the current speed of 3D printing, either 9mm/s (large digit) or 11mm/s (small digit), is described either as fast (e.g., “as fast as 9 [11] mm/s”), or neutral (i.e., without magnitude claims). As a result, the communicator's position increased the perceived magnitude of 9mm/s to a greater extent than they did to 11mm/s ($F(1, 218) = 4.59, p = .033, \eta^2 = .021$). In the meantime, 9mm/s was perceived to be subjective faster ($M = 5.0$ vs. $4.5, F(1, 218) = 4.46, p = .036, \eta^2 = .020$) than 11mm/s in the presents of large magnitude claims but not when magnitude claims are absent ($M = 3.8$ vs. $4.1, F < 1, ns$).

In persuasion, numbers are usually presented to support arguments. When the communicator's opinion stands against the recipients', recipients may resist the persuasion from that communicator, and become unwilling to adopt any positions that the communicator attempts to convey. In this case, the digit paradox should be eliminated. Study 2 tests this boundary condition. 214 undergraduate students prepared a debate on whether using social networks facilitates or hinders social interaction. Immediately after, they read a “research article” claiming that using social networks actually hinders social interaction as “frequent social network users on average are only involved in as few as 98 [112] incidences of face-to-face interaction with others every year.” Participants then reported their perceived magnitude of the 98 [112] incidences, with an expectation that those who prepared for the “facilitate” position were likely to counter-argue with the communicator; therefore, their judgments should not be affected by the digit paradox. As a result, for participants in the hinder conditions, 98 incidences was perceived to be larger than 112 incidences, replicating the digit paradox. For participants in the fa-

ilitate condition, however, this reversal did not happen ($F(1, 204) = 4.61, p = .033, \eta^2 = .022$). Different from study 1, the digit paradox was eliminated without changing the content of the communication; what was manipulated was participants' willingness to validate and adopt the communicator's position as hypothesis. It therefore rules out any alternative explanations that are based on the different content of information that participants receive during the judgment process.

Because using digit as evidence is a heuristic, the digit-as-evidence effect should only be observed among those who do not feel that they have the knowledge. Study 3 examines this moderator. Participants read that a governor had either created as many as 96,000 [112,000] jobs or as lost as many as 96,000 [112,000] jobs. Participants first judged the governor's performance. Then, they reported their familiarity in politics, which serves as a measure of feeling of knowing (FOK). We ran a linear regression including the following predictors: the magnitude of the digits, the valence, FOK, all the two-way interactions among these three variables, and the three-way interaction. As a result, the digit*valence interaction was significant ($\beta = 0.079, t(203) = 2.67, p = .008$), suggesting a strong digit paradox: the performance of creating/losing as many as 96,000 jobs was judged to be better/worse than creating/losing as many as 112,000 jobs. Further, the coefficient of the three-way interaction was negative and also significant ($\beta = -0.075, t(203) = -2.54, p = .012$), suggesting that the effect was moderated by how recipients feel that they know of the target of judgment: the strong this feeling was, the lesser the extent to which his/her judgment was affected by the magnitude of digits.

Providing numbers is a common approach of presenting a quantity – “Let the data speak for themselves.” The current research, however, we find that the subjective magnitude of a number is affected by the communicator's position, the extent to which depends on whether the focal number consists of large or small digits. Importantly, the fact that recipients are not influenced by the digits in the absence of magnitude claim suggests that this effect goes beyond a simple digit-magnitude association. While prior literature is largely silent on how people evaluate inevaluable quantities (e.g., in single evaluation), our research suggests a plausible approach – hypothesis testing with heuristic-based evidence. Essentially, holding a hypothesis about the target, judgment and evaluation may draw on remote associations that are otherwise meaningless in the absence of the hypothesis.

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When Lacking Awareness Arises: The Role of Unconscious Thought on Brand Extension Evaluations

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EXTENDED ABSTRACT

Prior brand extensions research provided insights into multiple factors that influence consumers' brand extension judgments. Important factors such as brand-characteristics (Meyvis and Janiszewski 2004), individual consumer differences (Monga and John 2007), as well as various contexts (Monga and Gurhan-Canli 2012), and communication strategies (Bridges, Keller, and Sood 2000), can all enhance consumer evaluations of weak-tie brand extension (i.e., the extension that has a low fit with the brand). In this research, we examine an important cognitive mechanism – an unconscious thought process – that impacts consumers' perceptions of weak-tie brand extensions. In this regard, prior research in psychology has shown that unconscious thought influences people's choice, decision making, attitude formation and change, impression formation, problem solving, and creativity (Bos, Dijksterhuis, and van Baaren 2011; Dijksterhuis and Nordgren 2006). However, in this research, we demonstrate that unconscious thought increases consumers' evaluations toward weak-tie brand extensions. Further, we show that unconscious thought is divergent and associative in nature, which can potentially influence consumers' abilities to establish possible connections of remotely associated information between the brand and the weak-tie extension. Additionally, we explore the role of consumers' agency-communion orientation, which determines the extent to which people have a focus either on the self or relationships with others (Abele and Wojciszke 2007).

Our hypotheses were tested in three studies. In study 1 and 2, participants were exposed to brand information. Then they were exposed to one of two versions of brand extension announcements (i.e., strong-tie vs. weak-tie) and then were asked to engage in one of two thoughts (i.e., unconscious thought vs. conscious thought). As expected, participants in the unconscious thought condition were more likely to evaluate a weak-tie brand extensions more favorably than those in the conscious thought condition. In study 3, participants read a WSJ article that introduced the brand information. Next, they were exposed to the weak-tie extension stimuli and then were asked to engage in one of two thoughts (i.e., unconscious thought vs. conscious thought). We used gender as a proxy for the agency-communion orientation. The analysis revealed that the weak-tie extension was more favorable in the unconscious thought (vs. conscious thought) condition. In particular, for female participants, they evaluated the

weak-tie more favorably in the unconscious thought (vs. conscious thought) condition. For male participants, there was no significant difference.

Through a series of three experiments, our research demonstrates that unconscious thought results in more favorable attitude toward weak-tie brand extensions than conscious thought. Also, unconscious thought increases weak-tie brand extension evaluations for female but not male consumers. These findings contribute to the literature by providing theoretical and empirical documentation of the unconscious thought effect on consumers' evaluations of brand extensions.

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The Unintended Consequences of Long Deadlines on Goal Pursuit

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EXTENDED ABSTRACT

Imagine that Mr. Long and Mr. Short each just bought a house in a recently-developed local community. The houses are practically identical. As it so happens, both admire the kitchen in the upgraded model home of their community, and decide they would like to renovate their own kitchens accordingly before moving in. While both want to commence work on their respective projects immediately, they set different deadlines for their goal of completing the renovation task, basing it on their move-in dates. Mr. Long (Short) expects to move in after six (three) months as his current lease expires then, and so wants to complete the project within the next six (three) months. They both need to assess the amount of resources (time and money) that they would devote to this renovation. Will the difference in the length of the two deadlines—long (six months) versus short (three months)—impact the level of resource committed by each individual? If so, why?

Given the similar nature of their goals—that is, with an identical current and (supposedly identical) desired end state of the kitchens—a naïve perspective may suggest that differences in deadlines should not impact resource commitment. An alternative hypothesis can also be offered. Prior research has consistently demonstrated that individuals form different mental representations of the same information depending on temporal distance (Trope and Liberman 2003). In particular, people categorize objects associated with distant future events in fewer, broader categories (Liberman et al. 2002). Unpacking a complicated task into fewer (vs. more) steps could lead to the inference that the task is easier, thus increasing optimism about task completion, and to underestimation of resources (time and money) needed to complete the task (Buehler et al. 1994; Kahneman and Lovaglio 1993). Together, this suggests that a longer (temporally distant) deadline might lead consumers to unpack a pre-set goal into fewer steps (due to broader categorization), which might lower resource commitment.

We propose yet another contrarian hypothesis. We argue and show that longer deadlines increase, rather than decrease, resource commitment. Our theorization is based on prior research suggesting that consumers tend to rely on salient, non-diagnostic contextual cues to make inferences (Broniarczyk and Alba 1994; Dicket al. 1990; Harris 1981; Kardes et al. 2004) and that constraints draw attention. For example, research on activation suggests that attention is typically drawn to inputs that are constrained and limited (Berlyne 1969; Pribram and McGuinness 1975). Mullainathan and Shafir (2013) suggest that resource constraints yield a “focus dividend”; this occurs because inputs associated with constraints impose themselves on us, capturing our attention above all else. Given that deadlines are inherently a constraint requiring one to complete a task within a specified time window, deadlines should emerge as a salient cue in the local decision-making environment. Thus, we expect consumers to rely on deadlines to make inferences about the focal goal. Given that longer deadlines imposed for a pre-set goal would allow one to incorporate more of subtle aspects (e.g., the finish, aesthetic composition, texture, quality of appliances) into the focal goal (e.g., the kitchen renovation), we expect that a long versus short deadline will lead consumers to infer the focal goal as more difficult, even when the deadline length is resultant from an unrelated exogenous constraint, and when the current and desired end states of the goal

are supposedly the same. Further, because a more difficult goal frequently requires more resources (e.g., time and money), we expect that longer deadlines will lead individuals to commit to spending more resources.

Experiment 1 provides support for our main thesis that a long versus short deadline of a pre-set goal increases the amount of resources committed to the goal. Participants in this study indicated the deadlines they imposed on themselves when shopping during the past Christmas season. They also reported the total amount of time and money they spent. Consistent with our predictions, the longer the deadline (i.e., the more months in advance participants started shopping before last Christmas), the more time and the more money they spent. These effects hold even after controlling for importance of Christmas shopping and the number of immediate family members.

Experiment 2 directly manipulated the length of the deadlines to examine the consequential effect of deadline length on resource commitment. In this experiment, we recruited students from an undergraduate class and asked them to complete the same extra credit assignment in either six weeks’ or in four weeks’ time. We find that the longer the deadline, the more time students committed to this assignment. Importantly, more participants failed to complete the assignment in the long deadline condition. Normatively, with more time, participants should have found it easier to complete the assignment in time. Yet, this seemingly counter-intuitive result is consistent with our proposed inference-making account that longer deadlines increase perceived goal difficulty. This increased goal difficulty arising from longer deadlines might have been responsible for the escalation of resource commitment and subsequently led to the increased likelihood of quitting.

Experiment 3 provides direct evidence for the proposed mediating role of perceived goal difficulty. We find that incidental deadlines resulting from an unrelated exogenous constraint (i.e., a friend’s availability) are sufficient to change the perception of goal difficulty, consequently affecting the level of resources committed to the focal goal. Experiment 4 tests whether the impact of deadline length on the amount of resources committed to a pre-set goal is moderated by the objective difficulty of the goal. Consistent with the proposed difficulty-based inference-making account, we find that when the objective goal difficulty was high versus low, the difference in deadline length produced a more pronounced impact on the level of resources participants committed to the focal goal. Finally, Experiment 5 provides further process evidence by demonstrating the moderating role of goal familiarity, showing that longer deadlines led to greater resource commitment only when the requisite knowledge necessary for making inferences about goal difficulty was available (i.e., high vs. low goal familiarity).

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Getting in Touch with Your Thinking Style: How Touchscreens Influence Purchase

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EXTENDED ABSTRACT

Affordable, easy-to-use touchscreen technology dramatically alters human-machine interfaces, and consumers have readily accepted this dramatic change, as indicated by the skyrocketing demand for touchscreen devices. Predictions indicate that the touchscreen market will experience compound annual growth rates of 41% from 2013 to 2018 and reach a value of \$51.77 billion by 2018 (Research & Markets, 2013). The prevalence of touchscreen devices sends a clear signal: Consumers enjoy tactile communication tools.

These nearly ubiquitous touchscreen interfaces spawn a new stream of questions for academia and industry. The use of touch potentially represents a new influence on behavior and consumption decisions, because consumers use their fingers to complete shopping processes; to zoom in and out to manage photo albums; and to tap, drag, slide, swipe, pinch, and rotate while playing games on touchscreen devices. Their intuitive interfaces also make touchscreens easy to use. Although this phenomenon is observable, the rapid growth of touchscreen usage has not been accompanied by academic theory. The way tactile uses on touchscreens affect consumer behavior and decision making in various activities is uncertain, suggesting the need for advanced tactile research.

To address this gap, the current study investigates touchscreen devices and the underlying psychological drivers that contribute to consumers' responses to products presented on different devices. We identify differential effects of device types on purchase intentions, such that consumers are more likely to purchase hedonic products on handheld touchscreen devices but favor utilitarian products when using desktop computers (study 1). We then validate situation-specific thinking style (Novak and Hoffman 2009) as an underlying mechanism that contributes to the differences between the devices. Specifically, compared to desktop users, touchscreen users apply a more experiential but less rational thinking style (study 2). We also demonstrate that these situation-specific thinking styles mediate the relationship between device type and purchase intentions, and this mediation is moderated by the nature of the product (study 3).

STUDY 1 DEVICE TYPE AND PRODUCT NATURE

Ninety-nine students from a North American university (41% female; $M_{\text{age}} = 19.6$) participated in exchange for course credit. We randomly assigned participants to one of four conditions in a 2 (*device type: handheld touchscreen device vs. desktop computer*) \times 2 (*product nature: hedonic vs. utilitarian*) between-subjects experimental design, with device type and product nature as independent variables and purchase intentions as the dependent variable.

An analysis of covariance revealed a significant interaction effect between device type and product nature on purchase intentions ($F(1, 95) = 11.82, p = .001$). Most importantly, as predicted by H1, the simple effects revealed that, participants have significantly higher purchase intentions for *hedonic products* when buying on touchscreens than on desktops ($M_{\text{Touch}} = 5.26, M_{\text{PC}} = 4.17; p = .012$) and significantly higher purchase intentions for *utilitarian products* on desktops than on touchscreens ($M_{\text{PC}} = 5.53, M_{\text{Touch}} = 4.53; p = .024$).

STUDY 2 DEVICE TYPE AND THINKING STYLE

Undergraduate students at a North American university ($N = 90$; 37% female; $M_{\text{age}} = 19.6$) participated for course credit. We use a *single factor (device type) between-subjects design*, with device

type as the between-subjects independent variable, thinking style as the dependent variable. An ANOVA analysis revealed a significant effect of device type on experiential thinking style ($F(1, 88) = 9.47, p = .003$). Specifically, touchscreen users exhibited a significantly higher experiential thinking score than desktop users ($M_{\text{Touch}} = 3.70$ vs. $M_{\text{PC}} = 3.22, p = .003$). We again used an ANOVA analysis, revealing a significant effect of device type on rational thinking style ($F(1, 88) = 10.62, p = .002$). Desktop users exhibited a significantly higher rational thinking score than touchscreen users ($M_{\text{PC}} = 3.77$ vs. $M_{\text{Touch}} = 3.35, p = .002$).

STUDY 3 DEVICE TYPE, PRODUCT TYPE, AND THINKING STYLE

Study 3 mirrors the study design of Study 1. It used a 2 (*device type: handheld touchscreen vs. desktop computer*) \times 2 (*product nature: hedonic vs. utilitarian*) between-subjects design, with device type and product nature as independent variables and purchase intentions as the dependent variable. Undergraduate students at a North American university ($N = 100$; 40% female; $M_{\text{age}} = 19.4$) participated for course credit.

A two-way ANOVA revealed a significant device type and product nature interaction ($F(1, 96) = 9.46, p = .003$). The results closely resembled those of study 1. Importantly, simple effects tests of the device type within product nature showed a significant difference for both hedonic and utilitarian products. Specifically, participants are more likely to purchase hedonic products when on a touchscreen than on a desktop ($M_{\text{Touch}} = 4.95, M_{\text{PC}} = 4.01; p = .039$). The results also showed participants are more likely to purchase utilitarian products on a desktop than on a touchscreen ($M_{\text{PC}} = 4.22, M_{\text{Touch}} = 3.25; p = .026$).

GENERAL DISCUSSION

Traditional touch research focuses on the functionality of touch and haptic information collected through fingers when consumers touch the surface of products directly (e.g., Peck & Shu, 2009). When using a touchscreen device to shop online, consumers cannot touch the product, yet touch remains an active part of their information search and facilitates purchase processes. In such a context, touching performed by fingers substitutes for traditional tools (e.g., mouse, keyboard). The functionality of touch as an evaluation tool during consumer decision making has received some academic attention (e.g., Krishna, Elder, & Caldara, 2010; Peck & Childers, 2003a, 2003b), but non-product touching remains an underexplored research area.

This research addresses the gap in tactile research by hypothesizing and testing different tactile effects of traditional computers and touchscreen devices on consumers' purchase intentions toward products of a certain nature (e.g., hedonic vs. utilitarian). We also reveal that handheld touchscreen devices are more likely to evoke an experiential thinking style, whereas desktop computers align better with a rational thinking style. Finally, we show that situation-specific thinking style mediates the impact of the two types of devices on consumers' purchase intentions, and this mediation effect is moderated by the nature of the product.

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How Embarrassing For You (and me): The Nature of Observer Embarrassment

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EXTENDED ABSTRACT

Research on embarrassment finds that the presence of observers is a necessary requirement that all embarrassing situations share (Dahl, Machanda, and Argo 2001; Blair and Roese 2013; Grace 2007, 2009). The effect of the embarrassing situation on the observer, however, has been largely ignored. This research aims to address the question: How are observers impacted by the embarrassing situation? We define observer embarrassment as the observer's emotional reaction to an intentional or accidental norm violation of an actor. Because one actor's embarrassment is often witnessed by multiple observers, observer embarrassment is more ubiquitous than actor embarrassment. In spite of the potential impact this imposes for marketers, the consumer literature at large has not examined observer embarrassment.

Drawing on Cognitive Appraisal Theory (Lazarus 1993), we examine the nature of observer embarrassment in a series of three experiments. In study 1, we show that observer embarrassment impacts consumers' consumption experience, and embarrassed observers exhibit the same avoidance strategies as embarrassed actors. Next, we introduce social identity congruence between observer and actor, as well as the social presence of other observers, as moderators that provide additional support for our conceptualization of observer embarrassment.

In study 1, one hundred and eighty-six undergraduate students at a large North American university imagined themselves in a hotel lobby observing the check-in process of an unrelated customer. Actor embarrassment is created when the checking in customer has a credit card declined. Analysis demonstrates an indirect effect of observing an embarrassing situation, through observer embarrassment, on avoidance intentions (total indirect effect: 95% CI = .0004 to .1816). This analysis provides evidence supporting the positive relationship between observing an embarrassing situation and experiencing observer embarrassment, as well as the subsequent avoidance intentions of the observer.

Study 2 provides further evidence of the underlying process behind the generation of observer embarrassment. The study uses a 2 (Perceived actor embarrassment: yes/no) X 2 (Actor identity: congruent/incongruent). We manipulate observer embarrassment and introduce social identity congruence (university affiliation: home versus rival) as a boundary condition for the presence of observer embarrassment. We recruited 210 undergraduate students at a large North American university who imagined themselves standing in the self-check-out lane at a store. Another customer purchases an embarrassing product (genital wart remover cream, pretested as an embarrassing product). We manipulate perceived actor embarrassment by having either the customer or a store clerk inquire about the price of the product. Analysis reveals a significant interaction between perceived actor embarrassment and social identity of the actor ($F(1, 209) = .86, p = .05$). Furthermore, the impact of the perceived actor embarrassment on observer embarrassment is only present for participants in the identity incongruent condition ($M_{\text{cong}} = 4.92$ vs. $M_{\text{incong}} = 4.26, F(1, 209) = 4.65, p < .05$). Thus, study 2 provides further evidence in support of our conceptual framework.

Study 3 had two main objectives. The first objective is to rule out a possible alternative explanation by demonstrating that observer

embarrassment can occur without the presence of empathy. Further, we examine the role of social presence of others on observer embarrassment. This distinguishes observer embarrassment from other related interpersonal emotions.

One hundred sixty-two undergraduate students at a large North American university participated in the study as part of a course requirement. The design was a 2 (Presence of Others: crowded/not crowded) X Continuous (Observer Embarrassment: Measured) design. Participants imagined an incident of customer rage directed at the front-desk employee during a hotel check-in process due to a lack of an available room. Social presence was manipulated by describing the lobby as virtually empty versus crowded. Analysis reveals a significant interaction between observer embarrassment and social presence ($F(1, 161) = -.23, p = .04$). We conducted a simple slopes analysis to qualify this interaction. Observer embarrassment leads to lowered observer satisfaction in a crowded environment. Satisfaction ratings were not impacted if the setting was not crowded. This underlines the impact that a social presence has on observer embarrassment.

The results across three studies highlight the nature and consequences of observer embarrassment. Thus, consumer embarrassment impacts their behavior as well as the behavior of others who observe the embarrassment. The mere observation of an embarrassing situation is enough to create observer embarrassment and observer embarrassment can, in turn, impact observers in ways unfavorable for marketers. Namely, observer embarrassment leads to avoidance intentions (Study 1) and lowered satisfaction (Study 3). Furthermore, we introduce boundary conditions for the antecedents of observer embarrassment as well as for the impact that observer embarrassment has on the observer in the form of identity congruence (Study 2) and social presence (Study 3). The social nature of observer embarrassment presents a particular challenge for marketers because crowded retail settings provide many benefits for marketers, but can also exacerbate negative consumer emotion.

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Not Just For Your Health:

How Regular Physical Activity Influences Processing of Irrelevant Product Information

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EXTENDED ABSTRACT

We document a novel “spillover” benefit of regular physical activity (RPA) on decision-making. Specifically, RPA seems to aid people’s ability to ignore irrelevant information. In the consumption domain, when evaluating products, consumers often face a wide range of information - some relevant and informative, while other information might be irrelevant for evaluating the benefits of a product. Exposure to irrelevant information typically weakens consumer’s belief in a product’s benefit and results in less extreme product ratings - the dilution effect (Nisbett, Zukier and Lemley 1981; Meyvis and Janiszewski 2002). The dilution effect represents a judgmental bias since non-diagnostic information is taken into account when it should be ignored to make the optimal choice.

Health research shows that RPA improves the ability to inhibit irrelevant distractors in psychometric tasks (e.g., Hillmann et al. 2014, Hillmann et al. 2004). Besides the positive impact on physical and emotional health, RPA also benefits cognition, particularly executive functions (Barenberg, Berse and Dutke 2011). However, the extant research has not looked at whether RPA also benefits information processing in completely unrelated domains.

The aim of this research was to investigate whether RPA affects information processing in ‘real-life’ decision domains, such as product judgments that require ignoring irrelevant information. We hypothesize that physically active individuals are less susceptible to dilution effects in consumer decision-making and investigate underlying mechanisms.

In Study 1 we combined an experimental manipulation of product information with an individual differences approach to investigate dilution effects in sedentary vs. RPA individuals. Two hundred and ninety-four US participants (age range: 18-65 years) completed an adapted version of Meyvis and Janiszewski’s (2002, experiment 1) consumer product test of the dilution effect. A 2 (information: informative vs. informative + irrelevant) x 7 (product replicates) mixed design was used and crossed with measured RPA, using the International Physical Activity Questionnaire (Hallal and Victora 2004). Participants were randomly assigned to one of two between-subjects factors and saw descriptions of seven products in random order. For each product, participants were first given the desirable benefit (“You are looking for a safe apartment”) and then received the product description. In the control condition, participants received one piece of supportive and diagnostic information (“24 hour on-site security”). In the dilution condition, this was followed sequentially by three pieces of irrelevant information (e.g., “complex name: Haywood Park”). Finally, participants rated the product’s benefit. We collected various control variables to account for differences between people with varying levels of RPA (affect, Big-5, lay beliefs in the effects of RPA, creative and analytical reasoning).

Study 2 was designed to 1) replicate the findings from study one; 2) shed light on underlying mechanisms; and 3) eliminate additional confounding variables as competing explanations. Two hundred eighty-nine US participants completed the same procedure as in study 1. Additionally, participants completed a reaction time recognition test of the product information, two inhibition measures (Stroop test, Necker Cube Pattern Control), two decision-making measures (intertemporal choice, self-control scenarios) and several controls (TIPI, lay beliefs in the effects of RPA, demographics).

In study 3 we tested two hundred and twenty-seven exercisers during their gym visit to address physical activity self-report issues. We used the same procedure but added a quasi-experimental manipulation of physical activity, by varying the timing of the testing (before vs. after workout).

In study 1, adding irrelevant information significantly weakened participant’s beliefs in the product’s benefit, thus demonstrating the classic dilution effect ($M_{Control} = 75.02$, $M_{Dilution} = 70.57$, $t(292) = 3.44$, $p < .001$). More importantly, we found support for our hypothesis. A two-way ANOVA showed a significant interaction between the dilution condition and RPA, $F(1, 290) = 4.37$, $p < .05$. Simple effects showed that sedentary subjects significantly diluted their product judgments when faced with irrelevant information ($p = .006$). There was no difference in product judgments for RPA individuals ($p = .899$). This finding persisted after controlling for various characteristics that could explain individual differences, including reasoning scores, socioeconomic status, mood, personality traits and lay beliefs in the effects of RPA.

In study 2 the positive “spillover” benefit of RPA on product judgments was replicated. A two-way ANOVA showed a significant interaction between the dilution condition and RPA, $F(1, 285) = 4.67$, $p < .05$. Sedentary subjects significantly diluted their judgments when faced with irrelevant information ($p < .001$). There was no dilution effect for RPA individuals ($p = .402$). Again, this remained after controlling for potential confounds. Further, we could rule out differences in memory for the product information and improved inhibitory control as mediating factors.

Study 3 revealed a significant three-way interaction between the dilution condition, RPA and time of testing, $F(1, 219) = 4.31$, $p < .05$. Planned contrasts showed that regular exercisers did not dilute their product judgments when faced with irrelevant information after they had just exercised, $p = .206$. All other groups showed a significant dilution effect, $p < .001$. Summary statistics of all studies across condition and RPA groups.

This research documents a novel effect: Regular exercisers are significantly less prone to dilute their judgments when faced with irrelevant product information. This effect remains after controlling for a number of confounds and also appears after a situational manipulation of physical activity with regular exercisers at a gym.

Our findings have important theoretical and practical implications. First, they are one of the first to establish the positive effect of RPA on cognition, particularly decision-makers’ ability to ignore irrelevant information. This can be useful to promote RPA among people who aren’t motivated to exercise by health benefits. Second, they extend the benefits of RPA to a new and unrelated domain – consumer product judgments. Marketers can take this into account when promoting products to regular exercisers. Finally, our findings shed light on potential remedies against the dilution effect as a judgmental bias. This is important considering the number of studies demonstrating the dilution effect in various applied domains including legal decision-making (Smith, Stasson and Hawkes 1998), negotiations (Wiltermuth and Neale 2011) or climate change (De Vries, Terwel and Ellemers 2014).

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Film Festival 2016

Vegetarianism: A Video-Ethnography of Conflicts Within and Outside the Movement That Affects The Market Dynamics

Renata Andreoni Barboza, FGV-SP/Escola de Administração de Empresas de São Paulo, Brazil
Tania Modesto Veludo de Oliveira, FGV-SP/Escola de Administração de Empresas de São Paulo, Brazil

This film approaches several types of conflicts in the consumer social movement of vegan and vegetarians. The realistic conflict theory serves as the basis to understand how hostility within and outside the movement arise as a result of conflicting goals and competition and how it affects the market. (19.34 min)

Meaningful Things: Exploring the Symbolic Meaning of the Material Environment and its Impact on Happiness

Mafalda Casais, Delft University of Technology, Netherlands
Ruth Mugge, Delft University of Technology, Netherlands
Pieter M. A. Desmet, Delft University of Technology, Netherlands

Symbolically meaningful possessions have the ability to make intentions tangible to remind of aspirations and to keep successes fresh. This videography is a compilation of stories about objects with symbolic meaning reflecting on the contribution of the material environment to the subjective well-being of individuals. (14.37 min)

Skoros: Anti-Consumption in Crisis

Andreas Chatzidakis, Royal Holloway University of London, UK
Pauline MacLaran, Royal Holloway University of London, UK

Skoros is an anti-consumerist collective in Athens Greece that runs a space where people give take or give and take goods and services for free. Soon after came the "Crisis" and with it a need to cater for people that are increasingly below the poverty line... (19.24 min)

Dedicated Followers of Fashion: The Role of Cultural Mythologies in Product Adoption

Skye-Maree Dixon, University of Bath, UK

Fashion is undergoing a shift in narrative. The rise of bloggers and the proliferation of social media have shifted power relations democratising a previously elitist industry. This film presents the initial pilot study into how marketplace-myths develop within a fashion context and their impact on product adoption. (24.21 min)

Shopping: A Retail Experience

Joao Fleck, Pontificia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Stefania Ordovas de Almeida, Pontificia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Vinicius Brasil, Pontificia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Jose Afonso Mazzon, FEA - USP, Brazil
Giuliana Isabella, Insper - Institute of Research and Education and FEA-USP, Brazil

Shopping: A Retail Experience is a videography made with the goal of analyzing purchasing motivations. The consumers reflected upon their purchase choices by participating in a shopping experience using an HD Camera Glasses and later on they were interviewed while viewing their on-store videos. (20.26 min)

Evil Eye: The Business of Anticipated Malicious Envy in India

Tanvi Gupta, Indian Institute of Management Bangalore, India
Preeti Krishnan Lyndem, Indian Institute of Management Bangalore, India

The evil eye belief (anticipated malicious envy) which fuels the \$40 billion Indian ritual market is studied from the academic lens using the 'theory of magic' 'compensatory control' 'information cascades' and more. This visual journey engages with sellers and buyers of cultural symbols used to cope with anticipated malicious envy. (35.32 min)

Living the Stream: A Study of Voyeuristic Consumption in Video Game Live Streaming

Jacob Hiler, Ohio University, USA
Andrew Kuo, Louisiana State University, USA
William Northington, Idaho State University, USA

Video game live streaming has seen explosive growth in the past few years and has become a multi-billion dollar industry. This film explores the phenomenon through the eyes of the consumers of live streams and furthers the theory of voyeuristic consumption. (26.21 min)

Further Away = Higher Willingness to Pay?

Karina Isaak, ESCP Europe, Berlin, Germany
Elena Dinkevych, ESCP Europe, Berlin, Germany
Robert Wilken, ESCP Europe, Berlin, Germany

Consumers' willingness-to-pay is influenced in many ways - psychological distance is one of them. Advertisements for instance can present products from a high distance or in a close-up. We empirically show that this spatial distance to a product does not only affect consumers' mean willingness-to-pay... (12.08 min)

Dodo Lé Là - From Beer Consumption to Heritage Edification

Julie Leroy, University La Réunion, France
Baptiste Cléret, University of Rouen, France
Michel Boyer, University La Réunion, France

This research studies the role of consumers in the edification of a convenience good as a patrimonial object of consumption. Through the practices representations and values they insert in the good and its context they transformed a regional product into an iconic brand; the beer "La Dodo". (40.43 min).

E-book. Just a small gadget?

Cecilia Lobo-de-Araujo, Fundação Getulio Vargas, Brazil
Patricia SM Boaventura, Fundação Getulio Vargas, Brazil
Suzana Battistella-Lima, Fundação Getulio Vargas, Brazil
Renata Andreoni-Barboza, Fundação Getulio Vargas, Brazil
Adriana Arcuri, Fundação Getulio Vargas, Brazil

E-books. How a new way of consumption – e-book reader opposed to physical book – is changing our understanding and relation with extended-self cultural capital transference reference of knowledge (treasure) sacredness of things and also the consumption of books itself. Interviews and questions to think about this apparent small technological change. (14.09 min)

Darth Vader, May I Take a Picture with You?

Rafael Mello, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Rafael Bronzatti, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Renan Sahity, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Joao Fleck, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Stefânia Almeida, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Vinicius Brasil, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil

We analyzed the experience of consumption of cosplayers in events of the geek subculture as well as aspects related to the process of character choice formation of groups feelings before and after the events and other characteristics of this activity. (22.25 min)

Shopping: A Study on Motivations

Stefania Ordovas de Almeida, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Joao Pedro Fleck, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Vinicius Brasil, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
José Afonso Mazzon, FEA - USP, Brazil
Giuliana Isabella, FEA - USP and Insper - Institute of Research and Education, Brazil

This videography aims at understanding what motivates people to shop nowadays. Our interviewees lead us to find four main influencers on shopping behavior: shopping malls store design and shopping environment; Atmospherics of Stores and Store Employees. (14.29 min)

Wonders of Waste. The Ideological Diffusion of the Upcycling Consumer Movement

Grace O'Rourke, University College Cork, Ireland
Stephen R. O'Sullivan, University College Cork, Ireland

This videography explores the ideological diffusion of the upcycling movement a movement attempting to restore the balance between production consumption and waste. The upcycling movement marks a new form of working consumer – creative deconsumers – working towards altering the ideological identification with waste. (22.25 min)

Empowerment Through Social Entrepreneurship

Thayse Schneider, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Denise Telli, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Tatiana Bolzoni, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
Guilherme Mattos, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
Stefânia Ordovás de Almeida, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil
João Pedro Fleck, Pontifícia Universidade Católica do Rio Grande do Sul, Porto Alegre, Brazil

Our goal with this videography is to connect Social Entrepreneurship and Consumer Behavior. We intend to show how Social Entrepreneurship can be used as a weapon to fight social exclusion empowering the less fortunate. (15.08 min)

Walking with Zombies – Insights into the Subculture of the Undead

Sascha Steinmann, University of Siegen, Germany
Frederic Nimmermann, University of Siegen, Germany
Hanna Schramm-Klein, University of Siegen, Germany
Andreas Rauscher, University of Siegen, Germany
Judith Ackermann, University of Siegen, Germany
Gunnar Mau, University of Siegen, Germany

This movie provides insights into the “zombie community” and by showing how zombie archetypes have evolved in media over time especially in movies and computer games. Furthermore we show how the zombie archetypes have influenced the way community members dress and perform during the Cologne Zombie Walk in 2015. (21.18 min)

Roundtable Summaries

ROUNDTABLE

Conceptualizing Consciousness in Consumer Research: A Holistic Look at Consumers' Mental Lives

Chairs:

Lawrence Williams, University of Colorado Boulder, USA
Kathleen Vohs, University of Minnesota, USA

Participants:

Jonah Berger, University of Pennsylvania, USA
Kristina Durante, Rutgers University, USA
Chris Janiszewski, University of Florida, USA
Juliano Laran, University of Miami, USA
Rik Pieters, Tilburg University, Netherlands
Andy Poehlman, Clemson University, USA
Sharon Shavitt, University of Illinois at Urbana-Champaign, USA
Itamar Simonson, Stanford University, USA
Michaela Wänke, University of Mannheim, Germany
Alex Genevsky, Erasmus University, Netherlands
Lan Chaplin, University of Illinois at Chicago, USA
Bob Fennis, University of Groningen, Netherlands

Consumer researchers long have questioned how unconsciousness shapes behavior. This roundtable redresses the field's neglect of consciousness's influence. Scrutinizing consciousness from evolutionary developmental cultural neurological methodological and applied approaches this session offers diverse perspectives on one of the more enigmatic aspects of human existence.

ROUNDTABLE

Consumer Neuroscience: Conceptual, Methodological, and Substantive Opportunities for Collaboration at the Interface of Consumer Research and Functional Magnetic Resonance Imaging

Chairs:

Martin Reimann, University of Arizona, USA
William M. Hedgcock, University of Iowa, USA
Adam Craig, University of Kentucky, USA

Participants:

Maarten Boksem, Erasmus University Rotterdam, The Netherlands
Raquel Castaño, Tecnológico de Monterrey, Mexico
Moran Cerf, Northwestern University, USA
Angelika Dimoka, Temple University, USA
Ming Hsu, University of California Berkeley, USA
Hilke Plassmann, INSEAD, France
Akshay Rao, University of Minnesota, USA
Ale Smidts, Erasmus University Rotterdam, The Netherlands
Carolyn Yoon, University of Michigan, USA

During this roundtable the results of the first Pre-Conference Workshop on Consumer Neuroscience are discussed especially the findings from three "design thinking challenges" on conceptual methodological and substantive issues concerning functional magnetic resonance imaging (fMRI). The roundtable aims to develop directions for research on the role of neurophysiology in consumption.

ROUNDTABLE
Boundary Research: Tools and Rules to Impact Emerging Fields

Chairs:

Koert Van Ittersum, University of Groningen, The Netherlands
Brian Wansink, Cornell University, USA

Participants:

Adam Brasel, Boston College, USA
Jeff Inman, University of Pittsburgh, USA
Ajay Kohli, Georgia Tech, USA
Cait Lamberton, University of Pittsburgh, USA
Connie Pechmann, University of California Irvine, USA
Rik Pieters, Tilburg University, The Netherlands
Linda Price, University of Arizona, USA
Stefano Puntoni, Erasmus University Rotterdam, The Netherlands
Aric Rindfleisch, University of Illinois at Urbana-Champaign, USA
Roland Rust, University of Maryland, USA
Peeter Verlegh, Free University of Amsterdam, The Netherlands
Luk Warlop, K.U. Leuven, Belgium
Ellen Van Kleef, Wageningen University, The Netherlands

Boundary research can be risky but it can also move academic disciplines into wider areas of influence. To help reduce the risk and increase the reward this roundtable brings together researchers interested in engaging in boundary research sharing experiences and best practices with regards to conducting and publishing boundary research.

ROUNDTABLE
Luxury Brands, Conspicuous Consumption and Social Signaling

Chairs:

Yajin Wang, University of Maryland, USA

Participants:

Darren Dahl, University of British Columbia, Canada
David Dubios, INSEAD, France
Kristina Durante, Rutgers University, USA
Lan Chaplin, University of Illinois at Chicago, USA
David Gal, University of Illinois at Chicago, USA
Barbara Kahn, University of Pennsylvania, USA
Anat Keinan, Harvard Business School, USA
Nailya Ordabayeva, Boston College, USA
C. W. Park, University of Southern California, USA
L.J. Shrum, HEC Paris, France
Amna Kirmani, University of Maryland, USA
Keith Wilcox, Columbia University, USA
Carlos Torelli, University of Minnesota, USA
Jennifer Stoner, University of North Dakota, USA
Lisa Cavanaugh, University of Southern California, USA
Yajin Wang, University of Maryland, USA

One of the biggest trends in consumer behavior over the last two decades has been the growth of luxury consumption. The goal of this roundtable session is to discuss the new trends and novel research questions in luxury consumption and to develop collaborative relationships.

ROUNDTABLE

Liquid Consumption: How Can We Use It in Consumer Research?

Chairs:

Fleura Bardhi, City University of London, UK
Giana Eckhardt, Royal Holloway University of London, UK

Participants:

Linda Price, University of Arizona, USA
Eric Arnould, University of Southern Denmark, Denmark
Russel Belk, York University, Canada
Eileen Fischer, York University, Canada
Cele Otnes, University of Illinois at Urbana-Champaign, USA
Adam Arvidsson, University of Milano, Italy
Rebecca Watkins, Cardiff University, UK
Aric Rindfleisch, University of Illinois at Urbana-Champaign, USA
Nancy Wong, University of Wisconsin-Madison, USA
Sofia Ulver, Lund University, Sweden
Soren Askegaard, University of Southern Denmark, Denmark
Christian Eichert, City University of London, UK
Jacob Ostberg, Stockholm Business School, Sweden

We introduce the concept of liquid consumption and discuss how it differs from 'solid' consumption as well as postmodern consumption. We focus on how liquid consumption can reinvigorate research agendas for a wide variety of consumer behavior constructs such as consumer attachment brand communities materialism and digital consumption.

ROUNDTABLE

Question-Behavior Effect Roundtable

Chairs:

Eric Spangenberg, University of California Irvine, USA

Participants:

David Sprott, Washington State University, USA
Ioannis Kareklas, University at Albany, State University of New York, USA
Berna Devezer, University of Idaho, USA
Katie Spangenberg, University of Washington, USA
Vicki Morwitz, New York University, USA
Paul Dholakia, Rice University, USA
Siegfried Dewitte, University of Leuven, Belgium
Chris Janiszewski, University of Florida, USA
Elise Chandon, University of South Carolina, USA
Andy Perkins, Washington State University, USA
Bianca Grohmann, Concordia University, Canada
Richard Yalch, University of Washington, USA

For 40 years consumer psychologists have explored the nature of the question-behavior effect (QBE). A new meta-analysis of the QBE (Spangenberg et al. 2016) finds varying support for four over-arching theoretical mechanisms (attitudes consistency fluency and motivations). The roundtable will challenge theoretical perspectives and facilitate further collaboration on the QBE.

Working Papers

Effects of Face and Gaze Direction in Print Advertisements

Safa Adil, Rennes 1 University, France
Sophie Lacoste-Badie, Rennes 1 University, France

This study assesses the effects of face presence and gaze direction in print advertisements on attention to and memorization of the product and the advertisement. Our main finding is that advertisements are more effective in “gaze towards the product” condition than in “gaze towards the observer” and “no face” conditions.

Virtue in Vice: Benefits of Conspicuous Consumption for the Powerless

Sumaya AlBaloohsi, BI Norwegian Business School, Norway
Mehrad Moeini-Jazani, BI Norwegian Business School, Norway
Bob M. Fennis, University of Groningen, The Netherlands
Luk Warlop, Katholieke University Leuven, Belgium & BI Norwegian Business School, Norway

Lacking power motivates people to consume conspicuously to signal status. However beyond the desire to signal status little is known about the positive consequences of conspicuous consumption for the powerless. In this ongoing research we provide initial evidence that powerless’ acquired status through conspicuous consumption enhances their cognitive abilities.

Social Valuation and Neoliberal Ideology in Postfeminist Digital Spaces

Mikael Andéhn, Aalto University, Finland
Joel Hietanen, Stockholm University, Sweden
Thom Iddon, Stockholm University, Sweden

The online community labeled “the red pill” is growing rapidly and references to it in mainstream media are becoming commonplace. Delving into the community we uncover traces of an ideology in which social relations operate under market-like conditions and where management of the self is the key to marketplace success.

Should I Copy Her? A Meta-Analytic Synthesis Of Mimicry Effects

Susan Andrzejewski, California State University Channel Islands, USA
Krista Hill, Babson College, USA
Dhruv Grewal, Babson College, USA
Nancy Puccinelli, University of Bath and Oxford University, UK

We quantitatively synthesize the work on mimicry effects (i.e. effects of copying another’s behavior). The results suggest for example that mimicry can increase favorable behavior by as much as 82% over a non-mimicry baseline. Importantly these effects are significantly attenuated by behavior that is mimicked and goals.

#NoBoysAllowed: Consumer Response to Brand Infidelity

Justin Angle, University of Montana, USA
Kathryn Mercurio, University of Oregon, USA
Eric Setten, University of Oregon, USA

This research explores consumer response to brands that shift their focus to different customers a concept we term brand infidelity. We propose that consumers who identify strongly with a brand experience more betrayal - yet are more likely to forgive - when a brand “cheats” on them with other customers.

Showing Off More For Less on Social Media: The Changing Dynamics of Conspicuous Consumption and Value While Renting

M. Eda Anlamlier, University of Illinois at Chicago, USA
Lez Trujillo Torres, University of Illinois at Chicago, USA
David Gal, University of Illinois at Chicago, USA

We examined consumers' online display of status products when renting not owning. Preliminary analyses of the "Rent the Runway" hashtag in Instagram show a) use value for products remains high while exchange value is dramatically lower due to renting and b) consumers conspicuously embrace the renting firm above specific brands.

Examining the Co-construction of Belonging between Consumers and Service Providers

Robert Arias, University of Illinois at Urbana-Champaign, USA

This research examines how consumers' sense of belonging (SB) develops within a consumption community supported by firms. The researcher conducted interviews with both consumers and service providers. The aim of the paper is to develop a theoretical framework explicating how consumers' SB experiences are co-constructed by themselves and marketing agents.

Can Food (Waste)-related Lifestyle Segments Explain Food Waste? – The Example of Denmark

Jessica Aschemann-Witzel, Aarhus University, Denmark

Identifying consumer differences in their relation to food in everyday life allows marketers and policy makers to efficiently design campaigns against consumer food waste. We adapt the food-related lifestyle concept to waste and through a survey and segmentation analysis find five segments deriving different recommendations for targeted social marketing action.

The Effect of Product Type on Consumers' Preference for Ambiguous vs. Precise Ratings

Amin Attari, University of Kansas, USA
Promothes Chatterjee, University of Kansas, USA
Yexin Jessica Li, University of Kansas, USA

We investigate whether when and why consumers prefer precise information over ambiguous information. We hypothesize that when buying a utilitarian product consumers prefer precise product ratings over ambiguous ones. However due to the motivation inherent in hedonic purchases we propose this preference gets attenuated when consumers consider such products.

Emotional Well-Being in Stressful Situations: the Effect of Luxury Brands

Leonardo Aureliano-Silva, ESPM, Brazil
Suzane Strehlau, ESPM, Brazil

Stress is a problem in contemporary societies thus the use of luxury brands might help consumers feel better. The purpose of this research is to verify the impact of luxury brands consumption on emotional well-being and brand attachment in stressful situations. A set of 4 experiments between subjects was conducted. In high stress context luxury brand has a powerful impact on emotional well-being and attachment level compared to non-luxury brand.

When, How, and Why Hedonic Adaptation Generates a New Consumer Desire

Rodolfo Azambuja, Universidade Federal do Rio Grande do Sul, Brazil
Vinicius Andrade Brei, Universidade Federal do Rio Grande do Sul, Brazil
Leonardo Nicolao, Universidade Federal do Rio Grande do Sul, Brazil

This work shows preliminary results of a model developed from a 10-month longitudinal study designed to test whether the emergence of a new desire comes from consumer hedonic adaptation processes. Partial results show such an effect. The current level of enjoyment with a product consequence of hedonic adaptation influences desire.

How Ownership Judgments Affect Brand Extension Evaluations

Aaron Barnes, University of Illinois at Urbana-Champaign, USA
Tiffany White, University of Illinois at Urbana-Champaign, USA

We find evidence suggesting that when brands extend into contexts where the user's ownership is ambiguous brand extension evaluations operate through how observers evaluate the user. We also demonstrate that these effects disappear when the consumer does not have a strong self-brand connection.

When Causes Change How We Think and License Indulgence

Aaron Barnes, University of Illinois at Urbana-Champaign, USA
Minkyung Koo, University of Illinois at Urbana-Champaign, USA

We investigate the psychological consequences of cause-related marketing (CM) and demonstrate that cultural differences in thinking style affect and are affected by CM. We identify cultural orientation as an important moderator of previously documented licensing effects because of differences in consumers' attribution of virtuosity.

Deny the Voice Inside: For Collectivists, Attitude Accessibility May Hinder Decision Making

Aaron Barnes, University of Illinois at Urbana-Champaign, USA
Sharon Shavitt, University of Illinois at Urbana-Champaign, USA

Although accessible personal attitudes are generally seen as desirable and helpful we present evidence that for collectivists compared to individualists such attitudes may have more negative or dissonance-inducing consequences particularly when those attitudes appear to be at odds with prevailing norms and thus interfere with adapting to normative expectations.

In The "I" of The Beholder: Improving Health Communication by Using The First Person Perspective

Frederic Basso, London School of Economics, UK
Benjamin Voyer, ESCP Europe, France
Olivia Petit, INSEEC Business School, France
Kevin Le Goff, Aix Marseille Université, Marseille, France
Olivier Oullier, Aix Marseille Université, Marseille, France

The present research draws from studies on food psychology and embodied cognition to investigate the effect of the attribute of the message (pleasure vs. health) and the visual perspective (first vs. third-person perspective) on persuasion using behavioral and neuroimaging (fMRI) experiments.

Not Just a Pretty Face! The Impact of Model Facial Expression and Body Mass Index on The Effectiveness of Health Advertising

Kerrie Bertele, University of Hertfordshire, UK
Ariadne Kapetanaki, University of Hertfordshire, UK
Paul Connell, Stoney Brook University, New York, USA

We examine the presentation of models in health advertisements. Eye-tracking experiments investigate the impact of: (1) facial expression (serious vs. fake smile vs. Duchenne smile) and (2) low versus high BMI on consumer's visual attention and intent to eat healthy. Recommendations to guide the design of health advertisements are developed.

Don't Freak, I'm a Sikh: Stigma, Styled Identities and Social Distancing of the Turbaned Sikh Male

Anoop Bhogal-Nair, University of Northampton, UK
Andrew Lindridge, Open University, UK

This working paper investigates how Sikh men utilise social distancing strategies in developing distinct identities not narratives. Grounded in social identity theory we examine how global discourses of 'Islamophobia' have prompted 'Sikh projects' as strategies to de-stigmatize cultural symbols and ultimately socially distance one 'Other' from another 'Other.'

A Trip to Your Past: The Effect of Ending on Preference for Nostalgic Products

Sheng Bi, Renmin University of China, China
Jun Pang, Renmin University of China, China

This research proposes the ending effect on consumers' preference for nostalgic products. Across three studies we show that the ending of a time period increases consumers' preference for nostalgic products. In addition we identify the perceptions of the passage of time as the underlying process that accounts for this effect.

What's in the Box? Risk in Surprise Subscription Models.

Severin Bischof, University of St. Gallen, Switzerland
Tim Boettger, University of St. Gallen, Switzerland
Thomas Rudolph, University of St. Gallen, Switzerland

Assessing subscription models in retailing we seek to identify the drivers that influence consumers' attitude towards product subscriptions. Using Prospect Theory we find that consumers prefer subscription boxes with surprise content in lower frequencies and subscription boxes with predefined content in higher frequencies.

Using The Aesthetic Design Principle 'Autonomous, Yet Connected' to Increase Purchase Intention of Radical Innovations by Consumers

Janneke Blijlevens, RMIT University, Australia
Wilfred Horig, RMIT University, Australia
Ruth Mugge, Delft University of Technology, The Netherlands

We find that both autonomy and connectedness simultaneously influence purchase intention mediated by aesthetic appreciation. We expected that the aesthetic design principle 'autonomous yet connected' principle would work to increase appreciation for radical innovations and sway the preferred balance to connectedness. These expectations were not confirmed and implications are discussed.

Experiencing the Self through Products: How Direct Product Experiences Paired with Abstract Product Construals Increase Consumers' Identification with and Evaluation of Products

Silke Blumer, University of St. Gallen, Switzerland
Philipp Scharfenberger, University of St. Gallen, Switzerland
Gerald Häubl, University of St. Gallen, Switzerland
Torsten Tomczak, University of St. Gallen, Switzerland

Consumers frequently use products to manifest their selves. We hypothesize that products fulfill this self-oriented function particularly when they are experienced directly and perceived on a high construal level at the same time. Evidence from two experiments supports this theorizing.

The “GMO” Halo Effect: How Labeling Products as Genetically Modified Influence Calorie Judgments

Nicolas Bochard, Université Grenoble Alpes, France
Dominique Muller, Université Grenoble Alpes, France
Norbert Schwarz, University of Southern California, USA

In the same way as organic or fair trade labels GMO can lead to misperceptions on the caloric content of the food products (health halo effect). Depicting food as not containing GMO lead to positive evaluation (less caloric). Depicting food as containing GMO conversely lead to negative evaluation (more caloric).

Live in Your World - Play in Ours: How Pre-Configurations Based on Preference Articulation Affect Consumer Product Configuration Processes

Daniel Boller, University of St. Gallen, Switzerland
Tobias Schlager, University of St. Gallen, Switzerland
Andreas Herrmann, University of St. Gallen, Switzerland

Firms face the challenge that product configurators are often perceived to be complex. This research proposes a novel format of product configuration that tackles these issues specifically providing consumers the opportunity to articulate their preferences and offering them an initial product configuration based on these articulated preferences.

Controversial Advertising: Reflections from Professionals

Jan Brace-Govan, Monash University, Australia

This study examines the work practices of advertising professionals through in-depth interviews to gather their views on controversial advertising specifically adverts that depict violence against women. The fragmentation of the advertising industry especially around digital channels has reduced opportunities for internal review leading to increases in unintentional controversy.

“You Shouldn’t Have!” Facework and Disposal in Gift Receiving as a Way to Manage Interpersonal Relationships

Ines Branco-Illodo, Nottingham Trent University, UK
Teresa Heath, Nottingham University, UK
Caroline Tynan, Nottingham University, UK

Drawing on Attachment Theory this research addresses the neglect of the ways in which recipients use gift receiving to manage relationships with givers. By pretending reducing dissonance and being honest in their gift responses and by using different disposal strategies recipients deal with the emotional anxiety of receiving unwanted gifts.

Uncertainty and the Provision of Online Reviews for Services

Leif Brandes, University of Warwick, UK
Rosa Cacabelos, Universität Zürich, Switzerland
Egon Franck, Universität Zürich, Switzerland

We study the effect of uncertainty about a service’s true quality level after purchase on the provision and content of online reviews. We show that such uncertainty reduces the number of posted reviews and makes posted reviews more negative such that reviews no longer reflect true product quality levels.

The Consumer as an Artist Citizen: The Emancipatory Potential of Art in the Formation of the Self and Public Sphere in the 21st Century Consumer Culture

Zafeirenia Brokalaki, King's College London, UK

This research amalgamates consumer and cultural studies literature to explore self-expressive art practices in consumption settings. Using Habermas's public sphere conceptualisation and an ethnographic case-study we demonstrate the critical role of authorship in art-stimulated dialogical discourses impacting consumers' multi-layered activation public expression and marketplace conversions into late modern public spheres.

Toward an Improved Understanding of the Privacy Paradox

Mirja Bues, University of Muenster, Germany
Wayne D. Hoyer, University of Texas at Austin, USA

The current research seeks to understand why consumers disclose vast amounts of personal information online despite high concerns of privacy a phenomenon known as the privacy paradox. We show that consumers' willingness better predicts their actual disclosure behavior than do behavioral intentions and also which factors influence the situation-specific willingness.

Why Customers Get Even? The Predicting Role of Vengeful Customer's Negative Emotions

Phuong Thao Bui Nguyen, Toulouse 1 Capitole University, France

This research clarifies two categories of negative emotions that vengeful customers can feel: one of which targets the firm and the other targets the final user of the defective product. The proposed typology highlights different roles of a vengeful customer (victim vs. guilty party) which will predict his revenge action.

The Impact of Visual Imbalance on Consumers' Donation Behavior

Fengyan Cai, Shanghai Jiao Tong University, China
Christopher K. Hsee, Chicago University, USA
Jieru Xie, Shanghai Jiao Tong University, China

Two lab studies and one field experiment together demonstrate that a visually imbalanced donation device could increase people's donation intention even real donation behavior. And this impact of visual imbalance on consumers' donation intention is mediated by their motivation to seek for balance.

The Collective Aggregation Effect: Aggregating Potential Collective Action to Motivate Prosocial Behavior

Adrian Camilleri, RMIT University, Australia
Richard Larrick, Duke University, USA

Is the statement "If X people all do Y action then Z outcomes will be achieved" motivating? We answer this question by conducting a series of laboratory experiments focused on motivating pro-social actions. It turns out that such statements are motivating by boosting perceptions of outcome efficacy.

The Power of Meaningful Stories over Happy Ones and the Moderating Role of Implicit Theories

Marina Carnevale, Fordham University, USA
Ozge Yucel-Aybat, Pennsylvania State University-Harrisburg, USA

In the current research we explore whether and how meaningful versus happy stories about a brand may influence consumers' attitude towards that brand. Results suggest that meaningful stories might lead to higher attitude towards the brand because of its perceived trustworthiness. However these effects occur only for incremental theorists.

Reactions Towards Wasted Food. Experimental Data on Food Appreciation and Sales

Luca Casetti, Bern University of Applied Sciences, Food Science & Management, Switzerland
Thomas A. Brunner, Bern University of Applied Sciences, Food Science & Management, Switzerland
Aline E. Stämpfli, University of Bern, Switzerland

In this experimental study we examine the reactions of consumers towards wasted food under two different conditions. Having an organic product and a more personal relation to the food provider evokes more self-related responsibility whereas having bought the product on sale shows no effect.

Political Affiliation Moderates Attitudes Towards Artificial Intelligence

Noah Castelo, Columbia University, USA
Adrian Ward, University of Texas at Austin, USA

Despite the inexorable march towards human-level artificial intelligence almost nothing is known about how consumers perceive the risks and benefits of this revolutionary trend. We report 2 studies exploring these issues finding that consumers' attitudes are strongly influenced by political affiliation and by anthropomorphism of computers.

Who Gets Nudged? How Choice Architecture Interventions Interact with Preferences

Noah Castelo, Columbia University, USA
Crystal Reeck, Temple University, USA
Jon Jachimowicz, Columbia University, USA
Eric Johnson, Columbia University, USA
Elke Weber, Columbia University, USA

We explore how default effects are moderated by decision makers' pre-existing preferences. Default effects are significantly enhanced when the intent of the choice architecture intervention is consistent with the preferences of the decision maker and when existing preferences are uncertain.

The Risk of Virtue

Boyoun (Grace) Chae, Temple University, USA
Hyun Young Park, China Europe International Business School, China
Katherine White, University of British Columbia, Canada

While prior research has examined the impact of corporate social responsibility (CSR) on consumers' attitude toward the company and its products no extant research has investigated how CSR affects consumers' risk-taking decisions. The current research explores how CSR influences consumers' financial risk-taking depending on their belief in a just world.

The Donation to The Emergent-poor and to The Prolonged-poor Victims

Chia-Chi Chang, NCTU, Taiwan

Study one suggests distinct processing modes lead to different levels of willingness to donate money to the emergent-poor vs. the prolonged-poor. Study two shows preference of donating to the emergent-poor over to the prolonged-poor is also found to be affected by raising appeals (sympathetic vs. inspiring).

Consumer Responses to Green Messages: The Mediating Role of Perceived Personal Contribution

Ming-Yi Chen, National Chung Hsing University, Taiwan

This research explores how congruous attributes claim in green product communication elicit perceived personal contribution and brand attitudes by considering two boundary conditions (i.e. appeal type and message frame). Research on this topic has the potential to provide a more comprehensive and meaningful account of green advertising than currently exists.

The Reversed Endowment Effect in Living-Goods Transactions

Rui Chen, Xiamen University School of Journalism and Communication, China
Leonard Lee, National University of Singapore Business School, Singapore
Yuhuang Zheng, Tsinghua University School of Economics and Management, China

Prior research has shown that the endowment effect is sizable and robust. However the results of four studies suggest that the endowment effect may be reversed in transactions involving living objects implicating the role of psychological ownership—in particular perceived accountability and anticipated costs of ownership—in this effect reversal.

The Effect of Power on Consumers' Preferences for Nostalgic Products

Huan Chen, Renmin university of China, China
Sheng Bi, Renmin university of China, China
Jun Pang, Renmin university of China, China
Lingyun Qiu, Peking University, China

This research proposes the effect of power on consumers' preferences for nostalgic products. Results from two studies show that consumers with lower power are more likely to purchase nostalgic products. In addition the motivation to search for meaning in life works as the underlying mechanism that accounts for this effect.

The Effect of Smiling Expression on Status Perception and Product Evaluation

Yunqing Chen, the Chinese University of Hong Kong, China
Robert S. Wyer, the Chinese University of Hong Kong, China

We examined the effects of an endorser's facial expression on consumers' reactions to endorsers used in print ads and the consequent impact of these reactions on evaluations of the products being promoted. One study showed that people perceive a smiling female to have lower social status than a nonsmiling female but perceive a smiling male to have higher status than a nonsmiling male. These attributions in turn influenced evaluations of the products that the endorsers promoted. However smiling also influenced consumers' liking for the endorser and thus had a direct effect on product evaluations independently of status.

#ConsumerActivism: How Online Consumer Activism Impacts Brand Change

Amber M. Chenevert, St. John's University, USA
Aleksandr V. Gevorkyan, St. John's University, USA

The authors sought to understand the motivations actions and expectations of both online consumer activists and brand executives who have encountered consumer activist campaigns. This research contains online consumer activism implications for brand managers economics and marketing theory integration and introduces qualitative research to a largely quantitative area of study.

Voters' Processing Mindsets and Construing Modes of Campaign Advertising

Hsuan-Yi Chou, National Sun Yat-sen University, Taiwan

Based on theories on attitude change resistance to persuasion and construal-level theory this study examines how party consistency and the timing of broadcasting campaign advertisements affect voters' processing mindsets and construing modes of advertising messages and therefore investigates their responses towards advertisements. The findings contribute to political-marketing research and practice.

Being an Underdog or a Frontrunner: The Effects of Candidate Labels on Voters' Responses

Hsuan-Yi Chou, National Sun Yat-sen University, Taiwan

Despite pervasive use of the underdog and frontrunner labels in elections related studies are still scant. This study examines the relative effects of labeling candidates as underdogs vs. frontrunners in political communications and explores the moderation of candidate-related and voter-related variables. Research results contribute to political-marketing theories and practices.

The Price is Right – Activation of Mating Goals as Driver of Price-Based Quality Inferences

Fabian Christandl, Fresenius University of Applied Sciences, Germany
Mario Pandelaere, Virginia Tech, USA
Sebastian Berger, University of Bern, Switzerland

Three studies demonstrate that activation of mating goals may strengthen the belief that price signals quality. They further show that this effect is mediated by feelings of prominence and status that higher prices signal to people and in line with evolutionary psychology that the effect is limited to male participants.

Consumers' Motivations for Engagement in the Sharing Economy

Jaeyeon Chung, Columbia University, USA
Gita Johar, Columbia University, USA
Oded Netzer, Columbia University, USA
Matthew Pearson, Airbnb, USA

We use Airbnb host rent-out database (N = 24053) to suggest that consumers who are driven by intrinsic motivations (e.g. meeting people and sharing beauty) are more likely to be successful in renting out their properties than hosts who are driven by extrinsic motivations (e.g. earning cash).

Reflexive Habitus and Consumption: Negotiation and (Re)Stabilization of Social Class in Czech Republic

Zuzana Chytkova, University of Economics, Prague, Czech Republic

The concept of reflexive habitus (according to which self-reflexivity can become habitual and thus a “second nature”) is used as a conceptual tool to describe how consumption is used to negotiate and (re)stabilize social class in a context in which the social structure has been disrupted by a neoliberal transformation.

How Health-based Body Image Stereotypes in Advertising Perpetuate Unhealthy Consumption Decisions Among at Risk Populations

Scott Connors, Washington State University, USA
Katie Spangenberg, University of Washington, USA
Andrew Perkins, Washington State University, USA
Mark Forehand, University of Washington, USA

The use of health-based body image stereotypes in advertising is shown to lead overweight consumers to make unhealthy product choices as a function of their own self body-image. An overweight implicit body image drives perceptions of product-model fit leading to more positive (negative) attitudes towards unhealthy (healthy) products.

Making Salient Immediate Post-consumption Affects Promotes Healthy Food Choices

Olivier Corneille, Université catholique de Louvain, Belgium
Claudia Toma, Université libre de Bruxelles, Belgium
Marcel Zeelenberg, Tilburg University, Netherlands

Three studies show (1) that consumers expect more instant than post-consumption satisfaction when choosing hedonic over healthy food items (2) more post-consumption than instant satisfaction when choosing healthy over hedonic food items and (3) that orienting consumers' attention on immediate post-consumption affects redirects their choice towards more healthy food options.

How Appropriate is Appropriation as a Branding Tool? Commercialization and the Value of Experiences

Gert Cornelissen, Universitat Pompeu Fabra, Barcelona, Spain
Galli Maria, ESADE Business School, Spain
Joan Serra, Universitat Pompeu Fabra, Barcelona, Spain

Previous research has demonstrated how advertising and branding efforts that appropriate valued aspects of life are successful in building a favorable brand image. In this paper we study whether such efforts can crowd out the pleasure inspiration or value that people derive from those areas in life.

Finding the Right Corporate Social Responsibility: How Identity Goals Influence Brand CSR Strategies

Diego Costa Pinto, ESPM Business School, Brazil
Márcia Maurer Herter, FADERGS Business School, Brazil
Dilney Gonçalves, IE Business School - IE University, Spain
Eda Sayin, IE Business School - IE University, Spain

Past research implies that sophisticated brands may not benefit from CSR. We demonstrate that priming consumers' identity goals moderates the effect of brand personality on perceived brand social consciousness. When social (personal) identity goals are primed consumers choose CSR with focus on self-(other) benefits for sophisticated (sincere) brands.

Signal with Cost: When and Why Identity Signals Are Perceived to Be Authentic

Katherine M. Crain, Duke University, USA
James R. Bettman, Duke University, USA
Mary Frances Luce, Duke University, USA

Punks signal with mohawks and piercings but sometimes they are called poseurs. How do observers judge the authenticity of a signaling consumer? We suggest that observers judge a signaling consumer's authenticity by inferring his or her willingness to accept the costs associated with his or her signal which is directly moderated by the positivity of the identity being signaled.

Message Not Received - The Effects of Creditor Pressure in Consumer Debt Management

Anna Custers, University of Oxford, UK

Survey data suggests that avoiding creditors is a common behavior by over-indebted consumers and is positively associated with debt levels negative emotions towards debt and creditor pressure. This behavior cannot be explained by observable individual characteristics. The results suggest that creditor pressure can increase avoidance and therefore can be counterproductive.

The Early Bird Gets the Worm: The Effect of Habituation on the Effectiveness of Counter-Attitudinal Appeals

Steven Dallas, New York University, USA
Gavan Fitzsimons, Duke University, USA

In a lab study and a field study the current research finds that counter-attitudinal persuasive appeals can have a greater impact on behavior after people habituate to them. This flies in the face of current practice which typically involves making counter-attitudinal appeals as in-your-face and attention-grabbing as possible.

The Effect of Moral Identity on Compensation Evaluation: Is Monetary Compensation Always Better?

Ahmad Daryanto, Lancaster University, UK
Felix Martin, Lancaster University, UK
Laura Salciuviene, Lancaster University, UK

We demonstrate how moral identity affects consumers' evaluation of damages vs. free repair compensation in a product moral crisis situation. Our findings reveal that it impacts the evaluation differently contingent upon the duration of product ownership.

Marketplace Mythology and the Politics of Identity

Ronnie Das, Coventry University, UK

This study recalls how the interdisciplinary field of cultural research has prioritised the investigation of 'Politics of Consumer Identity work' as a developing field of enquiry. Following this theoretical lead this study sought to understand the consequences of cultural branding in generating identity politics surrounding men and their two-wheeler machines.

Materialism and Participation in Sharing Practices

Alexander Davidson, Concordia University, Canada
Mohammad Reza Habibi, California State University Los Angeles, USA
Michel Laroche, Concordia University, Canada

The current research demonstrates that materialistic values are strongly associated with willingness to participate in sharing practices (i.e. couch surfing) due to the appeal of social status display. Because of a lack of appeal this effect does not carry over towards practices referred to as 'pseudo-sharing' (i.e. Airbnb).

A Theoretical Perspective on Guilt and Materialism in Helping Behavior

Ramona De Luca, FGV-EAESP, Brazil
Delane Botelho, FGV-EAESP, Brazil
Mateus Ferreira, FGV-EAESP, Brazil

In this theoretical paper we discuss the positive effect of a negative emotion such as guilt on individuals' attitudes toward charitable giving. In particular we propose that this effect is stronger for individuals with high levels of consumer materialism when compared with their low-materialism counterparts.

To Share or Not to Share: Coupon-sharing as a Way to Increase Expenditures of Face Concerned Consumers

Eline de Vries, University Carlos III of Madrid, Madrid, Spain
Sha Zhang, University of Chinese Academy of Sciences, Beijing, China

Unlike previous literature focusing on traditional non-shareable coupons this study highlights a new form of coupons that can be shared with friends. Across studies conducted in the U.S. and China we find convergent results that high face concerned consumers are willing to spend more to obtain shareable than non-shareable coupons.

Research Reflections on Mobile Phone Visual Ethnography in Ghana, West Africa: Bridging Mobile Phone Ethnography and Transformative Photography

Benét DeBerry-Spence, University of Illinois at Chicago, USA
Akon Ekpo, Rutgers University, USA
Dan Hogan, University of Illinois at Chicago, USA

While the proliferation of mobile phones in developing countries has been well documented researchers have not fully capitalized on this technology to inform ethnographic inquiries. Based on a study with consumer-merchants in West Africa we present mobile phone visual ethnography as a promising methodology for consumer research in emerging markets.

How Thinking Style Impacts Consumer Reactions to Corporate Social Responsibility

Yoshiko DeMotta, Fairleigh Dickinson University, USA
Catherine Janssen, IÉSEG School of Management, France
Sankar Sen, Baruch College, USA

We examine how consumers' thinking style may impact their evaluation of CSR. We show that analytical thinkers evaluate companies more positively when the company-cause fit is high (vs. low) holistic (vs. analytical) thinkers evaluate companies more positively when the fit is low. CSR attributions mediate these effects.

How Youtube Storytelling Can Win Consumers' Hearts: The Case of Nivea

Laurence Dessart, Kedge Business School, Dep. of Marketing, Bordeaux, France
Valentina Pitardi, Luiss University, Dep. of Business Management, Rome, Italy

The study explores the role of storytelling in generating positive consumer responses to video ads compared to fact-based ads. The findings support the relevance of storytelling in enhancing consumer-brand relationship and show how a co-creation process in the evolution of a brand's storytelling content contributes to large and positive consumer responses.

The Effect of Visual Transparency on Taste Perception

Isabel L. Ding, National University of Singapore, Singapore
Miaolei Jia, National University of Singapore, Singapore

We demonstrate that individuals perceive the same beverage to be thicker when it is served in a visually opaque (vs. transparent) container. This effect arises because individuals attribute the perceived thickness of the beverage to the visual density of the container that it is served in.

The Effect of Gender-Scent Congruity on Product Evaluation and Purchase Intention

Isabel L. Ding, National University of Singapore, Singapore
Ming Ming Loo, National University of Singapore, Singapore
Xiuping Li, National University of Singapore, Singapore

Gender-scent congruity (e.g. female consumers exposed to feminine scents) enhances consumers' product evaluation purchase intention and willingness to pay for gender-neutral products (e.g. backpacks) when consumers engage in self-expression considerations. This effect is further moderated by the gender of the spokesperson in the product advertisement.

The Effect of Feedback Frequency on Goal Performance

Isabel L. Ding, National University of Singapore, Singapore
Leonard Lee, National University of Singapore, Singapore

Frequency of feedback given to individuals when pursuing a goal has an effect on their goal performance. Long-interval feedback (feedback given at longer regular intervals) leads to higher goal performance than short-interval feedback (feedback given at shorter regular intervals).

Do You Cut In Line?

Predicting Individuals' Compliance to Social Norms From Day-to-Day Behavior.

Michael Dorn, University of Bern, Switzerland
Adrian Brügger, Universität in Cardiff, Wales
Claude Messner, University of Bern, Switzerland

This paper demonstrates the predictive validity of a recently developed conformity scale in which consumers self-report day-to-day behavior. This conformity scale is the only one constructed on a Rasch model hence incorporating both the probability of the behavior and the costs related to reporting engagement in this behavior.

Exploring Food Waste: The Role of Health Motivation

Marit Drijfhout, Research Master Student, Rijksuniversiteit Groningen, The Netherlands
Jenny van Doorn, Associate Professor of Marketing, Rijksuniversiteit Groningen, The Netherlands
Koert van Ittersum, Professor of Marketing and Consumer Well-Being, Rijksuniversiteit Groningen, The Netherlands

We propose that consumers' intentions to eat healthy impact food waste. A field experiment measuring actual food waste and a household food waste diary study both consistently show that consumers with a higher degree of autonomous health motivation waste less food.

Reward-Based Crowdfunding: The Roles of Funders

Natalia Drozdova, Norwegian School of Economics, Norway
Ingeborg Kleppe, Norwegian School of Economics, Norway

In different types of crowdfunding projects the nature of relations between founders and funders can differ significantly. Our analysis of the Oculus Rift case demonstrates how funders negotiate their roles in a reward-based crowdfunding project as the project evolves from social towards commercial logic dominance.

Why Giving to Others Can Both Help and Hinder Persuasion: The Influence of Product Type on One For One Promotions

Riley Dugan, University of Dayton, USA
Joshua Clarkson, University of Cincinnati, USA
Joshua Beck, University of Oregon, USA

Despite considerable acclaim little is known regarding the efficacy of one for one promotions. This research demonstrates that these promotions have differential effectiveness on the basis of product type (hedonic v utilitarian). Furthermore we find that an individual's competing needs of belonging and uniqueness underlie the effectiveness of this model.

On The Cutting Edge: The Relationship Between Expertise and Social Influence in Evaluating Normative and Innovative Opinion

Riley Dugan, University of Dayton, USA
Joshua Clarkson, University of Cincinnati, USA
Cammy Crolic, University of Florida, USA

The present research examines the importance of the social knowledge signaled by statistical majorities and minorities (i.e. normative adherence versus innovative thought). In particular we posit that the majority position signals reliance on the socially-accepted position whereas the minority position signals reliance on an alternative to the socially-accepted position.

A Fresh Light on Choice Regret

Marcel Escher, University of Bamberg, Germany
Steffen Wöflf, University of Bamberg, Germany

Choice regret is a retrospect experience with important implications for consumer behavior in future decision situations. This research uses polynomial regression analysis and response surface analysis to deepen the understanding of choice regret. A study in the higher education context shows how an expectation-performance discrepancy affects choice regret.

Chirping Birds and Freshly-Cut Grass: The Role of Incidental Sensory Cues on Pro-Environmental Purchases

Sina Esteky, University of Michigan, USA

Can sensory factors in a retail store subtly nudge consumers towards green products? There is reason to believe so. This research investigates auditory and olfactory cues and finds evidence that incidental exposure to nature-related sensory cues may indeed influence product preferences and pro-environmental choices.

Shedding Light on the Influence of Illumination on Social Behaviors

Sina Esteky, University of Michigan, USA
David Wooten, University of Michigan, USA
Maarten Bos, Disney Research Pittsburgh, USA

Three studies provide empirical evidence that illumination affects social behaviors. We find that participants in bright (versus dim) settings demonstrate greater consideration of others' opinions needs rights and viewpoints; public self-consciousness mediates the effect of illumination on social behaviors; and the effect is reversed when social desirability is not relevant.

Sensitivity to Price Changes: A Study Within the Prospect Theory

Andrzej Falkowski, SWPS University of Social Science and Humanities, Warsaw, Poland
Robert Mackiewicz, SWPS University of Social Science and Humanities, Warsaw, Poland
Nina Chrobot, SWPS University of Social Science and Humanities, Warsaw, Poland

Prospect theory assumes that people derive utility from the perspective of gain or loss. We present two experiments that show that consumers are more price sensitive when they provide the price that would discourage them from the purchase in comparison with the price that they would accept

Social Crowding and Consumer Reactance toward Service Providers

Linying Fan, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Two experiments revealed that a crowded environment increase consumers' reactance toward service providers who are perceived as warm and caring compared with consumers in uncrowded environments. Moreover this effect of crowding on reactance toward warm service providers is mediated by a heightened desire for social distance from others.

Financial Constraint Decreases Consumers' Variety Seeking Behavior

Yafeng Fan, Renmin University of China, China
Jing Jiang, Renmin University of China, China
Lin Jiang, Renmin University of China, China

This study examines the effect of financial constraints on consumer' variety-seeking behavior. Using different measures of variety-seeking choice we conducted three experiments to demonstrate that financial constraints increase consumers' insecurity which in turn decreases their variety seeking behavior. The moderating role of materialism in this effect was also examined.

On Aesthetic Pleasure: The Uncertainty-Reducing Role of Processing Fluency

Ali Faraji Rad, Nanyang Technological University, Singapore
Michel Tuan Pham, Columbia University, USA

We propose that the effect of fluency on aesthetic pleasure relates to fluency's role in reducing uncertainty: resolution of uncertainty is pleasurable; fluency contributes to faster uncertainty resolution and creates aesthetic pleasure. Three studies show that the effect of fluency on aesthetic pleasure attenuates when people are certain (vs. uncertain).

How One-Step (vs. Gradual) Presentation of Change Affects its Perceived Magnitude - The Role of Identity

David Faro, London Business School, UK
Emre Ozdenoren, London Business School, UK
Anja Schanbacher, London Business School, UK

Overall change in a stimulus is perceived to be larger when presented in one step vs. gradually but only when the changing stimulus has an underlying identity (e.g. a person or brand). Our findings suggest this is because one-step (vs. gradual) change causes stronger perceived disruption of the underlying identity.

Health is Up, Indulgence Down. Effects of the Vertical Location of Food Product Claims on Consumer Response

Alexandra Festila, MAPP Centre, Department of Management, Aarhus University, Denmark
Polymeros Chrysochou, MAPP Centre, Department of Management, Aarhus University, Denmark

Our research indicates that the position of specific food claims along the vertical dimension (of ads and packages) influences consumers' response such that products will be preferred when health-related claims are at the top and indulgence-related claims at the bottom.

The Dark Side of Connected Health Technology: How Connectivity Creates Exercise Addiction among Conscientious Users

Sandy Fitzgerald, RMIT University, Australia
Luke Kachersky, Fordham University, USA
Natalya Saldanha, RMIT University, Australia
Emily Chung, RMIT University, Australia
Lisa Farrell, RMIT University, Australia
Gaurangi Laud, RMIT University, Australia
Kaleel Rahman, RMIT University, Australia
Mike Reid, RMIT University, Australia
Linda Robinson, RMIT University, Australia

For many users connected health technologies (CHTs; e.g. diet and fitness apps) promote positive behavioral changes through simple psychological mechanisms. Yet emerging evidence suggests CHTs may compel some users to pursue health goals at unhealthy levels. This research examines if how and for which users CHTs foster exercise addiction.

The Effects of Selective Attention on Choice: An Eye-Tracking Study

Arnd Florack, University of Vienna, Austria
Martin Egger, University of Vienna, Austria

We conducted an eye tracking experiment to examine the effects of selective attention on consumer choice. We showed that selective attention influences preferences in consumer choice and provide new insights into the understanding of the mechanisms underlying the effects of selective attention on preferences.

Illusion of Illustration: The Impact of Picture Style on Dieters' Perception of Vice Food

Pei-Wen Fu, National Sun Yat-sen University, Taiwan
Pei-Chi Chen, National Sun Yat-sen University, Taiwan
Ying-Ying Li, National Sun Yat-sen University, Taiwan
Chun-Tuan Chang, National Sun Yat-sen University, Taiwan

This research investigates how different picture styles (photograph versus illustration) and dieting tendency influence consumers' perception of vice food. The results show that illustrated rather than photographic picture results in a healthier perception of vice food for dieters. Besides dieters' attention focus serves as the underlying mechanism.

Regaining Control or Avoiding Risk: When Social Crowdedness Inhibits versus Encourages Preference of DIY Product

Pei-Wen Fu, National Sun Yat-sen University, Taiwan
Chun-Ming Yang, Ming Chuan University, Taiwan
Chi-Cheng Wu, National Sun Yat-sen University, Taiwan

This paper proposes an important outcome of social crowdedness loss of control which results in the motivation of control restoration and the preference for control regaining products (DIY product). The results also showed that when DIY product fails to be a mean of control restoration avoidance motivation dominates consumers' choice.

Materialism, Green Values, and Well-Being: A Conflicting Values Perspective

Pia Furchheim, HEC Lausanne, Switzerland
Christian Martin, HEC Lausanne, Switzerland
Felicita Morhart, HEC Lausanne, Switzerland

People can endorse simultaneously green and materialistic values. Across two studies we show that the resulting latent value conflict is associated with increased psychological tension and reduced well-being. Moreover latent value conflict impacts psychological tension in part through experienced value conflict.

Magnitude Matters: The Role of Anger Intensity in Interpersonal Perceptions

Celia Gaertig, University of Pennsylvania, USA
Alixandra Barasch, University of Pennsylvania, USA
Emma Levine, University of Pennsylvania, USA
Maurice Schweitzer, University of Pennsylvania, USA

How does the magnitude of an anger expression influence interpersonal perceptions? We find that extremely angry people are perceived to be less competent and warm and receive less status in interpersonal interactions. Our results demonstrate that magnitude matters: the social consequences of emotion hinge on the magnitude of emotional expressions.

Using EEG to Understand The Brain Processing Mechanism of Irrational Consumption Bias Rooted in Different Income Sources

Fei Gao, HEC Paris, France

This research first explores consumer's cognitive neural mechanism of irrational consumption bias rooted in different income sources. Different income sources set up different brain processing mechanisms of mental accounting. P3 and LPC are the specific components which reflect different types of consumption preferences in different income source accounts.

Unintended Negative Consequences of Product Recommendations Among Prevention Focused Consumers

Arezou Ghiassaleh, University of Lausanne, Switzerland
Bruno Kocher, University of Lausanne, Switzerland
Joseph Lajos, University of Lausanne, Switzerland

Results of a behavioral experiment involving real product choices show that the provision of product recommendations decreases consumers' choice commitment when they have a prevention focus but not when they have a promotion focus and that this moderating effect of regulatory focus is mediated by decision difficulty.

Towards Better Understanding and Managing of Online Trolling Behaviors

Maja Golf Papez, University of Canterbury, New Zealand
Ekant Veer, University of Canterbury, New Zealand

Trolling is a pervasive phenomenon performed by 'real' perpetrators and at the expense of 'real' targets (people or brands). Our study defines how trolling is different from other online misbehaviors and it demonstrates how understanding the factors involved in trolling may help social marketers and managers addressing it more successfully.

Creating a Hyper-Place: How Refugee Helpers Create a Place for Their Values

Johanna F. Gollnhofer, University of St. Gallen, Switzerland

This ethnography of voluntary refugee helpers shows why and how a meaningful place is produced. By drawing on spatial theory we map out how activist consumers create a hyper-place: Embedded in the dynamics of demarcating and linking voluntary helpers set a place apart from the surrounding space and other places.

Consumers' Dissociation Responses to Incidental Similarity of Products in Different Product Domains

Xiushuang Gong, School of Business, Renmin University of China, China
Jing Jiang, School of Business, Renmin University of China, China
Lin Jiang, School of Business, Renmin University of China, China
Yan Wang, China Unicom Research Institute, China

The current research examines the effect of incidental similarity of products on consumers' dissociation responses in different product domains. Across three experiments we find that consumers' dissociation responses are higher for the incidental similarity of high symbolic products. This effect is mediated by embarrassment and moderated by group belongingness.

Linear or Nonlinear? The Effect of Product Aesthetics on Consumers' Post-purchase WOM Generation and Repurchase Intentions

Xiushuang Gong, School of Business, Renmin University of China, China
Jing Jiang, School of Business, Renmin University of China, China
Yan Wang, China Unicom Research Institute, China

The present research examines the effect of product aesthetics on consumers' post-purchase WOM generation and repurchase intentions. Across two studies we find that for products with medium quality product aesthetics of hedonic and utilitarian products both positively influence consumers' WOM generation while their effects on consumers' repurchase intentions are quite different.

How Shall I Thank Thee? Giver-Recipient Discrepancies in Preferences for Public or Private Expressions of Gratitude

Lauren Grewal, University of Pittsburgh, USA
Mary Steffel, Northeastern University, USA
Dhruv Grewal, Babson College, USA

This research examines how people prefer to give and receive gratitude and whether recipients accurately predict and respond to givers' preferences for receiving thanks. Across three studies we show that recipients fail to anticipate gift giver responses to public gratitude; causing recipients to miss opportunities to enhance gift givers' experiences.

Head in the 'Cloud': Online Information Search Inflates Consumers' Self-Confidence in Personal Decision-Making Ability

Tito L. H. Grillo, Federal University of Rio Grande do Sul, Brazil
Adrian F. Ward, University of Texas at Austin, USA
Cristiane Pizzutti dos Santos, Federal University of Rio Grande do Sul, Brazil

Consumers increasingly rely on the Internet to prepare for future decisions and experiences. This study shows that accessing information through online search (vs. accessing without online search) elicits a false sense of "already knowing things" which increases consumers' confidence in their own decision-making abilities.

Does This Dog Make Me Look Fat? The Liberating Effect of Choices Made for Others on Subsequent Choices for the Self

Kelley A. Gullo, Duke University, USA
Peggy Liu, University of Pittsburgh, USA
Lingrui Zhou, Duke University, USA
Gavan J. Fitzsimons, Duke University, USA

Consumers frequently make consumption choices for others. We propose that those choices affect subsequent choices made for the self. We show that a choice made for a pet's consumption that is congruent with a primary personal goal liberates subsequent pursuit of an opposing secondary goal for the self.

Two Shades of Green: Unravelling the Composition, Antecedents and Consequences of Benign and Malicious Envy on Brand Attitude

Tanvi Gupta, Indian Institute of Management Bangalore, India
Preeti Krishnan Lyndem, Indian Institute of Management Bangalore, India

Malicious (benign) envy is conceptualized as a cluster of relatively high (low) envy and low (high) admiration. Three antecedents to envy-type are identified namely deservingness relationship type and foul-play. These contextual factors differentially activate the assimilative (contrastive) emotion of admiration (envy) by influencing self-other congruence and significantly impact brand attitude.

Experiential Bridges - An Alternative Perspective on Acculturation

Aditya Gupta, University of Nebraska-Lincoln, USA
Xin Zhao, Lancaster University Management School, Lancaster, UK

This paper presents an expanded view of experiential consumption in trying to understand the consumer acculturation process for international students and uncovers three underlying themes which help explain how such individuals adjust and adapt to their different consumption context which they have to inhabit for the medium-term.

Promoting Ethical Consumption: Effects of Self Regulatory Focus on Evaluation of Multifinal Ethical Products

Rishad Habib, University of Guelph, Canada
Towhidul Islam, University of Guelph, Canada

As more companies profess their desire to fulfill ethical and functional goals the research on ethical products from a multiple goals perspective remains scant. This paper looks at ethical products as multifinal means and seeks to explore the effect of regulatory focus on evaluation of means and resource allocation.

Spending Predictions: The Effects of Unpacking Based on Typicality

Konstantinos Hadjichristidis, University of Trento, Italy
Kishore Gopalakrishna Pillai, University of East Anglia, UK
Bidisha Burman, University of Mary, Washington, USA

Spending predictions are key drivers of important life decisions so it is critical to understand the underlying psychology. We demonstrate that unpacking a target category of spending can increase decrease or leave predictions unaffected based on the typicality of the unpacked components and the perceived spending on them.

The Effect of Perceived Learning Opportunity on Consumers' Evaluations of Really New Products

Ajmal Hafeez, University College of Southeast Norway, Norway
Marit Gunda Gundersen Engeset, University College of Southeast Norway, Norway
Radu Dimitriu, Cranfield School of Management and University College of Southeast Norway, UK

We propose that consumers who are oriented towards future opportunities (learning) rather than focused on the attributes that maybe difficult to understand in the present will enhance consumers' evaluation of really-new products. Unlike previous research which has studied immediate costs-benefits we focus on consumers' long-term considerations of adopting really-new product.

Becoming an Insectivore: Results of an Experiment

Christina Hartmann, ETH Zürich, Switzerland
Michael Siegrist, ETH Zürich, Switzerland

Insects are considered as a sustainable alternative to conventional meat-based animal products however are not accepted as food by Western consumers. In this eating-experiment we explored whether or not offering insects in a processed form may facilitate the acceptance of insects in the diet in industrialized countries.

The Effects of Perspective Taking on Consumer Uniqueness-Seeking Tendency

Dongjin He, Hong Kong Polytechnic University, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

This research shows that incidental perspective-taking experiences lead consumers to become less attracted by unique products in subsequent consumption compared with those who do not take others' perspective. Moreover self-construal moderates this effect such that the effect is more salient for interdependent consumers.

Firm Power: On Its Construction and Consequences

Sharlene He, Northwestern University, USA
Derek Rucker, Northwestern University, USA

Firm power is an important aspect of the marketplace however the consumer behavior literature has limited understanding of how consumers represent firm power and the consequences of such perceptions. This research introduces and tests a model of antecedents to potential biases in and consequences of consumers' perceptions of firm power.

How Nudity in Advertising Affects Donation Behavior

Marloes Heijink, Hong Kong Polytechnic University, China
Yuwei Jiang, Hong Kong Polytechnic University, China
Jaideep Sengupta, Hong Kong University of Science and Technology, China

This research finds that exposure to nudity in advertising causes consumers to engage in more altruistic behavior as manifested both in monetary donations and intentions to donate blood. This effect is found to be mediated by the feeling of guilt elicited by viewing nudity.

The Ethical Consumption Gap in Fairtrade Consumption: How Price Importance, Habit and Ego Depletion Affect Attitude-Choice Incongruence

Atar Herziger, University of Cologne, Germany
Erik Hoelzl, University of Cologne, Germany

We examine an individual-level measure for the ethical consumption gap. In two studies involving incentive-compatible or hypothetical choices between Fairtrade and conventional products attitude-choice incongruence was significantly associated with reported price importance. In the incentive compatible design Fairtrade consumption habit and ego depletion tended to reduce the ethical consumption gap.

Shared Offline and Online Spaces of Ethical Consumption Communities

Vera Hoelscher, University of London - Royal Holloway, UK

This paper explores how the sharing of both physical and digital spaces impacts ethical consumption communities. Considering three independent sites in the London Borough of Camden through ethnography it studies the qualitative differences between offline and online spaces as well as the networks that form therein.

How Do They Feel: Categorial Sentiment Analysis of Emojis for Social Media Communication

Lisa Carola Holthoff, University of Duisburg-Essen, Germany

In electronic communication consumers increasingly use emoticons to express their emotions. We develop a categorial emoji sentiment analysis tool on the basis of a qualitative study with 900 participants and validate it with a second quantitative study. The tool simplifies the identification of emotional consumer reactions in social media communication.

Pain-Free Funeral: Creating the Market for the Bereaved in South Korea

Soonkwan Hong, Michigan Technological University, USA

This study illuminates the transformative process by which Koreans have been converted due to regulations with respect to funerary practice and unconsciously endorse the new experience industry that caters unprecedented “convenience” to the bereaved. The socio-political-cultural patterning of funeral experience is characterized as de-Confucianization which involves de-emotionalization hyper-symbolization and vulgarization.

When There’s Nothing You Can Do, an “Expansive” Window is For You: The Interaction Effect of Feelings of Personal Control and Promotion Period Framing on Promotion Evaluation

You Jeong Hong, Seoul National University, South Korea
Kyoungmi Lee, Seoul National University, South Korea

This research shows that when personal control is threatened consumers exhibit a more favorable attitude toward and a higher likelihood of participating in a promotion using expansive frame(‘anytime through Tuesday and Thursday’) than non-expansive frame(‘from Tuesday to Thursday’) to restore feelings of personal control.

Contemporary Art Consumer Experience: Using Video-Elicitation to Understand the Feeling of Strangeness

Richard Huaman Ramirez, Aix-Marseille University, France
Juan David Pinzon, Aix-Marseille University, France
Aranzazu Gaztelumendi, Aix-Marseille University, France

We analyze the feeling of strangeness of eleven visitors to a contemporary art museum by utilizing the “video-elicitation” technique combining video recording and in-depth interviews. We identified the participants values registers the terms they use to designate strangeness from artworks and the relation between the feeling of strangeness and satisfaction.

Creativity from Chaos: Disorder Material Display and Consumer Creative Success

Rong Huang, Shanghai University of Finance and Economics, China
Weiling Ye, Shanghai University of Finance and Economics, China
Darren Dahl, University of British Columbia, Canada
Yuqian Chang, Shanghai University of Finance and Economics, China

Our research demonstrated that when the materials to be used creatively are displayed in a disorderly manner people feel that they are more creative (i.e. subjective creativity) and objectively rated more creative in accomplishing a creative task. Subjective creativity also increase evaluations of the products/tools they are using.

Feeling of Luck Drives Preference for High-Effort Products and Activities

Feifei Huang, Chinese University of Hong Kong, China
Meng Zhang, Chinese University of Hong Kong, China
Yuwei Jiang, Hong Kong Polytechnic University, China

The current research examines the effect of incidental feeling of luck on consumers’ preference for high-effort products and activities. We find that feeling of luck increases consumers’ action tendency which in turn leads consumers to prefer high-effort products and activities over low-effort ones.

Responses to Injustice: Affect, Threats to Social Self-Esteem, and Materialism

Feifei Huang, Chinese University of Hong Kong, China
Robert S. Wyer Jr., Chinese University of Hong Kong, China

Five experiments demonstrate that people become more materialistic when the retributive and distributive justice of their misfortune are both high or both low. These effects are driven by the intention to boost social self-esteem and to eliminate the negative affect that results from the loss of this esteem.

The Effect of Personal Relationships on Pro-social Giving Behavior: Faith Based Giving

Jane Hudson, Plymouth University, UK
Jen Shang, Plymouth University, UK

How does the nature of our religious and personal relationships impact on our pro-social faith based giving behavior? We explore through experimental research how 'knowing' and 'caring' relationships with others influences financial generosity. Findings suggest 'caring' about siblings spouses and friends makes us more generous.

A Finite Pool of Worry

Brian Huh, Columbia University, USA
Ye Li, University of California Riverside, USA
Elke Weber, Columbia University, USA

People have finite cognitive resources in dealing with news. We tested the "finite pool of worry" hypothesis: Does worrying about one issue reduce worrying for other (perhaps more) important issues? We show that inducing concerns about an issue increases worry for that issue at the expense of other important issues.

Creative Power of Unique Fashion: Identifiable by Others or Exclusive for Yourself

San Young Hwang, Korea University, Korea
Nara Youn, Hongik University, Korea
Min Jung Koo, Sungkyunkwan University, Korea

We find that extraversion moderates the behavioral priming effect of unique fashion on wearers' creativity. "Self-awareness of being in the social spotlight" mediated the relationship for extraverts wearing bluntly unique clothing and "self-awareness of own distinctiveness that others don't notice" explained the effect for introverts wearing clothe with hidden uniqueness.

Retailer Pricing as Reassurance: Discounts and the Transaction Utility of Conflicted Consumers

Chris Hydock, Georgetown University, USA
Luc Watieu, Georgetown University, USA

Retailers often either follow "every-day low pricing" (EDLP) or "high-low" (Hi-Lo) models; recent research finds that consumers' perceive the EDLP model to be cheaper. This research indicates that despite the price perceptions Hi-Lo pricing offers consumers particularly price-quality conflicted consumers transaction utility not available through EDLP.

Food Label Use by Functionally Low-Literate Consumers in a Rural South African Context

Fay Irvine, North-West University, South Africa
Daleen Van der Merwe, North-West University, South Africa
Hanlie Van Staden, North-West University, South Africa
Magdalena Bosman, North-West University, South Africa
Susanna Ellis, North-West University, South Africa

This study investigated food label use by functionally low-literate consumers in a South African rural area. Respondents sometimes read labels and understood simple label information but struggled with more complex information and symbols. The provision of easily understandable labels for low-literate consumers to facilitate informed decisions will also benefit manufacturers.

Self-Reference as a Trigger of the Inner Prosecutor: The Moderating Role of the Self-Reference Effect on the Relationship between Consumers and Transgressor Brands

Didem Gamze Isiksal, Istanbul Technical University, Turkey
Elif Karaosmanoglu, Istanbul Technical University, Turkey

This study analyzes the interplay between self-reference effect and corporate brand transgressions on consumer punishing behavior. By a 2x2 experimental design it is found that the interaction effect between self-reference and no self-reference groups and transgression levels causes a dramatic increase in punishing behavior under mild transgression rather than severe transgression.

Delegitimation of a Cultural Product: The Case of Turkish TV drama Behzat C.

Anil Isisag, University of Wisconsin - Madison, USA

This study examines the process of marketplace de-legitimation during which consumption practices are challenged and eliminated from the marketplace as a consequence of their inability to comply with become associated with and alter the definitions of legitimacy.

Patterns of Emotional Brand Experiences Across Cultures: The Role of Context and Social Orientation of Emotions

Alexander Jakubanees, Norwegian School of Economics, Norway
Magne Supphellen, Norwegian School of Economics and Business Administration, Norway
Hege-Mathea Haugen, Telenor Research, Telenor Group, Norway
Njål Sivertstøl, Telenor Research, Telenor Group, Norway
Nhat Le, Norwegian School of Economics, Norway

There is a lack of frameworks predicting under what conditions different brand emotions will be observed across cultures. We address this limitation by focusing on the social orientation of emotions and field dependency theories. One important finding is that brands evoke theoretically atypical emotions in an interdependent culture.

Effects of Dialecticism on Consumer Responses to Products With Conflicting Goals

Alexander Jakubanees, Norwegian School of Economics, Norway
Alexander Fedorikhin, Indiana University, USA
Nina Iversen, BI Norwegian Business School, Norway

Research on drivers of consumer reactions to healthy vices (indulgent products with healthy claims) has been limited. We focus on dialecticism to predict and explain responses to these products within and across cultures. One important finding is that dialectical consumers (vs.non-dialectics) are significantly more accepting of products with conflicting goals.

Mortality Beliefs Distorted: Magnifying the Risk of Dying Young

Peter Jarnebrant, BI Norwegian Business School, Norway
Kristian O. R. Myrseth, University of St Andrews, UK

We explore mortality beliefs by eliciting individual-level belief distributions for participants' remaining lifespans. We find simultaneous great pessimism (about dying at < 50 years) and great optimism (about dying at > 100 years) compared to demographic data. This has important implications for a range consumer behavior including intertemporal choice.

Can the Color Value Affect Perceptions on Homosexual Images?

Eunmi Jeon, Sungkyunkwan University, South Korea
Myungwoo Nam, Sungkyunkwan University, South Korea

The current research examines how can color value affects perceptions on homosexual images. Our research aims to evaluate how an increased in color value results to a morally upright perception on homosexual images. A homosexual image on lighter tone yielded a positive attitude than that on a darker tone.

Seeking Indulgence by Involving Others

Miaolei Jia, National University of Singapore, Singapore
Gita Venkataramani Johar, Columbia University, USA
Leonard Lee, National University of Singapore, Singapore

We demonstrate that consumers are more likely to strategically involve others when they seek indulgence. This effect is mediated by the feeling of guilt. Accordingly promotions that involve others (e.g. "Buy one and get one free for your loved one") increase purchase intention for vice but not virtue products.

Lack of Control and Preference for Tangible Products

Li Jiang, UCLA, USA

We show consumers cope with lack of control by choosing tangible products over intangible counterparts. In three studies we show individual differences in desirability of control predicted choices of tangible products over intangible counterparts and participants who were made to feel lack of control chose tangible products over intangible counterparts.

Pride and Dishonesty-Why does Authentic Pride Lead to More Dishonesty?

Jinfeng (Jenny) Jiao, SUNY Binghamton, USA
Cathy Cole, University of Iowa, USA
Gary Gaeth, University of Iowa, USA

This paper focuses on authentic pride and hubristic pride as antecedents to consumer dishonesty and has both theoretical and empirical implications. We further examine the moderating role of cognitive resources in influencing pride effects on dishonesty. We demonstrate that it is moral disengagement that mediates the found effect.

Buyers Are More Impatient Than Sellers: The Timing of Peak Influences Satisfaction in Experiential Purchase

Zhenyu Jin, Shanghai Jiao Tong University, China
Wei Lu, Shanghai Jiao Tong University, China
Meng Duan, Shanghai Jiao Tong University, China
Jin Luo, Shanghai Jiao Tong University, China

Previous research demonstrated that the later the peak occurs the greater happiness people feel (Baumgartner et. al. 1997; Fredrickson and Kahneman 1993). We proposed that experience-buyer becomes more impatient than experience-seller while waiting for the delayed peak of an experience due to varying construal levels.

I Bought That First And You Know It: The Influence of Ambivalent Mimicry on the Desire for Social Approval

Sunghee Jun, Seoul National University, Korea
Y. Jin Youn, Seoul National University, Korea
Kiwon Park, Seoul National University, Korea

Prior research shows that mimicry can lead to dissociation responses due to its threat on uniqueness as well as a sense of social approval. However we argue that consumers who experience ambivalent mimicry will not value the product less nor dislike it but will seek ways to gain social approval.

Fathers are not Like Mothers: How Males and Females Differ in the Effect of Political Identity on Their Children's Educational Spending

Jihye Jung, Rice University, USA
Vikas Mittal, Rice University, USA

Through four studies this research examines the effect of parents' political identity on their spending decision on child's education. We find that conservatives prefer conformance-style education whereas liberals are more supportive of independent-style education. Further we identify this matching effect differs by individuals' self-versus other focus.

This Brand is MINE: Brand Psychological Ownership as a Distinct Construct and Powerful Driver of Consumer Behavior

Bernadette Kamleitner, Wirtschafts University, Austria
Sophie Süssenbach, Wirtschafts University, Austria
Carina Thürridl, Wirtschafts University, Austria
Ruta Ruzeviciute, Wirtschafts University, Austria

Marketers often aim to make consumers experience a brand as "mine" i.e. they hope to initiate psychological ownership (PO) for their brand. Across three studies we show that brand PO is a conceptually distinct construct with explanatory power above and beyond other brand relationship constructs such as attachment.

Do I More (or Less) Deeply Process Messages When I Am the Source? The Effect of Customization on Information Processing Mediated by Perceived Control, Perceived Identity and Self-Control Resources

Hyunjin Kang, Nanyang Technological University, Singapore

By customizing their own media technologies consumers become active sources rather than passive audiences in communication processes. The study investigates the effect of customization on how consumers process product-related information. The study also tests how psychological outcomes of customization (i.e. perceived control and identity) and self-control resources mediate this effect.

"Prosociality Lies in the Mind of the Believer": Differential Impacts of God and Religion on Prosocial Intentions

Mustafa Karatas, Koc University, Turkey
Zeynep Gürhan-Canli, Koc University, Turkey

We examine distinct cognitive consequences of two important religious concepts –God and religion– as they pertain to prosocial intentions. We show that God (vs. religion) reminders lead to higher (vs. lower) mind-set abstraction and increase compliance with abstractly (vs. concretely) framed messages and heightens prosocial tendencies toward psychologically distant (vs. close) targets.

Entitled to Spend: Discourse Analysis as a Framework for Understanding Student Buying Behaviour

Matthew Kearney, Ulster University, Ireland
Lorna Stevens, University of Westminster, UK
Pauric McGowan, Ulster University, Ireland

Drawing on discourse analysis this qualitative exploratory study identifies a discourse of entitlement amongst student consumers enabling them to justify compulsive buying and other maladaptive spending habits. Three sub-themes Deservedness Defiance and Desire for Distinction were identified within this framework highlighting the wider societal context within which individual spending occurs.

Sexualized but not Objectified - When do Women React Negatively Towards Sexualized Advertisements

Matthias Keller, University of Basel, Switzerland
Leonie Reutner, University of Basel, Switzerland
Mirella Walker, University of Basel, Switzerland
Rainer Greifeneder, University of Basel, Switzerland

Sex-Sells is a commonly used strategy which is often received negatively by women. Two studies investigated the underlying processes and indicate that it is not the sexualization per se but the objectification of the model that causes negative evaluations especially when oneself feels close to the model.

Do We Truly Like Those Who Work for It? The Effects of Consumption on Evaluations of Others Spending Earned Wealth

Corinne Kelley, Florida State University, USA
Martin Mende, Florida State University, USA
Maura Scott, Florida State University, USA

Two studies demonstrate that under automatic processing attitudes toward successful others with earned wealth decline when the target's consumption behavior is made salient. This effect is attenuated with systematic processing. The effect is mediated by jealousy and a decline in belief in a just world.

Involving Others in Sustainable Consumption: The Positive Impact of Exemplary Behavior

Corinne Kelley, Florida State University, USA
Martin Mende, Florida State University, USA
Maura Scott, Florida State University, USA

Drawing on theories of social observability impression-management and role-modeling we find experimental support for the idea that encouraging others to engage in sustainable behavior causes consumers to take on social role model responsibilities. This has downstream effects on their motivation to engage in other exemplary behaviors (e.g. healthy food choices).

Ethicality in Direct to Consumer Advertising of Prescription Medicines: Consumers' Autonomy and Safe Decision Making

Neda Khalil Zadeh, University of Otago, New Zealand
Kirsten Robertson, University of Otago, New Zealand
James Green, University of Otago, New Zealand

Self-regulation of DTCA assumes consumers can make autonomous decisions. Two population-based studies examined responding to DTCA based on attitudes knowledge and health behaviors. Attitudes and unhealthy behaviors predicted responding to DTCA so raised concerns regarding regulations on DTCA. Further research exploring factors that contribute to consumers' safe decision-making is described.

Seeking a Green City to Live in: The Differential Impact of Innovation-Based Versus Regulation-Based Environmental Policy on Willingness to Live

Sukhyun Kim, HEC Paris, France
Jaehoon Lee, Southern Illinois University, USA

In three studies we show that innovation-based policy leads to a greater willingness to live than regulation-based policy. Using a serial mediation analysis we further show that this effect is mediated by perceived innovativeness and then by perceived quality of life resulting in an increased willingness to live.

Human Model Effect? Online Visual Presentation of Fashion Merchandise

Jae-Eun Kim, Massey University, New Zealand
Kyeongheui Kim, SKK GSB, Korea
Jungkeun Kim, Auckland University of Technology, New Zealand

Fashion retailers use human models to present their merchandise. The purpose of this research is to investigate the effects of using human models on product evaluations. The results showed that it can vary depending on the level of individual's dispositional or situational visualization ability which further should be domain specific.

The Illusion of Processing Fluency on Pro-social Campaigns: Unjustifiable Efforts Produce Guilty Feelings

Yaeun Kim, Temple University, USA
Yae Ri Kim, Seoul National University, South Korea
Vinod Venkatraman, Temple University, USA
Kiwon Park, Seoul National University, South Korea

This study provides evidences that attitudes in processing pro-social campaigns are moderated by different goals. We found that if one's goal is dishonorable putting extra effort into difficult processing fluency (DPF) campaigns causes negative effects. The increase in guilt when dealing with DPF campaigns explains the underlying mechanism.

Proudly Going Green: Emotional Appeals Influence Outcomes for Environmental Marketing Challenges

Yaeun Kim, Temple University, USA
Crystal Reeck, Temple University, USA

We examined the effect of goal progress and emotional appeal messages. Findings support that emotional appeal messages increase the feeling of helping the environment and intentions to complete the marketing challenge. Subsequent experiments investigate the effect of progress in social goals on the attitudes toward pro-social behavior.

The Interplay of Happiness and Control on Reliance on Feelings versus Reasons in Decision Making

Moon-Yong Kim, Hankuk University of Foreign Studies, Korea
Sungjun Park, KAIST, Korea

Previous research has demonstrated that happy moods are known to promote feeling-based processing whereas sad moods promote reason-based processing. The current research shows that a high (vs. low) level of control in a happy situation can promote a greater reliance on feelings (vs. reasons) in making judgments and decisions.

You Stepped on My Toes: When Does Psychological Ownership Lead to Territorial Responses?

Colleen Kirk, New York Institute of Technology, USA
Scott Swain, Clemson University, USA
Joann Peck, University of Wisconsin - Madison, USA

Results of three experiments reveal that when consumers psychologically own a product they perceive infringement and behave territorially as another person signals control intimate knowledge or investment of self in the product. Infringement and territorial responses intensify when consumers believe they have more clearly signaled (i.e. "marked") their psychological territory.

Understanding Consumer Skepticism Towards Sustainable Innovations

Jan Koch, University of Groningen, The Netherlands
Koert van Ittersum, University of Groningen, The Netherlands
Jan Willem Bolderdijk, University of Groningen, The Netherlands

We offer a novel account for explaining consumers' skepticism towards sustainable innovations (e.g. insect consumption electric vehicles). We argue that adopting these innovations requires consumers to violate internalized norms which triggers negative emotions (e.g. disgust) and thus stimulating consumers to reject radical behavioral changes.

The Emotional Dynamics in Online Customer Reviews

Clara Koetz, Rennes School of Business, France
Renaud MacGilchrist, Rennes School of Business, France

Our objective is to model the nature of emotional dynamics in online customer reviews. Our findings demonstrate that rather than a diffusional process emotions switch between stochastic regimes through time. These regimes are characterized by significant changes in the temporal frequency of reviews and the transition probabilities of emotions.

Consumer Discrimination: How a Choice Mindset Influences Fairness Perceptions of Insurance Premiums

Michail Kokkoris, University of Cologne, Germany
Krishna Savani, Nanyang Business School, Singapore

We examined consumers' fairness perceptions of insurance policies that discriminate premiums based on individual behaviors or outcomes. We found that a choice mindset decreases perceptions of fairness among consumers who feel disadvantaged by the policy but increases perceptions of fairness among those who feel favored by the policy.

When do Consumers Feel More Authentic? The Interplay of Self-Control Choices and Thinking Styles

Michail Kokkoris, University of Cologne, Germany
Erik Hoelzl, University of Cologne, Germany
Carlos Alós-Ferrer, University of Cologne, Germany

We examined how consumption self-control affects authenticity for consumers with different thinking styles. Making a high self-control choice made participants with a higher (vs. lower) preference for deliberation feel more authentic whereas making a low self-control choice made participants with a higher (vs. lower) preference for intuition feel more authentic.

Do Consumer Choices Make Us Narcissists? The Role Of Self-Referencing And Self-Affirmation

Michail Kokkoris, University of Cologne, Germany
Ulrich Kühnen, Jacobs University Bremen, Germany
Constantine Sedikides, University of Southampton, UK

We examined two pathways from consumer choices to maladaptive narcissism operating in parallel. Choice yields both self-referencing and self-affirmation which in turn have opposing effects on narcissism: Whereas self-referencing increases maladaptive narcissism self-affirmation reduces it. Therefore consumer choices can simultaneously augment maladaptive narcissism via self-referencing and attenuate it via self-affirmation.

When Does Anxiety Make Consumers More Careful About Conserving Resources?

Shruti Koley, Texas A&M University, USA
Caleb Warren, Texas A&M University, USA
Suresh Ramanathan, Texas A&M University, USA

Anxiety is a multi-dimensional emotion that can be broken down into narrower categories. Individuals experience active-anxiety when they're lagging behind on goals they feel responsible for while they experience passive-anxiety when they perceive global threats that are outside their control. Active-anxiety unlike passive-anxiety increases choice for discounted products and activities.

Applications of the Need for Smell-Scale

Monika Koller, WU Vienna, Austria
Thomas Salzberger, WU Vienna, Austria
Arne Floh, University of Surrey, UK
Alexander Zauner, WU Vienna, Austria
Maria Sääksjärvi, Delft University of Technology, The Netherlands
Rick Schifferstein, Delft University of Technology, The Netherlands

Little is known about the individual propensities of consumers to actively engage their senses in purchase decision-making. This is especially true for the sense of smell. The current paper presents field applications of the Need for Smell-scale. Moreover common patterns of need for touch and need for smell are identified.

Functional Near-infrared Spectroscopy (fNIRS): A New Tool for Consumer Research?

Caspar Krampe, Heinrich Heine University Düsseldorf, Germany
Enrique StreLOW, Justus Liebig University Giessen, Germany
Peter Kenning, Heinrich Heine University Düsseldorf, Germany

As a new method for consumer research our study aims to validate the functional Near-Infrared Spectroscopy (fNIRS) in a laboratory experiment. Preliminary results indicate that the fNIRS is indeed a reasonable neuroscientific method to study consumer behaviour.

Precise Like a Swiss Watch: Semantic Precision in Marketing Communication

Ann Kronrod, Boston University, USA
Vincent Xie, University of Massachusetts, USA

Three studies reveal that semantic precision (verbally describing things exactly as they are) influences perceptions and attitudes towards products. This effect is mediated by perceived conversational cooperativeness and trustworthiness of the source. Further we find that the salience of the effect of semantic precision depends on context (hedonic/utilitarian).

The Environmental Impact of Anti-Consumption Lifestyles and Environmentally Concerned Individuals

Maren Ingrid Kropfeld, ESCP Europe, France
Marcelo Vinhal Nepomuceno, HEC Montreal, Canada
Danilo Dantas, HEC Montreal, Canada

Our findings indicate that certain anti-consumption lifestyles (i.e. voluntary simplicity and tightwadism) have lower environmental impact than being concerned with the environment suggesting that resisting consumption offers an alternative way towards more sustainable consumption. Voluntary simplicity has the lowest environmental impact of the lifestyles studied frugality the highest

Boomerang Effect of Conditional Promotions in Shopping Cart Abandonments

Atul Kulkarni, University of Missouri, USA
Cindy Wang, University of Oregon, USA
Hong Yuan, University of Oregon, USA

We find that shoppers' propensity to abandon shopping carts in response to unfulfilled conditional promotions is influenced by the interaction of promotion framing and distance-to-threshold. We found support for perceived fairness (perceived attractiveness) of the promotional offer as a driver of abandonment intention when distance-to-threshold is relatively far (close).

Taste Competitions in an Online Community: The Case of Yeni Gelin Evleri in Turkey

Alev Pinar Kuruoglu, Independent researcher, Turkey
Gulay Taltekin Guzel, Bilkent University, Turkey

This research aims to understand how the interplay of gender and class inflect taste displays and competitions in an online community. We conduct netnography on a Turkish facebook group "Yeni Gelin Evleri" in which lower-middle class newlywed women share photos and receive comments on their homes.

Doctoring Happiness: An Ethnographic Study on Plastic Surgery in Turkey

Alev Pinar Kuruoğlu, Independent Researcher, Turkey
Berna Tari Kasnakoğlu, TOBB ETU, Turkey

This ethnographically informed research investigates the entwinement of elective plastic surgery with the pursuit of happiness. We approach happiness as a "self-disciplining technique" that drives practices related to cosmetic surgery and which we argue constitutes part of broader dynamics related to being a "proper" woman living a worthwhile life.

How Thinking about Society's Past Influences Optimism towards its Future

Canice M. C. Kwan, Sun Yat-Sen University, China
Shirley Y. Y. Cheng, Hong Kong Baptist University, China
Alex S. L. Tsang, Hong Kong Baptist University, China

Consumers would feel nostalgic not only when reminiscing about their own past but also when reflecting on a historic era of their society. This research probes into the latter type exploring its impacts on optimism toward the society's future and decisions for the society (e.g. endorsement of risky public policy).

Resistance, Conformance, And Stigma in The Consumption of Music

Gretchen Larsen, Durham University, UK
Maurice Patterson, University of Limerick, Ireland

This paper delineates the nature of the stigma of conformity in music consumption. Such stigma is associated with too close an adherence to social norms as made manifest in popular culture and fashion. Thus this stigma is attached to that which is superficial and is seen to lack authenticity.

Thinking Creatively through Hands

Jeong Eun Lee, Hongik University, South Korea
Nara Youn, Hongik University, South Korea

Through four studies this research empirically demonstrates that physical hand movement and the elicitation of the embodied metaphor of hands enhance creativity. The relationship between using hands and creativity is mediated by the symbolic metaphor of the “craft-making” and “curiosity and imagination.”

Time and Conformity: The Effect of Temporal Distance on Consumers' Responses to Word-of-Mouth

Ran Li, The Chinese University of Hong Kong, HK, China
Yiren Dong, Nanjing University, China
Guocai Wang, Nanjing University, China

This paper examines the effect of temporal distance on consumers' responses to word of mouth. Two studies demonstrate that when participants buy a product for future use (vs immediate use) they will feel more similar and close with other consumers and conform more to their word of mouth.

Whom Do Incentives Motivate and Whom Do They Deter? The Role of Group Identity in Incentivizing Charitable Behavior

Charis Li, University of Florida, USA
Yanping Tu, University of Florida, USA
Ayelet Fishbach, University of Chicago, USA

The role of material incentives in prosocial domain has long been arguable. This research suggests that group identity changes how people view personal gains through charitable behaviors thus altering the role of incentives: incentives motivate charitable behavior among in-group donors or fundraisers but undermine charitable behavior among outgroups.

Work With Me or For Me: The Influence of Implicit Self-Theories on the Preference of Anthropomorphized Products

Chien-Wei Lin, State University of New York at Oneonta, USA
Dipankar Rai, LeMoyne College, USA

Three studies show that consumers' implicit theories of personality interact with anthropomorphized product roles when relating to consumer preference. Specifically incremental (entity) theorists prefer a product that portrays as a partner (servant) more since it fits their mastery (performance) goal orientation. This effect is moderated by task difficulty.

Heavy vs. Light TripAdvisor Reviewer Behavior

Heather Linton, Cornell University, USA
Robert Kwortnik, Cornell University, USA
Jay Russo, Cornell University, USA

Existing research on motivations behind engaging in online word of mouth (eWOM) has offered multiple discrepant lists of the reasons travelers choose to leave a review online. In this paper existing data from TripAdvisor reviews is analyzed to further investigate the behavioral differences of heavy versus light TripAdvisor reviewers.

On the Accuracy of Consumer Future Usage Estimations: Evidence From the Car Sharing Industry in Germany

Daniel Lippe, Karlsruhe Institute of Technology (KIT), Germany
Sven Feurer, Karlsruhe Institute of Technology (KIT), Germany

Estimations of future usage plays an important role in consumer decision-making. Drawing on real consumption data this study illuminates the accuracy with which consumers estimate future usage and provides evidence that involvement and need for cognition drive this accuracy.

It Feels Good and Bad to Be Fake: The Effect of Counterfeit Consumption on Consumer Feelings and Purchase Preference

Joyce Jingshi Liu, Hong Kong University of Science and Technology, China
Amy Dalton, Hong Kong University of Science and Technology, China
Jiewen Hong, Hong Kong University of Science and Technology, China

We find that using counterfeits in public elicits mixed feelings particularly for consumers with a high status-signaling motive. These mixed feelings in turn reduce the appeal of counterfeits relative to genuine products. Accordingly ads that highlight counterfeit consumption experience in the present of others effectively reduce consumers' counterfeit demand.

Focusing Only on Satisfying Customers? --- Negative Word of Mouth from Insiders

ShihHao Liu, Saint Louis University, USA
SangBong Lee, Saint Louis University, USA

The ongoing research proposes and identifies a systematically neglected source of negative word-of-mouth (NWOM). The current two studies revealed that feedback on service performance causes employees' to exert NWOM which is mediated by negative affect but not to make change in work-related behaviors.

'My Beautiful Self': An Exploration of the Effects of Advertising Campaigns on Female Empowerment

Cristina Longo, Université Lille, France
Meltem Türe, Université Lille, France

This study explores the effects of the recent advertising trend that promotes women's self-acceptance. We find that while these brands create a space of empowerment for women within a market that works with beauty standards they also subtly contribute to the powerless and insecure women myth they claim to challenge.

The Role of Visual Attention in Product Selection

Ruxandra Luca, Imperial College London, UK
Mirjam Tuk, Imperial College London, UK
Andreas Eisingerich, Imperial College London, UK

The cognitive impact of pop-up ads is not well known: while designed to inform they also interfere with online browsing behaviour. The purpose of this project is to investigate how the visual system filters ads depending on their location colour and duration and how this subsequently affects preferences for products.

How Companies' CSR Motivation Influences Consumers to Adopt Pro-social Behavior

Danielle Mantovani, Federal University of Parana, Brazil
Lucas Magalhães de Andrade, Federal University of Parana, Brazil
Angela Negrão, Federal University of Parana, Brazil

This paper proposes that CSR motivation impacts consumers' pro-social behaviors based on consumer-brand social distance. Consumers close to the brand are positively (vs. negatively) influenced by benevolent (vs. self-interest) CSR motivation (experiments 1 and 2). Experiment 3 provides evidence that this effect is mediated by consumers' skepticism about the CSR action.

Matte Is the New Green: The Influence of Matte Packaging on the Perceived Greenness of Products

Eva Marckhgott, WU Vienna, Austria
Bernadette Kamleitner, WU Vienna, Austria

In two studies we show that products in matte packages are perceived to be greener than products in glossy packages and that this cue is particularly strong in competitive presentation settings. Our findings draw attention to the importance of packaging surface and may inform packaging design.

Age-Related Changes in Materialism in Adults – A Psychological Insecurities Perspective

Christian Martin, HEC Lausanne, Switzerland
Sandor Czellar, HEC Lausanne, Switzerland

It has been reported frequently that materialism declines with age during adulthood. The reasons for this however have not yet been studied. In two studies we find that this effect can be partially explained by age-related changes in self-uncertainty. Implications for theory are discussed.

A Threatened Relationship Makes More Positive Consumers: The Effect of Romantic Jealousy on Advertising Effectiveness

Olga Martin, University of Washington, USA
Lea Dunn, University of Wasahington, USA

This research examined the effect of romantic jealousy on advertising effectiveness and found that romantic jealousy increased overall favorability of attitudes toward advertisements and advertised products as well as purchase intention. Mediation analyses confirmed that the effect of jealousy on confidence is the mechanism by which jealousy affects advertising effectiveness.

Consumer Engagement with Luxury Foods

Ewa Maslowska, Northwestern University - Medill, USA
Vijay Viswanathan, Northwestern University - Medill, USA
Mototaka Sakashita, Keio University, Japan

Luxury foods are often purchased for their experiential and identity benefits and hence can enhance consumer engagement. Preliminary analysis of purchase transactions from an ultra-luxury department store show that food purchases contribute to reducing the time elapsing between two shopping trips and thus increase engagement with the store.

The Voice From Afar: Reverberation in Spoken Advertising Messages “Influences Consumer Information Processing

Johann Melzner, NYU Stern School of Business / LMU Munich Institute for Market-based Management, Germany
Jochim Hansen, University of Salzburg, Austria

We provide first evidence that the sound design of an advertisement can have more than an aesthetic function as it affects consumers' cognition. When reverberation was added to an announcer's voice participants put more weight on statistical (versus individualized) product information. This effect influenced evaluation willingness to pay and choice.

“It Might Fit But Cost More”: Similarity, Skepticism, and Regulatory Focus in Cause-Related Marketing

Monica Mendini, Università della Svizzera Italiana, Switzerland
Paula C. Peter, San Diego State, USA
Michael Gibbert, Università della Svizzera Italiana, Switzerland

A key issue in CRM is how fit and skepticism are related. Our findings suggest that even if consumers perceive higher fit with taxonomic partnerships they are more skeptical and expect companies to contribute more to the cause. To lower this effect a promotion (vs. prevention) focus strategy is suggested.

Motivating Persistence and Risky Choice: Beyond Monetary Incentives

Rachel Meng, Columbia University, USA
Ran Kivetz, Columbia University, USA

Incentives motivate us. While considerable research has focused on monetary rewards our evidence suggests that non-monetary hedonic rewards may induce greater persistence—and better performance—in real-effort tasks. Participants facing hedonic (vs. monetary) incentives were also more likely to invest effort to earn a larger-uncertain reward over a smaller-surer one.

White and Clean: How Disease Avoidance Affects Color Preferences

Uwe Messer, University of Bamberg, Germany
Daniel Hein, University of Bamberg, Germany
Steffen Woelfl, University of Bamberg, Germany
Alexander Leischnig, University of Bamberg, Germany

This research examines how an activated disease avoidance system influences preferences for products with light-colored surfaces. Light-colored surfaces facilitate the detection of impurity which is a fundamental goal when consumers are motivated to protect themselves from contamination. The results of two experiments allow for important theoretical and managerial implications.

Online Retailing is Here to Stay - The Effects of Product-Context Levels On Consumer Decision Making

Jan Meyer, Tecnológico de Monterrey, Mexico
Eva Gonzalez Hernandez, Tecnológico de Monterrey, Mexico
Paz Toldos Romero, Tecnológico de Monterrey, Mexico

We investigate the role of context (with or without) in online product presentations and its influence on the consumer's value perception. High context presentations generate increased value through increased mental imagery. The level of involvement and the consumer's implicit theory moderate the relationship. Our results help improving online shopping experiences.

Resources Availability and Explicit Memory Largely Determine Evaluative Conditioning... Even in a Paradigm Conducive of Implicit EC Effects.

Adrien Mierop, Université catholique de Louvain, Belgium
Mandy Hütter, Universität Tübingen, Germany
Olivier Corneille, Université catholique de Louvain, Belgium

Three studies used a multinomial processing tree model to examine the impact of attentional load on implicit and explicit learning processes involved in Evaluative Conditioning. Results yielded evidence for explicit learning but no support for implicit learning processes even though studies relied on sensitive experimental and analytic procedures.

When a Change in Institutional Logics Does Not Lead to Market Evolution: The Case of Fertility Services Market

Laetitia Mimoun, HEC Paris, France
Francesca Sobande, University of Dundee, UK
Lez E. Trujillo Torres, The University of Illinois at Chicago, USA

Using institutional theory we investigate the lack of market evolution despite change in guiding institutional logics. The 15-year historical analysis of the fertility services market reveals how marketers use various strategies to maintain market and logics legitimacy despite conflicting scientific moral commercial and gendered logics surrounding the quest for parenthood.

Self-Awareness Fit and Consumer Product Evaluation

Bora Min, University of Southern California, USA
Cheryl Wakslak, University of Southern California, USA

Consumers increasingly engage in activities that can situationally increase self-awareness (e.g. taking selfies). Across two experiments we find that situationally increasing self-awareness via self-focusing stimuli (i.e. video and mirror) enhances (vs. hinders) experiences with products among consumers with high (vs. low) public self-consciousness.

The Effect of Spending Intentions on Windfall Use

Joshua I. Morris, Stanford University, USA
Jonathan Levav, Stanford University, USA

We show that receiving a windfall decreases the likelihood of choosing an option with a price exceeding the windfall amount when one does not have prior spending intentions for the purchase category. However receiving a windfall increases the likelihood of choosing such an option when prior spending intentions are present.

Do Deals Really Help Save: Deal Salience And Increased Consumer Spending

Sudipta Mukherjee, Virginia Tech, USA
Mario Pandelaere, Virginia Tech, USA
Daniel Villanova, Virginia Tech, USA

Consumers have the lay belief that looking for deals helps in saving money. In this paper we find that deal salience decreases self-control and increases consumer spending. Further we get the surprising result that deal salience has a greater influence on the spending behavior of tightwads than spendthrifts.

Is Altruism Perilous? Consumer Benevolence and Risk Taking

Sudipta Mukherjee, Virginia Tech, USA
Samuel Bond, Georgia Tech, USA

Our research examines the relationship between consumer benevolence and risk taking. Based on theory of less deliberative processing and optimism bias we hypothesize and find across three 3 studies that at both trait and situational levels benevolence is related to increased risk taking due to decreased risk perceptions.

Ambivalent Attitudes do Not Induce Confusion among Collectivists

Andy H. Ng, University of Illinois at Urbana-Champaign, USA
Sharon Shavitt, University of Illinois at Urbana-Champaign, USA
Hazel R. Markus, Stanford University, USA

People of Asian (vs. European) background perceived context-dependent attitudes as more socially desirable which led to a higher tendency to evaluate objects both favorably and unfavorably without context. This led to feeling of confusion only for those who did not strongly endorse collectivistic values and when independent self-construal was primed.

Goal Failure Enhances Creativity

Luke Nowlan, University of Miami, USA
Juliano Laran, University of Miami, USA

We examine the cognitive consequences of failed goal pursuit and demonstrate that goal failure leads to the consideration of an array of alternative goals which induces a flexible mindset and enhances creativity. Contributions to both the goal pursuit and creativity literatures are discussed.

Empirical Generalizations of Brand Personality Dimensions: Longitudinal Analysis of a Robust Six Factor Model

Travis Tae Oh, Columbia University, USA
Michel Tuan Pham, Columbia University, USA
Kamel Jedidi, Columbia University, USA

Since Aaker's seminal paper on brand personality the validity of this proposition has not been fully investigated. We analyze 15 years of proprietary panel data with 17000 subjects and 3000 brands per year provided by BAV. We find in fact a six dimension brand personality structure that evolves over time.

The Relationship between Happiness and Perception of Purchases: Experiential Versus Material

Hyewon Oh, University of Illinois at Urbana-Champaign, USA
Incheol Choi, Seoul National University, Korea

We examine two unanswered questions regarding happiness and the fuzzy boundary between experiential purchases and material purchases. Using a multi-method approach we found that happy people perceive their purchases as more experiential than less happy people do and people become happier when they practice 'experiential framing' of their purchases.

When Gift Giving is Stressful: The Role of Relationship Style

Lale Okyay Ata, Koc University, Turkey
Zeynep Gurhan Canli, Koc University, Turkey
Nicole Verrochi Coleman, University of Pittsburgh, USA

In two studies this research explores relationship attachment style as an antecedent of gift giving stress and investigates the differential impact of separate insecure attachment styles on consumers' attitudes toward various stages of gift giving. Implications for theory and practice are discussed.

Towards a Better Understanding of Sales Promotions' Impact on Impulsive Purchases

Mahshid Omid, Université Laval, Canada
Frank Pons, Université Laval, Canada

Although previous research emphasized that a significant percentage of impulsive purchases comes from sales promotions the psychological mechanisms at the origin of this influence have been understudied. To address this gap this paper investigates the mediating role of consumer affective and cognitive responses on impulse buying process of promoted products.

Webrooming or Showrooming? A Matter of Involvement

Carlos Orús, University of Zaragoza, Spain
Raquel Gurrea, University of Zaragoza, Spain
Carlos Flavián, University of Zaragoza, Spain

We examine two cross-channel behaviours formed by the integration of the online and physical channels: showrooming (information offline purchase online) and webrooming (information online purchase offline). We find that involvement is higher in webrooming than in showrooming and determines the channel preferences to search for information and buy the product.

When Beauty is Bad: Attractive Faces Alter People's Food Choices

Tobias Otterbring, Karlstad University, Sweden

Directly contradictory to individuals' lay beliefs prior exposure to attractive (versus unattractive) opposite-sex faces made people choose unhealthy rather than healthy food products. This effect primarily influenced people with a low (versus high) concern for healthy eating but did not generalize to exposure of attractive (versus unattractive) same-sex faces.

Attention to Country-of-Origin Information

Johanna Palcu, University of Vienna, Austria
Arnd Florack, University of Vienna, Austria
Adamantios Diamantopoulos, University of Vienna, Austria
Georgios Halkias, University of Vienna, Austria

The present study applies eye-tracking to establish the conditions under which country-of-origin (COO) information moves into the center of consumers' attention. Moreover applying the Stereotype Content Model to a COO context we demonstrate that consumers' warmth and competence country stereotypes are reflected in their warmth and competence product judgments.

Consumer Suspicion as a Communicational Opportunity in Ethical Consumption

Artemis Panigyraiki, Imperial College Business School, UK
Claudia Jasmand, Imperial College Business School, UK

This paper proposes the notion of suspicion as a unique opportunity for persuasion in ethical consumption. Can suspicion be more efficient than trust for marketers to achieve persuasion? Information search might be triggered by a certain level of suspicion and give to ethical companies the opportunity to overcome generalized distrust.

Customer Engagement: Conceptualization, Distinctiveness and Testing the Nomological Network

Prateeksha Parihar, Indian Institute of Management Raipur, India
Jagrook Dawra, Indian Institute of Management Raipur, India
Vinita Sahay, Indian Institute of Management Raipur, India

We have conceptualized & distinguished Customer Engagement (CE) from other constructs by extant literature review. We observed the mediation effect of CE between Involvement and Loyalty with the positive effect of Involvement on CE and CE's positive effect on Loyalty but No direct effect of Involvement on Loyalty.

Deliberate First or Act First? The Effect of Self-Construal on Goal Pursuit

Hanyong Park, University of Texas at San Antonio, USA
David Silvera, University of Texas at San Antonio, USA
Ashok Lalwani, Indiana University, USA

This research examines cultural differences in goal pursuit. Independent self-construal is associated with cost-benefit analysis which leads to emphasis on assessment-related goal pursuit activities. Conversely interdependent self-construal is associated with agreeableness which leads to emphasis on locomotion-related goal pursuit activities.

What Happens When the Company is the Unfairly Treated Party in Online Review?

Maria Alice Pasdiora, Universidade Federal do Rio Grande do Sul, Brazil
Cristiane Pizzutti, Universidade Federal do Rio Grande do Sul, Brazil
Natalia Englert, Universidade Federal do Rio Grande do Sul, Brazil

We show that consumers who perceive unfairness in an online review towards a company behave against the unfair review and reviewer and in favor of the wronged company. This effect is explained by the negative emotions caused by the episode reader's inferences about reviewer's motivations and empathy towards the company.

When Usage Repetition Leads to Predictions of Faster Adaptation

Maria Alice Pasdiora, Universidade Federal do Rio Grande do Sul, Brazil
Vinicius Andrade Brei, Universidade Federal do Rio Grande do Sul, Brazil
Leonardo Nicolao, Universidade Federal do Rio Grande do Sul, Brazil

We show how and when the perception of repetitive consumption leads consumers to predict hedonic adaptation. Results suggest that repetition salience stimulates consumers to predict diminishing enjoyment over time weakens the impact of assortment variety on predicted enjoyment and strengthens the impact of attention drawn by product on predicted enjoyment.

The Association Between Digit Ratios and Conspicuous Consumption, and the Moderating Role of Intrasexual Competition

Cristina Maria de Aguiar Pastore, Pontifical Catholic University of Paraná, Brazil
Marcelo Vinhal Nepomuceno, HEC Montreal, Canada
Eric Stenstrom, Miami University, USA
Eliane Cristine Francisco Maffezzolli, Pontifical Catholic University of Paraná, Brazil

We investigated the effects of hormones on conspicuous consumption. Low digit ratios (high prenatal testosterone exposure) were associated with greater conspicuous consumption in men particularly when intrasexual competition was high. In women high digit ratios (high prenatal estrogen) were only associated with greater conspicuous consumption when intrasexual competition was high.

From Consumers to Producers: The Identity Evolution of Food Bloggers

Gabrielle Patry-Beaudoin, HEC Montréal, Canada
Yannik St.James, HEC Montréal, Canada

Drawing from the professional identity and serious leisure literatures this study examines consumers' identity as they engage in production activities. A qualitative investigation of food bloggers documents three identity forms – novice amateur and professional – consumers integrate as they participate in production practices as well as identity tensions they must negotiate.

Pornographication and the Advertising of Sexual Services

Maurice Patterson, University of Limerick, Ireland
Gretchen Larsen, University of Durham, UK

This research reports on an analysis of advertising cards used by prostitutes in London from 1992 to 2008. It depicts a shift in such advertising described in terms of pornographication; a visual regime that relies heavily on the representational codes of pornography and an industrialization and commodification of sex work.

The Influence of Contextual Minority Status on Privately-Held Evaluations of Identity-Linked Products

Iman Paul, Georgia Institute of Technology, USA
Jeffrey R Parker, Georgia State University, USA
Sara Loughran Dommer, Georgia Institute of Technology, USA

Does being the lone female in a group of males influence women's evaluations of female identity linked products? Two studies find that when gender identity is activated by being in the numerical minority of a group women report less positive attitudes toward products associated with negative aspects of their gender.

I Aspire to Give to Your Needs, I am Responsible to Give to Your Aspirations: Persuasion of Philanthropy Functions Through Regulatory Non-fit

Sara Penner, University of Manitoba, Canada
Olya Bullard, University of Winnipeg, Canada

This research examines philanthropic giving from a goal-directed perspective. Applying the framework of Regulatory Focus Theory (Higgins 1997) a persuasion through regulatory non-fit phenomenon is identified. Individuals' promotion focus motivates giving to prevention-focused causes whereas individuals' prevention focus motivates giving to promotion-focused causes. Implications for theory and practice are discussed.

Brand Extensions - It's all About Managing Accessibility

Adrian Peretz, Kristiania University College, Norway
Lars Olsen, Kristiania University College, Norway

We demonstrate that using benefit-based brand extensions and selecting extension categories that can be subsequently subsumed into more abstract categories reduces interference in memory from category associations—allowing for easier retrieval of diagnostic of brand benefit associations.

The Interaction between Moral Behavior and Social Norms

Dikla Perez, Tel Aviv University and Technion, Israel
Ayelet Gneezy, University of California San Diego, USA

This research uses the case of digital-content piracy to examine the behavioral consequences of engaging in socially acceptable immoral behaviors. We suggest that consumers' willingness to pay for digital content piracy is driven by negative emotions linked to their perceived dishonesty and relevant when social norms against piracy are strong.

Comparing Prices Then and Now – the Store Price Image Determines Reference Price Dominance

Anne Odile Peschel, Aarhus University, Denmark

When evaluating product prices consumers compare the observed prices to an internally retrieved or externally suggested reference price. Using scanner panel data I show that while in high price image store formats the internal reference price dominates in low price image formats consumer rely more on externally suggested reference prices.

When Governmental Regulation Causes Price Increases: Is Communicating a Good Cause Always Beneficial?

Doreen Pick, University of Applied Sciences Merseburg, Germany
Stephan Zielke, University of Wuppertal, Germany
Wayne D. Hoyer, University of Texas at Austin, USA

Price increases can occur as the result of governmental regulations which support a good cause. Firms can justify the increase by highlighting the good cause (environment framing) or they could blame the government for the regulation (government framing). We analyze the impact of such strategies in a field scenario experiment.

Distant but Local: Border-Based Perceptions of Localness and Effects on Food Preference

John Price, University of Oregon, USA
Brandon Reich, University of Oregon, USA

We first introduce and validate the Locavore scale. We then show experimentally that consumers exhibit a “border bias” in which distant (vs. proximal) food is perceived as more local when it is sourced from within their political borders and how localness perceptions interact with Locavorism to influence food choices.

The Role of Social Endorsement in a Repeated Exposure Context

Suntong Qi, Lingnan University, Hong Kong
Yu-Jen Chen, Lingnan University, Hong Kong

We examine how social endorsement asymmetrically influence message persuasibility in a context of repeated information exposure. We show how subsequent social endorsement is more effective than initial one because message recipients inhibit pursuit of goal initially but rebound to a higher desirability level at subsequent exposure stage.

Friend or Firm: When Friendliness Reduces Comfort Perceptions During Sales Interactions

Suzanne Rath, Queen's University, Canada
Laurence Ashworth, Queen's University, Canada
Matthew Philp, HEC Montreal, Canada
Nicole Robitaille, Queen's University, Canada

It is generally believed that friendly firms facilitate positive consumer responses. However this may not always be true. This research suggests that friendly firms may make consumers feel less comfortable as consumers may not view firms as especially meaningful relationship partners even though friendliness is normally a desirable interpersonal exchange.

Money and Me: Thoughts of Money Change Individuals' Self-View

Leonie Reutner, University of Basel, Switzerland
Mirella Walker, University of Basel, Switzerland
Rainer Greifeneder, University of Basel, Switzerland

We show that money thoughts shift individuals' self-view (study 1) towards more agency and less communion when accuracy is central but does not similarly affect the way other people are viewed (study 2). When accuracy is not central money shifts self-view towards an ideal agentic and communal self (study 3).

The 'Flower Men' Phenomenon: Exploring the Cultural Encoding of Masculinity in South Korean Cosmetics Advertising

Ann Kristin Rhode, ESCP Europe & Université Paris 1 Panthéon-Sorbonne, France

Given the cultural relativity of masculinity and attractiveness representations of masculinity are likely to vary across cultures. This study explores images of masculinity in South Korean print advertising for men's cosmetics. Findings of a content analysis suggest a notion of 'soft masculinity' that may widen traditional gender lines around cosmetics.

Clicking Decisions and the Coexistence of Insufficient and Excessive Checking

Yefim Roth, Technion University, Israel
Michaela Wänke, University of Mannheim, Germany
Ido Erev, Technion University, Israel

We examines the impact of past experiences on the tendency to use easy "single-click checking" options in simplified settings. The results reveal the co-existence of insufficient and excessive checking. The direction of the deviation is captured with the hypothesis that consumers exhibit oversensitivity to the best in retrospect outcome.

When Choosing the Best Brings out the Worst: Maximizing Increases Cheating Due to Greater Perceptions of Scarcity

Caroline Roux, Concordia University, Canada
Jingjing Ma, Peking University, China
Kelly Goldsmith, Northwestern University, USA

Striving for the best or a maximizing mindset is often advocated as an ideal in many life domains. But how far are consumers willing to go when striving for the best? Three studies demonstrate that activating a maximizing mindset increases cheating behavior because it elicits greater perceptions of scarcity.

The Effects of Envy on Scarcity Appeals in Advertising: Moderating Role of Product Involvement

Rajat Roy, Curtin University, Australia

Results from two laboratory experiments show that when subjects experience benign (malicious) envy they exhibit higher value perception and purchase intention for the product showcased in a demand (supply) appeal over the supply (demand) appeal. This effect held under conditions of high product involvement but disappeared under low involvement.

Social and Behavioral Consequences of Feedback When Participating in Brand Pages

Salvador Ruiz de Maya, University of Murcia, Spain
Mariola Palazon, University of Murcia, Spain
Maria Sicilia, University of Murcia, Spain

This study combines data from Facebook and two experiments to show that (a) the content of consumers' posts on brand pages in social networks determines the feedback they obtain in the form of likes and comments and (b) how that feedback impact their perception of social recognition and behavioral intentions.

The Effects of Consumers' Identification and Disidentification in the Case of Corporate Misconduct – Exploring the Mediating Role of Emotions

Christopher Ruppel, University of Vienna, Austria
Sabine Einwiller, University of Vienna, Austria

Due to higher self-relevance corporate misconduct should elicit stronger emotions in identified and disidentified consumers compared to non-identified which mediate different consumer reactions. In a first study particularly disidentified consumers' adversarial behaviors were mediated through disapproving emotions and schadenfreude whereas sympathy elicited in identified consumers resulted in higher perceived trust.

Taking the Easy Way Out: The Structure of Complex Assortments Navigates Consumers Towards Different Product Choice Locations Under the Condition of Broad Attentional Scope

Sebastian Sadowski, University of Groningen, The Netherlands
Bob M. Fennis, University of Groningen, The Netherlands
Koert van Ittersum, University of Groningen, The Netherlands

Across two studies we show that assortment complexity affects consumers with a broad but not with a narrow attentional scope. Consumers with a broad attentional scope not only take longer to choose most preferred product from a complex assortment they also select products from different locations depending on assortment structure.

Advertising Effectiveness: Examining the Role of Latent Themes on Advertising Success

Prakash Satyavageeswaran, Doctoral Student, Indian School of Business, India
M G Parameswaran, FCB Ulka, India
Sridhar Samu, Great Lakes Institute of Management, India

We extract two latent themes from transcripts of television advertisements using latent topic modelling. Their impact on the advertisements' success is assessed using a multinomial logit model. We contribute methodologically and substantively by introducing a novel latent theme approach for understanding impact of textual themes on consumer's ranking of advertisements

Lost in the Supermarket: Searching for Products on Crowded Shelves

Ana Scekic, HEC Paris, France
A. Selin Atalay, Frankfurt School of Finance and Management, Germany

Crowded scenes make it more difficult to differentiate otherwise distinct objects. We study how the positions of products on the vertical range of the visual field affect consumers' search experience in a retail context. We provide initial evidence for shelf location based effects on consumer search in crowded scenes.

The Monetary Value of Ethical Attributes: Preference Reversal Effects Among Cause-Related Marketing Campaigns

Christina Patricia Schamp, University of Hamburg, Germany
Mark Heitmann, University of Hamburg, Germany
Julia Stehmann, University of Hamburg, Germany

The momentum of cause-related marketing allows the transfer of the norm theory of category-bound thinking on market scenarios evaluating the actual value of ethical attributes. Our results show that the importance of causes and subsequent choices reverse when two isolated campaigns are implemented jointly and brand-cause fit moderators this reversal.

Consumer-Expert Interactions in the Medical Domain: Exploring When and How Patients with Prostate Cancer Ask Their Physicians for Advice

Karen Scherr, Duke University, USA
Mary Frances Luce, Duke University, USA
Peter Ubel, Duke University, USA

With the increasing consumerization of healthcare the role of physician recommendations has become more complex and uncertain. Using data from patients with prostate cancer we find significant variation in how patients request recommendations how physicians respond to those requests and identify factors (e.g. anxiety) that predict whether patients request recommendations.

Using Humor to "Sell" Good Life Choices

Julie L. Schiro, University College Dublin, Ireland

What is the effect of humor on public service ads? On one hand humor could hurt by trivializing the problem. On the other humor could help by making the ad more likable. Using SEM I model these factors simultaneously to find the net effect of humor on behavior.

Close Alternatives: The Influence of Spatial Proximity on Choice Difficulty

Iris K. Schneider, VU University Amsterdam, the Netherlands
Norbert Schwarz, University of Southern California, USA
Sander L. Koole, VU University Amsterdam, the Netherlands

Decision difficulty is often expressed in spatial language for instance when people say "the choice alternatives are close". We explore the consequences of this metaphor for consumer decision-making. Our findings reveal that choices are harder when alternatives are presented spatially close together compared to far apart.

To Share or Not to Share? Social Distance as The Underlying Mechanism to Explain Sharing Behavior

Nadine Schreiner, Heinrich Heine University Düsseldorf, Germany
Peter Kenning, Heinrich Heine University Düsseldorf, Germany

Sharing is a fundamental part of human behavior but still lacks empirical research. Field theory suggests social distance as one of the underlying mechanism affecting sharing behavior. Using an experimental design preliminary results show a decrease of sharing ratio as a function of social distance resulting in a hyperbolic shape.

Humanizing Products Through Typeface Design

Roland Schroll, University of Innsbruck, Austria
Benedikt Schnurr, University of Innsbruck, Austria
Dhruv Grewal, Babson College, USA

Across three experimental studies the authors show that using handwritten (vs. machine-written) typefaces on product packaging positively affects consumers' product evaluations. This effect is driven by perceptions of social presence imbued in the product which increase consumers' emotional attachment to the product. Further the authors examine an important boundary condition.

Food Fight! A Comparative Analysis of the Portrayal of Food in Cartoons Targeting Girls and Boys

Eric Setten, University of Oregon, USA

This study shows significant differences in the number and meaning of food references in cartoons for girls versus those for boys. Girls' shows reinforce the message "food is love" while boys' shows reinforce the message "food is fuel." This has important implications for the development of identity-based attitudes towards food.

A Visual Consumption of Desserts: The Impact of Subtle Food Cues on Dieters

Donya Shabgard, University of Manitoba, Canada
Kelley Main, University of Manitoba, Canada

This research examines the differences between dieters and non-dieters in response to subtle consumption cues. Participants were presented with an image of a bitten cut or whole dessert. The results show that dieters in comparison to non-dieters respond more favourable to the bitten and cut desserts.

The Ending Effect on Positive Illusion

Ziqi Shang, Renmin University of China, China
Jun Pang, Renmin University of China, China
Lingyun Qiu, Peking University, China

This research proposes and demonstrates the ending effect on individuals' positive illusions. Across two studies we show that individuals have a lower level of positive illusion at the end of a time period than at other time points and this effect is mediated by the perceptions of resource depletion.

I Like It Because I Imagined The Scent: Olfactory Imagery Improves Product Evaluation

Varun Sharma, Bocconi University, Italy
Zachary Estes, Bocconi University, Italy

We show that visual image of a pleasant scent-inducing object in advertisements and packages improve (reduce) product evaluation for scent-relevant (scent-irrelevant) product categories. First study demonstrates this effect in product packages. Second study shows that this effect is mediated by generation of olfactory imagery while extending the applicability to advertisements.

Asymmetric Conformity to Positive and Negative Advice

Henry Shen, University of California, Riverside, USA
Ye Li, University of California, Riverside, USA

The ubiquity of online ratings has facilitated word-of-mouth transmission but researchers have yet to fully understand whether and how rating valence interacts with intrinsic product quality to affect consumer's ultimate product evaluation. We show that positive and negative WOM advice asymmetrically influences the evaluation of good and bad experiential products.

Leaps and Tweaks: The Impact of Version Numbers on Product Attractiveness

Meyrav Shoham, Technion - Israel Institute of Technology, Israel
Yael Steinhart, Tel-Aviv University, Israel
Sarit Moldovan, The Open University of Israel, Israel

When consumers evaluate products with version numbers smaller numerical gaps between version numbers can enhance product appeal. Three studies show that this effect occurs when the existing version has a decimal number while the new version has a whole number suggesting a more substantive leap after several incremental ones.

Mental Representation of Attitudinal Ambivalence

Amit Surendra Singh, Ohio State University, USA
H. Rao Unnava, Ohio State University, USA

An ambivalent attitude has both positive and negative reactions associated with it. In this research the underlying structure of oppositely-valenced components is investigated. Preliminary evidence indicates positive and negative thoughts about an object being stored together in memory. Further effect of situational relevance on accessibility is studied.

The Telepresence Effect: Changing Attitudes via Virtual Tours in Marketing Communications

Nathalie Spielmann, NEOMA Business School, France
Antonia Mantonakis, Brock University, Canada
Barry J. Babin, Louisiana Tech University, USA
Aikaterina Manthiou, NEOMA Business School, France

Virtual online tours enable a consumer to immerse themselves in environments without physically being in them usually in the hopes of encouraging positive attitudes toward the advertiser. Two studies demonstrate how consumer and advertiser interactivity unique to virtual tours leads to telepresence (e.g. immersion) which then leads to positive attitudes.

How Hunger Facilitates Dieting: The Paradoxical Effect of Hunger When Individuals are Primed With an Environmental Dieting Cue

Aline E. Stämpfli, University of Bern, Switzerland
Thomas A. Brunner, Bern University of Applied Sciences, Switzerland
Sabrina Stöckli, University of Bern, Switzerland
Claude Messner, University of Bern, Switzerland

This research examines the influence of an environmental dieting cue in interaction with hunger. Results reveal that the cue a screensaver showing thin human-like sculptures by the artist Alberto Giacometti reduced unhealthy food intake especially in hungry individuals. Thus the dieting cue was effective when it was actually needed.

The Role of Mimicry in Charity Advertising

Sabrina Stöckli, University of Bern, Switzerland
Aline Stämpfli, University of Bern, Switzerland

This research explores the effect that charity ads induce more empathy when showing sad versus neutral and happy children's faces. Assuming mimicry to be involved face reader analysis reveals that people mimic happy but not neutral and sad faces. This suggests that mimicry only partially facilitates emotional contagion.

Choosing an Inferior Alternative: The Case of Disappearing “Inherited Options”

Rusty Stough, University of Wisconsin - Madison, USA
Evan Polman, University of Wisconsin - Madison, USA

We extend work on subsequently unavailable options by examining items that consumers acquire despite their preferences. We found that when people experience a loss of an inherited option they recoup the loss with a similar option to the extent they choose an option that is inferior to other available options.

Eye Buy: Broad Visual Attention Increases Unplanned Purchases

Mathias Streicher, University of Innsbruck, Austria
Oliver Büttner, University of Vienna, Austria
Zachary Estes, Bocconi University, Italy

We investigate whether manipulating the scope of visual attention influences subsequent attention to products and unplanned purchases. We find that a broad vs. a narrow scope of attention increases attention to products in the visual periphery and that this may lead to more unplanned purchases and spending.

Social Exclusion and Consumer Switching Behavior: A Control Restoration Mechanism

Lei Su, Hong Kong Baptist University, China
Yuwei Jiang, Hong Kong Polytechnic University, China
Zhansheng Chen, University of Hong Kong, China
C. Nathan DeWall, University of Kentucky, USA

Four studies reveal that socially excluded consumers exhibit more switching behaviour than those who do not. This effect is mediated by a decreased sense of personal control after social exclusion. It diminishes when the switching behaviour cannot restore personal control or when other resources compensate the desire for internal control.

When Shared Joy is Lessened: Comparing Psychological Costs Between Online and Offline Positive Word of Mouth

Ana Suárez Vázquez, University of Oviedo, Spain
Manuel Chica Serrano, Open University of Catalonia, Spain

This research examines the difference in drivers of online and offline WOM. We suggest the existence of an emotional pain associated with the spreading of others' positive experiences that could have a deterrent effect over online positive WOM. That effect does not exist in the case of offline positive WOM.

The No-Pain, No-Gain Heuristic: The Effect of a Creator's Tragic Biography and Construal Levels on Quality Inferences

Yeonjin Sung, Seoul National University, Korea
Seojin Stacey Lee, Seoul National University, Korea
Kiwon Park, Seoul National University, Korea

Extending the effort heuristic we propose that people utilize a creator's tragic biography as a cue for high quality judgment of the creation. We demonstrate that this effect is observed at low construal level which facilitates process focus and is attenuated at high construal level which activates outcome focus.

Caveat Voluntas: Exploring the Dark Side of Volunteering

Stefan Suppanschitz, Viena University, Austria
Verena Gruber, HEC Montreal, Canada
Jonathan Deschenes, HEC Montreal, Canada

Academics have mainly focused on the positive consequences of volunteering. This paper explores its potential negative side through a review of literature and a preliminary analysis of interviews with 14 current or past volunteers working at the Vienna Red Cross.

Constructing Hybrid Identity: the Consumption of Brit-Asia Bhangra Music

Dr. Amandeep Takhar, University of Northampton, UK
Dr. David Chitakunye, AMA International University, Kingdom of Bahrain

We propose that the consumption of the Brit-Asian music genre plays a pivotal role in the lives of young British Sikhs in the UK. It acts as a sub-cultural force that reinforces the British Sikh identity but also mediates cultural and intergenerational tensions therefore acting as a catalyst for change.

Consuming a Transfusion of Fashion: Constructing Hybrid Identity amongst the Third Generation British Indian Community

Amandeep Takhar, University of Northampton, UK
David Chitakunye, AMA International University, Kingdom of Bahrain

This study contributes to an understanding of how migrating communities consume a transfusion of clothing and fashion. We adopt an interpretivist approach to explore how third generation British Indians consume fashion and found that fashion was consumed as an expression of their hybrid identities.

Complicitous Consumers? Deconstructing Online "Fertility Testimonials"

Jennifer Takhar, Novancia Business School, Paris, France
Kelly Pemberton, The George Washington University, USA

Our discursive analysis of American women's online customer testimonials on two "fertility wellness" websites reveals how this advertising strategy makes women unwittingly complicitous in the medical and marketing discourses that stigmatise them as solely responsible for procreative challenges and simultaneously undermines the tenets of fourth-wave feminism.

Effects of Task Routinization on Consumer Creativity

Jasper Teow, National University of Singapore, Singapore
Li Xiuping, National University of Singapore, Singapore

Our research posits that routine tasks lead to mental rigidity. It is demonstrated that after typing a string of letters repetitively participants were more likely to employ a local processing style and performed worse in a remote association task assessing creativity. Furthermore participants' psychological reactance moderates the effect of routinization.

Role of Mood in Cause-Related Marketing Effectiveness

Ali Tezer, Concordia University, Canada
Onur Bodur, Concordia University, Canada

Brands promise to donate certain amount of sales prices per product sold in cause-related marketing (CRM) promotions. Contrary to common wisdom we show that CRM is effective when consumers are in a bad mood but not when they are in a good mood.

Do Children Perceive Links Between Physical Attractiveness, Possessions, and Aggression?

Tabitha Thomas, Univesity of Otago, New Zealand
Kirsten Robertson, Univesity of Otago, New Zealand
Maree Thyne, Univesity of Otago, New Zealand

We examine beauty stereotypes in children and the associations they make between physical attractiveness possessions and aggressive behaviour. Across four studies we find that children perceive attractive children to own expensive possessions and display prosocial behaviour whereas unattractive children were perceived to own cheap possessions and display antisocial behaviour.

Does Visual Heaviness Convey Rich Flavor? Effect of Product Image Location on Consumers' Taste Expectation

Taku Togawa, Chiba University of Commerce, Japan
Jaewoo Park, Chiba University of Commerce, Japan
Hiroaki Ishii, Seikei University, Japan

This research found that product images' location on packaging affects consumers' perception of food products. In consumers with low autotelic need for touch product images placed at the bottom (vs. top) of packaging positively affected perception of flavor density. Additionally perceived heaviness mediated this effect.

Affective Influences on Activation of Social Network Type: The Effects of Social Motivations and Anticipated Audience Responses

Dandan Tong, Chinese University of Hong Kong, China
Jianmin Jia, Chinese University of Hong Kong, China
Robert Wyer, Chinese University of Hong Kong, China

This research investigates how event-elicited affective states (positive vs. negative) and relevance (self vs. other) give rise to activated social network types. We found that what people share in social media is driven by self-presentation motivation and emotion regulation motivation that are differentially associated with different types of social network.

'Compete or Cooperate' – How Motivational Mindsets Affect Facial Beauty Judgments

Natalie Truong, Nanyang Technological University, Singapore
George Christopoulos, Nanyang Technological University, Singapore

The present research examines the effect of competition versus cooperation mindset on facial beauty judgments and face processing style. Initial results show that a competitive state leads to higher evaluations of female faces compared to a cooperative state. We hypothesize a social comparison resulting in self-threat as the underlying process.

Theorizing Authority Relinquishment in Agency Relationships: Conditions and Consequences

Gulnur Tumbat, San Francisco State University, USA
Kent Grayson, Northwestern University, USA

According to agency theory exchange agreements range from where the buyer has high authority over the seller to where both are relatively independent. Some principal-agent agreements reverse this relationship by allowing the seller to exercise authority over the buyer. We study this unexplored type of agency agreement: "authority relinquishment."

Low Construals Prefer Atypical Colors

Jiyeon Uim, Hongik University, Republic of Korea
Nara Youn, Hongik University, Republic of Korea

The current research examines how atypical (vs. typical) color affects consumer information processing and examines the moderating role of construal level. Through three studies we demonstrate that atypical color would lead to favorable evaluation of product more for consumers with low level than for those with high level construals.

Genealogies of Consumers' Resistance

Carmen Valor, Universidad Pontificia Comillas, Spain
Eleni Papaokinoumou, Universitat Rovira i Virgili, Spain

This paper examines the subjectification process in the sustainable consumers' resistance movement. By applying the Foucault's genealogical method we aim to unveil the discursive roots and anchors of the sustainable subject and how such subject is opposed to the consumerist subject.

"I Deserve to Help!" Effects of Entitlement and Social Influence Appeals on Prosocial Motivations

Martine van der Heide, University of Groningen, The Netherlands
Bob Fennis, University of Groningen, The Netherlands
Koert van Ittersum, University of Groningen, The Netherlands
Debra Trampe, University of Groningen, The Netherlands

Entitlement—a sense that one deserves more than others—typically reduces prosocial motivations. We further investigate this relationship by considering the interplay between entitlement and social influence appeals. We demonstrate that a consistency appeal reinforces the negative effect of entitlement on prosocial motivations while a scarcity appeal fully attenuates it.

Non-price Determinants of the Purchase Intention Towards Counterfeit Global Brands: An International Comparison of Respondents as a Moderator of Behavior

Claudia Velez-Zapata, Universidad Pontificia Bolivariana, Colombia

This study analyzes the determinants of intention to purchase of counterfeit clothing global brands in Bologna Madrid Chicago and Medellin. This research shows the relevance of non-price factors (i.e. perceived quality public and private prejudice). Additionally it presents evidence which support city of the respondents as a moderator of behavior.

Communicating Less/No Meat Consumption: Dialogue between Meat Lovers and Avoiders

Handan Vicdan, EMLYON Business School, France

Despite the scientifically proven need for adoption of less/no meat diets few people adopt such diets. We explore the counterproductive communication that hinders the promotion of these diets between meat lovers and avoiders. Focus group and depth interviews identify ways to establish constructive dialogues in order to promote these diets.

Peeping on Poverty: Groupness and Moral Considerations in Slum Tourism

Julia von Schuckmann, ESADE Business School, Spain
Lucia Barros, EBAPE-FGV, Brazil
Eduardo Andrade, EBAPE-FGV, Brazil

Slum tourism is a prevalent tourist attraction in the Global South that brings a fierce ethical debate. In two field experiments in Rio de Janeiro we show that groupness and its impact on moral considerations help explain why some consumers (out-groups) find it appealing whereas others (in-groups) find it appalling.

“Love Accounting”: The Effect of Love Messages on Gift Budgeting

Yanan Wang, Bishop’s University, Canada
Ashesh Mukherjee, McGill University, Canada

Through three studies it is found that when people give a gift they engage in ‘love accounting’ so that they will spend less on it if they include a written expression of love with it. The amount of effort expended on preparing the message did not account for the effect.

Approach or Avoidance? The Dual Role of Face in Fashion Consumption

Wangshuai Wang, Shanghai Jiao Tong University, China
Xin-an Zhang, Shanghai Jiao Tong University, China

We propose face affects fashion consumption in two ways. Desire to gain face boosts fashion consumption whereas fear of losing face demotivates it. Moreover these effects are mediated by need for uniqueness and moderated by social visibility. Data from one survey and four experiments provide support for these hypotheses.

With A Little Help From My Friends: How Product and Website Socialness Drive Online Word-of-Mouth Persuasion

Yiru Wang, Kent State University, USA
Cesar Zamudio, Kent State University, USA

Consumers’ online review information processing depends on the social nature of the object under review and website used. When the object is consumed privately readers rely on both review content and writers’ social profile. However when the object is consumed socially readers rely on social profile alone.

Information-Searching Task Type and Searching Effort: the Mediating Role of Self-Efficacy

Feiqiong Wei, Renmin University of China, China
Yafeng Fan, Renmin University of China, China
Jing Jiang, Renmin University of China, China

This article examines information searching behavior under different searching tasks (general vs. specific) and the mechanism. Two experiments demonstrate that consumers make more efforts under general searching task than under specific searching task which is mediated by self-efficacy. We also explore this effect under different scenarios (material vs. experiential product).

When Detailed Information Works Better: Comparison Between 3-Colors and 5-Colors Traffic-Lights Nutritional System Labels

Carolina O.C. Werle, Marketing Department, Grenoble Ecole Management, France
Kévin Roche, Marketing Department, Grenoble Ecole Management, France
Olivier Trendel, Marketing Department, Grenoble Ecole Management, France

Two studies using implicit (i.e. automatic) tasks show that nutritional traffic light systems facilitate the recognition of the healthiest option among a pair of food products. Furthermore a more subtle system (traffic light with five colors instead of three) works better independently of consumers’ knowledge about the food nutritional value.

Creating the Flawed Hero: Consumer Movement Framing in the Online Environment

Jeff Wiebe, Queens University, Canada
Jay Handelman, Queens University, Canada

Employing a New Social Movement perspective we conduct a netnographic analysis to examine how members frame consumer movements in the online environment. We find that rather than adhering to traditional activist roles members position themselves as persistent “flawed heroes” who inform others of important truths.

What You Smell is What You See? The Effect of Ambient Scent on Stimulus Ambiguity in Product Aesthetics

Xiaoxuan (Farrah) Wu, Temple University, USA
Martin Reimann, University of Arizona, USA
Maureen (Mimi) Morrin, Temple University, USA
Angelika Dimoka, Temple University, USA

Can the olfactory and visual senses cooperate to resolve ambiguity? Two scent experiments aim to understand if and how pleasant ambient scent (e.g. eucalyptus) can mitigate stimulus ambiguity in visual product aesthetics (e.g. abstract artwork) and how consumers' perceptions and evaluations are influenced as a consequence.

Icing on the Cake or Not: The Impact of Positive In-Group Members' Advice on individuals' Preference on Choice

Yinghao Wu, Renmin University of China, China
Jing Jiang, Renmin University of China, China

Based on the optimal distinctiveness theory this study proposes that anticipated in-group similarity becoming excessive due to too much positive advice will make individuals feel emotional ambivalent which will evoke subsequent negative behavioral responses-preference decrease or shift. The situation will be even more intense when individuals are independent self-construal.

Do the powerful prefer the "Brand-As-Leader"? Gender Difference in the Power Effect on Brand Role Preference

Jiang Wu, Nanjing University, China

In the current research we investigated the gender difference in the power effect on brand role preference. Specifically we proposed that men with lower sense of power and women with higher sense of power would prefer "brand as leader" to "brand as partner".

The Impact of Corporate Environmental Transgressions on Consumer Support for Non-profits: The Role of Negative Moral Emotions and Moral Identity

Chunyan Xie, Stord/Haugesund University College, Norway
Richard P. Bagozzi, University of Michigan, USA

We add to research on pro-social decision making by providing a new psychological mechanism underlying consumer support for non-profits upon exposure to corporate environmental transgressions. Results showed that contempt anger and disgust mediate the relationship between corporate transgressions and consumer support. Further moral identity regulates such a mediation process.

"Slim-as-Luxury" Effect: The Influence of Product Shape on Product Luxury Perception

Ji (Jill) Xiong, National University of Singapore, Singapore
Yu Ding, National University of Singapore, Singapore

Based on anthropomorphism theory that people tend to imbue characteristics of human beings such as personalities emotions and facial features onto products we found that people also attribute their implicit belief about slim human body shape and its signaling of high status and luxuriousness onto slim-shaped products.

Asset or Liability? The Role of Brand Equity in Times of Crisis

Haiyue (Felix) Xu, Pennsylvania State University, USA
Lianxi Zhou, Brock University, Canada

The present research examines how brand equity affects consumer responses to brand crisis and its contingency on crisis characteristics. Results show that brand equity backfires when a crisis is of high severity or of ethical nature. Confirmatory bias and disconfirmation of expectation are identified to be the underlying processes.

Soap-Opera and Tourism: Rehabilitating the Ottoman Post-colonial

Cagri Yalkin, Brunel University, UK
Georgios Halkias, University of Vienna, Austria

We explore how the tourists from formerly colonized territories in the Ottoman Empire consume the former colonizer through 1. watching Turkish soap operas and 2. visiting Turkey and in doing so how they confront the post-colonial relationship through confronting Turkey as a destination and a nation-brand.

Virtue-Vice or Vice-Virtue: Ingredient Presenting Order Affects Consumer's Perceived Healthiness and Calorie Estimate

Chun-Ming Yang, Ming Chuan University, Taiwan

Two experiments demonstrate that consumers report a higher (lower) perceived healthiness and lower (higher) calorie estimate when a dish's ingredients are presented in a virtue-vice (vice-virtue) sequence. Perceived healthiness mediates the relationship between ingredient order and calorie estimate. However this effect is weaker for individuals with low appearance self-esteem.

Parenting Mindset Salience and Its Influence on Uniqueness Seeking

Chun-Ming Yang, Ming Chuan University, Taiwan

Two studies demonstrate that parenting mindset salience makes consumer interdependent self-construal more salient but does not do so for independent self-construal. This salient interdependent self-construal leads to a lower preference for unique or cool products. Moreover this effect was stronger for females than for males and mediated by interdependent self-construal.

Fewer When Mixed: When Food Presentation Format Biases Consumers' Perceptions of Calories and Fat

Ning Ye, Temple University, USA
Maureen Morrin, Temple University, USA
Angelika Dimoka, Temple University, USA
Dipankar Chakravarti, Virginia Tech, USA

Our research aims to investigate whether consumers' calories estimation is biased by the food format: when the ingredients are mixed together versus separate. We found participants underestimated the amount of calories in candies when asked to imagine eating the food in a mixed (versus separate) format.

Embarrassed Customers: The Dark Side of Receiving Help from Others

Youjae Yi, Seoul National University, South Korea
Seo Young Kim, Seoul National University, South Korea

Receiving support from other customers during service encounters has become common with increased customer-to-customer interactions. However there is a downside of inter-customer relationships. Customers receiving help from other customers during service encounters are more likely to feel embarrassed which would lead to decrease in customer satisfaction.

The Construction of 'Whiteness' in Indonesian Skincare Advertising

Jeaney Yip, University of Sydney, Australia
Susan Ainsworth, University of Melbourne, Australia

This research analyses the discursive construction of beauty through skin care advertisements in Indonesian women's magazines. A country with the largest emerging middle class in Southeast Asia we explore the polysemy of whiteness that promise youthful and fair skin to affluent middle-class consumers and the constant 'upscaling' of lifestyle norms.

How Self-disclosure and Interpersonal Similarity Affect Goal Achievement in Social Media-based Online Communities

Kelly Eunjung Yoon, University of California Irvine, USA
Cornelia Pechmann, University of California Irvine, USA

Our research examines the effects of community members' identity self-disclosure which we posit to be an underlying mechanism in the success of online communities. A mediation analysis supports the notion that identity disclosure in dyads is a significant factor that enables individuals to achieve their goals through strong interpersonal bonds.

Creating the Mood for Humor: A Gender Identity Perspective

Hye Jin Yoon, Southern Methodist University, USA
Yongjun Sung, Korea University, South Korea

Mood effects research in humor advertising with a focus on gender identity is non-existent. Two experimental studies found responses to different arousal and valence mood primes in humor advertising to be contingent on the individual's gender identity. The findings provide implications for theoretical as well as practical contributions.

The Effects of Social Sharing on Consumers' Self-Perceptions of Expertise

Daniel M. Zane, Ohio State University, USA
Rebecca Walker Reczek, Ohio State University, USA

This research explores how sharing preexisting online material (e.g. a news article) can enhance one's self-perceptions of subjective expertise. Sharers believe they are acting as experts by disseminating information to others and conclude from their act of sharing that they must be knowledgeable about the topic of the shared content.

Curiosity under Bright Light: The Influence of Lighting Conditions on Innovative Product Adoption

Yu Zhang, Nankai University, China
Lan Xia, Bentley University, USA
Jiangang Du, Nankai University, China

This paper examines the effect of lighting conditions on evaluation and purchase intention of innovative products. Four studies showed that consumers in a bright environment are more likely to adopt new products than those in the dark environment with curiosity mediating the effect. And the effect is moderated by loneliness.

From Perceived Conceptual Importance to Physical Weight Judgment: A Theme-Fit Analysis

Ke Zhang, The University of Hong Kong, Hong Kong
Echo Wen Wan, The University of Hong Kong, Hong Kong
Sara Kim, The University of Hong Kong, Hong Kong

Prior research shows that the physical weight judgment in a prior context can influence perceived importance of the product but not the other way around. We find evidences in three experiments that the conceptual importance can also influence the physical weight judgment and that this effect occurs in theme-fit conditions.

Warmer but Less Competent: When Co-Branding Helps or Hurts Less-Known Brands

Ke Zhang, The University of Hong Kong, Hong Kong
Sara Kim, The University of Hong Kong, Hong Kong
Echo Wen Wan, The University of Hong Kong, Hong Kong

We show that whether co-branding with a well-known brand will be beneficial or detrimental for a less-known brand depends on consumers' focus on warmth versus competence when evaluating the less-known brand. We show that co-branding with a well-known brand increases perceived warmth but decreases perceived competence of a less-known brand.

Attributions to Individual or Group? A Study on Gender Differences

Chun Zhang, Concordia University, Canada
Michel Laroche, Concordia University, Canada
Marie-Odile Richard, State University of New York Polytechnic Institute, USA

Based on the self-construal literature and the interdependent theory the current work examines the gender difference in attribution behavior. Results show that males are more likely to attribute to individuals while females are more likely to attribute to groups. This difference is also confirmed between relational and collective interdependent self-construal.

Future is “Right” on Your Face: The Role of Facing Direction of Product on Attitudes toward Product

Yuli Zhang, Drexel University, USA
Hyokjin Kwak, Drexel University, USA
Haeyoung Jeong, Drexel University, USA
Marina Puzakova, Lehigh University, USA

This research demonstrates that the facing direction of product images in advertisements plays a crucial role in consumers' attitudes toward the advertised products. Our two studies reveal that right (vs. left)-facing direction of product is more suitable for products that are intended for future (vs. past) needs.

Neutral Expressions Increase Psychological Distance and Price Estimation of Luxury

Hong Zhu, Nanjing University, China
Xin Wang, Nanjing University, China
Han Gong, Nanjing University, China

Neutral facial expressions of commercial models increase perceived psychological distance between consumers and products which further influence price estimation of goods. The type of products further moderates the effects of facial expressions on price estimation. Psychological distance is the mechanism to explain it.

When Originality Backfires: When and Why Conforming Consumers are Considered Smarter Than Nonconforming Ones

Ignazio Ziano, University of Ghent, Belgium
Mario Pandelaere, Virginia Tech, USA; University of Ghent, Belgium

Consumers routinely make inferences about products and other consumers based on purchasing behavior. In this paper we study the effect of conforming (or nonconforming) consumer behavior on expected product quality and perceived consumer competence.

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