

# **Asia-Pacific Advances in Consumer Research 2015**

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**Volume XI  
PROCEEDINGS**

**Editors  
Echo Wen Wan  
Meng Zhang**

## **Asia-Pacific Advances in Consumer Research, Volume 11**

Echo Wen Wan, Meng Zhang, Editors

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**Association for Consumer Research**  
Labovitz School of Business & Economics  
University of Minnesota Duluth  
11 East Superior Street, Suite 210  
Duluth, MN 55802

[www.acrwebsite.org](http://www.acrwebsite.org)

# Preface

The Asia-Pacific Association for Consumer Research conference 2015 was jointly hosted by the University of Hong Kong (HKU) and the Chinese University of Hong Kong (CUHK), on June 19-21, in Hong Kong. Reflecting the conference theme of “vibrant integration,” we have the privilege to host more than 270 scholars from around 24 countries and areas. A total of 125 competitive papers, 5 special sessions, 2 roundtables, and 96 working paper posters were presented/displayed at the conference. We thank all those who joined us. Their attendance and contribution make the conference a memorable event. Our great appreciation goes to the efficient and responsible review team, and to our dedicated chairs of different tracks and the local arrangement: Xianchi Dai, Sara Kim, Jiewen Hong, Leilei Gao, and Jayson Jia. We give the special thanks to our distinguished keynote speakers Darren Dahl, Angela Y. Lee, Mary Frances Luce, and Linda Price. We are also grateful to Benson Chan, Kerri Hung, and Jasmine Zhu for their assistance, and to our diligent doctoral student volunteers. We owe our thanks to HKU’s Faculty of Business and Economics and CUHK Business School for providing the strong support for running this conference. We also thank David Tse and Jamie Jia for their valuable advice. Finally, we would like to express our thanks to ACR board, and particularly to Rajiv Vaidyanathan, Executive Director of ACR. His guidance has always been timely and helpful.

Echo Wen Wan  
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# Special Session Summaries

## Influence of Emotional and Cognitive Factors on Consumer Well-being

Hyewon Cho, University of Illinois at Urbana-Champaign, USA

### **Paper #1: Feeling Empty? Comfort-seeking and finding Meaning through Consumption**

Hyewon Cho, University of Illinois at Urbana-Champaign, USA  
Ravi Mehta, University of Illinois at Urbana-Champaign, USA

### **Paper #2: How Feelings of Envy Promote Innovation Adoption**

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

### **Paper #3: Motivated Hypochondriacs: Disease Labels Shape Health Perceptions**

Chiara Longoni, New York University, USA  
Geeta Menon, New York University, USA

### **Paper #4: Discussant**

Leonard Lee, National University of Singapore, Singapore

### **SESSION OVERVIEW**

Important for both consumers and the society as a whole (Richins and Dawson 1992; Mazur 1964; Pancer 2009), the subject of consumer well-being has recently received a lot of attention from researchers across disciplines. In particular, researchers have sought to understand the different factors that might promote or hinder consumer well-being (Mick, 2008) in various domains, such as risk perception and financial decision making (Thompson 2005; Bernthal, Crockett, and Rose 2005; Henry 2005), substance abuse (Bolton et al. 2008), food choices (Khare and Inman 2006; Wansink and van Ittersum 2003; Pechmann and Knight 2002), and health care (Wong and King 2008; Yan and Sengupta 2013). This session contributes to this area of research by presenting three papers and a follow-up discussion that explore three antecedents of well-being: meaningfulness, innovation adoption, and product-label perception.

Together, the papers in this special session will discuss novel yet influential affective and cognitive factors that impact consumer well-being across several domains. These papers collectively serve to (a) further clarify the role of these factors in affecting well-being; and (b) illustrate different ways of mitigating or eliminating these effects. Understanding these factors is important in facilitating consumers' information processing and decision making, and, ultimately, improving their psychological and physical well-being. The session will close with a general audience discussion led by Leonard Lee, who is known for his work in the domain of affect and its impact on consumer welfare. We expect this special session to attract a wide ACR audience, in particular consumer researchers interested in the influence of emotions and cognitions on various dimensions of consumer well-being.

The first paper by Cho and Mehta explores how the feeling of emptiness impacts consumption in various product categories (e.g., food, books) that can subsequently impact their health and well-being in general. This work builds on previous research that suggests that the feeling of emptiness enhances potentially harmful over-consumption. Specifically, the present work starts by understanding the construct of emptiness and its underlying cognitive process. It is found that the feeling of emptiness arises from loss of social connectedness and leads to loss of shared meaning in one's life. It is then demonstrated that providing an individual with the opportunity to do something meaningful in fact reduces harmful over-consumption

that is geared towards comfort seeking. This paper thus suggests meaningfulness as a constructive way to deal with the feeling of emptiness. A set of five studies is presented in support of the authors' hypotheses.

Building on the session theme of identifying affective factors influencing well-being, the second paper by Chung and Lee examines how another negative emotion—the feeling of envy—

can motivate consumers to adopt innovation. Across three experiments, these authors demonstrate that consumers who experience envy adopt innovative products to restore their threatened self-image, and show that this tendency is prominent among those who are more attentive to their feelings.

In contrast with the first two papers, the last paper by Longoni and Menon presents a cognitive factor that influences consumer well-being with respect to health-related decisions. The researchers present a novel interplay between categorization-based biases and self-protection motives that systematically affects health perception and well-being. Four studies illustrate that the mere presence (vs. absence) of a one-word label biases symptom reporting, perceived symptom intensity, and overall health risk assessment. However, decreasing defensiveness when processing health information eliminates such bias.

Drawing upon the findings across these three papers, we will discuss comparative as well as overarching issues pertaining to the antecedents of well-being. For instance, to what extent are cognitive drivers different from emotional antecedents of well-being, and what are their relationships to each other? Under what conditions might one be more motivated to seek indirect compensatory consumption (Cho and Mehta; Chung and Lee) as a means to enhance one's well-being rather than more direct solutions? And, how persistent are these reported phenomena, for instance, would consumers learn over time to correct for the reported label-induced health perception biases (Longoni and Menon)? Comments and suggestions from the audience will be sought so as to enhance the session's interactivity and the discussion's overall quality.

### **Feeling Empty? Comfort-seeking and Finding Meaning Through Consumption**

#### **EXTENDED ABSTRACT**

Feeling of emptiness (FOE) is a vague inner numbness, when individuals do not have a clear idea of what they feel and have no definite experience of their desires or wants (May 1953). Most individuals, at some moment in their lives, experience FOE (Didonna and Gonzalez 2009). However, it has been argued and demonstrated that if such feelings are not dealt with appropriately, it can lead to clinical conditions, such as depression and eating disorders (Blasco-Fontecilla et al. 2012; Delgado-Gomez et al. 2011; Delgado-Gomez et al. 2012).

Despite its significant implications, existing work has been limited to examining a correlational effect between the FOE and food consumption. Not much work, both in consumer behavior and social psychology, has examined larger implications of feeling of emptiness and if and how they can be mitigated. Current work, thus aims to further current understanding of feeling of emptiness by examining the

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driving process behind such feeling, and its impact on consumption behavior in a non-clinical setting.

A review of literature suggests that FOE and the study of it thereof became prominent after World War II and has become one of the primary problems in modern society (May 1953; Cushman 1990). It has been suggested that in post-modern society, people became communally isolated (Rieff 1966; Zaretsky 1976) and individualized (Logan 1987; Meyer 1986) and thus more socially disconnected. We propose that this loss of social connectedness underlies the FOE. To test our proposition, in Study 1, we asked 68 participants to recall a time when they felt empty and write about what made them feel that way. A content analysis of the writings indicated that feeling of emptiness indeed arises from loss of social connectedness, for example, loss of a family member (grandparent), divorce of parents, moving to college and having no one around.

Building on the results of study 1 we propose that because FOE, which has been shown to enhance food consumption, arises from loss of social connectedness it should only do so (i.e., lead to enhanced food consumption) for the people who are high in need for connectedness. Study 2, provided support for our hypothesis by demonstrating moderating effect of need for connectedness on the relationship between feeling of emptiness and increased comfort food consumption (e.g., cookies, donuts, cake). The relationship between FOE and comfort food was moderated by need for connectedness ( $F(1, 51) = 2.99, p < .05$ ). In other words, people high in need for connectedness ( $M = 4.39$ ) compared to those low in need for connectedness ( $M = 3.23$ ) showed significantly stronger craving for comfort food.

Next, based on previous research (Cushman 1990; Widiger et al. 1995) we argue that because FOE arises from loss of social connectedness it would induce loss of shared meaning in one's life. Results from study 3, corroborated our proposition by demonstrating that that people who were primed with feeling of emptiness ( $M_{\text{Empty}} = 3.71$ ) compared to those who were not ( $M_{\text{Control}} = 2.63$ ), indicated higher concern about the purpose and meaning of their lives ( $F(1, 52) = 7.053, p < .05$ ) as measured through existential concern measure (Hazell 1984).

It has been argued that people have an innate need to find meaning and significance in their lives (Frankl 1988). Thus, we propose that when coping with FOE, given a choice people will prefer the products that are perceived as meaningful than the ones that are perceived as comfortable. In Study 4, we presented our participants comforting (e.g., 101 Top Funny Jokes, The comic book; Charlie Brown and friends) and meaningful (e.g., Great Dialogues of Plato, Mother Theresa: The inspiring story and lessons of Mother Theresa) books and asked them to indicate their preference between the two under empty versus a control condition. We found that participants who were primed to feel empty ( $M_{\text{Empty}} = 3.94$ ) compared to those who do not ( $M_{\text{Control}} = 3.37$ ) indicated significantly higher preference for the meaningful books ( $F(1, 42) = 4.62, p < .05$ ).

Building on results of study 4, we further propose that when individuals are reminded of something meaningful they have done it should reduce comfort consumption. That is, presence of meaning in one's life should moderate the relationship between FOE and comfort-consumption. In study 5, in addition to manipulating FOE we also asked our participants to write about a past event that was insignificant in nature (control condition) or when they did something meaningful (meaningful condition). The consumption was measured through actual number of M&M seated by participants that they were given to snack on. Analysis revealed a significant interaction ( $F(1, 75) = 4.66, p < .05$ ). Participants in the empty condition but recalled a meaningful past event ( $M_{\text{Empty-meaningful}} = 12.70$ ) showed significantly lower consumption in M&Ms than those in the empty

condition and recalled an insignificant daily event ( $M_{\text{Empty-non-meaningful}} = 21.53$ ). Participants in a control condition did not show a significant difference by writing tasks. ( $M_{\text{Control-non-meaningful}} = 11.05$  and  $M_{\text{Control-meaningful}} = 12.92$ ). This result suggests that meaning can halt comfort-seeking induced by feeling of emptiness.

Current research thus elaborates on how feeling of emptiness influences consumption behavior and how it can be dealt in a desirable way (i.e., seeking meaning in life rather than seeking comfort). In addition, it also provides significant policy implications for consumer welfare.

### How Feelings of Envy Promote Innovation Adoption

#### EXTENDED ABSTRACT

We often compare ourselves with coworkers, friends, and neighbors to assess how well we are doing at the workplace, in school, and in our daily lives. This comparison often makes us realize our own inferiority and relative deprivation, evoking feelings of envy (Ortony, Clore, and Collins 1988) "source": "ISI Web of Knowledge", "event-place": "Ortony a; Univ Illinois at Urbana-Champaign", "abstract": "The authors of this volume intend to, first, convince the reader that a cognitive approach to the study of emotions is viable and, second, to analyze the cognitive structure of emotional systems and of specific emotion types. The authors attempted to avoid restrictions of language and cultural specificity. The introductory chapters explain the authors' approach and sketch the outlines of their theory. The next two chapters discuss the central and peripheral factors that affect the intensity of emotion. Chapters five through eight discuss the classification scheme more fully, describing the three major classes of emotions, individual emotion types belonging to each class, and the variables that help to determine their intensity. The final chapter discusses those aspects of emotion the authors intentionally ignored and suggests ways in which Artificial Intelligence could benefit from their theory. The book ends with a summary and a request for empirical research to test the hypotheses it forwards.", "language": "ENGLISH", "author": [{"family": "Ortony", "given": "A."}, {"family": "Clore G.", "given": "L."}, {"family": "Collins", "given": "A."}], "issued": [{"date-parts": [{"1988}]}], "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json"} Envious feelings threaten one's self-concept, as we tend to build our self-worth by ascertaining our relative superiority to others (Cohen-Charash and Mueller 2007).

Prior research has suggested various ways in which people consume products as a means to compensate for their threatened self-concept (e.g., Gao, Wheeler, and Shiv 2009; Rucker and Galinsky 2008). In the present work, we examine how feelings of envy can similarly induce compensatory product consumption, in particular, the adoption of innovative products.

Innovative products are psychologically rewarding as they improve one's lifestyle, allows one to build identity, and provides a chance for one to differentiate oneself from others (Simonson and Nowlis 2000) explaining decisions, and an individual difference, need for uniqueness (NFU). Due to these advantages, individuals can thus construct a positive self-image through innovation adoption (Vandecasteele and Geuens 2010). Accordingly, we propose that individuals who experience feelings of envy are more likely to adopt innovative products to repair their self-concept. Furthermore, we argue that this product preference is more pronounced among individuals who are dispositionally inclined to attend to their feelings. Greater self-focused attention leads these individuals to more intensely experience the negative feelings that arise from the self-other discrepancy (Carver and Scheier 1981; Salovey 1991) which

in turn motivates them more strongly to repair their threatened self-concept (McFarland et al. 2007).

**Experiment 1** was designed to test the basic effect of our hypothesis. To manipulate different degrees of envy, we first 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. They then completed a series of tasks such as predicting the number of people in a crowd as shown in a given picture. After completing the 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 (a pre-test revealed that this method successfully generates different levels of envy, but not other emotions). In a supposedly unrelated second study, all participants read an advertisement for a new product—a multi-function adapter that can be used in over 150 countries—and were asked to rate the product. Finally, all participants responded to the Attention-to-Feelings scale (Salovey et al. 1995). The results showed that envious participants, especially those who dispositionally attended to their feelings, rated the global adapter more positively than non-envious participants ( $p = .024$ ).

**Experiment 2** conceptually replicated the findings in experiment 1 by using a different method to manipulate envy. M-Turk participants ( $N = 143$ ) were randomly assigned to one of two conditions. In the envy condition, participants wrote about an individual at their own level whom they envied. In the control condition, participants were simply asked to write about an individual whom they knew (Cohen-Charash 2009). Following this envy manipulation, in a purportedly unrelated study, all participants saw an advertisement for the “Smart Body Analyzer,” a one-step health-tracking scale that measures an individual’s weight, body composition, and heart rate, as well as the air quality of the room. Lastly, participants responded to the Attention-to-Feelings scale as in experiment 1. The results again showed that among participants who were dispositionally inclined to attend to their feelings, those who experienced envy rated the Smart Body Analyzer more positively than those who did not experience envy ( $p = .008$ ).

Thus far, experiments 1 and 2 consistently demonstrate that consumers, particularly those who are dispositionally inclined to attend to their feelings, are more likely to adopt innovative products when they experience envy. The goal of **Experiment 3** was to test the mechanism that this innovation adoption reflects envious consumers’ desire to repair their threatened self-concept. Specifically, we investigated whether envious individuals, when given a chance to self-affirm (via other means), would no longer show a preference for innovative products. A total of 172 lab participants were randomly assigned to one of four conditions (Envy: yes/no)  $\times$  (Affirmation: yes/no). As in experiment 2, half of the participants wrote about an individual whom they envied (envy condition) and the remaining half of the participants wrote about a person whom they knew (control condition). After the essay-writing task, 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 looks like (no-affirmation condition) (Gao, Wheeler, and Shiv 2009) “I am an exciting person”. All participants then evaluated the Smart Body Analyzer and responded to the Attention-to-Feelings scale as in experiment 2. Consistent with our hypothesis,

when individuals were not self-affirmed, envious participants who were inclined to attend to their feelings rated the innovative product more positively ( $p = .001$ ). Importantly, when envious participants were self-affirmed prior to the innovation-evaluation task, they no longer showed such a preference ( $p = .999$ ).

This research contributes to the literature in several ways. First, it adds to a limited but growing literature that examines how envy, even when incidentally experienced, leads individuals to repair their self-concept through product consumption. Second, our findings highlight the symbolic role that innovative products serve to consumers who seek opportunities to maintain a positive self-concept.

## Motivated Hypochondriacs: Disease Labels Shape Health Perception

### EXTENDED ABSTRACT

This research looks at how disease labels might fundamentally alter health perceptions. We propose that disease labels, much like categories, lack precise and discrete membership boundaries: for a stimulus (i.e., a constellation of somatic and affective sensations at a certain point in time) to be assigned to a category (i.e., a certain illness), not all features (i.e., symptoms) need be present. In other words, symptom matching, much like feature matching, should be a flexible process of interpretation rather than exact matching. This results in a certain degree of latitude when attending to, remembering, and attributing somatic and affective states, giving rise to biases in symptom reporting and thereby affecting health perceptions. Furthermore, such disease labeling effect is susceptible to self-serving biases, whereby inaccuracies in risk estimates reflect the interaction of categorization-based errors with defensive mechanisms.

In a series of four studies, we show the following: (a) Disease labels alter symptom reporting and bias health risk estimates; (b) The direction of this bias reflects a self-protection motive: a label signaling (or interpreted as signaling) a mild ailment leads to greater symptom reporting and higher risk estimates compared to a label signaling (or interpreted as signaling) a severe ailment; (c) Reducing defensiveness eliminates this bias; (d) Perceived disease threat partially mediates the effect; (e) Disease labels do not affect risk estimates made for the general population (i.e., base-rates) or for individuals matched for age and gender (further corroborating the motivational nature of the bias); and (f) This bias holds when controlling for incidental affect, well-being, and general health perception.

In Study 1, participants were handed a survey ostensibly assessing the wellness of the university community. Although all versions of the survey described the same medical condition, the disease was labeled as Seasonality, Mild Seasonality, Severe Seasonality, or was not labeled. Participants were asked to report (a) if in the previous month they had experienced any symptoms, and if so which ones, (b) how intensely they had experienced these symptoms, and (c) risk estimates for self and for another person matched for age and gender. As expected, the presence (vs. absence) of a label was associated with higher symptom recognition ( $p < .001$ ), higher perceived symptom intensity ( $p < .001$ ), and greater risk estimates ( $p < .05$ ). Perceived disease severity moderated the effect: symptom reporting, symptom intensity, and risk estimates were higher if the label signaled (or was interpreted as signaling) a mild (vs. severe) ailment (as measured by perceived severity ratings). Finally, labels affected risk estimates for the self ( $p < .001$ ) but not for others. These effects held when controlling for incidental affect, well-being, and general health perceptions.

In Study 2 and 3 we sought to better understand the phenomenon and identify boundary conditions. We hypothesized that the



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biasing effect of disease labels on health perception is due to defensive motives. If so, the effect should disappear when defensiveness is reduced, either because the person affirms alternative self-resources (Study 2), or because one's sense of perceived control is temporarily shaken (Study 3).

Building on self-affirmation theory (Steele, 1988) and on the role of self-affirmation in reducing perceived invulnerability to health risks (e.g., Sherman, Nelson and Steele 2000), in Study 2 participants were first either allowed to affirm themselves in an important domain or they were not allowed to do so. Participants were then handed a wellness survey containing a description of a medical condition that was either labeled or not labeled. To measure risk estimates, participants rated the likelihood they, as well as an average person of their same age and gender, would contract the disease. As predicted, defensiveness moderated the effect of labels on risk estimates, with the direction of the bias determined by participants' perception of disease severity ( $p = .05$ ). When participants did not engage in self-affirmation, risk estimates were biased by the presence of a label ( $p = .01$ ). However, when participants' defensiveness was reduced (because they engaged in self-affirmation), risk estimates were no longer biased by the presence of a label ( $p = .93$ ). Neither self-affirmation nor label affected risk estimates for another person, further corroborating the notion that the phenomenon reflects a self-protection bias.

Study 3 builds on research showing how high perceived control is associated with greater defensiveness and perceptions of invulnerability to negative events (e.g., DeJoy 1989; Harris 1996; Hoorens and Buunk 1993). We reasoned that we could reduce defensiveness and eliminate the biasing effect of labels by inducing perceptions of *low* control. Participants were first asked to recall and vividly describe an instance in which they felt they had high (vs. low) control, and then handed the same health survey used in Study 2, which contained the label (vs. no label) manipulation and the critical measures of risk. As expected, risk estimates of low-control participants were not biased by the presence of a label ( $p = .54$ ), presumably because low control tempered defensiveness; risk estimates were instead biased by a label when participants recalled an instance of high perceived control ( $p = .01$ ). The direction of the bias was once again determined by participants' perception of disease severity, and the effect did not apply to risk estimates for others.

Study 4 brings together the previous three studies to gain a better understanding of the process behind the phenomenon. We first manipulated the factor self-affirmation as in Study 2, and then manipulated the factor label. The wellness survey contained measures of risk estimates and an expanded web of measures of perceived disease threat. Bootstrapping analyses revealed that perceived disease threat partially mediated the relationship between label and risk estimates (LLCI: 0.1137, ULCI: 0.6016), and defensiveness moderated the relationship between perceived disease threat and risk estimates ( $p = .04$ ).

This research is important both theoretically and practically. Theoretically, this research elaborates on how health perceptions are formed, and presents a novel effect based on the interplay of categorization and defensive processes. From an applied perspective, this research has substantive implications for social welfare, as both preventive and care-seeking behaviors heavily rely on self-assessment.

#### Discussant

Drawing upon the findings across these three papers, we will discuss comparative as well as overarching issues pertaining to the antecedents of well-being. Comments and suggestions from the au-

dience will be sought so as to enhance the session's interactivity and the discussion's overall quality.

# Mobile Social Networks

Jianmin Jia, Chinese University of Hong Kong, China

## **Paper #1: Social Network Activation and Mobile Consumption after a Population Scale Disaster**

Jayson Jia, The University of Hong Kong  
Jianmin Jia, The Chinese University of Hong Kong

## **Paper #2: Mobile-Based Social Network Activation and Sharing: the Emotion and Relevance Effect**

Dan Dan Tong, The Chinese University of Hong Kong  
Jianmin Jia, The Chinese University of Hong Kong  
Robert Wyer, The Chinese University of Hong Kong

## **Paper #3: Mobile Samaritans and Phishers: Network Determinants of Response Behavior**

Jayson Jia, The University of Hong Kong  
Xianchi Dai, The Chinese University of Hong Kong  
Jianmin Jia, The Chinese University of Hong Kong

## **Paper #4: Discussant: Smart Marketing in China in the Era of Big Mobile**

Jianmin Jia, The Chinese University of Hong Kong

### **SESSION OVERVIEW**

In the past two decades, the scope for studying basic human interactions and conducting marketing research has undergone unprecedented change due to rapid advances in mobile telecommunications technologies. With over 7.3 billion active mobile phones globally, mobile devices and networks are a dominant environment for social, economic, and marketing interactions. In a world where most human beings are constantly interconnected within wireless networks, mobile phones have not only expanded the range of human interactions, but have begun to alter and even replace traditional face-to-face environments. Critically, mobile phones also act as a nexus between physical and virtual worlds and provide an interface for marketers and consumers in both electronic and physical environments. In doing so, mobile phones allow for the real-time linkage of historical behavioral data, intermediate marketing actions, and verifiable behavior (e.g., customer records, targeted offers, and coupon redemption), and have the potential to generate novel behavioral and marketing insights. Far more versatile than even the venerable internet browser cookie, mobile phones are essentially human cookies that allow for massively-scaled, data-driven field experiments in multitudinous contexts and environments.

Developing marketing research methodologies for such devices becomes more important as an ever increasing amount of social and economic activity migrates into the mobile domain. This is particularly pertinent for behavioral research, which has largely been ignored in the rise of big data analytics dominated by engineers, computer scientists, and physical scientists. Finding and showing the relevance, importance, and impact of behavioral theories, models, and experiments is ever more important in the age of big data, data mining, and machine learning, which have come to rise to the forefront of both industry and academic research. Instead of being sidelined by an increasing number of (non-behavioral) industry and academic researchers who are interested in data-heavy but theory-light approaches, the onus is on behavioral researchers to demonstrate that big theory and big data compliment, and ultimately cannot do without each other.

This session hopes to share experimental research that combines both behavioral marketing theory with the unique analytics opportunities afforded by mobile network research platforms. Our

papers range from an investigation of how random disasters can impact human behavior to research on how different social networks have different roles for emotional regulation to an exploration of the social network factors that determine basic response behavior. Our research will be pre-faced by a senior marketing scholar his experiences of seeing how smart marketing are now being implemented by every major firm in the Chinese market, old and new, offline and online, state owned and private, and is now part of a technological movement that is spearheading the development of China's information economy.

## **Social Network Activation and Mobile Consumption after a Population Scale Disaster**

### **EXTENDED ABSTRACT**

Many unobservable properties of complex social systems are revealed only under special circumstances. We used the 2013 Ya'an earthquake ( $M_s$  7.0) as an instrument linking natural phenomena and human response, 1) revealing hidden properties of both micro- and macro- level social networks, and 2) revealing human crisis dynamics and consumer behavior under risk. By revealing behaviors, dispositions, and relationships that are difficult to observe under normal circumstances, emergency situations such as earthquakes provide instruments to explore several important research topics ranging from human dynamics during important, rapidly changing, and extreme contexts to temporal-spatial properties of social network behavior.

We used 3-months of telecommunications records (centered around the April 20<sup>th</sup> earthquake) of 157,358 active subscribers of a major Chinese mobile telecommunications carrier residing in the Ya'an region of Sichuan (10.1% of total population, 40.4% in rural areas), who were connected with 2.08 million alters. The data included 56 million time-stamped records of individuals' voice calls, text messages (SMS), mobile internet usage, mobile app usage, mobility (tower access), demographics, and customer data (e.g., phone model, spending, family plan membership), which we combined with earthquake, geographic, and economic data to 1) explore the relational and structural pathways of important tie network activation during the earthquake, 2) investigate consumer behavior in the wake of the earthquake.

### **Part 1: Social Network Activation in the Wake of the Earthquake**

Understanding how individual relationships aggregate to form complex network systems is a basic question with manifold scientific and societal implications. Whereas extant social network research has typically explored network dynamics using experimental manipulations under normal circumstances, we investigated micro-to-macro social network dynamics of social network activation as 'manipulated' by the random shock of the 2013 Ya'an earthquake.

On the micro-level, we used initial bursts of post-disaster communications to create an alternative conceptualization of tie strength, called 'revealed tie importance' (based on the notion that many latent important ties are behaviorally revealed in special circumstances), which identified core social ties better than frequency-based tie strength measures. Whereas extant literature predicts that the strongest ties (based on frequency of communications) under normal circumstances should also be the most important ties during the earthquake, we found that this was not the case; rather communi-

tions with dormant important ties dominated communications. On the macro-level, we investigated how important ties activated by the earthquake aggregated and evolved over time to form information networks spanning communities. Conceptually, this explored how micro-level relational embeddedness based on important ties related to the structural embeddedness of the enveloping macro-network, and its socio-economic implications. Extant literature would predict that inter-community relationships should be based primarily on distance; for example, gravity models and the principle of homophily predict localization effects with close and similar communities reaching out to each other, e.g., neighboring rural villages communicating with each other. However, we found that after the earthquake, tie activation and information diffusion flowed upwardly along hierarchical community networks that exhibited heterophilic tendencies in addition to localization effects. How individuals' important ties aggregated over time and space to form the embedded structure of rural-urban community networks reflected phenomena disparate as information and empathy transmission, migration patterns, and economic development.

Overall, network activation and behavioral patterns could be captured by the purely statistics-based approaches commonly found in recent network research, e.g., frequency-based measures of tie strength and distance based gravity models of community networks. In contrasting purely statistics-based and behaviorally-calibrated network constructs, this research also explored the boundaries of 'big data' approaches. Unlike many natural networks (e.g., motion of particles), networks in society do not exhibit purely random behavior and are often guided by socially determined and embedded network processes. This is particularly apparent during irregular events such as emergencies and natural disasters, when behavior is cause-driven and statistical measures based on activity during regular time periods become less relevant and predictive.

Besides being a contribution to basic science, our temporal spatial findings also have a direct application to consumer behavior questions ranging from geospatial customer behavior (how people walk around a mall) to understanding the fundamental building blocks of consumer networks to predicting consumer response to black swan events (particularly those involving risk or stress). How behavioral research captures and understands increasingly complex consumer phenomena over time and space will be a fundamental and recurring research question in the new era of mobile and smart marketing.

### ***Part 2: Consumer Behavior in the Wake of the Earthquake***

We also explored changes in consumer behavior and human interest dynamics as a result of the earthquake. Since the earthquake generated a random distribution of force, individuals at different locations within Ya'an experienced different levels of physical shaking (as measured by magnitude or peak ground acceleration); thus, beyond looking at 'before versus after' effects, we were able to use level of shaking as an interval scale proxy for trauma and risk. We coded individuals' geo-locations down to individual neighborhoods and matched this to geophysical data; thus we were able to use amount of physical shaking to predict consumer behavior. We found that greater levels of physical shaking correlated to a much greater than proportionate increase in hedonic oriented mobile phone behaviors such as streaming music, watching online videos, playing mobile games, and engaging in mobile shopping; this increase increased on a gradient depending on the level of physical shaking in the neighborhood. Utilitarian mobile app usage also increased, but the change was relatively small by comparison. We also found that increase in hedonic mobile app usage was correlated with a decline in perceived risk, as measured by telephone survey 5 days after the

earthquake. We posit that the increase in hedonic app usage as a result of greater physical shaking was a coping strategy in response to greater psychological and biological stress. We are now preparing to test our hypotheses in a series of field experiments in which we manipulate risk information exposure to earthquake victims. Such investigations would also test whether disaster or crisis response management (from both societal and individual levels) benefit more or less from information availability and hedonics.

### **Mobile-Based Social Network Activation and Sharing: the Emotion and Relevance Effect**

#### **EXTENDED ABSTRACT**

The current research investigates both the antecedents and consequences of mobile-based social communication. In particular, it investigates what types of social networks are activated after encountering an emotion-laden experience and how the anticipated responses of recipients in the activated network affect the willingness to share both these and other experiences. We assume that the motivation to share experiences in such a situation is determined in part by expectations for responses from the likely recipients. Positive emotional experiences are likely to be shared to the extent communicators anticipate they will receive compliments or praise. However, the communicating about negative experiences is only likely to occur if people expect their messages to elicit concern and social support. Thus, people are generally willing to share self-relevant happy experiences with a large social network but are only willing to share self-relevant sad experiences with close friends, through a private channel.

In addition, emotional reactions to an experience can affect communications about unrelated events as well as about the events that elicited these reactions. People may be willing to share an unrelated content after having a happy experience. However, they may be less willing to share an unrelated content after having a sad experience. This may be due to the fact that their need to express their negative emotion has been satisfied by communicating about the experience with friends.

Three experiments examined these possibilities. In Experiment 1, participants recalled a happy or sad event they had experienced. They shared an event publicly more frequently when it was happy than it was sad. However, they were equally likely to share happy and sad events in private. In addition, participants recalled being activated of a larger size of social network with a happy event they had experienced than with a sad one.

In a second experiment, we also considered the personal relevance of the experience that people considered sharing. Participants imagined that either themselves or another person applied for a job and either got the job (a happy event) or did not (a sad event). In each case, they were asked the likelihood that they would publicly share the experience in social media. Participants reported to be more likely to share a happy experience of their own than to share a happy experience that others had had. However, they were equally unlikely to share a sad event regardless of who experienced it. In an ostensibly irrelevant study of mobile usage that followed, participants viewed an unrelated content with their mobiles, and were asked the likelihood that they would communicate about the unrelated content with mobile apps. They were significantly less likely to share an unrelated content when they had personally had a sad experience than when they had learned about the other's sad experience.

A third study focused primarily on the communication of unrelated content in social media with mobiles. Participants imagined reading about an airplane crash. In some cases, friends were on the



plane and either survived or not. In other cases, all passengers on the plane were unknown. Participants reported a greater likelihood of sharing an unrelated content publicly when friends survived or when unknown persons were not survived than in other conditions. These effects were mediated by participants' expectations of receiving a response to the shared message. That is, participants expected to receive more responses from a larger network to a happy event if it was personally relevant than if it was not, but expected to receive fewer responses from a smaller network to a sad event if it was personally relevant than if it was not.

In general, people are more likely to communicate about an unrelated content after experiencing a positive emotion than after experiencing a negative emotion when the focal event is personally relevant, but they are more likely to communicate about an unrelated content after experiencing negative emotion than after experiencing a positive emotion when the focal event pertains to irrelevant others. We suggest that after experiencing a happy event, a desire for compliments or praise leads people to think of a larger network in which positive responses from many people are likely. Moreover, negative emotions that are elicited by self-irrelevant event also activate a large network. In contrast, negative emotions that are elicited by a self-relevant event activate a small network involving only close friends. Therefore, people are more likely to communicate about an unrelated content after experiencing either a self-relevant happy event or a self-irrelevant sad event than they are in other conditions.

These findings in combination shed light on drivers of mobile-based social communication and demonstrate how emotion plays a role in what people communicate about and with whom they communicate.

### **The Wireless Good Samaritan: Pro-social Behavior in Mobile Networks**

#### **EXTENDED ABSTRACT**

A basic marketing question in the digital and wireless age is what drives basic response behavior. For contexts ranging from targeted advertisements to promotional offers to charitable appeals, response behavior can run the gamut from interest (e.g., clicking on ads) to communications (e.g., giving personal information) to purchase (e.g., promotion uptake), all of which are critical marketing research issues. This paper focused on response behavior in the context of pro-social behavior towards strangers, which can be thought of as a situational test of general social responsiveness.

Pro-social behavior has been a classic subject of intellectual discourse, and is a topic of increasing popularity in marketing research. However, investigating pro-social behavior (or any other social behavior) in mobile environments represents more than a change in behavioral context, and necessitates the adoption of methodologies, measurements, and concepts different from those used in traditional behavioral experiments. A growing body of research on individual and group behavior in digital social networks suggests that an individual's ego-network characteristics can predict a wide range of human behavior. In contrast from previous behavioral research on pro-sociality, we investigated the antecedents of pro-social behavior from a social network perspective.

Within marketing research, there has been growing interest in social network effects, but this has largely been in the domain of peer influence and contagion effects, i.e., the impact of one's peers' behaviors on one's own behavior (e.g., chance of product adoption if a friend has adopted a product). On the other hand, we investigate what structural characteristics of individuals' social relationship networks (e.g., how many social ties an individual has, their relative

position in a network) can reveal about their response and behavioral tendencies with strangers. Specifically, we combined large-scale individual-level mobile telecommunications records from a major Chinese telecommunications firm with behavioral field experiments to identify, test, and verify the social network factors that drove actual pro-social response. We show that network size and social network status as captured by two new centrality measures drove pro-social response.

Across three studies that involved 10,000 mobile phone users (who were connected to 330,000 other users on a mobile network), we used field experiments that combine measures of verifiable behavior, population-scale databases of network behavior, and between-condition manipulations to study the basis of pro-social behavior. We found that individuals' social status (e.g., iPhone ownership) and network structure (e.g. network centrality) could predict their pro-social behavioral intentions (Study 1) and actual pro-social behavior in a range of contexts (Study 2). Specifically, in Study 2, we sent text messages, ostensibly messages from a stranger, to 5,000 randomly selected mobile phone numbers (directly connected with 137,710 other subscribers) that requested a response, e.g. "I'm feeling depressed with the holidays, can you send me some cheerful message?" Higher status predicted less altruistic helping behavior, more response latencies, less detailed responses, etc.

Besides demonstrating what specific network characteristics predict actual pro-social behavior in multiple domains (Studies 1 and 2), we also tested the causality of our predictors in between-condition field experiments within the network (Study 3). In Study 3, research assistants called 2,000 randomly selected numbers (with 76,783 other direct connections) and masqueraded as a visitor who just arrived in a city, who ostensibly misdialed while trying to call a friend, and attempted to ask for directions "since you're already on the line". Number of questions answered and time spent were used as dependent variables. We manipulated the accent of the caller as a novel proxy for social status, and found that individuals with higher status within their wireless network discriminated against lower-class accents in terms of amount of help rendered. The interaction between social status network-variables and an exogenous manipulation of social status showed that the network variables in Studies 1 and 2 did not reflect some factor unrelated to social status, such as dispositional curiosity or information overload.

Our methodology combines measurements of verifiable behavior, exogenous between-condition experimental manipulations, and large-scale network data analysis, and uses a previously untapped wealth of individual behavioral histories from wireless devices to identify and confirm the drivers of pro-social behavior. We show that it was not the number and strength of connections between people in a network, but the relative structure of those connections that best predicted actual behavior. In particular, we identified and empirically tested "network asymmetry" as a network centrality variable that proxies for social status and can predict a wide range of behaviors.

Most importantly, our results showcase the possibilities of using large network based field experiments in experimental social sciences, which has recently come under criticism for small sample sizes, biased selection and self-reported information, and other methodology flaws. A network based approach can potentially facilitate experiments with sample sizes in the millions and capture real behaviors that were previously inaccessible before detailed and objective histories of individual behavior from large consumer-technology databases became widely available.

**Discussant: Smart Marketing in China in the Era of Big  
Mobile**

Drawing upon the findings across these three papers, we will discuss comparative as well as overarching issues pertaining to the antecedents of well-being. Comments and suggestions from the audience will be sought so as to enhance the session's interactivity and the discussion's overall quality.

# Consumer Responses to Multisensory Inputs

Rhonda Hadi, University of Oxford, UK

## **Paper #1: Virtual Touch: How Computer Interfaces Impact Consumer Choice**

Hao Shen, Chinese University of Hong Kong, China  
Meng Zhang, Chinese University of Hong Kong, China  
Aradhna Krishna, University of Michigan, USA

## **Paper #2: Positive, Energetic Multisensory Stimuli: When Ads Can Hurt Your Brand**

Nancy M. Puccinelli, University of Oxford, UK  
Keith Wilcox, Columbia University, USA  
Dhruv Grewal, Babson College, USA

## **Paper #3: Boost the Brightness, But Turn Down the Volume: Cross-modal Compensation for Meta-Sensory Homeostasis**

Rhonda Hadi, University of Oxford, UK  
Lauren Block, Baruch College, USA  
Suresh Ramanathan, Texas A&M University, USA

## **Paper #4: Discussant**

Rashmi Adaval, Hong Kong University of Science & Technology, China

### **SESSION OVERVIEW**

Consumers are continuously exposed to sensory cues, both in their environments (e.g., retail atmospheres) and while interacting with products (e.g., touching products). While it is well documented that sensory cues impact meaningful consumer behaviors, researchers have identified the need to more critically examine the mechanisms through which sensory cues exert their effects (Krishna, 2012).

The proposed session addresses this call and advances sensory research by combining three papers that move research on sensory cues away from mere effect demonstrations and on to a more refined understanding of when and why sensory cues are relevant to consumers' evaluations and behavior. Specifically, each of the three papers draws upon different supporting theories to explore the impact of various sensations (haptic, visual and auditory) on important marketing outcomes: product choice, product evaluations, and brand attitudes.

The first paper examines the impact of a single-modality cue: haptics. Shen and colleagues find that touch interfaces (e.g., digital tablets) lead to more affect-laden (as opposed to cognitively-superior) choices when compared to non-touch interfaces (e.g., computer with a mouse). They find that this effect is driven by increased mental simulation. Puccinelli and colleagues demonstrate positive, energetic multisensory stimuli can elicit a negative reaction when they conflict with the emotional state of the consumer. This research demonstrates the dynamic nature of multisensory cues. Finally, Hadi and colleagues bring the session to a close by demonstrating that sensory exposure in one modality may trigger general sensory goals. These goals might be satisfied along other modalities, in order to aid in meta-sensorial homeostasis. All of these papers are in advanced stages of completion, with multiple studies run.

Together, these papers highlight that there are many different nuanced processes through which sensory cues impact consumer responses. Particularly, they draw upon three different theoretical frameworks to explain the sensory effects: mental simulation (Shen, et al.), cognitive conflict (Puccinelli, et al.), and homeostasis (Hadi, et al.). Additionally, these papers explore distinct moderators to help define boundary conditions of these effects: depiction mode (Shen,

et al.), affective state (Puccinelli, et al.), and dispositional sensation-seeking (Hadi, et al.).

We are honored to have Rashmi Adaval, an eminent scholar specializing in affect, sensory information, and consumer judgments, as a discussant. Consistent with the conference's "Vibrant Integration" theme, Dr. Adaval's expertise and the progressive approaches from this session are sure to induce a lively discussion, and are likely to appeal not only to sensory researchers but also to researchers grounded in more traditional approaches to cognitive psychology and consumer behavior.

## **Virtual Touch: How Computer Interfaces Impact Consumer Choice**

### **EXTENDED ABSTRACT**

In the digital world, purchase decisions and product choices are increasingly made on a variety of computer interfaces. For example, people can order take-out meals on their smartphone, iPad, laptop, desktop computer, etc. Some of these interfaces are touch-based (e.g., iPhone, iPad) whereas others are not (e.g., laptop, desktop computers). When using a touch-interface, consumers often make a choice by touching the image of the option they want; on a desktop, they typically indicate their choice by using a mouse to click. Will the act of choosing on different interfaces lead to differences in choices? This paper examines such a possibility.

We focus our investigation on a binary context similar to the ones widely examined by prior researchers (Dhar & Wertenbroch 2000; Shiv & Fedorikhin 1999), that is, one alternative is affect-laden (i.e., it elicits a strong positive affect, but has fewer positive cognitive associations; e.g., cheese cake) and the other is cognitively superior (i.e., it has better cognitive benefits, but does not induce strong positive affect; e.g., fruit salad). The pair of products is presented pictorially on an iPad or a desktop. We predict that choosing on an iPad (vs. a desktop) enhances the choice share of the affect-laden alternative over the cognitively-superior one.

People may mentally stimulate the expected interactions with an object upon seeing it (Elder & Krishna, 2011; Tucker & Ellis, 1998; Shen & Sengupta, 2012). For example, the sight of a soccer ball makes people mentally simulate the action of kicking it with their foot. Decades of dual-system models (Espein, 1993; Loewenstein, 1996; Metcalfe & Mischel, 1999; Pham, 1998) have shown a key difference between the reason-based, more utilitarian alternative and the feeling-based, more hedonic one: Relative to the former, the latter induces a spontaneous action tendency within consumers to "grab it directly". This is, when consumers reach out to touch an option by their hand on an iPad, this action is very similar to the action that they would spontaneously simulate in their mind upon seeing the image of a hedonic product (i.e., an impulse to grab it – Shiv & Fedorikhin 1999). Reaching out to touch the hedonic product on a touch-interface is thus more congruent with the impulse than using a mouse to click on a non-touch interface, leading to a greater choice share.

We conducted five experiments to test our prediction. In Study 1 (N = 85), participants used either an iPad or a desktop to make a binary choice that was visually presented on the screen. The results were as predicted: Participants were more likely to choose cheese-cake over salad when they made their choice on an iPad (95%) than on a desktop (73%;  $p < .01$ ).

Study 2 (N = 192) further demonstrated the effect of interface on reaction time. In that study, participants were told that after they saw any pair of pictures, they should *choose the smaller picture as quickly as possible*. After some practices, they went to the target pair (cheesecake vs. salad). We found that when participants made the choice on an iPad, they were quicker to make a choice when the cake (vs. the salad) was the correct response ( $p < .05$ ), whereas this difference disappeared when they made choice on desktop ( $F < 1$ ). The interaction effect was also significant ( $p < .05$ ).

Study 3 (N = 132) further replicated our findings using similar stimuli (ice-cream vs. USB) and went a step forward to show that such an effect was not simply due to any other differences between an iPad or a desktop. Specifically, participants were assigned to three conditions: one on desktop and two on iPad. In the iPad conditions, half the participants made their choices by directly touching the pictures using their fingers (compatible with “grabbing the product directly”), whereas the other half made their choices by touching the pictures via an iPad touch pen (incompatible). As the latter iPad condition bears little resemblance to the mentally stimulated responses upon seeing a hedonic product, the choice of the hedonic product in this condition (58%) was similar to the desktop condition (60%) - both being significantly lower than the other iPad condition (80%;  $ps < .05$ ).

Study 4 then tested the predicted effect using a moderator. Since people typically use their dominant hand to grab the object they want, using the dominant hand to choose on an iPad might match their spontaneous impulse of grabbing the hedonic product, whereas using the non-dominant hand to do so, might not. We recruited only participants those who were right-handed (N = 226). Participants were either instructed to use their right or left hand to choose between pictures of two types of food on the screen. As predicted, when they used their right hand to choose, they were more likely to choose a cupcake over blueberries on an iPad (69%) than on a desktop (52%,  $p = .07$ ). However, when they used their left hand to make their choice, such a pattern was not observed (35% vs. 48%,  $p = .16$ ). The interaction effect was significant ( $p = .02$ ). In addition, we also demonstrated that our effect in right hand condition was mediated by the increased desire to reach toward the hedonic food.

Study 5 (N = 224) examined whether our predicted effect held only when the products were presented pictorially. This is because that prior evidence only shows a strong link between “vision” and “action” such that the visual depiction of an object can activate the mental simulation of interacting with the object, but not so strong between the name of the objects and the mentally simulated responses (Tucker & Ellis, 1998). As expected, when the two options were visually presented on the screen, participants were more likely to choose an ice-cream cup over a corn cup on an iPad than a desktop (71% vs. 51%,  $p = .03$ ). However, when the two foods were verbally presented (i.e., their names were shown), such an effect disappeared (60% vs. 69%, respectively, *n.s.*). The interaction effect was significant ( $p = .02$ ).

Taken together, the results of five experiments provide converging evidence for our prediction. These findings advance the current literature of mental simulation, affect-cognition choice conflict, and have rich implications in the new area concerning the influence of different digital interfaces on consumer behavior.

## Positive, Energetic Multisensory Stimuli: When Ads Can Hurt Your Brand

### EXTENDED ABSTRACT

Sensory experience is often assumed to be static. This research demonstrates the dynamic nature of sensory experience, in particular, the moderating role of consumer emotional state. While positive, energetic stimuli generally make consumers feel positive and upbeat, there are conditions under which the reverse occurs. From a managerial perspective, there is a growing paradox within media: while ads remain uniformly positive and upbeat, the media content they sponsor grows increasingly negative. Eleven out of the top 25 programs are negative (Schneider 2013). By comparison, only about 10% of the top programs from 1990-1999 where negative (TV.com 2013).

The negative emotions engendered by media content are likely to affect consumers since emotions have been shown to influence judgment and decision-making (Adaval 2001; Cohen & Andrade 2004; Raghunathan & Pham 1999). However, it is less clear how consumers experiencing a negative emotion, such as sadness, will respond to positive marketing communications. One perspective argues that people want to feel good so they will seek ways to uplift themselves when they are feeling down (Zillmann 1988), suggesting that consumers experiencing negative emotions should respond favorably to positive marketing communications. Nevertheless, there is evidence that people experiencing negative emotions often avoid activities that might improve their affective state (Erber, Wegner & Theriault 1996). For instance, people frequently choose to listen to sad songs instead of happy songs when they are sad (Cohen & Andrade 2004). Similarly, consumers often prefer negative salespeople over positive salespeople when they are experiencing sadness (Puccinelli 2006). Thus, a better understanding of how and why people experiencing negative emotions respond to positive sensory cues can help managers improve on the execution of their marketing strategies.

We argue that because the experience of sadness is characterized by a preference for inactivity (Rucker & Petty 2004), sad consumers experience conflict when exposed to positive, energetic content. Consequently, they find the experience of watching such content more difficult, making them more likely to avoid watching it compared to positive content that is less energetic. Additionally, we propose that the same conflict from watching highly energetic commercials will not be observed among consumers experiencing a neutral affective state or another negative emotion not characterized by deactivation (e.g., anger) because such states are not characterized by a preference for inactivity. While highly energetic positive commercials may not be inherently difficult to watch, we show that sad consumers find such commercials difficult because the characteristics of the commercial conflict with their emotional state.

Four studies were conducted to test this theory. In Study 1 (N = 94), we induced sadness or a neutral affective state using a video clip before having participants watch a positive commercial that was either high or low energy. We show that people experiencing sadness spend less time watching the positive, high energy commercial compared to a positive low energy commercial ( $p < .05$ ). The tendency to avoid the high energy commercial was not observed for people in a neutral affective state. Study 2 (N = 80) demonstrates that people experiencing sadness have less favorable attitudes ( $p < .01$ ) and marginally less favorable behavioral intentions ( $p < .10$ ) toward an advertiser after watching a positive high energy commercial by the advertiser compared to a positive low energy commercial by the advertiser. Studies 3a (N = 154) and 3b (N = 178) provide



evidence that the difficulty viewing high energy content by those experiencing sadness is due to a preference for inactivity. Specifically, we show that the effect of sadness on the difficulty of exposure to positive, high energy cues is attenuated when people are primed with an action goal, that reduces people's preference for inactivity (Study 3a interaction  $p = .001$ ; Study 3b interaction  $p < .05$ ). Additionally, we demonstrate that the same aversion to high energy cues is not observed when people are in a neutral affective state (Study 3a) or experience another negative emotion not characterized by deactivation (i.e., anger; Study 3b). Studies 3a and 3b suggest that the phenomenon generalizes to the broader media context. Finally, Study 4 ( $N = 197$ ) was a field study on Hulu (hulu.com) to demonstrate that sad consumers perceive positive, high energy commercials to be more difficult to watch than low energy commercials ( $p < .05$ ).

This research makes several contributions. This research demonstrates that under certain conditions, consumers can find positive stimuli difficult to process, choose to reduce their exposure to the stimulus, and exhibit more negative attitudes towards the stimulus. Specifically, when consumers are sad they respond more negatively to positive, upbeat stimuli which may cause positive, upbeat ads to backfire.

### **Boost the Brightness, But Turn Down the Volume: Cross-modal Compensation for Meta-Sensory Homeostasis**

#### **EXTENDED ABSTRACT**

While much of marketing practice seems to stem from the basic tenet that more sensory stimulation is better (Lutz & Lutz 1978), research has documented the potential risks of sensory overload (Baker 1984; Malhotra 1984; Morrin & Chebat 2005; Soars 2009), and the importance for individuals to achieve and maintain relatively homeostatic levels of sensory stimulation (Berlyne 1960; Steenkamp & Baumgartner 1992). Everyday observation suggests that we do indeed seek balance within each sensory mode. When music is too loud (quiet), we lower (increase) the volume. We dislike food that is too bland or too spicy. However, no research has examined whether over-stimulation in one sensory mode (e.g., audition) may lead individuals to compensate by seeking reduced stimulation in other sensory modes (e.g., vision or olfaction). In this research we demonstrate that this may be the case: when individuals are exposed to sensory stimuli sufficiently above their optimal homeostatic level in one sense, they may seek to compensate across other sensory dimensions in an effort to achieve meta-sensory homeostasis.

Individuals often face fluctuations in their external environment that may originate from natural sources (e.g., changing weather) or marketing-driven sources (e.g., music in a retail store). In response to such variations, we have a tendency to regulate our internal environment to ensure stability- a dynamic, iterative process known as homeostasis (Jänig 2008; Marieb & Hoehn 2007). While this is often done via automatic physiological processes, research suggests that decision-making can also function as a homeostatic process (Bechara, Damasio & Damasio 2000; Paulus 2007). Specifically, our brains encourage behavioral homeostasis via state-dependent alterations of hedonic perception, by signaling pleasure or aversion towards stimuli depending on our internal state and corresponding homeostatic needs, and we are accordingly led to make decisions that promote stability (Cabanac 1971; Rolls 2005, Paulus 2007). For example, if an individual is exposed to a sub-optimally cold environment, she will be motivated to seek warmth and will make decisions to help achieve that warmth goal. This homeostasis-driven decision-making account is consistent with optimal stimulation level (OSL) theory, which posits that if environmental stimulation is too

low (high), individuals will attempt to increase (decrease) stimulation (Berlyne 1960, 1974; Steenkamp & Baumgartner 1992).

Within the sensory domain, research has demonstrated the existence of optimal levels of visual (Berlyne 1971), auditory (Knöferle et al. 2012) and olfactory (Doty et al., 1984) stimulation. Thus the majority of research on sensory OSL has examined the construct within independent sensory modes. However, perception is fundamentally multisensory (Krishna 2012), and one area of the brain (the insular cortex) is responsible for integrating multimodal sensory inputs (Wheeler 2003). Accordingly, cross-modal correspondences exist between the sensory modalities (e.g., haptic and auditory sensations influence taste perceptions, Krishna & Morrin 2008; Spence et al. 2013). While research suggests that cross-modal congruency is generally favorable (Holmes & Spence 2005), the synaesthetic quality of sensory inputs should also imply that if input in one modality exceeds an individual's optimal level and she is unable to quell input in that modality, she may seek to reduce inputs in alternative modalities. This notion of homeostasis-driven, cross-modal compensation is precisely the phenomenon we propose in this research.

In Study 1 ( $N = 95$ ), we randomly assigned participants to a condition based on a 2 (music valence: unfavorable vs. favorable) x 2 (music volume: low vs. high) between-subjects design. Music valence was manipulated by playing music that pretested as either unfavorable or favorable, and music volume was manipulated by pre-adjusting the volume of the stereo system in the lab. While being exposed to the music, participants evaluated a series of (non-auditory) products that differed in sensory intensity. We found that when the music played was unfavorable and high in volume, participants showed a greater preference for products low in sensory-intensity (e.g., mild food, unscented products, visually-simple objects) as compared to products high in sensory-intensity (e.g., spicy food, scented products, visually-complex objects). This suggests that the unfavorably high auditory stimulation led to a reduced desire for stimulation in other modalities. A follow-up study followed the same procedure, but included a condition in which individuals were able to adjust the music volume to their liking before evaluating products. This study demonstrated that when individuals are able to regulate within the disturbed modality, they no longer show the tendency to compensate across other modalities.

Our first two studies suggest that if we are exposed to above-optimal environmental sensations in one modality, we may seek decreased sensory input across other modalities. Interestingly however, sensory inputs also contain semantic meaning, due to their common associations with experiences (e.g., cinnamon is a "warm" scent and mint is a "cool" scent, Krishna, Elder, & Caldara 2010). In fact, cross-modal congruence can be assessed by the consistency of the semantic associations among sensory characteristics and has been shown to impact behavior (Holland, Hendriks, & Aarts 2005). If this is the case, then according to our earlier theorizing, we should expect the cross-modal compensation phenomenon to additionally apply across conceptual dimensions. Thus in Study 3 ( $N = 130$ ), we wished to examine if above-optimal levels of an environmental sensation would lead individuals to compensate along the same dimension but in other sensory modes. We manipulated the temperature of the laboratory (between 64-91°F) to create a variety of conditions that would lead to variations in thermal comfort. Participants indicated the extent to which they wished the room was colder, and then indicated their current desire for products that varied in terms of conceptual temperature (e.g. conceptually cold products included mint-flavored gum and Piano Jazz music, while perceptually warm products included cinnamon-flavored gum and Latin Salsa music). We found that individuals who wished the room was colder were

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more likely to show preference for the conceptually cool (vs. warm) products than those individuals who did not want the room colder.

In this research, we uncover a cross-modal compensation phenomenon, by demonstrating that when individuals are exposed to sensory stimuli sufficiently above their optimal homeostatic level in one sense, they may seek to compensate other sensory modes, either in terms of intensity or across a conceptual dimension. This research has important implications for marketers targeting consumers within contextual and dynamic environments. Future studies will measure arousal to examine its role in the underlying process and explore the moderating role of dispositional sensation-seeking.

### **Discussant**

Drawing upon the findings across these three papers, we will discuss comparative as well as overarching issues pertaining to the antecedents of well-being. Comments and suggestions from the audience will be sought so as to enhance the session's interactivity and the discussion's overall quality.

# Antecedents of Consumer Preference for Indulgent/Hedonic Consumption

(Grace) Ga-Eun Oh, HKUST, Hong Kong

## **Paper #1: The Influence of Nutrition Information on Sequential Consumption Decisions for Indulgent Food**

(Grace) Ga-Eun Oh, HKUST, Hong Kong  
Young Eun Huh, HKUST, Hong Kong  
Anirban Mukhopadhyay, HKUST, Hong Kong

## **Paper #2: The Color of Indulgence: The Impact of Dark Color on Consumer Preference for Indulgent Consumption**

Kuangjie Zhang, Nanyang Technological University, Singapore  
Monica Wadhwa, INSEAD, Singapore  
Amitava Chattopadhyay, INSEAD, Singapore

## **Paper #3: Preference Reversal of Indulgent Rewards as A Dynamic Self-Control Mechanism**

Qian Xu, The University of Hong Kong  
Liyin Jin, Fudan University, China  
Ying Zhang, Peking University, China

## **Paper #4: What's Next? Anticipated Consumption Variety: Borrowing Affect from the Future to Slow Satiation in the Present**

James Mead, University of Kentucky, USA  
Maura L. Scott, Florida State University, USA  
David Hardesty, University of Kentucky, USA

### **SESSION OVERVIEW**

Prior research has investigated how consumers resolve self-control dilemma when they have conflicting long-term goals and short-term desire for indulgences (Hoch and Loewenstein 1991; Laran 2010). Indulgences have tempting natures because of their instant hedonic benefits, but also require cost of delayed benefits (Trudel and Murray 2011). In this session, the four papers feature how various factors can impact consumers' preference and consumption decisions for indulgent and hedonic consumption. Specifically, those papers reveal when consumers would prefer indulgent consumption more or less and how enjoyment that consumers derive from hedonic consumption changes during consumption experience.

Firstly, papers 1 and 2 examine various antecedents that affect indulgent consumption. By taking into account consecutive consumption decisions, paper 1 shows the effect of nutrition information provision on indulgent food consumption. When nutrition information for choice options is present (vs. absent) for the focal food choice, restrained eaters adjust subsequent consumption of indulgent food. Paper 2 focuses on perceptual antecedent of indulgent consumption by showing the effect of darkness in various consumption domains including food, fashion, and entertainment. The authors propose and demonstrate the *color of indulgence hypothesis* that dark colors lead more (less) indulgent consumption when consumers focus on pleasurable (sinful) dimensions of indulgent consumption than bright colors.

Paper 3 reveals that consumers strategically exploit indulgent consumption opportunities by investigating how consumers' preferences of indulgent rewards change over a course of goal pursuit and goal attainment. Before (after) attaining the focal goal, highly motivated consumers show higher (lower) preference for indulgent rewards that dampen their background goal. These results suggest that consumers' preferences for indulgent consumption are not only affected by cognitive and perceptual antecedents but also affected by consumers' own motivation toward a specific goal.

Lastly, paper 4 extends discussion to hedonic consumption by introducing an interesting way to reduce consumption satiation from

an ongoing experience (e.g., music) that can be either indulgent or virtuous. When consumers anticipate high (vs. low) variety of consumption, they satiate more slowly to a current consumption experience via negative affect. This effect is pronounced for indulgent (vs. virtuous) experiences, and among consumers with high (vs. low) emotional intelligence.

Considering importance of indulgent and hedonic consumption in consumer research and diverse perspectives of the four papers, we believe that this session will be appealing to many researchers who are interested in indulgent and hedonic consumption as well as consumer well-being in general. Together, the four papers sheds light on consumers' decision processes for indulgent consumption: how consumers decide indulgence consumption decisions upon consumption-relevant information (paper 1) and consumption-irrelevant information (paper 2) and how consumers actively use indulgences as motivators (paper 3) and how anticipation of future variety slows down satiation to same hedonic consumption (paper 4). These findings contribute to understanding of when and how consumers are more or less likely to prefer indulgent consumption.

### **The Influence of Nutrition Information on Sequential Consumption Decisions for Indulgent Food**

#### **EXTENDED ABSTRACT**

Prior research has shown mixed evidence regarding the effectiveness of providing calorie information to facilitate healthy food consumption (Bollinger et al. 2011; Downs et al. 2013). However, it is possible that consumers may change their subsequent consumption as a result of having nutrition information about what they just ate. In this research, we investigate whether the provision of nutrition information can have an influence either on an initial food choice (e.g., entrée), or a subsequent indulgent food consumption (i.e., dessert). We propose that restrained (vs. unrestrained) eaters tend to have smaller mental budgets for calories, and hence they should reduce subsequent consumption of indulgent food after having made a high-calorie unhealthy choice.

In a pretest, participants were categorized as either restrained or unrestrained eaters using the restrained eating scale (Herman and Polivy 1980; median-splitting is standard practice for this scale). We found that 58% of restrained eaters set calorie budgets but only 20% of unrestrained eaters did ( $p < .01$ ). Moreover, restrained eaters set a smaller daily calorie budget ( $M = 1,580$ ) than unrestrained eaters ( $M = 1,998$ ;  $p = .01$ ). These results suggest that restrained eaters have a tight budget that restricts themselves from further consumption if they had used up a large amount previously.

Study 1 examined how nutrition information provided for entrees influences either their choice of entrée or their subsequent dessert consumption. We used a 2 (nutrition information: absent vs. present) X 2 (restrained vs. unrestrained eaters) between-subjects design. Participants made a choice between a steak and a salad, with only half receiving nutrition information. All participants then rated the healthfulness and tastiness of both options, and estimated/recalled their caloric values. Then, they indicated how much ice cream they wanted to eat for dessert (0 – 100 scale). The choice of healthy food at time 1 (T1) was not affected by either nutrition information or restrained eating tendency. However, at time 2 (T2) there was a significant three-way interaction between nutrition information, T1 choice and restrained eating on the consumption decision ( $p < .05$ ).

Only restrained eaters reduced T2 indulgent consumption after making an unhealthy choice at T1 as a result of nutrition information provision ( $p < .01$ ). In contrast, making a healthy choice at T1 did not affect subsequent indulgence at T2.

Study 2 adopted the same design as study 1 to test whether the observed effect occurs when nutrition information is not salient at the T2 decision. The procedure was the same as in study 1 except that participants did not rate healthfulness, tastiness or calorie estimate/recall before the T2 decision. The T1 choice pattern remained the same as in study 1. However, unlike study 1, restrained eaters at T2 did not adjust consumption of indulgent food in the presence (vs. absence) of nutrition information (*ns.*). The results of studies 1 and 2 together suggest that nutrition information can have a prolonged effect on subsequent indulgence among restrained eaters, but the salience of nutrition information is necessary.

Study 3 aimed to test restrained eaters' use of small mental calorie budget in the presence of nutrition information. We employed the same design as Study 1 except that we added one more manipulated condition where participants were given a budget reference (e.g., average daily calorie intake of US population) along with nutrition information. Because the average calorie intake was higher (2,000 – 2,500) than their own range observed in our pretest ( $M_{LowerBound} = 1,282$ ,  $M_{UpperBound} = 1,899$ ), restrained eaters should not regulate themselves after having chosen a high-calorie option at T1. Consistent with study 1, the results replicated the interactive effect of nutrition information  $\times$  T1 choice  $\times$  eating restraint in that providing only nutrition information significantly reduced subsequent ice cream consumption among restrained eaters after an unhealthy food choice ( $ps < .05$ ). However, providing average daily calorie intake information did not decrease subsequent consumption among restrained eaters compared to control after an unhealthy choice ( $F < 1$ ).

The results so far showed that when consumers freely choose between unhealthy and healthy food (at T1), providing nutrition information does not influence on this choice but subsequent indulgence at T2 among restrain eaters. But what if the choice at T1 is imposed, rather than freely made? This is an important question as there have been increasing efforts to force healthier food consumption (e.g., Smart Snack provision of Hunger-Free Kids Act of 2010 in the US). Thus in study 4, we examined whether the prolonged effect of nutrition information still holds when the choice at T1 is imposed.

Study 4 employed a 2 (nutrition information: absent vs. present)  $\times$  2 (imposed food choice: unhealthy vs. healthy)  $\times$  2 (restrained vs. unrestrained eaters) between-subjects design. The study procedure and methods were identical to study 1 except that here we randomly assigned T1 choice to participants. Then, they indicated ice cream consumption as before. Surprisingly, regardless of eating restraint, there was an interaction only between nutrition information and prior food choice ( $p = .01$ ). Participants who had been imposed with a healthy (vs. unhealthy) food increased subsequent consumption when no nutrition information had been provided for their imposed choice options ( $p < .05$ ). However, when nutrition information for the imposed choice options had been provided (vs. not), those who had been imposed with a healthy food reduced subsequent indulgence ( $p < .01$ ). The results suggest that although imposing a healthy choice backfires by increasing subsequent indulgent consumption regardless of eating restraint, providing nutrition information successfully undoes the backfire effect of imposing healthy choice.

To summarize, we demonstrate that although providing nutrition information has no effect on initial choice, it has positive prolonged effects on subsequent consumption decisions. Nutrition information provision helps restrained eaters to reduce indulgent food consumption at T2 after choosing an unhealthy option at T1 (studies

1 and 3). However, such effects are attenuated when nutrition information is not salient (study 2) and when an external reference for mental budget is provided (study 3). When a choice is imposed, providing nutrition information successfully eliminates backfire effects of imposing healthy food on subsequent indulgences.

## The Color of Indulgence: The Impact of Dark Color on Consumer Preference for 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 dark versus bright colors on consumers' preference for indulgent consumption.

Recent research suggests that people tend to associate dark colors with sin in moral judgments, compared with bright colors (Sherman and Clore 2009). Applied to the present context of indulgent behaviors, this research would imply that dark colors should lead consumers to think of indulgent behaviors as sinful, thus 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, dim lights are widely used for indulgent events at clubs and movie theaters, whereas switching on the lights signals the end of such indulgent events. In everyday language, phrases such as "dark temptations" or "dark desires" are often used to describe indulgent behaviors. Consistent with this notion, a pilot survey we conducted also indicated that people were more likely to associate dark colors with indulgence.

Importantly, indulgence has been characterized as both sinful and pleasurable in the existing research (Khan and Dhar 2006; Saldanha and Williams 2008). Building on these perspectives, we argue that the impact of dark colors on indulgent consumption should depend on consumers' relative focus on pleasurable versus sinful aspects of indulgence. Specifically, when consumers focus on the pleasurable aspect of indulgence, dark (vs. bright) colors can enhance consumers' preference for indulgent consumption. In contrast, when consumers focus on the sinful aspect of indulgence, dark (vs. bright) colors can reduce consumers' preference for indulgent consumption. We refer to this proposition as the "color of indulgence" hypothesis.

We tested our 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 darkness: bright vs. dark)  $\times$  2 (focus: pleasure vs. sin) between-subjects design. Specifically, we instructed participants to focus on either the sinful (calorie content) or pleasurable (tastiness) aspect of an indulgent product (movie popcorn). Like typical popcorn boxes, we used red as the hue of the packaging color and manipulated the degree of darkness of the packaging color. We found that when participants focused on the pleasurable aspect of indulgence (i.e., tastiness of the popcorn), dark (vs. bright) packaging color enhanced their intention to consume the popcorn. However, when participants focused on the sinful aspect of indulgence (i.e., calorie content of the popcorn), dark (vs. bright) packaging color reduced their intention to consume the popcorn. Importantly, our results also show that this color of indulgence effect was mainly driven by the dark color, rather than by the bright color.

In study 2, we 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 darkness: bright vs. dark)  $\times$  2 (focus: pleasure vs. sin) between-subjects design. As was in study 1, we instructed participants to focus on either the sinful (caloric 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, we show that when consumers focused on the pleasurable (vs. sinful) aspect of indulgence, dark color as compared to bright color induced a greater (vs. lower) sense of feeling right toward the indulgence. This subjective sense of feeling right toward indulgence mediated the impact of dark colors on indulgent consumption.

In study 3, we generalized the color of indulgence effect in a non-food indulgent consumption context—impulsive purchase intention for luxury products. 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 darkness: bright vs. dark)  $\times$  2 (goal prime: pleasure-seeking vs. self-control) between-subjects design. We found 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. 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.

In study 4, we provided further support for the color of indulgence effect by examining the actual consumption of entertainment news. The study followed a 2 (color darkness: 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 (a collection of blogs on business and financial news) and Entertainment Buzz (a collection of blogs on fashion and celebrity news). Descriptions of the two websites were presented on either a dark or a bright color display board. 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. We found that when participants were primed with a pleasure-seeking goal, exposure to dark (vs. bright) color increased the consumption of entertainment news. However, this effect was reversed when participants were primed with a self-control goal.

Together, these results provide converging support for the color of indulgence effect. Specifically, we show that when consumers focus on the pleasurable aspect (vs. sinful aspect) of indulgence, dark colors as compared to bright colors increase (vs. decrease) consumers' preference for indulgent consumption. Our findings provide important implications for both marketing and consumer welfare.

### **Preference Reversal of Indulgent Rewards As a Dynamic Self-Control Mechanism**

#### **EXTENDED ABSTRACT**

Consumers often set up an indulgent reward to motivate themselves to better pursue a goal. For example, researchers often think of luxurious trips to reward themselves for a semester's tough work when schools get really busy, and students make plans to indulge on a nice dinner when pulling those drowsy all-nighters in the library for exams. These incentives, however, often end up not being realized once people successfully attain the goals. Researchers might

prefer to rest and finish up the unfinished reviews when semester actually ends, and students might realize that a better use of the money is to save up for the school supplies for next semester.

A large body of research has documented how people use incentives to motivate their goal pursuit and the effectiveness of these incentives (e.g., Cameron and Pierce 1994). In these works, the incentives are often treated as an external reward that individuals spontaneously choose to help them achieve important life goals. What remains relatively unclear, however, is how people choose these incentives and, once they help people achieve their goals, whether and how these incentives are consumed. In the present research, we propose a dynamic self-control mechanism that specifically examines the choice of indulgent rewards when people try to resolve self-control conflicts, and role of these incentives once the conflicts are resolved.

Drawing from the literature in multiple goal pursuit (Dhar and Simonson 1999; Kruglanski 2006), we define focal goals as goals that people are actively pursuing at the moment, and chronicle goals as goals that are temporally neglected during the focal pursuit. We propose that because the pursuit of focal goals temporarily suppresses chronicle goals into the background, indulgent options that violate the chronicle goals would appear particularly appealing as the incentive for the accomplishment of the focal goal. However, once the focal goal is attained, chronicle goals become prominent and focal, the appeal of these chosen options, ironically, decreases quickly. Four studies in two self-regulatory domains (dieting and academic) demonstrated the preference of indulgent rewards that undermine chronicle goals reverses as the goal priority shifts.

Study 1 used a focal goal status (active vs. completed)  $\times$  chronicle dieting goal (weak vs. strong) mixed design. Participants were asked to choose a reward (ice cream vs. movie) either in the midway or in the end of a prolonged survey. When the focal task was ongoing, greater commitment to the goal of being slim, ironically, increased the likelihood that people chose ice cream as their reward for completing the more urgent goal in hand ( $\beta = 0.31$ , Wald  $\chi^2(1) = 4.09$ ,  $p < .05$ ). However, once the focal goal was attained, the dieting goal negatively predicted the choice rate for the ice cream coupon ( $\beta = -0.39$ , Wald  $\chi^2(1) = 4.84$ ,  $p < .05$ ), suggesting a clear self-control pattern.

Study 2 tested for the observed effect using a within-subject design. Participants were first asked to choose a reward (Karaoke or food) in the middle of a number reduction task, and offered another chance to revise their choice after completing the task. The results replicated the previous findings. Interestingly, the more the participants concerned about academic pressure, the more likely they would choose a time-wasting Karaoke coupon first and then changed their minds in the end,  $\beta = 0.91$ , Wald  $\chi^2(1) = 8.48$ ,  $p < .01$ .

Study 3 tested the preference reversal for a Karaoke coupon either before the task began or when the task was ongoing. When the focal goal was not initiated, the greater one wanted to study the less likely he or she would choose a coupon for Karaoke ( $\beta = -0.58$ , Wald  $\chi^2(1) = 4.68$ ,  $p < .05$ ). However, when the focal goal was ongoing, a strong academic goal, ironically, increased the likelihood that people chose Karaoke as their reward ( $\beta = 0.64$ , Wald  $\chi^2(1) = 4.05$ ,  $p < .05$ ).

Study 4 explored whether the observed preference reversal was due to the suppression of chronicle goals during the focal goal pursuit. Similar to study 1, participants encountered a choice between a coupon for a tempting cheesecake (indulgent option) and an entertainment voucher either during or after the task. We then reminded half of them of the dieting goal through presenting a health (vs. geography) magazine on the desk. In the control condition, the results replicated the previous findings. However, when the chronicle goal

was made salient via a health magazine, the observed preference reversal disappeared. People no longer preferred a cheesecake coupon even when the focal task was ongoing (*NS*).

In conclusion, during the focal goal pursuit, consumers prefer the reward that undermines the chronicle goal to better motivate the pursuit of the focal goal; whereas, after the focal goal is attained, the chronicle goal rebounds, consumers avoid the indulgent reward to maintain the chronicle goal. This dynamic self-control process resolves the conflicts between a focal goal and a chronicle goal.

### What's Next? Anticipated Consumption Variety: Borrowing Affect from the Future to Slow Satiation in the Present

#### EXTENDED ABSTRACT

With enough repetition, even very enjoyable experiences eventually become tiresome and unfulfilling. That is, a consumer's first Hershey's Kiss is often more enjoyable than their fifth due to satiation (Galak, Kruger, and Loewenstein 2013). While satiation is often regarded as an inevitable side-effect of recurrent consumption (Brickman and Campbell 1971; Redden 2008), the ability to accelerate or slow the effect remains of great interest given the implications for consumer enjoyment, repeat purchases (McAlister and Pessemier 1982), and consumption regulation (Galak et al. 2014; Redden and Haws 2013).

Consumers often ponder dessert options throughout a meal or search for a new song while listening to a play list. How does anticipating more or less variety in the future influence consumer's satiety in the present? This research examines this question: How and why does anticipating future consumption variety accelerate or slow present consumption satiation?

Past satiation research has primarily focused on how consumers perceive and experience stimuli during an ongoing consumption experience, often related to cognitive appraisals of consumption variety or repetition. For instance, item categorization level (providing general vs. specific descriptions) (Redden 2008), attention to consumption amounts (Redden 2008; Redden and Haws 2013), and mental imagery (Larson, Redden, and Elder 2014) have each been shown to influence consumer satiation rates during a present consumption experience. However, consumers attend to more than their present consumption experiences; they also anticipate the future. Past research has demonstrated the importance of present variety on consumer satiation (Redden 2008), and that anticipated variety represents an important aspect of future consumption (Ratner and Kahn 2002). This research investigates how anticipating more or less future consumption variety can slow or accelerate consumers' satiation rates in a present experience.

Anticipated experiences (e.g. thinking about dessert while eating an entrée, browsing song lists while listening to music, or thinking about Sea World during a visit to the Magic Kingdom) can produce emotional responses similar to actually experiencing the consumption event (Holmes and Mathews 2005). As such, anticipated experiences often produce a measurable effect on a range of consumer behaviors through the affect they evoke, from self-regulation (Nenkov, Inman, and Hulland 2008) to purchase decisions (Blair and Roes 2013; Tsiros and Hardesty 2010). Despite being a seemingly common consumer phenomenon, little is known regarding how anticipated future consumption variety, and the affect it may generate, influences consumers' satiation responses in the present. Further, the moderating roles of product indulgence and consumer emotional intelligence are investigated in this research.

*Central Hypothesis.* We hypothesize that during a present consumption experience, consumers who anticipate more (less) variety in a future consumption experience will satiate less (more) quickly to a present consumption experience. We furthermore hypothesize that negative affect mediates the relationship between anticipated consumption variety and satiation rate during a present consumption experience, such that anticipated consumption variety reduces the amount of negative affect consumers experience during a present consumption experience, which leads to a decreased satiation rate.

*Empirical Support.* Four experiments support our theorizing. To test our hypothesis, experiment 1 utilized a 2 (anticipated consumption variety: more, less) x 15 (song clip exposure) mixed factor design. Anticipated consumption variety was between-subjects and song clip exposure was within-subjects. Participants were told that the study involved two listening tasks to evaluate songs for advertisements. Participants were informed that for the *first task* they would repeatedly evaluate the same song clip 15 times (procedure adapted from Galak et al. 2009). Participants repeatedly listened to the pretested song, "Hey Ho" by the Lumineers, and rated (15 times) their enjoyment of the 20-second clip. The description of the second task was our manipulation of anticipated consumption variety. Participants were told that after the first 15x listening task, their second task would be to listen to another [similar / different] style song from a [similar / different] style artist that most college students enjoy.

A 2 (anticipated consumption variety: more, less) x 15 (song clip exposure) repeated measures ANOVA was performed on present consumption enjoyment. Results revealed the expected song clip exposure main effect; participants found the song clip less enjoyable the more they listened to it ( $F(14, 70) = 122.45, p < .01$ ). The main effect of anticipated consumption variety also significantly influenced consumption enjoyment ( $F(1, 84) = 5.44, p < .05$ ). This linear trend of decreased enjoyment with repeated consumption interacted with participants' experimental condition ( $F(14, 70) = 1.71, p < .05$ ); consumers who anticipated more consumption variety in the subsequent listening task satiated more slowly than consumers who anticipated less consumption variety.

Following a similar study design, experiment 2 replicates the effects of study 2, that is, participants who anticipated more consumption variety in the subsequent listening task satiated less quickly during their first listening task ( $F(14, 120) = 1.70, p < .05$ ). Experiment 2 also demonstrates that negative affect fully mediates the relationship between anticipated consumption variety and enjoyment (time 15), [95% CI: .59 to 7.22]. Finally, this experiment shows that the effect holds above and beyond alternative explanations (e.g., variety seeking, attention to consumption).

Studies 3 and 4 reveal two important moderating effects: perception of product indulgence (study 3) and consumer emotional intelligence (study 4). These studies also use different music selections to further generalize the findings. In experiment 3, we predict and find support for the hypothesis that the effect of anticipated consumption variety on consumer satiation is magnified (attenuated) for vice (virtue) products. In experiment 4, we predict and find support for the hypothesis that the effect of anticipated consumption variety on consumer satiation is magnified (attenuated) for consumers with higher (lower) levels of emotional intelligence.

# The Effects of Workload, Numeracy, and Framing on Consumer Financial and Health Decision Making

Maura Scott, Florida State University, USA  
Martin Mende, Florida State University, USA

## Paper #1: 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 #2: The Effects of Workload Level and Literacy on Consumer Compliance

Maura Scott, Florida State University, USA  
Martin Mende, Florida State University, USA  
Mary Jo Bitner, Arizona State University, USA  
Amy Ostrom, Arizona State University, USA

## Paper #3: Impact of Rounded Numbers on Preventive Decision Making

Monica Wadhwa, INSEAD, Singapore  
Kuangjie Zhang, Nanyang Technological University, Singapore

### SESSION OVERVIEW

This session features three papers in the area of consumer financial and health decision making, which focus on understanding how to encourage consumers to make decisions that foster well-being (i.e., developing and sticking with a financial budget, following financial advisor recommendations, complying with medical doctors' recommendations, and reducing risky health behaviors). Paper 1 examines how categorical (versus overall) framing influences consumers' financial budgeting decisions. Paper 2 studies how consumer workload level and literacy interact to influence compliance in medical and financial decision making. Paper 3 examines how the presentation of numerical cues influences risky health behaviors.

These papers converge with the potential to bring new insights and a lively discussion on the important topic of consumer health and financial well-being. Specifically, Papers 1 & 3 examine how numerical information is presented, and its effects on consumer financial and health decisions. Papers 1 & 2 study how to help consumers optimize financial planning, in terms of complying with a budget or with a financial advisor. Papers 2 & 3 uncover factors that influence consumer's responsiveness to health messages and their willingness to engage in preventive health behaviors. In sum, this session extends the analytical realm of prior consumer research on financial and health decision making; it urges consumer behavior scholars to adopt a fresh perspective on how and why consumers make financial, health, and risk decisions.

The primary audience for this session is likely to consist of researchers interested in financial decision making, consumer health, numerosity, and consumer well-being. To facilitate a lively discussion, in the remaining time after the 3 presentations, presenters will jointly discuss the findings emerging from the presentations, guided by the discussants. The audience will be asked to provide ideas and to ask questions that address the linkages between the papers—as opposed to focusing on a specific paper. We propose to have two large pads of paper in the room in the front and back (to facilitate maximum involvement) and will encourage presenters and audience members to draw conceptual models of their connections between papers or to offer competing views. We seek to create a “workshop” atmosphere with interaction and discussion.

## The Influence of Categorical Framing on Budgeting

### EXTENDED ABSTRACT

Consumers frequently budget for various types of consumption (e.g., how much to spend next month, how much to spend on clothes or vacations each year). The amount they budget can have significant impact on their subsequent spending behavior (Cheema and Soman 2008). In this work, we investigate how different ways to arrive at one's budget can affect the amount of budget that consumers set and, in turn, their actual level of expenditure.

Specifically, we test two ways that consumers typically use to arrive at a budget. First, consumers can set budgets for different constituent categories in order to derive an overall budget (“categorical framing”). The second approach is to set the overall budget with or without considering its constituent categories or components (“overall framing”). We propose that when consumers explicitly budget for individual constituent categories before setting an overall budget (“categorical framing”), they tend to set a higher overall budget than if they budget for their expenditure in aggregate regardless of whether they think about all the components of their consumption or not (i.e., “overall-with-reminders framing” and “overall-without-reminders” framing). Our theorization draws upon support theory – support theory suggests that the estimated probability of a multifaceted category increases when the category is unpacked into its components (Rottenstreich and Tversky 1997; Tversky and Koehler 1994). Although the core support theory has focused exclusively on probability judgments, recent related studies have shown that unpacking can increase numeric judgments in other domains as well (e.g., Tsai and Zhao 2011).

Study 1 was conducted to test our main hypothesis. Participants ( $N = 51$ ) were randomly assigned to one of three budget-framing conditions: In the *categorical* condition, participants were asked to set individual budgets for their next-month spending in six major consumption domains (e.g., accommodation or rent, food and drinks, transportation, entertainment, clothing, and other expenses). The budgets set for the six categories were then summed up to derive their overall budget for the month. In the *overall-with-reminders* condition, they were asked instead to budget how much they would spend in the following month with the six aforementioned consumption domains provided as examples. Finally, in the *overall-without-reminders* condition, they were asked to budget how much they would spend in the following month without being reminded of the major consumption domains.

An ANOVA analysis revealed a significant effect of budget framing on participants' set budget ( $F(2, 49) = 8.77, p = .001$ ). Contrast analysis further indicated that participants set larger budgets under categorical framing ( $M = \$949.44, SD = \$470.52$ ) than either overall-with-reminders framing ( $M = \$555.88, SD = \$307.15; t = -3.09, p = .003$ ) or overall-without-reminders framing ( $M = \$442.94, SD = \$324.96; t = 3.97, p = .001$ ). There was no significant difference in budgets between the overall-with-reminders condition and the overall-without-reminders condition ( $t = .87, p = .39$ ).

Study 1 demonstrated that individuals set larger budgets under categorical framing than under the two types of overall framing (with and without reminders). A natural follow-up question is under which



type of budget framing people would set more precise budgets when compared with their actual spending. If categorical framing indeed induces people to pay more attention to the component categories of consumption that they might overlook under overall budget framing (Tversky and Koehler 1994), then categorical framing (vs. overall framing) should lead to more precise budget setting.

We designed and conducted Study 2 to address this question. Study 2 involved two stages. In stage 1, as in Study 1, participants were asked to set budgets for their spending in the coming month under one of the three types of budget framing. In stage 2, participants were contacted one month later to report their actual spending through an online survey.

We conducted a 3 (budget framing: categorical vs. overall-with-reminders vs. overall-without-reminders) X 2 (repeated measure: set budget vs. actual spending) repeated-measures analysis ( $N = 113$ ). The results revealed a significant interaction effect between repeated measure and budget framing ( $F(2, 110) = 17.52, p < .001$ ). Replicating the results of study 1, further contrast analysis revealed that in stage 1 participants again set larger budgets under categorical framing ( $M = \$790.93, SD = \$421.82$ ) than either overall-with-reminders framing ( $M = \$420.63, SD = \$266.97; t = -4.53, p < .001$ ) or overall-without-reminders framing ( $M = \$411.71, SD = \$309.09; t = 4.61, p < .001$ ). When we compared participants' budgets with their actual spending, results revealed that under overall-with-reminders framing, there was no significant difference between set budget ( $M = \$420.63, SD = \$266.97$ ) and actual spending ( $M = \$373.56, SD = \$235.72; F(1, 110) = .75, p = .39$ ); similarly, under overall-without-reminders framing, the difference between set budget ( $M = \$411.71, SD = \$309.09$ ) and actual spending ( $M = \$436.41, SD = \$339.02; F(1, 110) = .27, p = .61$ ) was also not significant. By contrast, under categorical framing, participants set larger budgets ( $M = \$790.93, SD = \$421.82$ ) than their actual spending ( $M = \$431.93, SD = \$295.49; F(1, 110) = 54.74, p < .001$ ).

In stark contrast with what support theory and prior research might predict, participants set more precise budgets under overall framing than under categorical framing. We conjecture that while categorical framing brings to mind the component categories of expenditure that might be overlooked under overall framing, categorical framing also makes these subcategories more salient and perceived to be more important (Tversky and Koehler 1994). Thus consumers might set higher budgets for these individual categories than their actual spending in these categories. Moreover, in the overall-framing condition, consumers might have used their monthly income as a reference point to set their budget, and how much people actually spend may be constrained by their income. Thus, it is possible that categorical framing induces people to think about how much they *want* to spend, whereas overall framing makes them focus on how much they *can* actually spend. Further research would be needed to pin down the underlying mechanism of these counterintuitive results.

### The Effects of Workload Level and Literacy on Consumer Compliance

#### EXTENDED ABSTRACT

Consumer coproduction of services - the direct involvement of consumers in service design and delivery - is an omnipresent marketplace phenomenon (Vargo and Lusch 2004). Honebein and Cammarano (2005, p. IX) observe: "In the past, customers expected companies to do a lot of the work for them. Now, companies are expecting customers to do more of the work themselves." How do

consumers respond to greater workload demands? This research accounts for individual and contextual factors underlying consumer coproduction, which has important (moderating and mediating) effects on consumer compliance with requests. Consumers' compliance can vary as a function of context-literacy (e.g., medical, financial). We study: How does a consumer's context-literacy influence compliance at varying levels of coproduction workload? And what is the underlying role of "positive stress"? Three studies demonstrate that context-literacy moderates the relationship between coproduction level and consumer outcomes.

We propose that higher (vs. lower) levels of coproduction workload lead to more positive service outcomes (e.g., increased compliance, reduction of maladaptive behaviors). There is a positive relationship between goal level and performance (Locke and Latham 1990); goals have an energizing and activating function on the focal task, such as coproducing a service experience. Goals affect persistence. Difficult goals prolong effort, provided consumers can control the time they spend on a task (ibid.).

Literacy is a socially embedded, and *context dependent* construct (Adkins and Ozanne 2005); various types of literacy have emerged (e.g., financial literacy, media literacy) (Kopp 2012; Lusardi and Mitchell 2007). For instance, business literacy refers to the ability to actively engage in economic life (Corus and Ozanne 2011). More challenging goals can lead to better performance, provided the individual accepts the goal (Locke and Latham 1990). We expect that lower literacy consumers will be more challenged by the higher (vs. lower) coproduction workload levels. Feeling challenged, higher (vs. lower) coproducing consumers should display more effort, resulting in greater compliance behaviors. We hypothesize:

*Higher (vs. lower) coproduction levels will have a more positive effect on service outcomes; especially for consumers with lower levels of context-specific literacy.*

**Field Experiment.** The experiment was in a hospital with patients as the study participants. It examines the effect of coproduction workload levels (high versus low) on patients' compliance with the doctors' treatment plan (e.g., smoking cessation, taking medications, exercising). Patient compliance is an important form of coproduction (Berry and Bendapudi 2007; Stremersch 2009). This study examines the moderating role of context-specific literacy in influencing compliance.

The design was 2(coproduction level: high, low) between subjects, (medical) literacy was measured,  $N=121$ . All patients completed forms in the waiting area prior to their appointment. In the high coproduction condition, patients prepared *additional* documentation at home *prior* to their appointment. After meeting with their doctor, all patients were asked to complete a post-visit questionnaire. Patients indicated their medical literacy, relationship duration and quality, and compliance intentions.

**Results.** The regression included patient compliance as the DV; the coproduction workload factor (dummy-coded), service literacy and their interaction as predictors; and relationship duration, relationship quality, age, gender, and education as covariates. The model was significant  $F(8, 112) = 4.16, p < .001$ , adjusted  $R^2 = .17$ . Analysis revealed the proposed main effect of coproduction workload level. It also showed a main effect of service literacy, and the significant two way interaction between coproduction level and service literacy. Spotlight analysis revealed that at lower service literacy, higher coproduction led to significantly higher compliance. At higher service literacy, coproduction levels did not influence compliance.

**Discussion.** This study demonstrates that higher levels of coproduction can positively influence service outcomes (e.g., patient compliance intentions, willingness to change maladaptive behaviors), among lower literacy patients. As patients' service literacy increases, this difference diminishes. This suggests that finding ways to activate lower literacy consumers as coproducers helps heighten compliance with (well-being focused) treatment plans. Higher coproduction workload eliminated the gap in compliance intentions between lower and higher service literacy consumers. Study 2 supports similar findings in a lab setting; lower medical-specific literacy consumers experienced higher levels of relationship quality with higher coproduction demands; higher medical literacy consumers were not different. Study 3, in a financial advising/financial decision-making context, provides further insights into the underlying process by examining the mediating role of positive consumer stress. Positive consumer stress is a significant mediator in the model.

## Numbers and Preventive Decision Making

### EXTENDED ABSTRACT

A massive amount of money is spent each year on preventive care (Begley 2013). Given the high preventive care costs incurred both by governments and consumers, one important question that arises is how can one encourage people to engage in simple, inexpensive preventive actions, such as getting vaccinated against flu, eating healthy etc.? To persuade people to adopt preventive actions, consumers are often exposed to preventive messages making the risks of not engaging in preventive behaviors salient. Such preventive messages commonly use numerical cues, such as probabilities expressing how beneficial a preventive action could be. The question we ask is could presenting the numerical cue in a round versus a precise number format make the preventive health message more effective? We propose that when the numerical cues incorporated in the message appear round (e.g., 60.00%) versus precise (e.g., 60.41%), it can positively impact one's intention to adopt preventive health behaviors.

Recent research suggests that round versus precise numbers are more fluently processed (Kettle and Häubl 2009). Emerging research on processing fluency further argues that fluently processed stimuli are likely to lead one to respond more affectively (Alter et al. 2007). Drawing upon this research, we propose that when exposed to round versus precise numerical cues, people should respond more affectively. Since affective reactions to the risks have been shown to be more effective in motivating preventive behaviors (Loewenstein et al. 2001), we further propose that when numerical cues in preventive health messages are presented in round (vs. precise) number format, people should have a greater intention to adopt preventive actions against the health risks.

In Studies 1-3, employing different preventive health contexts, we provide consistent support for our primary hypothesis. In Study 1, we show that participants chose to consume a smaller portion of an indulgent but an unhealthy food item (glazed donuts) when the percentage of people who indicated the food item to be high on trans fat and cholesterol in the description was expressed as a round (80.00%) versus a precise number (81.37%). Findings from Study 2 show that participants reported higher intention engage in the preventive action (take a cab) instead of driving under the influence of alcohol, when the probability of getting into a drunken driving accident was presented as a round (50.00%) versus a precise (50.37%) number. In Study 3, we measured participants' intention to take a vaccination against a deadly Bird flu when the probability of getting this flu was presented as a round (60.00%) versus a precise (60.41%) num-

ber. We also measured participants anticipated worry on not taking the vaccination. Exposure to round numbers increased participants' anticipated worry, as well as their intention to take the vaccination against the flu, compared to exposure to precise numbers. Further, this effect of format of numbers on intention to take the vaccination was mediated by anticipated worry.

This study provides stronger support for our conceptualization related to affective reactions by examining the impact of mere exposure to round versus precise numbers in an unrelated context on people's intention to adopt preventive health behaviors. Specifically, in Study 4, participants were first asked to sort different images of numbers according to the font size of the images. Participants sorted either round number images or precise number images. Subsequently, participants received the same vaccination scenario used in Study 3, except that the numerical information related to the effectiveness of the vaccination was not provided in this study. At the end of the study, participants completed the 18-item need for cognition (NFC) scale (Cacioppo, Petty, and Kao 1984). We found that those low on NFC and thus have a greater tendency to rely on feelings reported greater intention to take the vaccination against a painful disease when they were primed with round (vs. precise) numbers. However, this effect was attenuated for those high on NFC.

Thus far, our conceptualization suggests that round numbers should lead people to respond affectively, thus increasing their preventive behavioral intention. However, engaging in an action in itself could be associated with negative feelings. If our conceptualization is valid, then the round number effect found in previous studies should be eliminated if the negative feelings associated with the process of engaging in the preventive action (e.g., pain associated with taking the vaccination) are made salient. Again, participants were first primed with either round or precise numbers. Participants then evaluated the Bird Flu scenario used in Study 4 with the following change. Half of the participants saw the possible symptoms of being affected by the Bird Flu disease and included a picture of people with flu symptoms. The other half saw the possible side effects of getting the vaccination and included a picture of a flu shot needle. Replicating the results of previous studies, when the negative consequences of not engaging in the preventive action (getting the disease) was made salient, those primed with round number showed a higher intention to take the vaccination, compared to those primed with precise number. However, when the negative affect associated with the process of taking a painful vaccination was made salient, the demonstrated round number effect was directionally reversed.

In a final study, we extend our findings to real life behaviors. Participants saw a message. Which presented the risks of unhealthy eating as round or precise numbers, and encouraged them to avoid unhealthy eating. We measured participants' consumption behaviors in the 24 hours, following exposure to the message. When the risks of unhealthy eating were presented as round versus precise numbers, participants consumed less unhealthy food.

Some simple preventive actions can prevent people from suffering from massive health problems. It is, therefore, important to understand how the effectiveness of marketing campaigns aimed at persuading people to engage in preventive behaviors could be enhanced. Findings from this research show that merely presenting the numerical cues, incorporated in the preventive health message campaigns, in a round versus precise number format can increase the effectiveness of preventive message campaigns.



# Competitive Papers—Full

## Object Agency and the Extended Object

Russell Belk, York University, USA

Mariam Humayun, York University, USA

### ABSTRACT

The extended object is offered as the counterpart to the extended self (Belk 1988). Rather than people extending themselves through objects and other people, it involves objects extending themselves through people and other objects. Two types of object extension are theorized: *Extension by Association* and *Extension by Co-Constituted Action*. For example, a late Ming scroll painting displayed in the Art Museum of the Chinese University of Hong Kong has enhanced stature and value by virtue of its association with the museum, other artwork displayed there, its provenance of prior ownership by famous literati and their chop or poem added to the original painting, the staging of the painting under glass with special lighting, the artist and artistic school that created the painting, and the interpretations offered of the museum curators and art historians who have written about it. This is *Extension by Association*.

The painting's *Extension by Co-Constituted Action* is not due to its associations, but rather involves the actions that the painting prompts among viewers. As Freedberg (1989) observes:

People are sexually aroused by pictures and sculptures; they break pictures and sculptures; they mutilate them, kiss them, cry before them, and go on journeys to them; they are calmed by them, stirred by them, and incited to revolt. They give thanks by means of them, expect to be elevated by them, are moved to the highest levels of empathy by them (1).

The perspective embraced here is not purely that objects can make us do things, but rather that both humans and objects are needed for any behavior to occur.

A contemporary branded example of the extended object is found in the Moleskine brand of notebooks which extends itself by associations with famous authors (e.g., Hemingway) and artists (e.g., Picasso) as well as by co-branding with Lego, the Simpsons, and Evernote and associating itself with a constellation of other brands including Apple and Leica with which it is often depicted (Courtice 2006; Raphael 2014; Stanley 2008). It also co-constitutes consumer desire and purchase among those who imagine themselves writing the next great novel or sketching a masterwork of art in a Moleskine notebook. By projecting ourselves into the milieu of hip Parisian intellectuals of the 1920s and 1930s, we co-constitute our desire with the help of the brand mythology that is also co-created by the brand and its consumers through posted blogs, videos, photos, and other narratives. Similar combinations of both types of object extension are seen in Apple's "Think Different" and "I'm a Mac" campaigns as well as in celebrity and adventure campaigns for brands like Red Bull, Tag Heuer, Rolex, Hard Rock Café, Planet Hollywood, and many other image brands creating associations that we dream of being a part of.

Drawing on various models of object agency including actor network theory (e.g., Latour 2005), entanglement theory (Hodder 2012), vibrant matter (Bennett 2010), alien phenomenology (Bogost 2012), post-phenomenology (Verbeek 2000/2005), speculative realism (Harman 2011), new realism (Sparrow 2014), and assemblage theory (Deleuze and Guattari 1987), the formulation of the extended object being put forward offers a view of co-constituted desire that

Alfred Gell (1988) referred to as advertising magic. By creating an ideal brand image such marketplace mythology (Holt 2004; Kniazeva and Belk 2010; Thompson 2004) offers us an avenue to our ideal self. Thus the extended object and the extended self merge in our imaginations and actions. And just as objects are incorporated into the extended self, consumers are often incorporated into the extended object. This is especially evident when consumers wear clothing bearing the labels such as Ralph Lauren Polo, Hard Rock Café, Armani, or a particular university or city. In such cases the brand has effectively branded us and we have become co-opted into the respective brand community (Muñiz and O'Guinn 2001), sub-culture of consumption (Schouten and McAlexander 1995), brand tribe (Cova, Kozinets, and Shankar 2007), or brand cult (Belk and Tumbat 2005).

Although the extended object invokes a "flat ontology" in which both objects and people jointly enact behaviors, only humans have the intentionality to initiate behaviors. Thus Gell (1998) refers to the agency of objects as being "secondary agency" in that it still requires a human for actions to take place. Nevertheless, as Latour (2005) points out both are needed. Try to imagine, he asks:

...hitting a nail with and without a hammer, boiling water with and without a kettle, fetching provisions with or without a basket, walking in the street with or without clothes, zapping a TV with or without a remote, slowing down a car with or without a speed-bump, keeping track of your inventory with or without a list, [or] running a company with or without bookkeeping (p. 71).

Both humans and objects are needed for these actions to take place. Generally the animation of the object is dependent on intentional beliefs by humans in the efficacy of the focal thing. These beliefs often derive from contemporary forms of *contagious magic*, as well as *anthropomorphism*, *animism*, *fetishism*, *memorialization*, and *singularization*.

In consumer research *contagious magic* is generally seen as positively affecting our regard for objects that have been in touch with famous people like John F. Kennedy (Newman, Diesendruck and Bloom 2011). Contagious proximity to prestigious products on retail store shelves can enhance the value of a product (Mishra 2009). Country of origin effects may be explained as contagion from the image of the place of manufacture (Newman and Dhar 2014). And a guitar with special provenance of being played by a rock legend can bring about reverent behavior among musicians (Fernandez and Lastovicka 2011).

*Anthropomorphism* has been recognized in a variety of consumer research studies recently (e.g., Agarwal and McGill 2007; Belk 2014; Daston and Mitman 2005; St. James, Handelman, and Taylor 2011). As Brown and Ponsonby-McCabe (2014) document, consumers are highly receptive to anthropomorphized brand characters, which seem to make the brand more endearing (see also Haraway 1994; He 2014).

*Animism* goes a step beyond anthropomorphism in that the object is believed to have a soul and the ability to bestow favors or punishments upon us. Gell (1998) attributes such willful behavior to his Toyota which he nicknamed "Olly." But because of criticism



of animism by both Western science and religion, contemporary animist beliefs are not readily admitted. This is not the case in Shinto Japan however, and belief in the life force of objects has been cited as one reason that the Japanese are more apt to embrace robots while Westerners are more apt to fear them (Hornyak 2006; Mims 2010).

*Fetishism* is a special devotion to or reliance on an object, regardless of whether the focus is religious fetishism, commodity fetishism, or sexual fetishism (Belk 1991; Ellen 1988; Fernandez and Lastovicka 2011). Unlike animism, the fetishized object is not believed to be alive. An example is found in Karl Marx's overcoat. While he was writing *Das Kapital* in the British Museum Reading Room his family funds were depleted and he was forced to pawn the family's clothing. One of the last things to be pawned was his precious overcoat which Marx believed to be the minimal object of decency that he needed in order to appear in public among English gentlemen in 19<sup>th</sup> century London. Without it his visits to the library were curtailed until he was able to reclaim it (Stallybrass 2003). The man who gave us the concept of commodity fetishism could well be his own best example.

*Memorialization* involves investing memory in an object, either intentionally or unintentionally. Souvenirs, mementos, photos, heirlooms, and monuments are all intentional vehicles of memorialization, while the possessions of a dead loved one are often unsought but poignant reminders that act without our intent in provoking our memories and emotions. Belk and Yeh (2011) regard tourist photographs as a memorializing message to a future self, although this may be changing as posted, tweeted, or e-mailed photos become less of a memory cue and more of a means of communication with others – a sort of instant postcard with selfie.

Finally *singularization* is the process by which we turn a brand, commodity, or found object into a meaningful personal possession. After acquisition we singularize an object like an iPhone by installing our apps, our music, our ringtones, and our protective case. By itself, the brand lies somewhere between a generic commodity and a singularized personal possession (Appadurai 1986; Belk 1988). While the pre-acquisition brand strives to be singular in comparison to other brands and generic commodities, the objects sharing the same brand, model, and other details are all fungible before they are acquired. In this sense branded objects for sale in the marketplace are closer to the words that refer to an object than they are to the object itself or what Kant and Heidegger (1954/1967) referred to as the “thing-in-itself” (*Ding an sich*). Once a consumer acquires a branded object it becomes the “thing-for-us” (*Ding für uns*) and phenomenologically it begins a process of singularization epitomized by the non-fungible object like a wedding ring, that we would not trade for any identical-appearing substitute. However, by attaching itself to other objects and people, the extended brand object seeks to pre-singularize itself by becoming non-fungible with similar appearing competing brands.

In all of these ways humans breathe life and meaning into objects. We see objects as more than the thing-in-itself by virtue of its associations. And this meaning makes the object a source of desire, repulsion, awe, and fascination that, with our help, prompts our behavior.

The distinction between the thing-in-itself and the words that refer to it is an important one and parallels the distinction between the concrete and the abstract. Brown (2004) calls for more attention to the things we encounter rather than things we think about. Words do not trip us, cut us, or feed us; *things* do. This is even true of virtual things on the Internet which exist because we can see and manipulate them and not just because we think about them. The post-structuralist tendency to turn everything into a text to be analyzed has been called by Schwenger (2006) “the murder of the thing by

words.” However attention to the thing-in-itself does not mean we can ignore words entirely. For consumers words and images are the chief ways in which we learn about new products through advertising, the Internet, packaging, and display. Rather, what the extended object perspective seeks to avoid is the post-structuralist emphasis on free-floating signifiers that can supposedly be attached to any object with impunity.

One antidote to this arbitrariness is found in Boivin's (2008) stipulation that such free association is rare and restricted to symbolic associations in Peircean semiotics rather than iconic associations like photographs or indexical associations like fallen leaves as a sign of Autumn. Metaphors are a powerful source of meaning (Lakoff and Johnson 1980) and rather than linguistic or even visual metaphors, the strongest iconic and indexical metaphors are material (Tilley 2000) or natural metaphors (Douglas 1970). Grayson and Shulman (2000) argue that “irreplaceable special possessions are indices because they have a factual, spatial connection with the special events and people they represent” (19). Thus a possession that is special and irreplaceable is a powerful index of its owner because it is material and benefits from the contagion of being a personal possession.

A telling reminder of the power of both object *Extension by Association* and *Extension by Co-constituted Action* is the following account of encountering a piece of moon rock displayed at the Smithsonian National Air and Space Museum:

People from all over the world come to see it,” says one Museum security officer. “I've seen people kneel down and pray at it.” ... Others held back tears or even blessed themselves after seeing it. The rock's popularity may best be explained by the reaction of an older couple, who walked away from it shaking their heads in disbelief. ... “I cannot believe that we did something that incredible, that fantastic,” said the man. “It almost seems like a dream now, but here's proof. My God, what we can do when we put our minds to it. (Cradock 2002).

Just as the Moleskine associations help to co-constitute our purchase actions, the moon rock serves to co-constitute acts of reverence, thanks to associations with the Apollo moon missions, heroism, nationalism, romanticism, and the personal associations that the museum visitor brings to the experience. Such is the potential power of the extended object.

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# Consumers' Rejections of Game-based Deals

Donnel Briley, University of Sydney, Australia

Shai Danziger, Tel Aviv University, Israel

En Li, Central Queensland University, Australia

## ABSTRACT

Games are used as mediums for delivering rewards to consumers by many marketing promotions, including scratch-and-win cards and other lotteries. Our research predicts an inverse relation between consumers' willingness to accept deals offered in this way and their valuing of choice freedom (Markus & Schwartz, 2010).

## INTRODUCTION

Promotional games are marketing efforts in which consumers engage in some form of play or activity through which they can win some reward, with chance often having a role in determining this outcome. Research examining responses to game promotions has often focused on situations in which consumers must choose whether to participate in a promotional game with an uncertain outcome (Jiang, Cho, and Adaval 2009; Kamleitner, Mandel, and Dhami 2011; Yan and Muthukrishnan 2014). For example, researchers have examined participation in promotional games in which there is uncertainty regarding which reward might be received (small and large awards, Yan and Muthukrishnan 2014), the magnitude of the reward ("risky" discounts, Kamleitner, Mandel, and Dhami 2011) and whether any reward will be received at all (Jiang, Cho, and Adaval 2009, study 3). In addition, research has also looked at whether consumers engage in games that use external, public events as reward triggers (e.g., local sports team makes the playoffs, or snowfall reaches a record level, Ailawadi et al. 2014).

These research streams have provided important insights about consumers' willingness to engage in promotional games characterized by various types and degrees of uncertainty. However, we know little about how consumers respond to opportunities that have arrived via a game after the uncertainty presented by the game has been resolved and, more specifically, whether these responses might differ across consumers. In particular, when consumers win a deal opportunity via a promotional game, do their cultural backgrounds influence their evaluations of these deals? Given the increasing importance of recognizing and addressing cultural influences on consumers judgments and decisions (Aaker 2006; Briley, Wyer, and Li 2014), this question is of considerable interest to marketers serving culturally diverse markets—a situation most marketers face to some degree.

In the present research, we develop predictions regarding which consumers are most and least receptive to deals won in a game setting, based on their cultural backgrounds. We examine promotion vehicles that utilize a chance-based gaming activity as a means for distributing deals or discounts to shoppers. A marketer who wishes to offer customers a particular deal could deliver this opportunity via a game or non-game vehicle. Games can provide a positive hedonic experience that can help evaluations of the delivered deal, in line with marketers' intentions (Chandon, Wansink, and Laurent 2000). But this advantageous influence can be mitigated and reversed, we suggest, because games can also make salient the manipulative intent of the marketer, hurting deal evaluations. We propose that consumers who highly value their own choice freedom (e.g., Anglo Americans), as compared to those who do to a lesser extent (e.g., Asians), are more likely to perceive manipulative intent when games are involved, and to reject the offered deals.

## Influence of Games on Deal Selection

Promotions not only fulfill shoppers' utilitarian needs, but also can provide hedonic benefits such as entertainment (Chandon, Wansink, and Laurent 2000). And those that fulfill hedonic needs can elicit more positive responses than promotions that do not (Dhar and Hoch 1996). More specifically, studies confirm that shoppers who consider unexpected or entertaining promotions experience spontaneous positive responses, leading to more positive evaluations of the associated deals (Jiang, Cho, and Adaval 2009; Naylor, Raghunathan, and Ramanathan 2006).

But other evidence suggests that deals delivered via games might be resisted. In particular, the game framing could coincide with increased suspicion about the marketer's motives and, consequently, resistance to the marketing tactic at hand (Friestad and Wright 1994, 1995; Kirmani 1990; Kirmani and Wright 1989). Because the game aspect of the promotion is essentially a superfluous activity for conveying a deal offer, consumers may sense that the marketer is attempting to persuade them covertly. This inference is likely to increase suspicion regarding the manipulative intent of the promotion (Fein 1996; Vonk 1998). And lower deal evaluation is likely to result due to a "detachment effect," whereby cognitive activities are disrupted and the consumer disengages (Friestad and Wright 1994). In summary, games might yield positive hedonic benefits in some cases, but in others these benefits might be overriden due to suspicion about the perceived manipulative nature of this tactic.

## Need for Free Choice

We suggest that consumers' choice freedom needs determine whether the positive versus negative effects of game promotions occur. Research shows differences in the need to express oneself though choice impacts responses to product options one receives. When obtaining some decision alternative through a process in which free choice has been thwarted, Anglos (high need for choice) as compared to Asians (low need for choice) feel less commitment to the outcome (Hoshino-Brown et al. 2005; Kitayama et al. 2004) and evaluate it less positively (Savani, Markus, and Conner, 2008). We suggest that this pattern could apply as well to situations in which consumers have yet to choose, and perceive their choice freedom to have been infringed upon during the decision process. We test this premise in the present research, predicting that promotions using a game format to present deal offers to consumers can hinder selection among those who chronically protect against choice infringements.

## Overview

We predict middle class Anglo Americans are less likely than Asians to choose deals offered via promotions that use games as the delivery vehicle, after controlling for preferences for the underlying product offer. Consumers may often react positively to deals offered using games, and this should be true for those who are Asian. However, we expect this tactic to cause suspicion about the manipulative intent and lower evaluations of the offered deal for middle class Anglo Americans. We expect consumers' needs for choice freedom to drive this influence such that regardless of culture, consumers who possess a higher inclination to seek and protect choice freedom are less likely to select deals offered through promotional games.

## Study 1: Receptiveness to Options after Attempted Choice Restriction

An assumption underlying our predictions is that when people are steered toward a choice alternative, and thus have their choice freedom infringed upon, they are more likely to reject this alternative if they are high rather than low in choice freedom needs. The findings from the Savani, Markus, and Conner (2008) study of pen evaluations, mentioned above, indicate this may be the case. However, their examination does not directly parallel the deal selection context because participants in their “restricted choice” conditions were denied an option they had already chosen, and were then asked to accept and evaluate some other option.

In study 1, we examine selections completed after an attempt has been made to co-opt participants’ choices, similar to the promotion context. We observed choices of two popular candies after some limitation of choice freedom either had or had not been attempted, and included in the study Hong Kong Chinese (low choice freedom needs) and Anglo American (high choice freedom needs) participants. Our goal was to see if people with high rather than low needs for choice freedom were more likely to reject an option toward which they have been steered. Thus, the experimental design was 2 (culture: Chinese, Anglo American)  $\times$  2 (choice freedom allowed: restricted choice, free choice), with manipulations between subjects.

### Method

One hundred and eight Hong Kong Chinese and 80 Anglo American undergraduates studying business participated for course credit. After arriving at the lab, participants were told they would be completing a series of unrelated tasks. They first completed a series of measures, among which was a seven-point scale indicating their need to protect choice freedom (Mirels 1970,  $\alpha = .72$ ; -3 = strongly disagree, 3 = strongly agree). Verme (2009) confirms this measure reflects people’s needs for free choice.

Then, participants were told that the study session had been concluded and, under this pretense, made the study’s key candy choice. The administrator told them they would receive a candy for participating, and both Kit Kat and Crunch were available. Thus, they were likely to infer they could choose either alternative. About half of the participants could freely choose the candy they preferred (free choice conditions), and the others were initially told they had been assigned one of the candies (restricted choice conditions).

Participants were led to a separate room, one at a time. Those in “restricted choice” conditions were told that they would be assigned one or the other candy, and were asked to draw from a box a paper indicating the assignment. Half of the papers indicated Kit Kat, and half indicated Crunch. But when the time came to collect the candy, the administrator told the participants she had discovered there was an ample supply of both candies at the moment, and they could have either one. Participants were directed to a table in another room that held Kit Kat and Crunch candies in separate boxes, and their choices were observed through a one-way mirror and recorded. In the “free choice” condition, participants selected a candy from the boxes without any pre-assignment.

### Results

The pattern of choice-freedom needs participants reported was consistent with our prediction, with Chinese having a lower need for free choice than Americans ( $M_{\text{Chinese}} = -1.43$ ,  $M_{\text{American}} = .99$ ,  $F(1, 186) = 6.76$ ,  $p < .01$ ).

We expected that among participants in the “restricted choice” conditions, Americans would be more likely than Chinese to restore choice freedom by rejecting the candy assigned to them (i.e., choosing the other option). Results supported our prediction. The choice

results for the “free choice” condition verified the baseline preferences for the two candies are similar across the two cultural samples. Forty-seven percent of Chinese and 54% of Americans chose Crunch rather than Kit Kat ( $\chi^2(1) = .19$ ,  $p > .20$ ). Nonetheless, in the “restricted choice” condition, the choice patterns of the cultural groups diverged. Among Chinese participants, candy assignment substantially increased each candy’s choice probability. A majority chose the Crunch bar when it was assigned (84%), but only a small fraction chose the Crunch when the Kit Kat was assigned (11%;  $\text{diff} = .73$ ,  $\chi^2(1) = 39.50$ ,  $p < .001$ ). Assignment had the opposite effect on the candy selections of Americans, who chose the Crunch less often when it was assigned to them (21%) than when Kit Kat was assigned (60%;  $\text{diff} = .39$ ,  $\chi^2(1) = 4.50$ ,  $p < .05$ ). Also, in a logistic regression of participants in “restricted choice” conditions, culture predicted whether they did or did not choose the candy that they had been pre-assigned, with Chinese more likely to do so ( $\beta = 2.66$ ,  $\chi^2(1) = 25.50$ ,  $p < .001$ ).

We also examined whether choice freedom reports, rather than culture, could predict selections in restricted-choice conditions. In a logistic regression using choice-freedom needs as the predictor, these reports predicted whether participants did or did not choose the candy that they had been pre-assigned ( $\beta = -.53$ ,  $\chi^2(1) = 3.68$ ,  $p = .05$ ).

## Study 2: Cross-National Survey

Our predictions suggest that game-based delivery vehicles for deals can trigger feelings of choice freedom infringement and consequent patterns of choices similar to those observed in study 1’s “restricted choice” conditions. Study 2 tests this proposition, using cross-national evaluations of common, generic (not product-specific) promotional offers. We conducted an online survey of Chinese and American consumers to see if cultural differences were apparent in evaluations of price discount promotions that were delivered to shoppers in different ways, some using games and others not doing so. Survey respondents rated the attractiveness of promotions from both of these categories.

### Method

We administered an online questionnaire through two online survey panels, one based in the U.S. and administered in English, and the other based in Mainland China and administered in Chinese. Two hundred nineteen American panel respondents and 310 Chinese panel respondents completed the questionnaire. The following analysis was based on 182 American panel respondents who reported U.S. nationality and 304 Chinese panel respondents who reported Chinese nationality.

The instructions indicated we were interested in understanding what motivates people when they make retail purchases. With this preamble, we asked them to evaluate four different ways in which retailers offer price reductions to shoppers. Two of the promotions participants evaluated were delivered by a game, a “scratch-and-win” game card promotion (discount is offered when you receive a winning scratch card) and a trivia game promotion (discount is offered when you correctly answer a trivia question). The other two promotions they evaluated, which did not involve games, were end-of-aisle display (discount is offered at an end-of-aisle display in the store) and coupon offers (discount is offered via a coupon). For each of the four promotions, participants were asked to indicate on a seven-point scale its attractiveness when they encountered it while shopping (likely to make me want to buy the product, likely to make me like the brand even more; 1 = not at all, 7 = very much so;  $r = .82$ ). Finally, participants provided some demographic information and indicated the frequency with which they visit or shop at major department stores or large grocery retailers. Most participants (97%) responded they visit such stores at least once a month.



## Results

Our prediction is that Chinese and Americans differ systematically in their evaluations of promotions based on games. This was the case. Americans evaluated the discount arising from the scratch-and-win game less positively than Chinese did ( $M_{\text{American}} = 2.95$ ,  $M_{\text{Chinese}} = 3.60$ ;  $F(1, 484) = 18.33$ ,  $p < .001$ ), and they evaluated the promotion using the trivia game less positively than Chinese did ( $M_{\text{American}} = 3.13$ ,  $M_{\text{Chinese}} = 4.41$ ;  $F(1, 484) = 62.36$ ,  $p < .001$ ). However, the pattern of results found for evaluations of gaming promotions did not occur for those that were not delivered via a game. Cultural differences did not emerge for the evaluation of the end-of-aisle promotion ( $M_{\text{American}} = 4.67$ ,  $M_{\text{Chinese}} = 4.66$ ;  $F(1, 484) < 1$ ,  $p > .90$ ), and Americans reported more favorable evaluations than did Chinese for the coupon promotion ( $M_{\text{American}} = 4.92$ ,  $M_{\text{Chinese}} = 4.52$ ;  $F(1, 484) = 8.45$ ,  $p < .01$ ).

In summary, though Chinese as compared to Americans had similar or lower evaluations of a discount offer not received in a game context (end-of-aisle display, coupon), Chinese evaluated those won in a game (chance scratch-and-win, trivia) more positively than Americans did. Though the purpose of study 2 was to examine cross-national differences, we noted that Chinese participants gave higher evaluations to non-game than game promotions—a pattern that we did not expect. This pattern could be due to the fact that our survey required joint (within-subject) evaluations of different promotions, which might have caused participants to become more diligent than otherwise as they attempted to discern differences across promotion types. Such diligence could have caused lower evaluations of games than is warranted. Our subsequent studies (3, 4 and 5) address this issue by using independent (between subject) evaluations of promotions, a design that avoids the aforementioned shortcomings.

Next, rather than having participants evaluate generic promotional offers, we tested whether this cultural difference holds for choice shares of a specific product deal. We presented Chinese and American participants with a scenario in which we asked them to indicate the likelihood they would buy a promotional golf umbrella, based on a scenario from Simonson, Carmon, and O'Curry (1994). Critically, the delivery mode through which they received this deal was manipulated such that the offer did or did not include game framing. We found in study 2 that Americans and Chinese have similar evaluations of end-of-aisle promotions and, therefore, we used this promotion type as the stimulus in study 3's non-game conditions.

## Study 3: Cross-National Lab Study

### Method

One hundred and three Hong Kong Chinese and 160 U.S. college undergraduates participated for course credit and the 112 Anglo Americans in the U.S. sample were included in our analyses. We randomly assigned approximately half of the participants to "game delivery" conditions, and the other half to "non-game delivery" (end-of-aisle) conditions. Thus, the experimental design was a 2 (culture: Chinese, Anglo American)  $\times$  2 (deal delivery mode: non-game, game), with manipulations between subjects.

Participants were told that the study examined various types of decisions and were presented with a shopping scenario. We asked them to imagine that after making a purchase at a department store on a routine shopping outing, they discover they have the opportunity to buy a large golf umbrella for \$8.50, instead of the regular price of \$12.00. In "game delivery" conditions, we asked them to imagine receiving "a scratch-and-win card from the cashier," and "after removing the opaque surface with a coin," they find the card indicates "you are a winner!" Those in "non-game delivery" conditions imagined running across "a deal opportunity at an end-of-aisle

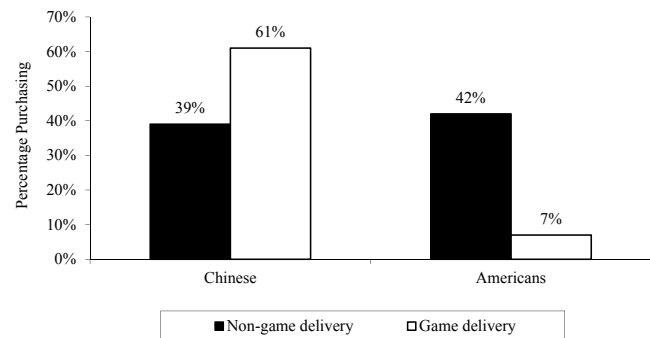
display," and "after having a look at the offer," they find the display indicates "you get a great deal!"

After reading the scenario, participants indicated whether they would buy the umbrella or not. Then, after a filler task, they completed the same measure of choice-freedom needs used in study 1 and some demographic information. Finally, they were asked what the purpose of the study was, and were debriefed and dismissed. None guessed the purpose.

## Results

**Cultural analyses.** We expected that culture would not influence responses to the deal when no game was involved, but would in game delivery conditions. This was the case. Participants' selections of the umbrella deal was not contingent on culture in non-game delivery conditions ( $M_{\text{Chinese}} = 39\%$ ,  $M_{\text{US}} = 42\%$ ,  $\text{diff} = 3\%$ ,  $\chi^2(1) = .09$ ,  $p > .20$ ), but was in game delivery conditions ( $M_{\text{Chinese}} = 61\%$ ,  $M_{\text{US}} = 7\%$ ,  $\text{diff} = 54\%$ ,  $\chi^2(1) = 23.40$ ,  $p < .001$ ). These culture-level effects are shown in Figure 1. The results of a logistic regression further confirm this pattern. We predicted selections of the deal, using cultural sample (Chinese, Anglo American), deal delivery mode (non-game, game), and their interaction. The interaction was predictive of deal purchases ( $\chi^2(1) = 11.19$ ,  $p < .001$ ), though the main effects were not ( $p$ 's  $> .20$ ).

**Figure 1**  
Study 3 Results: Selections by Culture and Deal Delivery Mode



**Choice freedom needs.** Our framework suggests participants' needs to preserve choice freedom underlie the cultural effects found here. If so, we should find that culture influences participants' reported scores on this variable, and that this variable is predictive of deal choices in game but not non-game conditions, independent of culture. Consistent with the first assertion, self-reported needs for choice freedom were greater for Americans ( $M = 1.79$ ) than Chinese ( $M = -.69$ ,  $\text{diff} = 2.48$ ,  $F(1, 213) = 25.69$ ,  $p < .001$ ). To test the second assertion, we predicted deal selections with a logistic regression (buy = 1, reject = 0), using as independent variables deal delivery mode (non-game, game delivery), continuous choice-freedom needs measure, and their interaction. The interaction was significant, as expected ( $\beta = -.77$ ,  $\chi^2(1) = 5.16$ ,  $p < .05$ ). Also, participants were more likely to buy in game delivery than control conditions ( $\beta = .76$ ,  $\chi^2(1) = 3.96$ ,  $p < .05$ ). To understand the nature of this interaction, we examined the slopes of choice-freedom needs at both levels of delivery mode. As expected, choice-freedom needs had a significant negative influence on deal selection when the opportunity was delivered via a game win ( $\beta = -.60$ ,  $\chi^2(1) = 6.21$ ,  $p = .01$ ), but had no effect when it was not ( $\beta = .17$ ,  $\chi^2(1) = .52$ ,  $p > .20$ ).

We also examined whether choice-freedom needs mediate the influence of participants' cultural backgrounds on their deal selections in game delivery conditions, as our framework predicts. To test for mediation, we conducted a bootstrap analysis in which coefficient

estimates were developed by running logistic regression on 2,000 samples of the data (Zhao, Lynch, and Chen 2010), using only participants from instant-win conditions. The results support mediation ( $\beta = -.64$ ,  $SE = .31$ , 95% CI [-1.46, -.15]; Zhao, Lynch, and Chen 2010).

### General Discussion

The present article suggests deals delivered under the guise that the opportunity has been won in a game can increase purchase likelihood for some consumers, but decrease it for others. In particular, consumers with strong rather than weak desires to protect their choice freedoms are more likely to reject options they feel have been forced upon them. We find converging evidence for this prediction in a cross-national survey (study 2), evaluations made in laboratory (study 3), and actual choices (study 1). This pattern holds across both cultural (studies 1-3) and self-report (studies 1 and 3) indicators of participants' choice-freedom needs. Supporting our explanation, we find that participants' reported choice freedom needs mediate our effects (study 3).

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# The Impact of Chinese Customer's State and Trait Regulatory Focus on Customer Engagement Behaviors

Xinxin Chen, Sun Yat-Sen University, China  
Hongyan Yu, Sun Yat-Sen University, China  
Aiqiang Fang, Sun Yat-Sen University, China  
Weijian Zeng, Sun Yat-Sen University, China

## ABSTRACT

This research used two studies to explore the relationships between customer engagement behaviors and customer's state and trait regulatory focus, respectively. In total, the results showed that customer engagement behaviors (complaint and recommendation) were different in customers with different state and trait regulatory focuses.

## INTRODUCTION

With the advent of the Internet, customers become more aware of service/product information. Customers now have control over product and service information due to increased access to word-of-mouth, customer reviews, or customer referrals, and so on (Lee 2012), as compared to former conditions in which most information came from marketers. Due largely to the Internet, customers have been increasingly dialoguing with firms. What's more, the dialogue is no longer controlled by firms, as customers are gradually grasping the initiative (Prahalad and Ramaswamy 2000). Today's customers are informed, connected, empowered, and active (Prahalad and Ramaswamy 2004). They are playing more and more important roles in marketing because of these changes.

In addition to purchase, customers also play important roles in marketing through many other behaviors. These behaviors include, but are not limited to, recommending the brand to others, blogging and web posting the consumption experience, providing feedback to the company, and participating in business activities. (Van Doorn et al. 2010) defines these behaviors as "customer engagement behaviors (CEBs)," which refers to customers' behavioral manifestations toward a brand or firm beyond purchasing. More and more researchers and companies have been aware of the important role of CEBs in business performances (Rust, Lemon and Zeithaml 2004).

There are many previous researches about CEBs, such as the theory of CEB (Van Doorn et al. 2010), word of mouth (De Matos and Rossi 2008), customer referrals and recommendations (Jin and Su 2009; Ryu and Feick 2007), and so on. However, there has been little research exploring CEBs from the perspective of the customer's personality characteristics. Customer personality characteristics are important factors that influence CEBs (Van Doorn et al. 2010), encouraging the exploration of the impact of customer's characteristics on CEBs.

Customer regulatory focus is one such important personality characteristics. Regulatory focus is a self-regulation process through which people seek to align their behavior with relevant goals and standards (Higgins 1997). Customer regulatory focus can be divided into promotion-focus and prevention-focus (Higgins 1997). Customers with different regulatory focuses are different in behavior strategies and are sensitive to different behavioral outcomes. Behavior strategies and outcome sensitivity will both affect CEB.

As the role of CEBs in marketing increases, it is necessary to explore how customer regulatory focus influences CEBs. The rest of this article is divided into three sections. The first section provides the theoretical foundations of CEB and customer regulatory focus. Two studies are reported in the second section. The final section discusses the implications, limitations and directions for future research.

## THEORY AND HYPOTHESES

### Customer Engagement Behavior

CEBs are customer behavioral manifestations toward a brand or firm, beyond the act of purchasing (Van Doorn et al. 2010). From the firm's perspective, CEBs can be classified as positive or negative (Brady et al. 2006). Positive CEBs, such as recommendations, derive from the customer's experience exceeding expectations of a product/service. Negative CEBs, such as complaints, derive from the customer's unsatisfactory experience with the product/service. Positive/negative CEBs will have positive/negative impact on the company's performance. This research will use recommendations and complaints as the indicators of positive and negative CEBs.

CEB is mainly affected by three types of factors: customer-based factors, firm-based factors, and context-based factors (Van Doorn et al., 2010). Customers are the generators of CEBs; therefore, customer-based factors play an important role in CEB. This research explores how customer regulatory focus (a customer-based factor) influences negative and positive CEBs. Customers with different regulatory focuses are expected to differ in terms of behavioral strategy and sensitivity of outcome, leading to differences in their CEBs.

### Customer Regulatory Focus

Customer regulatory focus is comprehensively discussed in regulatory focus theory, which views regulatory focus as a self-regulation process in that people seek to align their behavior with relevant goals and standards (Higgins 1997). The theory divides two different self-regulation systems: promotion-focus and prevention-focus systems. Promotion-focus individuals pursue growth and development, whereas prevention-focus individuals pursue safety and security. Promotion-focus individuals are trying to achieve their hopes and aspirations, while prevention-focus individuals focus on their duties and obligations. Promotion-focus individuals emphasize the pursuit of gains; in contrast, prevention-focus individuals stress the avoidance of losses. Promotion-focus people tend to use pro-active behavior strategies; however, prevention-focus people tend to use vigilance-based behavior strategies. Promotion-focus customers are more sensitive to positive outcomes, while prevention-focus customers are more sensitive to negative outcomes (Higgins 1997).

Customer regulatory focuses are situational factors (state regulatory focus) as well as personality traits (trait regulatory focus) (Daryanto et al. 2010). State regulatory focus can be elicited by cues embedded in the task or context, whereas trait regulatory focus is a relatively stable individual tendency toward a consistent pattern of response in situations. In fact, state regulatory focus as a temporarily inducing regulatory focus state may dominate or even obliterate trait regulatory focus (Daryanto et al. 2010; Higgins 1997, 2000). State and trait regulatory focuses are different, and they may have different impacts on CEBs. Therefore, we will explore the relationships between CEBs and state regulatory focus as well as trait regulatory focus.



## Hypotheses

The impact of customer regulatory focus on CEB is mainly manifested in that customers with different regulatory focuses have different behavior strategies and sensitivities of outcomes. On one hand, promotion-focus individuals tend to use pro-active strategies, and prevention-focus individuals tend to adopt vigilance-based strategies. CEBs are initiated by the customers. Therefore, from the behavioral strategies perspective, we predict that promotion-focus individuals will be more likely to initiate CEBs than prevention-focus individuals, regardless of whether they are positive (e.g., recommendations) or negative (e.g., complaints).

On the other hand, promotion-focus customers are more sensitive to positive outcomes, whereas prevention-focus customers are more sensitive to negative outcomes. Then promotion-focus customers would provide more positive feedbacks (e.g., recommend to others) after encountering a pleasant shopping experience, while prevention-focus customers would provide more negative feedbacks (e.g., complain to others) after encountering an unpleasant shopping experience. From this perspective, we predict that promotion-focus customers will initiate more positive CEBs than prevention-focus customers, while prevention-focus customers will initiate more negative CEBs.

From these two perspectives, we could obtain a consistent prediction on positive CEBs: promotion-focus customers will initiate more positive CEB than prevention-focus customers. Thus, the following hypothesis is set up:

*Hypothesis 1: Promotion-focus customers will initiate more positive CEBs than prevention-focus customers.*

However, we could obtain opposite predictions on negative CEBs from these two perspectives. On one hand, these two effects (i.e., behavioral strategy effect and outcome sensitivity effect) may offset each other. On the other hand, one effect (either behavioral strategy effect or outcome sensitivity effect) may be dominant. If these two effects offset each other, there will be no difference in negative CEBs between promotion-focus and prevention-focus customers. If behavioral strategy effect/outcome sensitivity effect is dominant, promotion-focus customers will initiate more/less negative CEBs than prevention-focus customers. Thus, the following competing hypotheses are offered:

*Hypothesis 2a: There will be no difference in negative CEBs between promotion-focus and prevention-focus customers.*

*Hypothesis 2b: Promotion-focus customers will initiate more negative CEBs than prevention-focus customers.*

*Hypothesis 2c: Promotion-focus customers will initiate less negative CEBs than prevention-focus customers.*

As mentioned above, state and trait regulatory focuses are different. Thus, we will test these hypotheses by customer's state and trait regulatory focuses in study 1 and study 2, respectively. Typically, state regulatory focuses are assessed through the use of a priming technique, and trait regulatory focuses are assessed through a self-reported measure (Higgins et al. 2001; Lockwood, Jordan and Kunda 2002).

## STUDY 1

### Study Design

In this study, we tested the relationship between state regulatory focus and CEB. We used priming technique to generate participants' state regulatory focus. A 2 (regulatory focus: promotion-focus vs. prevention-focus) x 2 (scenario: satisfactory vs. unsatisfactory) between-subjects experiment was designed. The dependent variable was the likelihood of complaining or making recommendations to a good friend.

We recruited 128 students from a Chinese university and they were randomly assigned to one of four groups. We primed state regulatory focuses by asking participants to think about and write down their hopes and aspirations (state promotion-focus) or their duties and obligations (state prevention-focus) (Freitas and Higgins 2002). We further asked participants to write down how to achieve their hopes and aspirations or fulfill their duties and obligations.

Following the regulatory focus manipulation, each individual was presented with a satisfactory or unsatisfactory shopping experience scenario. We used a virtual laptop named brand A as the experimental stimulus. First, the basic information of brand A was presented to participants. Then, participants were asked to imagine that they had bought, used and been very satisfied or unsatisfied with the brand A. Experience details were included to reinforce their satisfactory or unsatisfactory feelings. Finally, we asked the participants the question, "One of your good friends wants to buy a new laptop. What is the probability that you recommend this product to him/her?" or "One of your good friends wants to buy a new laptop. What is the probability that you complain about brand A and remind him/her not to buy the product?" Participants made their selections among 11 available alternatives, from 0% to 100%. In addition, we measured the participants' familiarity to laptops (7-point scale, from "very unfamiliar" to "very familiar").

### Results

Three independent raters who did not participate in the experiment assessed whether the contents wrote by the participants reflect their hopes and aspirations or duties and obligations. Ten participants were excluded from data analysis because their contents did not reflect hopes and aspirations or duties and obligations. The data of 118 participants (49 male) were included in the final analysis. Table 1 showed the probabilities of complaint and recommendation in each group.

**Table 1 The probabilities of complaint and recommendation for two groups**

	State promotion-focus	State prevention-focus
Probability of Complaint	82.19% (20.28%)	85.52% (18.82%)
Probability of Recommendation	82.41% (11.85%)	71.19% (23.42%)

Note. — Standard deviations were given in parentheses.

A 2 (regulatory focus: promotion-focus vs. prevention-focus) by 2 (scenario: satisfactory vs. unsatisfactory) ANOVA showed the interaction between regulatory focus and scenario was significant ( $F(1,114) = 3.95, p < .05$ ), but the main effects of regulatory focus ( $F(1,114) = 1.08, p > .05$ ) and scenario ( $F(1,114) = 3.69, p > .05$ ) were both not significant. Specifically, in the dissatisfied case, the complaint likelihood of state promotion-focus participants was not significantly different from that of state prevention-focus participants

( $F(1,115) = .37, p > .1$ ). In the satisfactory scenario, the recommendation likelihood of state promotion-focus participants was greater than that of state prevention-focus participants ( $F(1,115) = 4.23, p < .05$ ). In addition, the familiarity of laptops had no significant relations to the complaint likelihood ( $p > .1$ ) and recommendation likelihood ( $p > .1$ ).

## Discussion

In study 1, the results showed that state promotion-focus participants made more recommendation behavior than state prevention-focus participants. For complaint behaviors, the difference between these two groups was not significant. These findings supported H1 and H2a. Our results suggested that behavioral strategy effect was offset by outcome sensitivity effect for complaint behaviors. When the state regulatory focus was primed, these two effects might be both activated and offset each other.

## STUDY 2

### Study Design

In study 2, we studied whether people with different trait regulatory focuses had different tendencies to complain and recommend in real life over time. We used a modified regulatory focus questionnaire (RFQ) ( $\alpha = .80, CR = .90$ ) to test customer's trait regulatory focus (Higgins et al. 2001).

We used an online questionnaire to collect the needed data. The questionnaire mainly included two parts, the first part investigated the participants' shopping experiences during the latest three months, and the second part investigated the participants' trait regulatory focuses via a modified RFQ (see Table 3). In the first part, the two key items were "Have you complained about the brands (or companies) to people around you (such as friends, family, classmates, roommates, etc.) after encountering an unpleasant shopping experience?" and "Have you recommended the brands (or companies) to people around you (such as friends, family, classmates, roommates, etc.) after encountering a pleasant shopping experience?" The order of these two questions was balanced among participants. The answer to each question was assigned a score on a 5-point scaling system from "never complain/recommend (1)" to "complain/recommend every time (5)."

### Results

A total of 260 Chinese people (300 contacts) responded to our Internet survey and 215 provided complete response. In total, our samples are mostly from 20 to 40 (80.5%), middle-income (3000~10000 yuan/mo., 70.7%), and enterprise and public employees (80.0%). Nearly half of the responders were male (51.6%).

The promotion-focused and prevention-focused groups were defined as the participants with regulatory focus scores that were .5 standard deviation above the mean (71 people) and .5 standard deviation below the mean (62 people), respectively. Table 2 showed the scores of complaint and recommendation in each group. A 2 (regulatory focus: promotion-focus vs. prevention-focus) by 2 (scenario: satisfactory vs. unsatisfactory) repeated ANOVA showed that the complaint scores ( $F(1,131) = 4.92, p < .05$ ) and recommendation scores ( $F(1,131) = 23.84, p < .001$ ) were both significant different between promotion-focus and prevention-focus groups, with trait promotion-focus people launched more complaints and recommendations than trait prevention-focus people (Table 1, study 2 section). In addition, the complaint scores ( $M = 2.52, SD = 1.08$ ) were lower than the recommendation scores ( $M = 3.40, SD = 1.14$ ),  $F(1,131) = 52.70, p < .001$ .

**Table 2** The scores of complaint and recommendation of two groups

	Trait promotion-focus	Trait prevention-focus
Complaint	2.76 (1.18)	2.35 (0.89)
Recommendation	3.86 (0.98)	2.97 (1.13)

Note. — Standard deviations were given in parentheses.

### Discussion

In this study, we found that trait promotion-focus people had more complaint and recommendation behaviors than trait prevention-focus people. These findings supported H1 and H2b. For complaint behaviors, the behavioral strategy effect (vs. outcome sensitivity effect) was dominant over time. We also found that the degree of recommendation was higher than that of complaint, suggesting that compared to positive CEBs, people were less likely to spread negative CEBs.

## GENERAL DISCUSSION

### Summary of Research

In this article, we used two studies to explore the impact of customer state and trait regulatory focus on positive and negative CEBs, respectively. The results of study 1 showed that state promotion-focus customers were more likely to make recommendations than state prevention-focus customers; whereas there was no difference in complaining behaviors between these two groups. In study 2, we found that trait promotion-focus customers were more likely to recommend and complain than trait prevention-focus customers. In summary, customers with different regulatory focuses usually behaved differently.

### Implications and Discussion

Our results suggest that state and trait regulatory focuses are different and have different impacts on negative CEBs. The results of study 1 and study 2 showed the conflict of trait accessibility and situation-induced accessibility (i.e., state). State regulatory focus as a temporarily inducing regulatory focus state may dominate or even obliterate relative stable trait regulatory focus (Daryanto et al. 2010; Higgins 1997, 2000). It implies that firms can prime customer's specific state regulatory focus by using special procedures to get better performance. For example, firms can prime customer state promotion-focus (e.g., emphasize their hopes and aspirations, (Freitas and Higgins 2002)) even those with prevention-focus trait, in order to promote positive CEBs. Also firms may prime customers' state prevention-focus (e.g., emphasizing duties and obligations, (Freitas and Higgins 2002)) when customers with promotion-focus trait are dissatisfied in order to reduce negative CEBs.

Our research noted that in the long term, the customer's tendency to recommend was higher than the tendency to complain. It is not consistent with the view of "prospect theory" (Kahneman and Tversky, 1979), which states that people are more sensitive to negative events (losses) than positive events (gains). One possible explanation might be the fact that our sample subjects were Chinese. Chinese cultures emphasize an interdependent view of the self, where one's status depends on membership in a larger social group (Markus and Kitayama 1991, 1994). In China, people are asked to "do not hide others' good, and do not openly speak others' bad." Relative to Western people, Chinese people always want to maintain good interpersonal relationships, even with strangers. Chinese people believe that words of praise are beneficial to maintain good interpersonal relationships, while negative words do harm to these relationships.

This mindset can spread to the consumption field. In addition, Chinese people were asked to “be strict towards oneself, be broad-minded toward others.” It might lead customers blamed themselves for the bad experiences but not the companies. This cultural background might be the reason that people in our study tended to recommend more to others than complain to others.

CEBs have great impact on the firm’s performance. Firms are likely to hope that their customers can initiate more positive CEBs and less negative CEBs. How to make customers generate more positive CEBs has become an important topic for firms. Our research finds that promotion-focus customers tended to initiate more positive CEBs. Due to the long-term and stable characteristic, firms can establish the databases which included customers’ trait regulatory focuses by using RFQ. When companies launch marketing activities to prompt positive CEBs, they can focus on those promotion-focus customers in their databases.

### Limitations and Future Researches

The current research also has some limitations. Our research only discusses one dimension of CEB: valence (positive vs. negative). CEB can be understood by other four dimensions: form and modality, scope, nature of impact, and customer goals (Van Doorn et al. 2010). Future research can explore the impact of customers’ personality characteristics on CEB from these dimensions. In addition, except customer regulatory focuses, other customer’s personality characteristics may also affect CEBs, such as self-enhancement (Hennig-Thurau et al. 2004). Future research should explore the influences of other customer personality characteristics on CEBs.

In this paper, we focus on customer’s recommendation and complaint behaviors. In fact, CEBs include many other aspects of behaviors, for example, blogging and web posting (Chevalier and Mayzlin 2006; Hennig-Thurau et al. 2004). We selected only one of these behaviors as indicators due to the fact that there has been no well-defined scale to measure overall CEBs. There is a need to develop a scale to effectively measure overall CEBs, so as to better understand the influence of customer personality traits on CEB.

There are many audiences to which CEB may be directed, such as friends, the family, company employees, strangers, etc. Studies indicate that the strength of the relationship has an effect on the likelihood of recommendation (Ryu and Feick 2007). The current research scenarios were recommending or complaining to “good friends” or “the people around you,” but did not discuss other possible relationships, for example “strangers”. Future research can investigate whether CEBs are different between the two different regulatory focus customers when CEBs are directed to the people with differing relationships. The CEBs in this article are directed to other customers. A question to be addressed is, “What would happen when CEBs are directed to companies?”

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# The Effect of Familiarity and Dread on Health Risk Perception

Silvia Heideker, University of Erlangen-Nürnberg, Germany

Martina Steul-Fischer, University of Erlangen-Nürnberg, Germany

## ABSTRACT

Although people know that smoking can cause lung cancer and see health advertisements against smoking, they still light up cigarettes. In this case, consumers are seemingly not threatened enough by the health risk to avoid risky behavior such as smoking. One reason could be the biased perception of health risks as a basis for all health-related behavior. However, which factors influence health risk perception and contribute to the specific perceived level of risk? How can health risk perception be described and potentially manipulated? Does greater threat cause higher health risk perception and therefore increase the possibility of changing behavior? Moreover, if so, can factors such as familiarity and dread of a health danger contribute to higher threat? Answers to these questions are not only relevant for companies that want to sell health-related services or parts of the public sector, such as health insurance providers that want their insured consumers to behave in a more healthy manner in order to lower costs, for example; they are also a focus of risk perception research and, in particular, health risk perception research.

This paper uses the implications of the psychometric paradigm established by Slovic, Fischhoff and Liechtenstein (1980), a dominant paradigm relating to risk perception, and the paradigm's factors "dread" and "familiarity" to predict specific health risk perception. In this respect, the following paper examines the effects of these factors on each other and on the level of health risk perception. In addition to new insight into health risks, the results provide new information about health risk perception by giving suggestions for adapted methods to measure the factors dread and familiarity, by proving that dread mediates familiarity in the case of health risks, and by using these factors to predict the level of health risk perception. With this knowledge, public sector organizations, such as health insurance providers, will be able to design preventive health advertising more effectively in order to increase health risk perception and consequently to increase the public's intentions of changing health behavior by framing their information with higher or lower familiarity and dread.

## CONCEPTUAL FRAMEWORK

### Health risk perception

Health risk perception is often included in specific models of health behavior, although the significance accorded to its influence varies. The comprehension of health risk perception is based on these models and theories, and it makes sense to take a closer look at health behavior models. Knowing that there is currently no model that can explain health behavior, and subsequently health risk perception, perfectly, there is a need for new approaches to health risk perception.

In general, Conner and Norman (2005) define health behavior as any activity undertaken for the purpose of preventing or detecting disease or for improving health or well-being. The model which accords major importance to health risk perception and greatly influences researchers was developed in the late 1950s as the Health Belief Model (HBM) (Hochbaum 1958, Rosenstock 1960) and was subsequently improved by Becker (1974). The HBM uses the following constructs: Perceived susceptibility, perceived severity, perceived benefits, perceived barriers, self-efficacy and cues to action. Perceived threat depends on an individual's perceived vulnerability to contracting a specific disease plus its perceived severity. These are influenced by cognitions as a result of socio-demographic and socio-psychological

influences. In terms of criticism of the model, Clark and Janevic (2014, p. 13) mention that the HBM as a psychosocial model is limited to accounting for as much of the variance in individual's health-related behaviors as can be explained by their beliefs and attitudes, and that other forces also influence health behavior. In addition, Carpenter (2010) mentions that the constructs of self-efficacy and cues to action have rarely been tested. Furthermore, LaBrosse and Albrecht (2013) reason that in their pilot study folate intervention based on the HBM effectively increased knowledge about folate and health, but had no effect on increasing consumption of folate-rich food and no significant effect on perceived benefits, barriers, severity or cues to action. Clark and Janevic (2014, p.13) criticize the premise of the HBM that health is a highly valued concern or goal for most individuals and cues to action are prevalent. If these conditions are not satisfied, the model is not able to predict behavior. In addition to the present criticism, situational and threatening aspects of health risks do not feature prominently in the HBM.

Other models that should be mentioned in matters of health behavior as a result of health risk perception include the Protection Motivation Theory (PMT) (Rogers 1975). In the PMT, the strength of completion perception results from self-efficacy and activity efficiency reduced by activity costs. The Theory of Planned Behavior (TPB) (Ajzen 1991) connects intention and behavior but does not provide an answer to how consumers can be motivated to practice healthier behavior. Prochaska and DiClemente (1982) developed the Transtheoretical Model (TTM), which implies that consumers pass through different stages called processes of change instead of a continuous change of behavior. Bandura's Social Cognitive Theory (SCT) from 1977 forecasts health behavior through perceived self-efficacy and outcome expectations. Therefore, perceived self-efficacy includes perceived situational controllability.

Previous research has focused on health behavior in general, and health risk perception is just one factor in specific models. With regard to health risk perception, Menon, Raghurir and Agrawal (2007, p. 985) classify common research into five major types of psychological factors: motivational, cognitive, affective, contextual, and individual differences. Affective factors influence consumers' ability to deal with negative information (Menon, Raghurir and Agrawal, 2007, p. 987). If health risk information is seen as negative, it is necessary to take a closer look at affective parameters and threatening situational influences such as "familiarity" and "dread" of health risks because they may play a role in this context. Until now, situational and threatening influences of health risks on health risk perception have not yet been analyzed sufficiently in present research.

### Health risk perception and psychometric approach

In contrast to general risk perception, Ajzen and Timko (1986) point out that specific health behavior is largely unrelated to general attitudes such as attitude towards medical services, concern about illness and evaluation of health practices. On the other hand, they also assume that attitudes and perceived control with respect to specific health-related actions correlate highly with corresponding behaviors. Obeying these thoughts, attitudes act as predictors in terms of predicting behavior. Furthermore, Menon, Raghurir and Agrawal (2007, p. 982) underline the interplay of cognitive and affective systems in the construction of risk estimates and analyze the factors which moderate the link between health risk perceptions and health behavior.

It is important to differentiate between the cognitive, emotional and behavioral level. The cognitive level includes thoughts about specific risks and the emotional level includes positive or negative feelings that are triggered through an event or scenario. In response to this, it is important to distinguish between objective, given factors and subjective, perceived factors which for their part influence cognitive and emotional consumer attitude. The level of health risk perceived by consumers can be objectively less or more risky depending on the current health risk situation or can, due to perception, be subjectively more or less risky. To analyze the level of health risk perception, it is necessary to identify objective, given and subjective, perceived health risks which can be manipulated in order to measure their influence on health risk perception. However, there is no general overall view of health risk classes and an objective scale of health risks.

Our research distinguishes between external and internal health risks. External risks affect consumers' health (for example technology, environment and accidents) but cannot be greatly influenced by the consumer themselves. In terms of internal risks, a distinction has to be made between the unalterable risks of genetics and risks that result from active and passive behavior. Many health risks cannot be categorized in simply one of these classes; for example, lung cancer could be caused by smoking cigarettes as active behavior, by technologies such as x-rays, by genetic predisposition, or simply by missing several preventive check-ups. Following these thoughts, a virus seems to be a suitable health risk for our study; it is possible to present an objectively riskier or less risky situation and likewise a subjectively riskier or less risky perceived health risk to consumers.

To the best of our knowledge, there are no specific studies that have tried to use the threatening factors "dread" and "familiarity" from the psychometric paradigm to predict health risk perception. Risk perception research has been dominated by the psychometric paradigm established by Slovic, Fischhoff and Lichtenstein (1980). The psychometric paradigm is fairly successful in predicting and explaining perceived risk. Slovic, Fischhoff and Lichtenstein (1980) identified dread and familiarity as two describing components for risks. Familiarity and dread accounted for over 70% of the variance in risk perception. Further research confirmed these findings (Poumadere et al. 1995, Wiegman, Gutteling and Cadet 1995, Bronfman and Cifuentes 2003). Bronfman, Cifuentes and Gutiérrez (2008) suggest that the psychometric paradigm is also able to explain differences among participants, while socio-demographic conditions have no substantial explanatory power on their own. Only Mullet, Ciudad and Rivière-Shafiqhi (2004) examine the cognitive processes involved in lay people's health risk assessment using factors of the psychometric paradigm. Likewise correlated to health risks, Flynn, Slovic and Mertz (1994) for their part investigated differences between men and women regarding health risks, and found that risk perception also varies depending on the type of risk in question. The aim of our study is to determine the explanatory power of the psychometric paradigm for health risks, including the possible influencing factors familiarity and dread.

## Familiarity

In terms of general risk perception, several researchers have investigated familiarity; for example Weber, Siebenmorgen and Weber (2005), Richardson, Sorenson and Soderstorm (1987) and Zuckerman (1979) found that risk perception increases as familiarity increases. Related to research of health risks and familiarity, Royne et al. (2014) found a moderating effect of familiarity with direct-to-consumer advertising and the relationship between health consciousness and attitude toward dietary supplements. Their findings also suggest that knowledge plays an important role in attitude and perception formation. Furthermore, they point out that benefit and risk information

about supplements should be provided to consumers so they can make informed decisions about their health. In addition, Mullet, Ciudad and Rivière-Shafiqhi (2004) verify that knowledge has an effect on the judged severity. Following these insights, knowledge and therefore familiarity as a part of the classic psychometric paradigm may influence health risk perception formation in a certain way. Consumers' willingness to react to specific events depends on their attitude towards the risk. As attitudes act as predictors for health behavior, they also predict health risk perception as part of health behavior. Accordingly, familiarity affects health risk perception.

## Dread

Like familiarity, the effect of dread on general risk perception was the focus of many investigations by Slovic, Fischhoff and Lichtenstein (1980, 1981 and 1984). In the original psychometric paradigm, dread includes aspects such as the risk is seen to be uncontrollable, catastrophic, hard to prevent, fatal, inequitable, threatening to future generations, not easily reduced, increasing, involuntary, and threatening to the person evaluating the risk. Mullet, Ciudad and Rivière-Shafiqhi (2004) found interactions between familiarity and dread in the context of health. In this context, dread and knowledge are combined in a subadditive way. Additionally, if the risk is not well known, the effect of dread is reduced. When knowledge is seen as a prior factor for familiarity, familiarity affects dread accordingly.

*Hypothesis 1: The more unfamiliar a health risk is perceived to be, the more dread is perceived.*

Because of its implicit danger to consumer health, it is logical to assume that dread affects health risk perception. Dread has an effect on judged severity; in the case of a higher level of dread, there is a higher judged severity (Mullet, Ciudad, Rivière-Shafiqhi 2004). Accordingly, dread affects health risk perception.

*Hypothesis 2: The more dread is perceived, the higher the health risk perception.*

In exactly the same way as in general risk perception, in health risk perception consumers have to be personally threatened by the health risk to change health behavior, as is seen in common health behavior models. For health risk perception, specific health risks must exist and be present for the consumer. If they are not familiar with a health risk, participants cannot evaluate the level of dread. Chronologically, familiarity comes before dread, and without any familiarity there is no possibility of discovering dread. Dread seems to mediate the relationship between familiarity and health risk perception. Accordingly, familiarity affects dread and results in higher perceived health risks.

*Hypothesis 3: The more dread is perceived, the more familiarity affects health risk perception and health risk perception is higher. Dread mediates unfamiliarity.*

## STUDY

Our study tests the prediction that dread and familiarity will have an effect on health risk perception (H1, H2 and H3). The theory-based hypotheses include familiarity as an independent variable, dread as a mediator and health risk perception as a dependent variable. We assume that if a given health risk is objectively dreadful and unfamiliar then consumers' subjective health risk perception is higher compared to a non-dreadful and familiar health risk.

## Method

Two hundred and fifty-eight university students (34.5% male, age ranging from 17 to 30 years, mean age = 24.77 years) participated in this study. Participants were assigned at random to one of four conditions in a 2 (familiarity: familiar/unfamiliar) x 2 (dread: not dreadful/dreadful) between-subjects design. Participants were invited to read an article from a prestigious journal. In this article, participants read information about a virus called ZZP. By giving specific keywords for dread and familiarity respondents perceived their scenario to be not dreadful or dreadful and familiar or unfamiliar. Similarity from objective and subjective familiarity and dread were successfully tested through a manipulation check.

Participants' perceived level of dread, familiarity and health risk was quantified after they read the scenarios based on existing scales from the psychometric paradigm. A pretest indicated that the items for the variables dread and familiarity needed to be modified to fewer items than in the original psychometric paradigm because of its transfer from general risk perception to health risk perception. Therefore, items for dread were reduced to eight compared to the original nine items, which was warranted as the original item "voluntary" is not needed in a study with a given virus that affects every participant. The new scale for familiarity used was the result of reducing five items to two items, focusing on the most influential factors of "awareness" and "knowledge". Referring to Menon, Raghurir and Agrawal (2007, p. 1000), awareness is an important subject to analyze when consumers are faced with health hazards as in our study. Furthermore, Orom, Kiviniemi, Shavers, Ross and Underwood (2013) argue that health risk perception can be influenced by access to health messages and the presence of several health risks. As a result of the greater presence, we consider "knowledge" to have a major influence on health risk perception and to be worthy of examination.

Based on the original psychometric paradigm, for both constructs a 7-point scale was used (see Appendix A). To check the validity of these new measurement scales for both constructs, Cronbach's Alpha was used as the most prominent and most frequent criteria which can be used for constructs with only two items or higher (Cronbach, 1951). In our study we calculated  $\alpha = 0.740$  for familiarity and  $\alpha = 0.885$  for dread respectively. To measure health risk perception we used one item on a 10-point scale from 1 (no risk for own health) to 10 (very high risk to own health). The questionnaire was completed with questions on "own health condition" with a 7-point scale (Lumpkin and Hunt 1989) ( $\alpha = 0.717$ ), "risk aversion" with a 7-point scale (Donthu and Gilliland

1996) ( $\alpha = 0.759$ ), and "knowledge" and "thoughts about health risks", each with a 5-point scale.

## Results and Discussion

**Manipulation Check:** ANOVA reveals significant perceived familiarity ( $M_{\text{familiar}} = 4.57$  and  $M_{\text{unfamiliar}} = 5.73$ ,  $p = .000$ ) as well as perceived dread ( $M_{\text{not dreadful}} = 2.76$  and  $M_{\text{dreadful}} = 4.20$ ,  $p = .000$ ). Thus, participants' objective and subjective perception is similar. Health risk perception is different between the scenarios familiar and unfamiliar ( $M_{\text{familiar}} = 3.94$  and  $M_{\text{unfamiliar}} = 4.66$ ,  $p = .029$ ), as well as not dreadful and dreadful ( $M_{\text{not dreadful}} = 2.80$  and  $M_{\text{dreadful}} = 6.12$ ,  $p = .000$ ).

**Results:** Among all participants the scenario is perceived as realistic ( $M = 3.71$ ,  $SD = 1.62$ ), plausible ( $M = 3.63$ ,  $SD = 1.41$ ) and easy to understand ( $M = 3.16$ ,  $SD = 1.44$ ) (see Appendix A). Correlation analysis reveals a correlation between familiarity and dread ( $r = .20$ ,  $p = .001$ ) which should indicate mediation (Baron and Kenny, 1986, p. 1177). There is no significant correlation between familiarity and health risk perception ( $r = .09$ ,  $p = .164$ ). Furthermore, there is a correlation between dread and health risk perception ( $r = .77$ ,  $p = .000$ ).

Altogether, hypotheses 1, 2 and 3 suggest an indirect effect, whereby the relationship between familiarity and health risk perception is transmitted by dread. To test this mediation, similarly to Cole, Walter and Bruch (2008), regression analysis was done with the SPSS macro PROCESS as described by Hayes, due to several defects in the multi-stage method described by Baron and Kenny (1986). This macro enables estimation of the indirect effect with the normal theory approach and with the bootstrapping approach to obtain confidence intervals, and also incorporates the stepwise procedure described by Baron and Kenny.

The results for hypotheses 1-3 are reported in table 1. Proving hypothesis 1, familiarity is positively associated with dread, as indicated by a significant unstandardized regression coefficient ( $B = 0.14$ ,  $t = 3.26$ ,  $p = .001$ ).

This supports hypothesis 1, the more unfamiliar a health risk is perceived to be, the more dread is perceived. Consistent with this, Richardson, Sorenson and Soderstrom (1987) found decreasing perception of technology risks as familiarity increased. Testing hypothesis 2, a positive relationship between dread and health risk perception controlling for familiarity is shown ( $B = 1.73$ ,  $t = 19.57$ ,  $p = .000$ ).

Therefore, hypothesis 2 is supported: the more dread is perceived, the higher the health risk perception. Seeing health behavior as an outcome of health risk perception, similar findings to our results

**Table 1**

<i>Results of Regression for Simple Mediation and Sobel Test</i>				
Variable	B	SE	t	p
Direct and total effects				
Health risk perception regressed on familiarity:	0.14	0.10	1.40	.164
Dread regressed on familiarity:	0.14	0.04	3.26	.001
Health risk perception regressed on dread, controlling for familiarity:	1.73	0.09	19.57	.000
Health risk perception regressed on familiarity, controlling for dread:	- 0.11	0.06	- 1.75	.081
Indirect effect and significance using normal distribution				
Sobel	0.25	0.08	3.21	.001
Bootstrap results for indirect effect				
Effect	0.25	0.08	0.10	0.40

Note. N = 258. B = Unstandardized regression coefficients. Bootstrap sample size = 5,000.

LL = lower limit; CI = confidence interval; UL = upper limit.



were found by O'Connor and White (2010), where dread of risks was found to be a predictor of non-users' willingness to engage in a free trial of functional foods. In our study, there is no significant direct effect for health risk perception as a dependent variable regressed on familiarity ( $B=0.14$ ,  $t=1.40$ ,  $p=.164$ ) which backs the notion of dread as a mediator. Finally, testing hypothesis 3, familiarity is found to have an indirect positive effect on health risk perception ( $B=0.25$ ). The formal two-tailed significance test assuming normal distribution demonstrates this indirect effect significantly (Sobel  $z=3.21$ ,  $p=.001$ ). Bootstrap results confirm the Sobel test, as is seen in the table of results, with a bootstrapped 95% CI around the indirect effect not containing zero (0.10, 0.40). The model shows good explanatory power ( $R^2=0.60$ ) for our global assumption of health risk perception as a dependent variable and familiarity as an independent variable. These results support hypothesis 3, the more dread is perceived, the more familiarity affects health risk perception and health risk perception is higher. Dread evidently mediates familiarity.

Other results are shown through an ANOVA: Having experience with a virus ( $M=4.21$ ,  $SD=2.63$ ) and having no experience with a virus ( $M=4.53$ ,  $SD=2.53$ ) has no significant influence on the level of perceived health risk. Considering the means of health risk perception supports hypothesis 3 that unfamiliarity in terms of having no experience with a virus increases health risk perception compared to having experienced the virus. An ANOVA shows that women ( $M_{\text{women}}=4.62$ ,  $SD_{\text{women}}=2.62$ ) perceive health risk as significantly higher than men ( $M_{\text{men}}=3.85$ ,  $SD_{\text{men}}=2.46$ ,  $p=.023$ ). Several other studies also report significant differences by gender. Dosman, Adamowicz and Hrudehy (2001) showed that women perceive risks from food as higher than men. In our study the level of perceived dread is also significantly higher for women ( $M_{\text{women}}=3.54$ ,  $SD_{\text{women}}=1.22$ ) compared to men ( $M_{\text{men}}=3.24$ ,  $SD_{\text{men}}=1.08$ ,  $p=.049$ ), which is the same result obtained by Bronfman, Cifuentes and Gutiérrez (2008). Similarly to common research, the results show that women ( $M_{\text{women}}=2.98$ ,  $SD_{\text{women}}=1.20$ ) have significantly lower risk aversion than men ( $M_{\text{men}}=3.37$ ,  $SD_{\text{men}}=1.17$ ,  $p=.013$ ). Underlining these findings, our results are not biased due to knowledge of health risks ( $M_{\text{women}}=2.61$ ,  $SD_{\text{women}}=0.80$  and  $M_{\text{men}}=2.45$ ,  $SD_{\text{men}}=0.80$ ,  $p=.128$ ), thoughts about health risks ( $M_{\text{women}}=2.75$ ,  $SD_{\text{women}}=0.93$  and  $M_{\text{men}}=2.83$ ,  $SD_{\text{men}}=0.88$ ,  $p=.505$ ), or perception of own health condition ( $M_{\text{women}}=3.37$ ,  $SD_{\text{women}}=1.23$  and  $M_{\text{men}}=3.17$ ,  $SD_{\text{men}}=1.39$ ,  $p=.257$ ), because there are no significant differences between women and men.

## GENERAL DISCUSSION

The aim of our study was to examine the psychometric paradigm originally proposed by Slovic, Fischhoff and Liechtenstein in the early 1980s to predict health risk perception. Our study supports the conclusion that the classical paradigm is able to explain differences in health risk perception even though the scales used to measure "dread" and "familiarity" have to be modified to fit health risks because of the differences between general risk perception and health risk perception. Our findings suggest that higher subjective familiarity and consequently higher subjective dread cause a higher subjective perceived level of health risk. This applies more notably for women than for men. Further research should examine particular personality traits in addition to the situation-based factors of dread and familiarity that might influence the level of health risk perception. As Ajzen and Timko (1986) mention, attitudes correlate highly with corresponding behaviors. It is not enough to simply intentionally threaten consumers through dread and unfamiliar risks to change their health behavior. Nevertheless, increasing health risk perception using the factors familiarity and dread is one significant option.

In line with this conclusion, it is important to underline that

negative information generally comes to mind more easily than positive information (Higgins, 1989) and therefore may be more likely to influence risk perception. In connection with our study, health risks are manipulated by giving specific words as a kind of framing. Framing effects in health risk perception are therefore a distinct area in research with specific phenomena, such as that framing affects the efficacy of health messages (Block and Keller, 1995 or Keller, Lipkus and Rimer, 2003), and surely affect our results in a certain way. It is also important to mention that negative information like that given in our study could put people in a negative mood which may mean that consumers are less likely to process health messages, as Keller, Lipkus and Rimer (2003) show.

Our study has shown the effect of dread as a mediator for familiarity for the level of health risk perception. For companies such as health insurance providers that need a higher risk perception through health advertisement to increase healthier consumer behavior, this effect implicates a combination of higher dread and lower familiarity to increase health risk perception. The combination of this knowledge and framing effects remains a topic for further research.

Health risk perception is an essential factor in health behavior. Understanding health risk perception is one approach used to predict health behavior. However, following the classification of health risk perception research by Menon, Raghubir and Agrawal (2007, p. 985) into the five major types of psychological factors, motivational, cognitive, affective, contextual, and individual differences, it seems obvious that no complete model that explains health behavior perfectly can exist until the five layers, as well as their interaction and correlation, are examined completely. This should be considered by future investigations.

With dread and familiarity, we have examined two essential factors for health risk perception on the objective and subjective level of consumer perception, but some other intervening factors may exist. Personal traits and consumers' personalities may also influence the results. At the personality level, for instance, controllability attenuates self-positivity as a bias on health risk perception, as Darvill and Johnson (1991) show. "Depressive realism" examined by Keller, Lipkus and Rimer (2002) shines another spotlight on the influence of personal traits on health risk perception, to name just one example.

Our study focuses on situational and threatening effects and should be linked with other factors influencing health risk perception. Furthermore, to what extent the results can be transferred to other health risks with higher or lower controllability through consumer behavior is a potential topic for further research.

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**APPENDIX: Measures and Validation**

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**Health Risk Perception (10-point Scale)**

Scenario is risky to your health (1= "No risk" to 10= "Very high risk")

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**Dread: According to Slovic, Fischhoff and Liechtenstein (1980) ( $\alpha = 0.885$ )**

1= "Very high controllability" to 7= "Very low controllability"

1= "Not dreadful at all" to "7= Very dreadful"

1= "Not global at all" to 7= "Very global"

1= "Not deadly at all" to 7= "Very deadly"

1= "Affects few" to 7= "Affects many"

1= "No risk for further generations" to 7= "High risk for further generations"

1= "Easy to reduce" to 7= "Hard to reduce"

1= "Decreasing risk" to 7= "Increasing risk"

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**Familiarity: According to Slovic, Fischhoff and Liechtenstein (1980) ( $\alpha = 0.740$ )**

1= "Totally familiar to public" to 7= "Not familiar at all to public"

1= "Up-to-date knowledge of public" to 7= "Not up-to-date at all knowledge of public"

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**Own health condition: According to Lumkin and Hunt (1989) ( $\alpha = 0.717$ )**

Compared to others my age, I am healthier 1= "Totally agree" to 7= "Totally disagree"

Compared to others my age, I have no physical problems 1= "Totally agree" to 7= "Totally disagree"

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**Risk aversion: According to Donthu and Hunt (1996) ( $\alpha = 0.759$ )**

I would rather be safe than sorry 1= "Totally agree" to 7= "Totally disagree"

I want to be sure before I purchase anything 1= "Totally agree" to 7= "Totally disagree"

I avoid risky decisions 1= "Totally agree" to 7= "Totally disagree"

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**Knowledge about health risks:**

1= "Very good" to 5= "Very low"

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**Thoughts about health risks:**

1= "Very much" to 5= "Little"

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**Realistic:**

1= "Very realistic" to 7= "Unrealistic"

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**Plausible:**

1= "Plausible" to 7= "Not plausible"

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**Complex:**

1= "Easy" to 7= "Very complex"

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# Recovery Satisfaction Construct and Construct-Related: Assessment Measurement from Item Response Theory

Martín Hernani-Merino, Universidad del Pacífico (UP/Lima), Peru

Giuliana Isabella, São Paulo University (FEA/USP), Brazil

Enver Gerald Tarazona Vargas, Pontificia Universidad Católica del Peru

José Afonso Mazzon, São Paulo University (FEA/USP), Brazil

## ABSTRACT

In failure service situations, companies attempt to recover customer satisfaction. Keeping customers satisfied is necessary to retain existing customers, and it is much less expensive than acquiring new customers (Mittal & Kamakura, 2001). Therefore, many researchers have explored the antecedents and consequences of recovery satisfaction, investigating the relationship with other constructs, such as perception of justice (Isabella & Mazzon, 2015), trust (Zhou, 2013), negative emotions (Kuo & Wu, 2012), switching (Pick & Eisend, 2013) or post-purchase intention (Holloway, Wang, & Parish, 2005). Consumer researchers explore these relationships by creating, improving or using scales. According to Wong, Rindfleisch and Burroughs (2003), marketing researchers are increasingly interested in testing their measurements and theories in different segments. It is common for one scale to be used in different contexts or regions (Steenkamp & Baumgartner, 1998). Thus, scales need to measure constructs independently of the segment, context, culture or nation. Within this paradigm, item response theory (IRT) has emerged, a methodological approach that helps measure items on a scale in an invariant way. Based on that the present research aims to evaluate the measures of the construct related to recovery customer satisfaction using IRT. The use of IRT models for ordinal data type (as Likert scale) remain rare in the marketing literature (Bazán, Mazzon & Hernani-Merino, 2011); however, researchers have recognized their contributions to measuring latent variables or constructs (Bacon, 2012; De Jong & Steenkamp, 2010). Such research implies that it is also important to consider the dissemination and application of these methods in consumer research. Such research implies that it is also important to consider the dissemination and application of these methods in consumer research. We opted to test the recovery satisfaction construct and other related constructs (perception of justice, trust, negative emotion, switching and post-purchase intention) during failure service situations because this kind of consumer satisfaction is very important in today's market. To evaluate the scales, we used the telecommunication failure service context. Since, the telecommunication signal is very important for a cell phone to work and, these companies have a high number of customer complaints compared to other segments. In the theoretical chapter of the full paper, we included the theoretical development of recovery satisfaction and its relationships, describing each construct. After that we described the methodology. Clearly, we surveyed college students in a metropolitan city, and we evaluated the construct measurements (items). All the participants had cell phones and service accounts with a telecommunication company. Participants used a computer lab to answer questions about a telecommunication failure service context. In some sections, we collected 265 surveys, of which 244 were considered valid. Participants responded to six famous and very used scales (described in details in the full paper) using seven-point rating scales. The analyses were based on IRT and in the classical test theory. For the marketing context, Singh, Howell and Rhoads (1990) proposed an IRT of graduated answers based on the Likert scale, selecting the most representative items. The measurement model (item analysis) were evaluated in two ways: (1) based on classical test

theory (CTT), analyzing mean, standard deviation and estimating Cronbach's alpha coefficient for the construct and the item-total correlation; and (2) based on item response theory, which estimates the parameters of discrimination ( $a$ ) and difficulty ( $b$ ) through the graded response model (GRM) (Samejima, 1969). This model is often used for ordinal data (Likert scale) in marketing research. The analysis of results reports the statistics of CTT and the parameter estimates from IRT for all items of the six constructs. With CTT, all the items had higher correlations (above 0.50). The analyses show that all items on the scale are useful in defining their respective constructs because IRT items in the model showed high or moderate quality for evaluating the discrimination parameters " $a$ " estimate following the graded response model from Samejima (1969). Together, the IRT and CTT show that all items on all scales are useful in defining their respective constructs. In terms of discrimination, it is important to note the difficulty or the location that the items are presented. Thus, in CTT, mean scores measure the item difficulty, indicating the severity of the item; usually, a low average denotes low agreement with the item, while a high average suggests a high correlation with the item. The parameters from the IRT show the difficulty " $b$ " of the items towards total agreement. The items have 7 score points; therefore, the distance of difficulty between one point to another is 6 ( $b_1$  to  $b_6$ ). We also graphically (in the full paper – please contact the authors if you want to read the full study) presented the information function of latent traits from six constructs: negative emotion, recovery satisfaction, post-purchase intention, switching, perception of justice and trust (divided in three dimensions: integrity, benevolence and competence). Working with IRT, we obtained more information about the items in the scales. IRT is a sound technique for evaluating items from scales, permitting researchers to define short scales, measure a construct without loss of significant information, or choose the best item from the construct scales when they cannot use many questions. Thus, while the TCC uses Alpha Cronbach to evaluate the reliability of a construct, the IRT uses the information function, indicating the upper range of ability where an item or scale could better discriminate between individuals. Superior information denotes more accuracy or reliability of the item in the construct (Embretson & Reise, 2000). This research contributes to the management field because companies can identify specific critical points in the service provided to consumers. This contribution is clear through analysis of the difficulty parameter ( $b$ ), achieving the highest degree of agreement for items in the satisfaction construct. Based on this information, companies can develop marketing strategies and services according to the degree of difficulty in matching a particular item. We conclude the paper by mentioning some limitations. For instance, we used specific groups - undergraduate students; we run few scales related to recovery satisfaction however many other scales could be used; we also opted one scale for each construct, different scales could be used to test which one would be the best. Future researchers could study respondents' abilities in the context of satisfaction with services and many other marketing contexts.



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# Influence of Low Endorser-Brand Congruence

Sukyung Kang, Korea University, South Korea  
Hyehyun Yulrea Kim, Korea University, South Korea  
Dahye Jung, Korea University, South Korea  
Kyunhoon Boo, Korea University, South Korea  
Sejung Marina Choi, Korea University, South Korea

## ABSTRACT

The days of perceiving brands simply as markers of certain products are long gone. Brands can be a comforting friend, a lover, or even an enemy. Fournier's (1998) extensive qualitative study on consumer's relationships with brands showed that consumers form various types of relationships with brands. For these people, these brands represent who they are, and are a part of themselves. A construct that illustrates such a bond a consumer can form with a brand is self-brand connection (Escalas, 2004). Self-brand connection refers to the extent to which consumers have incorporated "their" brand into their self-concept, thus integrating the brand as a part of their extended self (Escalas & Bettman, 2005). Because brands carry certain associations and meanings (for example, Nike's "Just Do It"), when an individual consumes a brand, the consumer can draw a certain connection toward the brand, and the brand's associations and meanings are transferred onto the consumer. Simply put, what we buy represents our personality and image.

For this connection, a successful match or congruence between the endorser and the associated brand's attributes has been considered as a critical factor that influences the effectiveness of celebrity endorsement. Misra and Beatty's (1990) study shows that a congruent endorser-brand combination can result in higher ad recall and greater transfer of positive affect from the endorser to the brand. Although this situation is ideal, companies may find it difficult to select an endorser whose image is perfectly congruent with their brand. They may also want to change the brand's image or meanings by associating it with a new endorser whose image is incongruent with its current image. In fact, some companies in Korea hire K-pop stars who are incongruent with their brand images for commercials in order to attract more foreigners who are interested in K-pop and Korean culture.

This incongruence is a threat to consumers with strong brand-self connection, also referred to as brand identification. Past studies show that strong brand identification makes the consumer immune to negative brand information (Cheng, White, & Chaplin, 2012; Lisjak, Lee, & Gardner, 2012). This immunity, then, protects people from the negative information, which makes them unwilling to change their brand attitude and evaluation. In both Cheng et al., and Lisjak et al.'s studies, it was found that 'implicit self-esteem' plays an important role in the relationship between self-brand connection and brand attitude. Low implicit self-esteem, when triggered through a self-activation task, can make even a strong brand identifier lower his or her brand attitude when exposed to negative brand information (Lisjak et al., 2012). This shows that even though a strong self-brand connection can attenuate the effects of negative brand information, other aspects of an individual's psychological composition, namely implicit self-esteem, can eliminate the effect of self-brand connection on brand attitude.

However, to the best of the researchers' knowledge, no research offers insights into this important issue. Our study, therefore, seeks to address this missing link in the literature and investigate how self-brand connection influences consumer response to endorser-brand incongruence. Furthermore, for a more comprehensive configuration, the role of endorser characteristics (i.e., perceived credibility) and self-esteem is assessed as well.

## THEORITICAL BACKGROUND

Past research has shown that it is essential to know when an endorser's characteristics do not connect with the brand or the product because it can lead to lack of attention from the consumer towards the ad and the brand (Atkin & Block, 1983; Fishbein & Ajzen, 1975; Goldberg & Hartwick, 1990; Mitchell & Olson, 1981). For example, it may not be the most ideal to hire a physically unattractive comedian to endorse beauty products or a rebellious celebrity to endorse life insurance. Thus, advertisers must learn that even though a celebrity is well-known, if his or her characteristics do not match the product, it is difficult to deliver the message to the audience effectively.

Self-Brand Connection (SBC) can be explained as "the psychological association a person develops with a brand" (Wei & Yu, 2012). To further define the type of association a person makes with a brand, self-congruity theory suggests that a consumer will integrate into his self-concept a brand whose image matches with his own image (Childers & Rao, 1992). Self-concept is defined as the "totality of the individual's thoughts and feelings having reference to himself as an object" (Rosenberg, 1979). The term self-concept not only includes the traits, values, personal goals, or personality, but also includes close others, self-relevant material, and emotional objects (Kihlstrom & Cantor, 1984; Markus 1983; Markus & Wurf, 1987). Thus, self-relevant material, and emotional objects, such as a specific brand, can also become a part of one's self-concept to achieve consumers' goals or express their personal value and personality, building a strong linkage between the brand and consumer.

In recent relationship marketing research, researchers found that consumers often try to construct their self-identity and show their personality to others through their brand choices, which is presumably based on the congruence between their self-image and the brand's image (Escalas & Bettman, 2003, 2005). Thus, when people consume certain brands, brand meanings are transferred onto the individual, and consumption of these brands also help to create brand associations.

Previous research in self-brand connection shows that consumers with high self-brand connection will integrate the brand as part of their self-concept, and as a result, will defend the brand even when exposed to negative information because they perceive the negative information as a threat to their self-concept (Lisjak et al., 2012). In consumer behavior research, a person's self-esteem was found to be an important activator of defensive responding (Cheng et al., 2011; Lisjak et al., 2012). Because self-esteem and self-concept are closely related constructs that constitute a person's perspective toward the self, further research in self-brand connection needs to explore the role of self-esteem.

Self-esteem can be divided into two categories: implicit and explicit self-esteem. As the name suggests, "implicit self-esteem refers to the automatic evaluation people have about themselves, assessed through implicit measures" (Greenwald & Farnham, 2000), whereas "explicit self-esteem refers to the conscious and reasoned evaluation people have about themselves, typically assessed through self-report" (Rosenberg, 1965). The relationship between implicit and explicit self-esteem with defensive responding emerges differently in previous studies. Although self-esteem is divided into implicit and



explicit self-esteem, it has been shown that low implicit self-esteem is a global indicator for ego fragility (Gregg & Sedikides, 2010). While studies regarding self-esteem are somewhat divided, the most common pattern seems to suggest that when an individual is under threat, those with low implicit self-esteem are more defensive (Lisjak, Lee, & Gardner, 2012). Thus, in this study, implicit self-esteem is measured to examine the relationship between self-brand connection and brand attitude.

In recent research, some of the studies show that low implicit self-esteem is one of the factors that influence vulnerability when a person faces self-threat (Conner & Barrett, 2005; Robinson & Meier, 2005; Rudman, 2004). This means those who have low implicit self-esteem are individuals who are more likely to see a situation or event as harmful to themselves when they make contact with a new event or situation (Conner & Barrett, 2005). Accordingly, Gardner, Gabriel, and Hochschild's (2002) research supports this proposition, demonstrating that a person's emotional response to his or her successes and failures will also affect his extended self. Thus, individuals who have low implicit self-esteem are likely to defend their extended selves when they face threat. According to self-brand connection, an extended self can also include brands with which the individual has a close connection. This implies that an individual will perceive the brand's failure as his own, a finding that has been shown in Cheng et al.'s (2011) study. While brand endorser incongruence may not necessarily be deemed as a brand failure, it is speculated that an endorser whose image that does not fit the image of the brand may pose a threat to the brand, and subsequently to the self-esteem and self-concept of the consumer whose connection with the brand is strong.

Lastly, many marketing researchers have pointed out that a proper match between the endorser and the product is crucial for effective message receiving and successful endorsement. A successful endorser refers to whether or not he or she can effectively and positively affect the consumer in message acceptance. This is commonly referred to as endorser credibility (Ohanian, 1990).

Endorser credibility originally emerged from Source Credibility, (Hovland & Weiss, 1951) and is conceptualized using three dimensions: expertise, trustworthiness, and attractiveness (Baker & Churchill, 1977; Giffin, 1967; Hovland, Janis, & Kelley, 1953; Joseph, 1982; Kahle & Homer, 1985; Maddux & Rogers, 1980; Mills & Harvey, 1972). The first dimension, expertise, is conceptualized as certain knowledge that the endorser has related to the contents in advertisements, and trustworthiness refers to the endorser's objective and honest characteristics (Ohanian, 1991). On the other hand, attractiveness refers to an endorser's physical attractiveness, which from past research shows higher ability to influence beliefs (Chaiken, 1979; Dion & Berscheid, 1972).

Based on endorser credibility, hiring an endorser who possesses all of the three dimensions (attractiveness, trustworthiness and expertise) is the most ideal; however, in reality, it is difficult to find the perfect endorser who has the combination of all three traits.

## HYPOTHESIS

Strong self-brand connection integrates a brand into a person's self-concept. This integration, then, leads to a person becoming protective of the brand when exposed to negative brand information. When a brand is integrated into a person's self-concept, an incongruent endorser-brand combination may be perceived as a threat to strong brand identifiers. A strong self-brand connection indicates a close association between a person's self-concept and self-esteem. This means that when a person's self-concept is under threat, their self-esteem is also affected.

Therefore, an individual's level of self-brand connection, the

level of self-esteem, and perceived endorser credibility must be examined. This leads to the formation of the following three hypotheses:

*Hypothesis 1: Stronger brand identification will lead to a more positive change in brand attitude when endorser brand congruence is low.*

*Hypothesis 2: The effect of brand identification on brand attitude will be moderated by implicit self-esteem such that strong identifiers with low implicit self-esteem will show an even more positive change in brand attitude when endorser brand congruence is low.*

*Hypothesis 3: Higher perceived (a) attractiveness, (b) trustworthiness, and (c) expertise of the celebrity endorser will lead to a greater positive change in brand attitude.*

## METHOD

### Research Design

Prior to the main survey, two pretests were conducted in order to determine the brand and the endorser for the stimulus information presenting the case of low endorser-brand congruence. Converse, a relatively clear distinction in consumer likeability ( $M = 4.769$ ,  $SD = 1.833$ ), was selected.

In a second pretest, the results showed that Gil, a musician/entertainer on the popular television show in Korea, Infinity Challenge, had the lowest image congruence with Converse. Both pretests were administered with an even sexual distribution. Thus, the brand Converse, and entertainer, Gil, were selected for the study.

A total of 119 undergraduate students from a private Korean university were recruited for the survey. The paper-and-pencil survey was administered in three stages. In the first stage, self-brand connection, brand attitude, and implicit self-esteem were measured. First, participants' attitude toward Nike, Converse, and New Balance were measured on a 17-point scale. Nike and New Balance were included in the questionnaire so that the objective of the study was not made clear to the participants. Then, self-brand connection with Converse was measured using Escalas and Bettman's (2003) 7-item, 7-point scale. Lastly, implicit self-esteem was assessed on a three-item, 7-point scale (Gebauer, Riketta, Broemer, and Maio 2008). Upon completing the pre-stimulus measurements, participants were led to the second stage in which they were instructed to read a short article stating Converse's new endorsement deal with the entertainer, Gil, for the launch of the Spring Collection. In the last and third stage, attitude toward Converse was re-measured on the same 17-point scale. In addition, endorser credibility, endorser brand congruence, story plausibility as well as demographic characteristics were gauged. All of the variables were assessed on a 7-point scale, with the exception of brand attitude, which was measured on a 17-point scale.

## RESULTS

### Overview

Data were analyzed using hierarchical regression analysis. Continuous predictors, self-brand connection (Cronbach's  $\alpha = .94$ ), implicit self-esteem ( $\alpha = .82$ ), and endorser credibility were centered prior to conducting the analysis. Endorser credibility, a variable mea-

sured along three dimensions, attractiveness ( $\alpha = .80$ ) trustworthiness ( $\alpha = .91$ ), and expertise ( $\alpha = .87$ ), were divided into three variables according to different dimensions, and then centered for the analysis.

Change scores for brand attitude, which was measured before and after stimulus, were calculated by subtracting the before score from the after score on all three items, respectively. Then, the change scores were gathered to form one composite variable, which was used for the analysis. All of the centered predictors as well as gender were inserted into the first block of the regression analysis and the interaction term for implicit self-esteem and self-brand connection was inserted into the second block.

Prior to conducting the regression analysis, one-sample t-test was conducted to ensure the induction through the stimulus was effective. The results showed that participants' perception of the fit between the endorser and the brand was lower ( $M = 2.85$ ,  $SD = 1.43$ ) than 4, the midpoint of a 7-point scale. Thus, it was believed that the scenario indeed led to the expected perception of endorser-brand incongruence among participants.

### Hypothesis Testing

Hierarchical regression was used to test the three hypotheses. The overall model for testing the strength of first-order predictors (brand identification, implicit self-esteem, and endorser credibility) on changing brand attitude was significant,  $F(6, 112) = 9.11$ ,  $p < .05$ ,  $adj. R^2 = .29$ . (see Regression table) Brand identification ( $\beta = -.25$ ,  $t = -3.12$ ,  $p < .05$ ), implicit self-esteem ( $\beta = -.18$ ,  $t = 2.28$ ,  $p < .05$ ), endorser trustworthiness, ( $\beta = .20$ ,  $t = 2.38$ ,  $p < .05$ ), endorser expertise, ( $\beta = .27$ ,  $t = 3.02$ ,  $p < .05$ ) were all significant predictors of brand attitude. One dimension of endorser credibility, endorser attractiveness, ( $\beta = .06$ ,  $t = 0.62$ ,  $p > .05$ ) was the only non-significant predictor.

For hypothesis 1, the result was significant, showing that self-brand connection ( $\beta = -.25$ ) is a significant predictor for changing brand attitude, but not in the predicted direction. Therefore, it is concluded that the data were not consistent with the hypothesis.

Hypothesis 2 tested the interaction between self-brand connection and brand attitude when implicit self-esteem plays a moderating role. Overall model for testing the moderating role of implicit self-esteem was not significant  $F_{change}(1, 111) = 2.58$ ,  $p = .11$ ,  $R^2_{change} = .02$ . There for, results in this study, indicated that the interaction between brand identification and implicit self-esteem was not significant ( $\beta = .13$ ,  $t = 1.61$ ,  $p = .11$ ).

Third and last hypothesis predicted that higher perceived endorser credibility would result in greater positive change in brand attitude. The results showed that endorser trustworthiness ( $\beta = .20$ ,  $p < .05$ ,  $t = 2.38$ ) and expertise ( $\beta = .27$ ,  $p < .05$ ,  $t = 3.02$ ) were significant predictors of brand attitude while attractiveness was not ( $\beta = .06$ ,  $p > .05$ ,  $t = 0.62$ ). Thus, it was concluded that the data were consistent with hypotheses H3b, and H3c, but not with H3a.

## DISCUSSION AND IMPLICATION

### Discussion

This study was inspired by Lisjak et al. (2012) and sought to expand beyond implications that have been previously explored by existing literature. The research conducted by Lisjak et al. (2012) found that low implicit self-esteem heightens brand attitude when negative information is released because people accept the negative information as a threat to them based on the perception that the brand is a part of their extended-self. Thus, they become defensive to the perceived threat. The brand surveyed by prior research was Starbucks and the negative information offered was through a fictitious editorial that was based on real information. Also, they stimulated

the self-activation conditions randomly and only those who activated their self-esteems showed strong defensive mechanisms toward the negative information.

This study, on the other hand, endorser-brand incongruence was manipulated through a public news article, which announced entertainer/musician, Gil, as Converse's new endorser. It was assumed that consumers would expect to see many public advertisements that Gil and Converse created a partnership. As compared to Starbucks, when consumers adorn Converse sneakers, the image of the brand that the product carries is strongly transferred from the product to the consumer, as the product is symbolic and public. The public nature of the brand may make the person more sensitive to the brand image and the associations that the brand carries. Thus, the defensive responding that consumers were expected to show was not activated because the threat from the endorser-brand incongruence may have exceeded the consumer's threshold for the activation of the defensive mechanism. In other words, the high symbolism of the brand exponentially multiplies the negativity associated with the incongruence related to Gil. Thus, the results of our study show that self-esteem cannot be a moderator in the change of a consumer's brand attitude despite any possible self-brand connections.

Another explanation is that disconfirmed expectations toward brands damages brand-consumer relationship (Aaker et al., 2004). The stronger expectations consumers have, the bigger negative changes occur toward self-connection, which was the same result as our study.

In addition, the sample for our study consisted of a group of university students, majority of who reported high implicit self-esteem ( $M = 5.13$ ,  $SD = 1.29$ ). Lisjak et al.'s (2012) study specifically tested the role of low implicit self-esteem. The fact that there was no large range of different levels of self-esteem may have contributed to the lack of interaction in our analysis.

Overall, it was confirmed that endorser brand incongruence results in lower brand attitude even if consumers love the brand. This is because an endorser represents the brand; therefore, the endorser's image and the brand's image, ideally, should be congruent in order for the endorsement to be successful. However, in the case of Converse and Gil, change of an endorser translates to a change in the image of the brand. When the brand image drastically changes, the brand may suddenly become an attitude object that the consumer no longer wants to be associated with, an example of an out-group (Escalas & Bettman, 2005). Once a consumer views the brand as an "out-group," no matter how strong the previous self-brand connection, it is likely that the person will adjust his brand attitude, causing the consumer to distance himself from the brand. This finding implies that the safety net that self-brand connection may have created in the consumer's self-concept was broken due to the incongruence. Lastly, further study needs more concentration on relation between the level of brand identification and brand-endorser congruity.

### Future Research and Practical Implication

In studies conducted by Lisjak et al. (2012) and Cheng et al. (2011), it was found that activation of low self-esteem played a moderating role in lowering consumers' brand attitude when negative brand information is released. Researchers manipulated participants' self-esteem through a self-activation task that triggered implicit self-esteem. Further research should consider self-affirmation or activation as an important factor that can stimulate higher self-esteem in a consumer. Doing so would create a more complete picture of the way consumers respond to celebrity-brand incongruence, thus also providing better advice for advertisers when responding to such situations.

Table 1. Regression Results

Brand Attitude		B	SE	$\beta$	t	sr
First block						
Identification		-.45	.14	-.25*	-3.12	-.24
Trustworthiness		.53	.22	.20*	2.38	.19
Expertise		.64	.21	.27*	3.02	.23
Attractiveness		.15	.25	.06	.62	.05
Sex		-.65	.45	-.11	-1.43	-.11
		$F(6, 112) = 9.11, p < .05, adj. R^2 = .29$				
		* $p < .05$				
Second block						
Identification x Implicit self-esteem		.16	.10	.13	1.61	.12
		$F_{change}(7, 111) = 2.58, p > .05, R^2_{change} = .02$				

In addition, in the celebrity credibility category, consumers reacted significantly toward trustworthiness and expertise, but not to attractiveness. This outcome implies that trustworthiness and expertise of the endorser play a more significant part than attractiveness in determining the perceived credibility of the endorser for product categories like Converse sneakers. However, it should be noted that Gil, a celebrity not known for his “attractive” appearance, may have led participants to perceive attractiveness in different ways, which may have affected the measurement of endorser attractiveness.

Furthermore, product categories may also affect consumers in creating self-brand connections. The brand Converse belongs to the sneakers product category, making it very public, such that other people can easily see what the consumer chooses to consume. However, if the product category is less public, consumers might care less about other people’s perspectives and rely more on self-esteem and self-brand connection. Thus, in future studies, less public product categories can be selected to explore different possibilities.

Based on our study findings, advertising practitioners who make decisions on the selection of the celebrity endorser should consider not only endorser credibility, but also the goodness-of-fit between the endorser and brand. In our study, Gil did not affect consumers in attractiveness component, unlike for trustworthiness and expertise. As a possible advertising strategy, a brand can endorse multiple celebrities simultaneously to better match the brand to appeal to a more diverse group of consumers. An endorsement deal is a financially risky advertising strategy, therefore, must be treated with utmost care. As was demonstrated in our study, selection of a brand endorser is a sensitive issue due to its public nature.

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# The Real Me or the Ideal Me: A Match between Self-Concept and Ad Message Framing

Dong Hoo Kim, University of North Carolina, USA

Jinnie Jinyoung Yoo, Gachon University, Korea

Wei-Na Lee, University of Texas at Austin, USA

## ABSTRACT

This study examines the role of self-concept in consumer response to advertising messages. Specifically, this study postulates that matching advertising message framing (concrete vs. abstract) with consumers' self-concept (actual vs. ideal-self) should yield positive ad evaluation. Results from an experimental study suggest that consumers primed with the actual-self evaluated the concrete ad message more favorably than did the abstract ad message. In contrast, those primed with the ideal-self responded more favorably to the abstract ad than to the concrete ad. Implications from the study and suggestions for future research are provided.

## KEYWORDS

*Construal Level Theory; Self Concepts (Actual vs. Ideal); advertising message framing; Advertising effectiveness*

## INTRODUCTION

The self-concept has been advanced as a useful construct to understand how consumers connect with brands. Since consumers tend to use brands as self-expression tools, they are likely to prefer brands that are consistent with how they view themselves (Belch 1978; Sirgy 1980). Therefore advertising messages that appeal to the consumer's self-concept may increase the message effectiveness (DeSarbo and Harshman 1985; Sewall and Sarel 1986). Past research has provided evidence to support this congruity effect of the self-concept and product image. The more a brand's image matches the consumer's self-concept, the higher the purchase intention from that consumer (Belch 1978; Gardner and Sidney 1955; Landon 1974).

As a multidimensional construct, the self-concept consists of a wide variety of self-conceptions such as the possible self, the ideal self, and the ought self (Markus and Kunda 1986). At any given moment, a subset of this universe of self-conceptions may be activated and has an impact on an individual's behavior. Among them, the actual-self and the ideal-self have attracted much interest from consumer behavior researchers. The actual-self is the perceived reality of oneself. Meanwhile, the ideal-self is based on the imagination of goals and ideals that a person is eager to achieve (Lazzari, Fioravanti, and Gough 1978; Wylie 1979). For instance, Sirgy (1982) suggests that product preference tends to be more influenced by the ideal-self than the actual-self, while purchase intention is more affected by the actual-self rather than the ideal self. While many studies have investigated the impact of self-concept on the relationship between brands and consumers (Aaker 1999; Chaplin and John 2005; Grohmann 2009; Park et al. 2010; Sirgy 1982) and the effectiveness of marketing communications (Aaker and Lee 2001; Lee and Aaker 2004; Sung and Choi 2011), there have been limited empirical attempts to examine the relationship between the self-concept and ad message types.

According to Construal Level Theory (CLT), the greater a person's psychological distance from an object or event, the greater the possibility that the individual conceptualizes the object and event in an abstract rather than a concrete manner (Liberman, Trope, and Stephan 2007). In general, individuals tend to perceive their ideal-self as something psychologically distant while their actual-self as something psychologically proximal (Malär et al. 2011). Therefore,

it can be postulated that an individual with a focus on the ideal-self may be more concerned with abstract thinking rather than concrete thinking. The reverse will be true for individuals thinking about their actual-self. Thus, a person's focus on the actual- or ideal-self should play a role in how that person responds to messages framed in a concrete or abstract manner. The purpose of this study is to examine the effect of self-concept (actual vs. ideal) and message types (abstract vs. concrete) on consumer response. Specifically, it is postulated that when there is a good fit between an individual's self-concept and the message framing, that individual is likely to respond more positive toward the ad and the brand featured in the ad than when there is not a fit.

## THEORETICAL BACKGROUND

### How We Think of Ourselves and Information Processing

The self-concept is the "totality of the individual's thoughts and feelings having reference to himself as an object" (Rosenberg 1979, p. 7). It refers to individuals' subjective thoughts toward themselves (Zinkhan and Hong 1991). Specifically, the self-concept has been regarded as a set of self-schemas which are cognitive structures about the self that systematically influence the processing of self-related information (Markus, Smith, and Moreland 1985). External stimuli which are congruent with the self-schema tend to be more easily and more quickly comprehended, encoded and retained compared to those stimuli that are incompatible with the self-schema (Markus 1977). This self-congruent effect has been demonstrated to have an impact on consumer brand preference, brand attitudes and purchase intentions (Hong and Zinkhan 1995; Graeff 1996), product involvement (Celsi and Olson 1988; Park and Young 1986), and product evaluation (Heath and Scott 1998; Sirgy and Samli 1985). Specifically, Sirgy (1985) employed the constructs of *self-congruity*-a match between a product's image and a consumer's actual self-image, and *ideal congruity*-a match between a product's image and a consumer's ideal self-image to investigate consumer purchase intention and he found that both constructs significantly had an impact on purchase intention. Hong and Zinkhan (1995) also suggested that consumers often attempt to realize their aspirations by choosing the brand that has an appeal congruent with their ideal-self.

Previous studies have shown that the self can be primed by experimental manipulations, which, in turn, would have an impact on information processing (Aaker and Lee, 2001; Gardner, Gabriel, and Lee 1999; Trafimow, Triandis, and Goto 1991; Sung and Choi 2011). Given that schema-relevant information tends to be processed faster, more confidently and deeply than schema-irrelevant information (Markus, Smith, and Moreland 1985; Rogers, Kuiper, and Kirker 1977), advertising expressions compatible with the consumer's self-concept will be easily accepted and result in positive attitude toward the advertised brand. The question thus becomes what types of message content are congruent with what types of self-concept. In order to answer this question, we need to look for additional theories for insights.



### Construal Level Theory

Construal-level theory (CLT) suggests that temporal distance, the perceived proximity of an event in time, can influence an individual's reaction to future events by changing their mental representations of those events (Liberman and Trope 1998; Trope and Liberman 2003). Trope and Liberman (2003) propose that the greater the temporal distance, the more likely the events are to be denoted by abstract features concerned with the essence of the events (high-level construals) rather than in terms of concrete features related to incidental details of the events (low-level construals). Based on this suggestion, the CLT has been developed as a special case of a general theory of psychological distance (Bar-Anan, Liberman, and Trope 2006; Liberman, Trope, and Stephan 2007; Trope, Liberman, and Wakslak 2007). Psychological distance is therefore defined as "a subjective experience that something is close or far away from the self" (Trope and Liberman 2010, p. 440). In other words, psychological distance is an egocentric concept with a reference point that is the self, here and now. Therefore as the psychological distance from an object or event increases, individuals are more likely to conceptualize the object or event in higher level and more abstract terms that emphasize the fundamental attributes of the object or event. In contrast, as the psychological distance decreases, individuals are more likely to conceptualize the object or event in low-level and concrete terms focusing on the peripheral properties of the object and event (Malär et al. 2011; Wright et al. 2012).

Since a superordinate goal has to do with the relatively abstract, the "why" aspect of the activity, high-level construal is tied to the superordinate goal. In contrast, the subordinate goal associated with the specific "how" aspect of the activity is linked to the low-level construal. For example, an individual with a high-level construal described their wedding with abstract terms such as "expressing love," while an individual with low-level construal represented their wedding in specific terms such as "having pictures made" (Vallacher and Wegner 1985). Therefore in high-level construals, peripheral, incidental, subordinate and contextual features are replaced by more central and abstract features representing the essence of the event or object (Liberman and Trope 1998).

Generally, when individuals focus on their actual-selves, the psychological distance will be proximal, whereas when they focus on their ideal-selves, the psychological distance will be distant. (Malär et al. 2011). According to Trope, Liberman, and Wakslak (2007), "An event is in some manner psychologically distant whenever it is not part of one's direct experience" (p. 84). Even if individuals can imagine and construct their ideal-selves, they cannot experience it directly in reality. Additionally, the ideal-self is formed by the imagination of ideals and goals that an individual desires to achieve (Wylie 1979), and is less likely to be formed compared to an individual's actual-self (Malär et al., 2011). Consequently, this less probable ideal-self seems to have a greater psychological distance than a more probable actual-self.

The psychological distance associated with an individual's ideal- or actual-self can be applied to how they process external stimuli such as advertising messages. Previous research suggests that construal levels have an impact on judgment and decision-making by increasing an individual's preference for information that fits his or her mindset (Fujita et al. 2006; Kim and John 2008; Trope and Liberman 2000). Specifically, individuals with an abstract mindset tend to make their judgments and predictions based on higher-level construals of available information, while individuals with a concrete mindset tend to make their judgment and predictions based on lower-level construals of available information (Liberman and Trope 1998; Trope and Liberman 2003). Put another way it is likely

that an individual focused on his or her actual-self tends to prefer information composed of concrete features. In contrast, an individual who is highly concerned with the ideal-self is more likely to prefer information containing high-level construals that are abstract ideals. Therefore, the following hypotheses are put forth.

*Hypothesis 1: Individuals primed with the actual self will show more positive attitudes toward appeals emphasizing concrete features of the brand, whereas individuals primed with the ideal self will react more favorably to appeals focusing on abstract features of the brand.*

### METHOD

An experimental study was conducted to test the proposed hypotheses. A 2 (ideal- vs. actual-self) × 2 (concrete message vs. abstract message) between-subjects design was employed. A set of print advertisements of a fictitious brand with the same visuals but two distinctive copies was employed as stimuli in the study.

### Stimulus Development

In order to minimize the confounding effects of existing brands that might be perceived differently by participants, a fictitious brand was created. Two head copies and two body copies were developed to represent two types of messages – abstractness vs. concreteness. Based on prior research, the current research defines abstractness as general information describing superordinate and essential features whereas concreteness as specific information describing the subordinate and incidental features. For example, in Lee, Keller, and Sternthal's research (2010), they manipulated the construal level of the flash drive ad message through the headline and the body copy. "Having your data in your data in your pocket is music to your ears" was used as the high-level message whereas "2-in-1 feature: a data storage device + an MP3 player" was used as the low-level message. Through a pretest, the most distinct set of two copies (among 12 copies) was selected for the main study. For the abstract condition, the head copy was "When it comes to rebooting, **amazing speed** makes all the difference." and the body copy read "The Latest Model of Processor, Larger Screen Size, Huge Hard Drive Size, and Clear and Vivid Graphics." In contrast, for the concrete condition, the head copy read "When it comes to rebooting, **8.5 seconds** makes all the difference," followed by the body copy, which read, "Genuine Windows 7 Home Premium (64b), 14.0" Screen size, 750GB Hard Drive Capacity and AMD Radeon HD 6490M." Pretest results show that the two copies differed in terms of their concreteness ( $M_{\text{abstract}} = 3.78$  vs.  $M_{\text{concrete}} = 5.48$ ,  $t = 3.01$ ,  $p < .05$ ). Appendix 1 provides the advertisements that were used in the main experiment.

### Sample and Procedure

A total of 125 undergraduate students from a major southwestern university (67% female) participated in the main study. Extra course credits were provided as an incentive for completing the study. Once subjects consented to participate in the study, they were primed with either an ideal-self condition or an actual-self condition by writing simple essays describing themselves. According to Förster, Liberman, and Friedman (2009), at the priming phase, carryover effects from previous actions can have an impact on the performance of subsequent actions. Writing essay can be a good example for inducing this carryover effect. For example, Liberman and Förster (2009) primed participants with high-level construals or low-level construals by making them write simple essays about their near future lives (tomorrow) or distant future lives (1 year later). Similarly, in the

current study, participants who were in the ideal-self condition were asked to write about who they would like to be whereas participants who were in the actual-self condition were asked to write about who they are. Through this task, half of the participants were primed with the actual-self and the other half of the participants were primed with the ideal-self. Subsequently, participants in each primed subject group (actual-self vs. ideal-self) were randomly assigned to evaluate one of the two advertisements (abstractness vs. concreteness). After viewing the ad, subjects answered a series of questions about their evaluation of the brand, the ad, and their purchase intention. The approximate time to complete the study was 20 minutes.

### Dependent Measures

Two dependent variables were used to assess the effectiveness of persuasion. These two dependent variables were based on Lee and Aaker's research (2004). Participants' attitude toward the advertising was assessed with four-item seven-point scale (1 = *bad, unfavorable, not helpful, and not persuasive*; 7 = *good, favorable, helpful, and persuasive*; Cronbach's  $\alpha = .90$ ) and attitude toward the brand was assessed with three-item seven-point scale (1 = *bad, negative, and unfavorable*; 7 = *good, positive, and favorable*; Cronbach's  $\alpha = .91$ ).

## RESULTS

### Priming Tasks

In order to confirm that the priming task was successful, two coders were employed to analyze the essays that participants wrote at the beginning of the experiment. It was presumed that if participants described their selves appropriately according to their experimental conditions (ideal vs. actual), they were primed successfully. The two coders did not have any information of the current research such as its purpose and hypotheses. The coding scheme included a total of 11 items to check how closely essay descriptions related to the ideal or the actual self. The 11 items were *description of daily life, future life, actual-self personality, ideal-self personality, ultimate goal, current occupation (school life), current friend and family relationship, future family plan, current preference, current residence, and future (planned) residence*. Inter-coder reliability reached 86.25% on average overall, ranging from 75.0% to 100%. Among a total of 129 essays, 20 essays were used to calculate inter-coder reliability and the rest of the 109 essays were analyzed. The results indicated that all 11 items were significantly different from the two conditions (actual vs. ideal). Therefore as expected, the self-priming manipulation was successful. See table 1.

### Manipulation Check

To assess the efficacy of the ad messages (concreteness vs. abstractness), subjects were asked to rate the extent to which they perceived the ad messages as abstract or concrete on a 7-point scale (1=Abstract; 7=Concrete). The result of an independent *t*-test was consistent with the pretest, showing that there was a significant difference in means between perceived abstractness (vs. concreteness) of the two manipulated ads ( $M_{\text{abstract}} = 4.03$  vs.  $M_{\text{concrete}} = 4.61$  vs.,  $t [123] = -2.14, p = .04$ ). That is, subjects exposed to the abstractly framed message perceived the ad to be more "abstract" while those who were exposed to the concretely framed message perceived the ad to be more "concrete." The manipulation of ad messages was successful.

**Table 1**  
**Results of Self-Priming Manipulation Check**

Items (description of)	Actual Self	Ideal Self	$\chi^2$
Daily life	43(81.13%)	5(9.43%)	57.60*
Future life	10(18.87%)	51(96.23%)	57.60*
Actual self-description	51(96.23%)	15(28.30%)	54.97*
Ideal self-description	8(15.09%)	50(94.34%)	60.20*
Dream & ultimate goal	7(13.21%)	52(98.11%)	69.57*
Classes currently taking	32(60.38%)	2(3.77%)	40.94*
Current friend & family relationship	38(71.70%)	17(32.08%)	18.62*
Future family plan	1(1.89%)	30(56.60%)	35.74*
Current preference	31(58.49%)	12(12.64%)	15.66*
Current residence	17(32.08%)	2(3.77%)	15.37*
Future(planned) residence	1(1.89%)	14(26.42%)	12.26*

\* Indicates significance at  $p < .01$

\* Total number of actual-self participants – 53  
Total number of ideal-self participants - 56

### Hypothesis Testing

To test the hypotheses, 2 (actual vs. ideal)  $\times$  2 (concrete vs. abstract-focused message) ANOVA tests were conducted on each of the dependent measures – attitude toward the ad and attitude toward the brand.

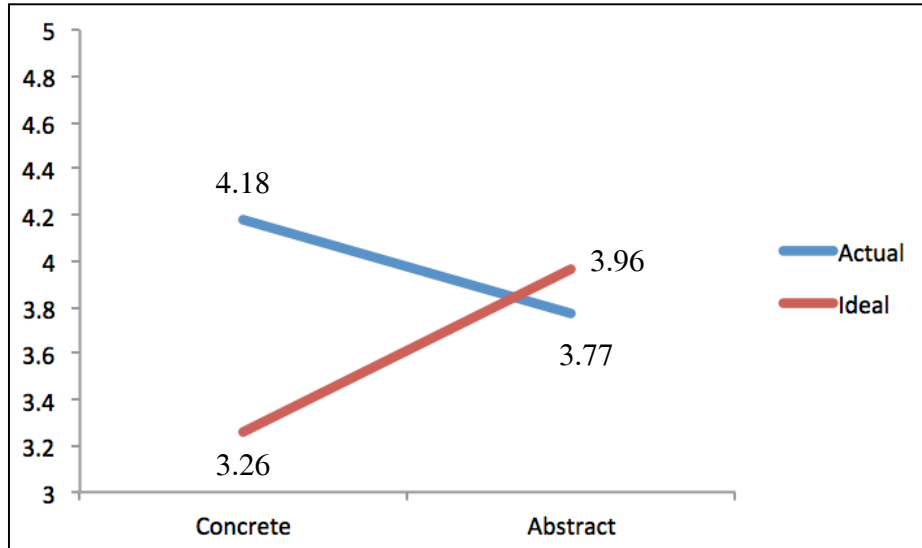
*Attitude toward the ad.* As shown in Figure 1, the ANOVA test results showed a significant interaction ( $F [1,121] = 7.88, p = .01, \omega^2 = .06$ ). Two main effects (self-concepts and message framing) were shown not to be significant ( $F_{sc} = 3.36, p = .07, \omega^2 = .03$ ;  $F_{mf} = .51, p = .48, \omega^2 = .00$ ). To investigate the interaction effect further directly, planned one-tailed contrasts were operated. Participants primed with ideal-self showed more positive attitudes toward the ad with abstract message versus the concrete message content ( $M_{\text{abstract}} = 3.96$  vs.  $M_{\text{concrete}} = 3.26, F = 6.15, p < .05, \omega^2 = .05$ ). However, participants primed with the actual-self did not show significantly different preference for the advertising messages ( $M_{\text{concrete}} = 4.18$  vs.  $M_{\text{abstract}} = 3.77, F = 2.21, p = .14, \omega^2 = .02$ ). Therefore, the two-way interaction was more influenced by the relationship between ideal-self and message types.

*Attitude toward the brand.* ANOVA results also showed a significant interaction ( $F [1,121] = 7.93, p = .01, \omega^2 = .06$ ). Both the main effect of self-concepts ( $F_{sc} = .30, p = .59, \omega^2 = .00$ ) and message framing ( $F_{mf} = .00, p = .96, \omega^2 = .00$ ) were found to be not significant. Planned contrast showed that subjects primed with ideal-self showed more positive attitudes toward the brand with abstract message versus the concrete message content ( $M_{\text{abstract}} = 4.40$  vs.  $M_{\text{concrete}} = 3.90, F = 3.94, p < .05, \omega^2 = .03$ ). In contrast, for subjects primed with actual-self, the concrete message induced a more favorable attitude toward the brand than the abstract message ( $M_{\text{concrete}} = 4.31$  vs.  $M_{\text{abstract}} = 3.80, F = 4.30, p < .05, \omega^2 = .03$ ). A visual representation is provided in Figure 2.

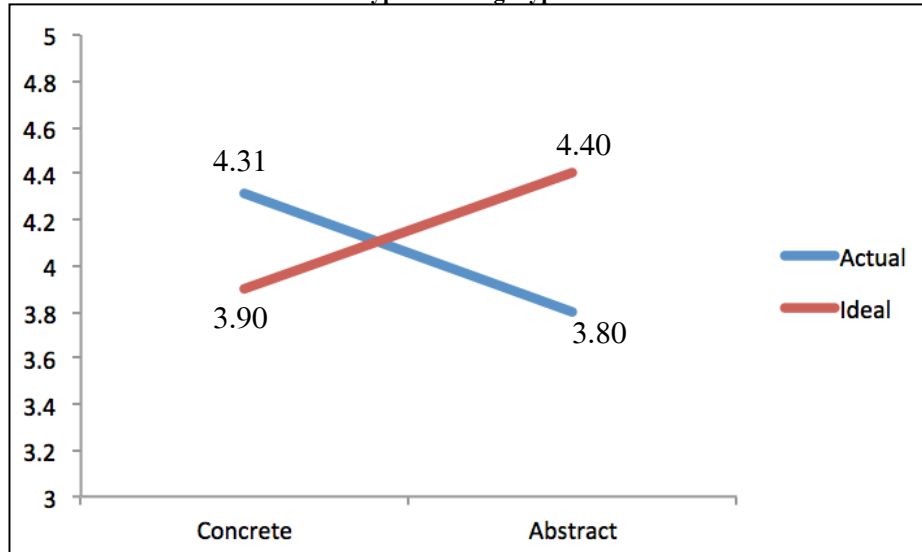
## GENERAL DISCUSSION

The topic of ad effectiveness has always been one of the most important issues for advertising practitioners and researchers. Advertisers are constantly challenged to find ways to build creative strategies and engage consumers in order to increase effectiveness. This research is a step toward meeting this challenge. The purpose

**Figure 1**  
Self Type × Message Type on AAD



**Figure 2**  
Self Type × Message type on AB



of the experimental study was to investigate the congruence effect of self-concept and message content on consumer response. Based on the premise that an ideal-self has a thread of connection with abstractness whereas the actual-self is associated with concreteness, the current research empirically tested the notion that advertising message types (abstract vs. concrete) that are congruent with consumers' self-concept (ideal vs. actual) increase consumers' positive evaluation of the advertisement and the brand.

As expected, results of this research showed that when individuals were primed with the ideal-self, an abstract advertising message was more persuasive than a concrete message. In contrast, when individuals were primed with the actual-self, a concrete advertising message was more effective than an abstract message. Given that ideal- and actual-self are closely related to consumers' product choice and purchase intention (Malhotra 1988; Sirgy 1985), the current research investigating the effects of these two self-concepts on advertising message framing can offer an opportunity for researchers and marketers to understand what roles the self-

concepts can play in marketing communication contexts.

Furthermore, by demonstrating the potential relevance of self-concept and construal levels, this research can also increase the general applicability of the construal-level theory. This research also offers important implications for advertisers and marketers. Prior research suggests that the advertising context can prime or activate certain traits of an audience and influence their interpretations of products in the advertisement (Yi 1990). Findings from the current study particularly suggest the possibility that the audience can be primed either with the actual-self or with the ideal-self. If advertising practitioners are able to prime self-concept, it will help increase ad message effectiveness by providing congruent message with the primed self-concept. For example, Sung and Choi (2011) primed people into either independent or interdependent self-construal by showing them individual sports events (e.g., marathon, tennis, and golf) or team sports events (e.g., football, soccer, and baseball). In the same vein, a certain media content that is closely related to an individual's ideal-self such as SF or super hero movie primes an audi-

ence into the ideal-self. By placing abstractly framed advertisement right after the content, the matching effect of the ideal-self and the abstract ad can occur and the effectiveness of the ad can increase. The findings from this study can shed light on developing a new media planning and copywriting guideline with using self-concepts and abstract and concrete message framing.

In addition, the characteristics of product category can play a role to prime individuals on their actual- or ideal-selves. For example, cosmetic products concerned with consumers' aspiration of beauty can activate their ideal-self whereas necessities closely associated with daily lives can activate the consumers' actual-self. Therefore future research needs to examine the association between product categories and message framing (abstract vs. concrete).

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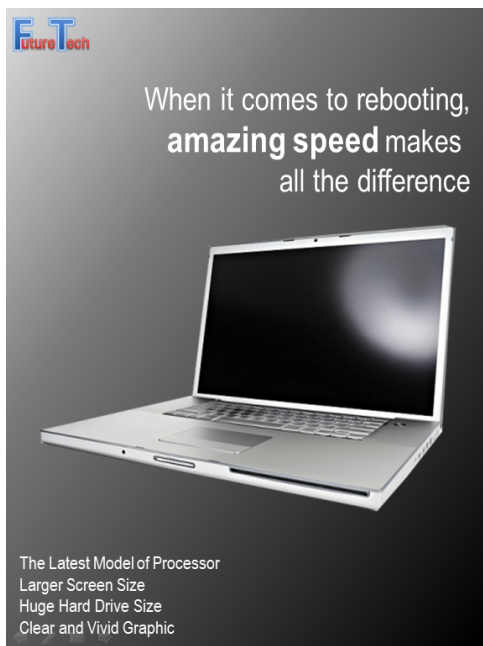


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### Appendix 1

High construal (abstract) Advertisement



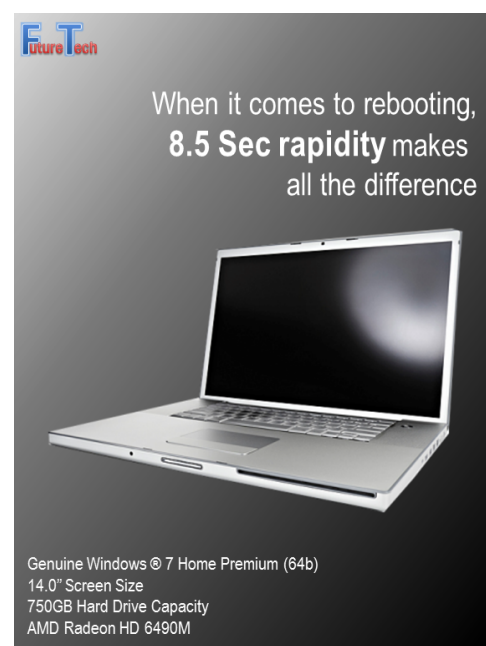
FutureTech

When it comes to rebooting,  
**amazing speed** makes  
all the difference




The Latest Model of Processor  
Larger Screen Size  
Huge Hard Drive Size  
Clear and Vivid Graphic

Low construal (concrete) Advertisement



FutureTech

When it comes to rebooting,  
**8.5 Sec rapidity** makes  
all the difference



Genuine Windows © 7 Home Premium (64b)  
14.0" Screen Size  
750GB Hard Drive Capacity  
AMD Radeon HD 6490M



# Brands at The Point of No Return: Understanding #DRESSFORYOURSELFIE Culture as Post-Postmodern Branding Paradigm

Vimviriya Limkangvanmongkol, University of Illinois at Chicago, USA

## ABSTRACT

The emergence of selfie culture provides an avenue for brands to respond to the post-postmodern branding conditions. In the post-modern branding paradigm, consumers “peel away brand veneer,” making brands unable to hide their commercial motivations. The capability of brands to provide an original perspective contributing for consumers’ identity formation is questioned. The situation calls for the need of brands to create and deliver their values more creatively (Holt 2002, 87). Given the importance, the rise of the post-postmodern branding paradigm aims to deliver such demands as a part of the consumers’ project of self (Giddens 1991). In this era, consumers rely on brands for the roles of citizen-artists who show concern for civic responsibilities and communities. As such, brands in today’s world serve as a form of “expressive culture” (Holt 2002, 87), inspiring consumers’ imaginations. Brands are expected to provide cultural materials that consumers can rely on while making sense of their everyday lives as a part of the world that surrounds them (87).

Since the rise of smartphones with a built-in front-facing camera in 2010, taking and sharing selfie photos online have become tremendously popular as socially oriented activities. Selected as Oxford Dictionaries’ Word of the Year for 2013, the term “selfie” refers to “a photograph that one has taken of oneself, typically one taken with a smartphone or webcam and uploaded to a social media website” (Oxford 2013). Up to date, more than 250,000 images with the hashtag #selfie can be tracked on Instagram (iconosquare 2015). Although selfie culture is perceived as a product of social media, its prominence spans the commercial worlds. Kenneth Cole, an American fashion brand by *Kenneth Cole Productions, Inc.*, is one of the most successful pioneering brands in 2013 (Digital Insights 2014; Postano 2014) in attracting consumers to join their selfie contest launched from January 31<sup>st</sup> to March 31<sup>st</sup>, 2014. The #DRESSFORYOURSELFIE sweepstakes encourage consumers to enter their selfie photos for a chance to win a pair of Kenneth Cole shoes every month for a year. The steps go as to follow @KENNETHCOLEPRD on Instagram and take a selfie with a printable message strip, such as *Selfie Obsessed*, *Outfit Change* or #DRESSFORYOURSELFIE. The last step is to post it on Instagram using #DRESSFORYOURSELFIE hashtag.

Prior works have focused on consumers expressing their selves in digital environments (Belk 2013); a form of conspicuous presentation of selves on personal websites (Schau and Gilly 2003), and the branded selves as fashion tastemakers on fashion blogs (McQuarrie, Miller and Phillips 2013). In all of the studies, selves are crafted and branded as online personas attracting imagined audiences. However, none of which can provide an insights to fully understand the performing of online personas through selfie. Particularly, the selfie culture itself has never been studied as a part of post-post branding paradigm. I developed theoretical claims by qualitatively investigating Kenneth Cole’s #DRESSFORYOURSELFIE contest as a case study that the brand uses selfie-related activities to connect with consumers and promote brand visibility. Previously, the antibranding movement resists brands that acted as cultural engineers in the modern branding paradigm and as (not) authentic cultural resources in the postmodern branding paradigm. Illuminated from datasets, this research investigates why the selfie culture can help resolve the

tension of the antibranding movement by unpacking the case study of Kenneth Cole’s #DRESSFORYOURSELFIE. In analyzing datasets, I recognized that the notions of self-presentation from the work of Goffman (1959) and self-identity from the literature of Giddens (1991) provided useful conceptual underpinnings for understanding the phenomenon of selfie culture in the post-post branding paradigm.

## CONCEPTUAL FRAMEWORK

The fact that the Internet has become mainstream and everyday life (Marwick 2005, 186) changes the way online identity is presented and perceived. People “write [online] self into being” (Markham, 2013) and at the same time, are consumed by other audiences (Marwick 2005, 2013). As a part of late modernity, online media users negotiate the construction and shaping of their identity toward reflexivity through daily life experiences. Online identity is, thus, constantly reflexive, negotiated and far from traditionally bound by the virtue of class, nationality and ethnicity, as Giddens explains, “The individual’s biography, if she is to maintain regular interaction with others in the day-to-day world, cannot be wholly fictive. It must continually integrate events which occur in the external world, and sort them into the ongoing ‘story’ about the self” (Giddens 1991, 54). In this era, communication technologies come into play for the process of self-formation. Various experiences from mediated communication expand symbolic resources, place a new demand of self, and change symbolic points of reference (Thompson 1995, 212). Such lived experiences are situated in the temporal flow which possesses the quality of immediacy, continuousness and reflexivity. As such, the core self is extended (Belk 1988), and performed in multiple online personas (Belk, 2003). Selfie is, thus, a way to perform online personas through sharing one’s photos, as well as creating captions, using hashtags, and setting geo-tagged locations

## Performing Online Personas

The presentation of online personas is a performance. Drawing from Goffman’s dramaturgical metaphors, the networked platform is a theatre where every social media user is on stage playing a part (Goffman 1959). By referring to the theatre, this research refers to an online setting that is not “the *bodily-material place*” (Rasmussen 1997, 1) or a *physical* environment, such as, cafés, parks and schools where recurring co-present interaction influences routines, rituals and other conduct (Rasmussen 1997). Yet, the theatre becomes phantasmagoric (Giddens 1999), characterized by the empty time leading to the emptying of space, influencing the distant communication of agents mediated between remote locales. Through an imagined communication process (Rasmussen 1997, 3), one is reading the posts, commenting on images or typing as to chat by staring at the screen of one’s laptop while imagining as if their conversation partners were physically in front of them.

In presenting oneself via digital media, one is the “producer, director, and star” (Turkle 1995, 26) of the performance. By defining the term performance, Goffman (1959) refers to “all the activity of given participant on a given occasion which serves to influence in any way any of the other participants” (p.15). By performing on the front stage, the presentation of self on social space serves as a means for impression management (Goffman 1959) in front of audiences. The front stage is defined as “the expressive equipment of a standard

kind intentionally or unwittingly employed by the individual during the performance” (32). One would carefully construct and control the consistency of an idealized image or persona in terms of the setting (e.g., scenic, location, etc.); personal front (e.g., size, looks, race, speech, etc.); appearance (e.g., social status marker); as well as manner (e.g., the way an actor conducts himself). In a way, the front stage is where the performance is “given.” In the back stage, on the other hand, one would be placed away from the watchful eyes of other people and become more of their authentic selves. The back stage is defined as “a place, relative to a given performance, where the impression fostered by the performance is knowingly contradicted as a matter of course” (114). It is where the performance is “given off.” The distinct performance in the front and back stages of online self-presentation relies heavily on the symbolic interactionism (Blumer 1969). Online identity is, thus, constructed not by only one own self but co-constructed through feedbacks from interactions with others (Belk 2003; Marwick 2013).

The presentation of online self can be understood as branding one persona (Marwick 2008, 165) as a salable product. Everyday media users as producers “write self into being” (Markham 2013) and allow their online identity to be consumed by other audiences or as customers. Rooted from branding literature, self-branding (Hearn 2008; Peters 1997) or as known in other terminologies as personal branding (Lair et al. 2005), human branding (Close et al. 2011), or self-marketing (Shepherd 2005), is primarily a series of marketing strategies applied to the individual. The term was first coined by *Tom Peters* in 1997 in his article, *The Brand Called You*, in the online magazine *Fast Company* (Peters 1997). Peters encourages that an individual should look to create their “own micro equivalent of the Nike swoosh” (Peter 1997).

Predominantly, Peters implies that self-branding is not optional but seemingly obligatory in the Internet world. Ordinary media users should make use of the new democracy of free space online to make themselves become visible. Most importantly, one should ask, *What am I famous for?* As such, self-branding strategies in web 2.0 serve as an individual’s mind-set and a means to gain attention as to have “recognition, identity, and meaning, in the eyes of those around [us]. It provides sustenance to spirit, mind and body, in just about any form” (Marwick 2013). Unlike branding a real product or service in a material economy, gaining online status rather than monetary profit becomes the ultimate goal for branding an online image or persona in immaterial attention economy (Senft 2008, 9). Presumably, the attention that online media users strive to gain is a currency which makes create value of self. As a result of using the self-branding practice, the entrepreneurs in Silicon Valley sell themselves successfully, living as famous rock-stars among their peers. The advent of the Internet mainly contributes to the successful discovery of a version of self or selves that might not be previously uncovered (193). Reading posts, posting tweets, sharing links, images and videos, as well as online interacting with one another in any communities serve to identify and brand oneself. At this point, the self-branding practices do not only involve with an individual self to be sold as a commodity but also to be adjusted and constructed according to the structure of each online community.

This study explicates Goffman’s dramaturgical metaphors as a starting point to conceptualize the selfie culture as a way to perform online personas. In order to present oneself, we also argue that selfie is *collective* and *social* rather than individual. The study argues that self-branding strategies serve to manage the front stage of performance (Goffman 1959) for selfie-posters. As a marketing strategy applied to the individual, the self-branding techniques allow online media users to execute what and how they can attract real and imag-

ined audiences’ attention. Although the #DRESSFORYOURSELFIE lasted only two months and the winners were chosen from sweep-stake system, selfie-posters attentively crafted one’s online personas for their own identity works as salable products to gain social currency in the forms of calculated number of likes, comments and number of followers (Marwick 2013). The way they filter the reality through shared photos, name their account names, use the captions and hashtags, as well as the geo-tagged location represent their online personas crafted for the #DRESSFORYOURSELFIE contest.

Drawing on insights from these literatures, we address the question why the selfie culture can help resolve the tension of the anti-branding movement. This research aims to explore the role of selfie culture as a part of post-postmodern branding paradigm.

## METHOD

Visual materials can reveal the ordinary hidden or taken for granted messages (Rose 2011). Following this stance, the research primarily relies on grounded theory (Glaser and Strauss 1967) to approach publicly available Instagram photos on [www.iconsquare.com](http://www.iconsquare.com) where users can access viewing and interacting with Instagram posts as using the Instagram mobile application. Beginning with the data-driven approach, 476 photos with the #DRESSFORYOURSELFIE hashtag posted from January 31st to March 31st, 2014, were qualitatively analyzed to bring out repeated concepts and underlying elements across posts. I consider posts as media texts in discourse that contain items in both written form (e.g., username, captions, comments, number of likes) and visual material (Fairclough 1995; van Dijk 1985). Guided by the framework of visual discourse analysis approach (Albers 2007), my coding and analytical memos (Saldana 2012, 50) aim to identify “the discourses that emerge within visual text, the text itself, the macro and micro conversations surrounding the making and viewing of texts, and the visual text as a communicative event” (84).

This research offers a methodological contribution as the visual discourse analysis is located in multiple approaches; artwork, visual, and discourse analyses.

Located within artwork analysis method, the visual discourse analysis approach is known as the structural approach for analyzing art as a language. I define visual texts following Albers (2007) as “a structure of messages within which are embedded social conventions and/or perceptions, and which also present the discourse communities to which visual text maker identifies” (84). Like artwork, selfie posts have their own underpinning grammar systems (88) which are communicative. Initially, I began with reading visual elements that are visible to the eye (88), and recorded the structure of objects in visual texts: the composition of the face and body in the posts (whole body, half body, from head to only a chest level, or only some parts of the body); how photos were taken (hold handheld devices at arm’s lengths or reflected from mirrors); the persona looks (casual, working suits, homie); strip messages used; and types of filters used (eg., nofilter, Valencia, X-Pro II, Sierra). In this research, a written text is intertextually related to extend an understanding of visual images. Thus, I also recorded captions, numbers of hashtags, likes, and comments. In the further stage, I interpreted how social identities played out in visual text productions and what social meaning visual and textual elements across posts have taken on (Albers 2007, 88). I read, reflected on, and reread my coded works and analytical memos; emergent themes are salient to understanding Kenneth Cole’s selfie contest by focusing on theory of self-presentation (Goffman 1959) and self-identity (Giddens 1991).

## DISCUSSION

Data analyses led to the identification of three emerging theme conducive to Kenneth Cole's selfie contest as the successful social media brand communication. These themes explain why the incorporation of selfie contest can help Kenneth Cole respond to the post-postmodern branding conditions.

### Consumers as citizen-consumers

Kenneth Cole takes the role of citizen artist showing concern for civic responsibilities and communities. While taking this role, the brand allows consumers to become citizen-consumers who make use of the new democracy of free online space to express themselves under the conditions of the brand. By following @KENNETHCOLEPRD on Instagram, consumers are eligible to join the selfie contest. The brand asks consumers to take a selfie with a printable message strip, such as *Selfie Obsessed*, *Outfit Change*, or #DRESSFORYOURSELFIE, and post it on Instagram using #DRESSFORYOURSELFIE hashtag. As the brand does not indicate that consumers need to take selfie photos of themselves with clothes, accessories or shoes by Kenneth Cole, consumers can freely create the unique element in their selfie photos by themselves. Thus, they are willing to turn themselves into participants allowing the brand to become a part of their life experiences posted online. Their posts for the contest show that they have positive feeling taking their own selfie photo(s) for the contest (analytical memo 2015), as their captions read; "I'm loving kenneth cole! #DressForYourSelfie," and "Its a miracle, babe doing selfie mode ?!...#DressForYourSelfie." Evidently, asking people to take their own photos engages participants because taking photos is perceived as easy and fun (Darbyshire et al. 2005). Furthermore, their fun moments are mixed with an excitement of a chance to win the lucky draw as their captions read, "@kennethcoleprd #dressforyourselfie hope I win some shoes wish me luck" (colevirgo), "#dressforyourselfie Flipped for optimal performance and shoe-winningness" (@burt\_hindy), and "Free shoes every month for a year! \*fingers crossed\* #DressForYourSelfie" (@lando1414). Here, the term "citizen-consumers" implies civic minds and citizenship of free space on the Internet. The value of civic participation empowers consumers, becoming an important facet for brands to reconnect with consumers in the contemporary era.

### Selfie as Post Self/Selves into Being

Posting selfie can be understood as posting self/selves into being, rather than "writ[ing] self into being" (Markham 2013). The presentation of online identity through photography for the Kenneth Cole contest allows one to test and try as part of the constructing and reconstructing their self-project (Van Dijck 2008). In this study, we argue that the selfie is a way to perform online personas by using the self-branding practice. Thus, the selfie contest provides the space for interested consumers to craft a version of their multiple personas (Belk 2003) for the contest. Instead of following the styles by celebrities on media, consumers from different cultures (eg., African, White, and Asian) can freely express their own personal styles through clothing, shoes, accessories and strip messages. The female winner with username @kissmycolor did a full makeup and wore a flowery green necklace and white earrings. Her outstanding painted orange lips made her look very confident. However, she did not have any message strips in the photo (Figure 2a). Presumably, the brand is not very serious about having a message strip in selfie photos but expected that selfie-posters can use it as a prop (analytical memos 2015) While most of them hold a message strip under their neck or at the face level, some play with the strip creatively; by circling it around her neck (@zyasha\_sp), putting it on the floor between two

unmatched shoes (@dbillyp), or sticking it to his smartphone (@harper1210). While selfie-posters in Kenneth Cole's sweepstakes have equal rights to win the lucky draw, each post is creatively curated to represent their own personal styles. A selfie photo, thus, serves as a prosthetic possession that "become[s] (re)embodied parts of self" (Belk 2003, 490) in D-I-Y cultivation. The important part is that the brand is allowed to be a part of that posted self/those selves.

### Instagram as a Play Place

Instagram is a photo-sharing mobile application available for the iOS and Android mobile operating systems. The app has attracted more than 300 million monthly active users (Instagram 2015). Consumers using the app instantly turn their mobile snapshots into visually appealing images, which are then shared with others on the networks. Instagram is a play place for participants' identity project because posts shared on Instagram are user-generated contents portraying digital selves in order to document their outfits, foods, cars, vacations, and any activities of the moment users want to record (Marwick 2015, 138). Not only visual contents but also textual captions, the use of hashtags and geo-tagged location also contribute to the performance of online personas and documentation of a life moment in daily lives (Rettberg, 2014). On Instagram, people need their audiences to like their photos (Marwick, 2015). As such, Instagram serves as a play place for users to craft their own personas and become co-constructed from their audiences' feedbacks in terms of giving likes or comments. Through self-branding practice, selfie-posters can evoke a different message communicated of their selfie images (Hochman and Manovich 2013) by manipulating filters and Photoshop-like tools. Most of them posted their photos with no filters yet Valencia or X Pro II filters are the two most popular filters for posts with filters. Interestingly, #DRESSFORYOURSELFIE participants used at least one hashtag - #DRESSFORYOURSELFIE, and other co-hashtags, such as #shoes, #fashions, #selfie. A participant with username @iamjcarson (Figure 2b) used up to 25 hashtags, allowing his photo to receive more than 100 likes and 10 comments. Arguably, using many hashtags strategically lead to receive more likes or new likes and followers (Titlow 2012). As a part of the Kenneth Cole contest, participants also use @kennethcole or @kennethcoleprd in their captions to call attention to the brand to see their posts. In return, @kennethcole responds to each post by giving likes. The brand also gives a comment on posts that win the lucky draw as "Congratulations! You've been selected to win a Kenneth Cole gift card for your #selfie. Please email us at kcpmarketing@kennethcole.com to claim your prize." As such, Instagram is a play place for participants' identity project, and for the participants and brand to directly get connected for a period of the contest.

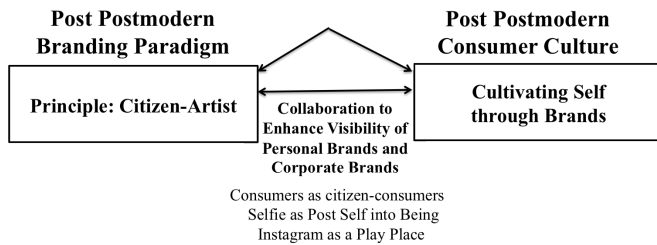
## CONCLUSIONS

The emergence of selfie culture provides an avenue for brands to respond to the post-postmodern branding conditions. Previously, the antibranding movement resists brands which acted as cultural engineers in the modern branding paradigm and as (not) authentic cultural resources in the postmodern branding paradigm. The post-postmodern paradigm aims to create and deliver their values creatively, becoming a part of consumers' project of self (Giddens, 1991). This research investigates why the selfie culture can help resolve the tension of the situation by unpacking the case study of Kenneth Cole's #DRESSFORYOURSELFIE, as shown in the dialogical model in Figure 1.

Kenneth Cole takes the role of citizen-artist who allows consumers to become citizen-consumers. The brand shows concern for civic responsibilities and communities by not asking consumers to



**FIGURE 1**  
**Dialectical Model of Post Postmodern Branding Paradigm**  
 Adapted from Holt (2002, 87)



buy or use the brand’s product to be a part of selfie photos. Consumers enjoy their own freedom as civic participation for not only the contest, but the Internet as a whole. Both brand and consumers value the civic mindedness for becoming a part of the contest. Second, the visual turn of social media represented by selfie is a way to post self/selves into being. The presentation of online identity for the Kenneth Cole contest allows one to construct and reconstruct their self-project in which their “bodies” and “being” were creatively curated by

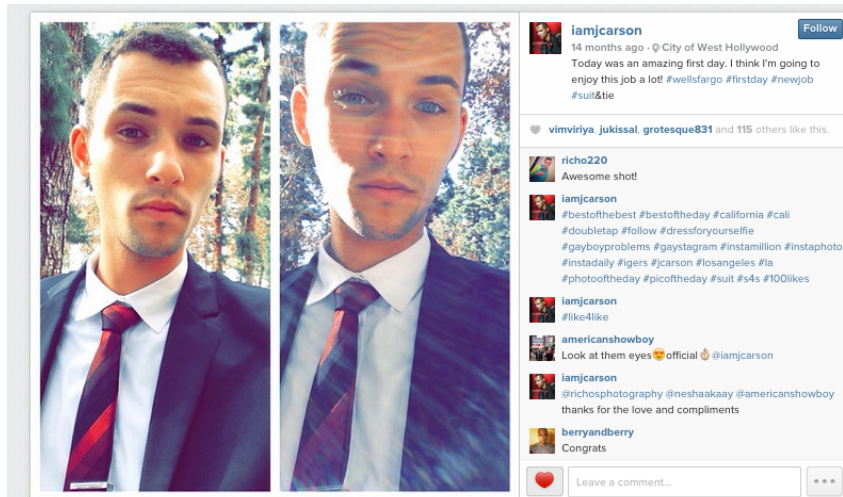
their own. Third, Instagram is a play place for participants’ identity project, and for the participants and Kenneth Cole to directly get connected for a period of the contest. Selfie-posters craft themselves by using self-branding practices to manipulate Instagram’s features; filters, Photoshop tools, use of hashtags, and geo-tagged locations. This research does not discuss geo-tagged locations as not many selfie posts for this contest had not turned on the geo-tagged function.

Kenneth Cole’s selfie contest were launched in the period that the presentation of online personas becomes everyday life. The selfie culture, whereby the self is performed in Goffman’s (1959) front stage using self-branding practices provides an avenue for brands to reconnect with consumers amidst of antimovement branding. While consumers are aware that brands are usually driven by commercial motivations, the selfie contest allows both consumers and brands to benefit one another. The case study explains the post-postmodern branding paradigm that brands do not need to hide their commercial motivations and consumers do not need to avoid or resist brands. Instead, brands and consumers can work together, particularly, by using online platforms as space for consumers to control power and for brands to connect with consumers. Given the importance, con-

**Figure 2**  
**Figure 2a Username @kissmycolor is the winner of**  
**Kenneth Cole’s #DRESSFORYOURSELFIE sweepstakes, receiving a pair of shoes every month for a year**



**Figure 2b Username @iamjcarson used 25 hashtags in his caption and comments**



sumers' posts become a symbolic exchange in two ways; first, they exchanged their self/selves as personal brands with the potentiality to attract more audiences resulted in a calculated numbers of likes and comments, becoming more recognizable online. Second, they exchanged their self/selves with the chance to win 12 pairs of shoes. Although they are not the winners of the sweepstakes, their posts portray a version of their self/selves recorded as a part of their everyday lives. For Kenneth Cole, the selfie contest allows them to connect with their customers and become a part of their identity projects. Importantly, brand visibility is enhanced when selfie-posters post their pictures wearing accessories or shoes by Kenneth Cole, use the #DRESSFORYOURSELFIE hashtag and other co-hashtags to enhance their own visibility. The final conclusion extends theory of self-presentation (Goffman 1959) and self-identity (Giddens 1991) in that performing online personas as part of one's identity projects on visual-based social media platform enhance the visibility of both personal brands, and corporate brands that consumers are willing to work with.

This research relies on findings which are limited to only one case study of Kenneth Cole's #DRESSFORYOURSELFIE contest on only the Instagram platform. However, the insights gained shed light on how consumers test, try and play with the online personas as part of identity project as to enhance the visibility of themselves and corporate brands in the digital environments. It is ironic that when brands give the power to consumers to choose whether to join the contest and ask consumers to complete minimal tasks, consumers tend to be willing to join the contest and be controlled by brands. The research lends itself to brands and social media policy makers to understand how to effectively persuade consumers to become a part of their social media communication campaigns. However, the research does not suggest that incorporation of selfie-related activities as parts of brand communication is exhaustive for brands to be liked and valued by consumers. The selfie activities would be only one of many other promising and creative ways that brands can help consumers create value; serving as an expressive culture in consumers' everyday digital era lives. Moreover, examining similar activities on other platforms might yield different results. While Facebook mainly aims to bridge weak ties and bond strong ties (Ellison, Charles and Cliff 2010), Twitter serves "ghostwriters" (Marwick 2015) whose content can be the most talked about or buried in a real-time (Bruns and Stieglitz 2012). Instagram works well for campaigns using visual posts to enhance visibility of brands and people.

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# The Effects of Self-Disclosure on Social Network Sites on Psychological Well Being: A Case of Thai Adolescents

Issariya Woraphiphat, Chulalongkorn University, Thailand

Yupin Patara, Chulalongkorn University, Thailand

## ABSTRACT

Social media has become popular with adolescents, a transitional stage of physical and psychological human development that generally occurs during the period from puberty to legal adulthood. Adolescents in this generation have grown up with the development of technology, particularly the Internet. Kaplan and Haenlein (2010) defined social media as a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0. It allows the creation and exchange of User Generated Content. Web 2.0 is a platform that is continuously modified by all users in participatory and collaborative fashion. With the development of technology, nowadays consumers have many social media applications such as blogs, virtual social worlds, collaborative projects, content communities, virtual game worlds and Social Network Sites (SNSs).

To date, the world's leading social media networking Internet-based application is Facebook (launched in 2004), which currently has more than one billion registered users worldwide. According to Facebook reports first quarter 2014, on average, the daily number of active users (DAUs) was 802 million on average as of March 2014, a 21% increase since March 2013. SNSs are transforming the nature of social relations (Manago et al., 2012) and have captured the attention of many researchers and practitioners in the last decade.

In recent years researchers, have become more interested in examining the motivation for engaging in Social Network Sites (SNSs). While some studies show that socially competent adolescents to use Internet more because it is just another venue through which they can keep in touch with their peers (Kraut et al., 2002), others show that adolescents who turn to online communication are in fact those with social anxiety (Valkenburg & Peter, 2009; Schoun et al., 2007). SNSs enable users with social anxiety to compensate for the lack of face-to-face interactions. In either case, users will gain benefit from using SNSs such as Facebook, which lead to improvements in their psychological well-being via emotional sharing (Buechel & Berger, 2012) and perceived social support (Kim & Lee, 2011).

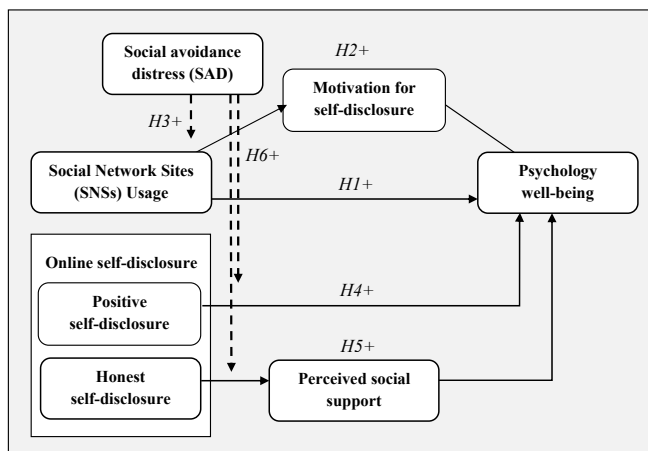
The present research aims to investigate these conflicting views and extend existing knowledge by studying the effect of SNS usage on the psychological well-being of adolescents' users living in Thailand. Our central question is whether and how the use of SNSs increases the well-being of adolescents with different personality traits. Although a number of scholars have examined the relationship between SNS usage and psychological well-being, several gaps exist. This article seeks to address them.

First, previous studies examined the mechanism behind the influence of self-disclosure on SNSs on the psychological well-being of college students. We aim to extend previous findings by investigating the impact of self-disclosure via SNSs on users' psychological well-being among adolescents. Second, from a developmental psychology perspective, adolescents are seeking self-identity development and connection with their peers. SNSs enable adolescents' self-disclosure, which they use for identity and relationship development. Hence, adolescents who are motivated to use SNSs for self-disclosure should gain more benefit. Therefore, we aim to examine the mediated role of motivation for self-disclosure on adolescents' psychological well-being when using SNSs. Finally, previous studies show conflicting findings between SNSs usage and user person-

ality traits (e.g., social competency vs. social avoidance). We aim to investigate these conflicting findings by examine the moderated role of Social Avoidance Distress (SAD) on the motive for self-disclosure when using SNSs.

In sum, a comprehensive picture of the motivation and consequences of SNS usage among adolescents is still lacking. The current articles aim to fulfill this gap by exploring whether and how the use of SNSs increases the well-being of adolescents (see Figure 1).

**Figure 1 The Effects of Self-Disclosure on Social Network Sites on Psychological Well Being among Adolescents Framework**



## Motives for and Consequences of Using SNSs

Uses and gratification research shows that individuals use mass communication to strengthen their connection, or sometimes disconnection, with others, such as self, family, and peers (Katz et al., 1973). The key assumption of the study is that individuals are aware of their needs and are able to identify their sources of satisfaction.

Adolescents are in a period of social reorientation, which is when they declare their independence from their parents. Peers become important others who play a fundamental role in adolescents' lives; thus, they have a heightened need to belong to a group of friends. Recently, SNSs have become a venue for interacting and developing relationships and intimacy with others. Connectedness provides a climate of trust that includes emotional support (Barber & Schluterman, 2008). Individuals who show increased social support over the course of emerging adulthood also show increases in psychological well-being (Galambos, Barker, & Krahn, 2006), whereas low perceived social support leads to depression and loneliness in college students (Jackson, Soderling, & Weiss, 2000).

SNSs enable connectedness among peers. Social network sites like Facebook could help youths satisfy their psychological needs for developing and securing social relations (Manago et al., 2012). Facebook functions, such as posting status updates and messages, allow adolescents to disclose themselves. Self-disclosure, or the sharing of information, helps adolescents develop intimacy with their peers, which could enhance their psychological well-being (Buechel & Berger, 2012).

Besides enabling social connection, SNSs enable adolescents to develop their self-image. Adolescents are also in a period of self-identity development. Self is “the individual as known to the individual” (Murphy, 1947). It has four dimensions, which include self-consciousness or the salience of the self to the individual, the stability, self-esteem and perceived self. A disturbance of self-image appears as children enter adolescence. They exhibit heightened self-consciousness, greater instability of self-image, and lower self-esteem, as well as lower opinion of themselves (Simmons et al., 1973). SNSs enable adolescents to control and/or present a socially favorable self-image, reduce the instability of self that is associated with disturbance, and increase their psychological well-being.

Thus, the use of SNSs allows adolescents to disclose themselves, which would help them develop intimacy with peers and/or develop their self-identity. Ultimately, the use of SNSs should lead to an increase in psychological well-being in adolescents. Accordingly;

*Hypothesis 1*    *The usage of SNSs will enhance the psychological well-being of adolescents.*

*Hypothesis 2*    *The usage of SNSs will enhance the psychological well-being of adolescents if the motive is for self-disclosure.*

### **The Influence of Personality Traits**

Personality traits influence the motives according to which individuals develop relationships online. Previous studies reveal two opposing views regarding the type and the likelihood of online communication usage among individuals with different personality traits. One view argues that *socially competent* individuals use the Internet more often. Under the rich get richer hypothesis, socially competent adolescents who already have strong skills may consider the Internet as just another venue to get in touch with peers (Kraut et al., 2002).

Another view argues that *socially incompetent* individuals are more likely to use online communication than those with high social skills. Studies show that introverts form online relationship under the compensation motive as they aim to compensate for their lack of face-to-face social skills. This motive leads to higher levels of self-disclosure and frequency of communication, which result in higher levels of friendship formation (Subrahmanyam & Greenfield, 2008). The current study aims to test these conflicting views by examining the influence of individual differences, in term of Social Avoidance Distress (SAD), on psychological well-being as a result of using Social Networking Sites (SNSs). Social anxiety often yields negative interpersonal consequences is a trait-like characteristic that remains relatively stable across temporal and situational variation (Leary & Kowalski, 1995).

Anxiety is both cognitive and affective response characterized by apprehension about an impending; potentially negative outcome that one thinks one is unable to avert (Schlenker & Leary, 1982). Social anxiety is a result of personal evaluations, in real or imagined social situations, where individuals might become the focus of attention of others, such as when one engages in a conversation or gives a speech. One is aware of conspicuous characteristics, such as a lack of reciprocity and appreciation of social cue, failure to share interests with other people or failure to engage in eye gaze, facial expression or body posture to regulate the social interaction.

One’s awareness about one’s lack of social skills or worry about him/herself consequently is inhibited in face-to-face social interactions. As a result, individuals with social anxiety are unable to develop relationships appropriate to their developmental level. Many

of them are aware of their social disconnectedness and desire greater social interaction (Attwood, 2000). SNSs enable adolescents with social anxiety to engage in interactions with peers in a controllable manner and overcome such worries. Hence, they prefer communicating online more than their more socially competent peers do. Accordingly:

*Hypothesis 3*    *The higher the level of social avoidance distress (SAD), the more adolescents will use social network sites for self-disclosure.*

**Self-disclosure on SNSs.** Self-presentation is the attempt to control images of self before real or imagined audiences (Schlenker & Leary, 1982). Self-disclosure is the propensity an individual has for revealing personal information to others related to the content of self-presentation. It refers to online communication about personal topics that are typically not easily disclosed, such as one’s feeling, worries and vulnerabilities (Patti & Peter, 2009).

**Positive self-disclosure.** Adolescents can present themselves in a selective manner, such as positively presenting their socially desirable aspects. The attempt to control or put the best part of oneself into public view is referred to as impression management (Baumeister, 1982). Impression management has been studied as a fundamental interpersonal process. It consist of two distinct sub-processes; impression motivation and impression construction. The motives for self-presentation are to construct one’s public self in a way that is congruent to one’s ideal or to gain a favorable opinion from one’s audience (Baumeister, 1982). The current study focuses on the construction of impressions in an online context, SNSs in particular, which can be done via self-description, nonverbal behavior, or props. Users can create impressions by posting positive images or status updates and sending messages about themselves.

Positive self-presentation in face-to-face interactions can yield affective benefits and put people in a positive mood; perceiving oneself in a positive state may serve as a psychological buffer against negative life events (Kim & Lee, 2011). In an online context, positive self-disclosure has also found to help adolescents enhance their psychological well-being (Kim & Lee, 2011; Ellison, Steinfield, & Lampe, 2007).

*Hypothesis 4*    *Positive self-disclosure will directly increase the psychological well-being of adolescents.*

**Honest self-disclosure.** Honest self-disclosure could enhance adolescents’ psychological well-being through the perception of social support. It is contradicted with positive self-presentation, which enhances adolescents’ psychological well-being through the perception of favorable views held by others. Social support is information that leads an individual to believe that he or she is care for and loved, he or she is esteemed, and he or she belongs to a network of communication and mutual obligation (Cobb, 1976). It involves affection and emotion exchange between individuals (House, 1986). Social support could act as the buffer against negative life events or negative treatment from other people. As adolescents become independent from their parents, they look to develop intimacy and acceptance from their peers to gain social support (Berndt, 2004). Thus, adolescents who lack the social competence to develop intimacy with their peers in the offline world might turn to online SNSs as a place to develop relationships with their peers. Accordingly:

*Hypothesis 5*    *Honest self-disclosure will indirectly increase the psychological well-being of adolescents via perceived social support.*

In addition, self-disclosure is an interpersonal situation that is characterized by how an individual should interact with his or her personal characteristics to effect a situational reaction. Those who perceive themselves as lacking social competence might have lower outcome expectations and evoke higher standards than those with strong social skills. Those with social avoidance distress traits do not perceive themselves capable of producing and controlling information to attain a desired reaction; and, as a result, should have higher tension when disclosing themselves in social situations (Schlenker & Leary, 1982).

Even though individuals desire to create a particular impression, they might be uncertain about how to do it or think that they will not be able to project the type of image that will produce preferred reactions from others. Likewise, they may be unable to engage in social interaction even when they want to do so. Online self-disclosure is easier for certain individuals than physical self-disclosure because of social desirability pressures; hence, the former alleviates these potential problems.

Thus, online communication should be able to help adolescents with social anxiety because it greatly alleviates stress by allowing them to seize control of information and present to their peers with certainty. It also enables them to receive supportive feedback that reduces their anxiety. Accordingly:

*Hypothesis 6 The degree to which self-disclosure will increase psychological well-being in adolescents depends on the level of social avoidance distress (SAD).*

## METHOD

### Samples and Measurements

The research design employed for the present study is an online questionnaire. The construct for the study was based on a literature review and was double translated (English–Thai) by two independent researchers. A convenience sample of 376 late adolescents (16 to 17 years old) was used. Participants were high school students from two schools located in different parts of Bangkok, Thailand. Participants were asked to fill out questionnaires (seven-point Likert item; 1 = strongly agree to 7 = strongly disagree) in a classroom under the supervision of a teacher and hand it in to the class teacher in exchange for a gift.

The questionnaire includes Internet motivation and usages, types and consequences of online self-disclosure, and perceived social support as well as, the level of social avoidance distress among users. The scales were adapted from existing literature and double translated (English–Thai) by two researchers. The overall reliability of the scales is greater than 0.70 ( $\alpha > 0.70$ ). The reliability levels of each scale are reported below.

**Internet usage.** Scales that captured the form of Internet usage were adapted from Lin (1999) and categorized into six items that include different forms of use such as chat, online games, and SNSs.

**Motivation for using SNSs.** Scales that captured motivation for using SNSs consisted of twenty items, which can be divided into 5 subscales, including self-presentation, keeping up with trends, information sharing and storage, entertainment, and showing off, with alpha reliabilities of 0.863, 0.743, 0.836, 0.856, and 0.839, respectively. The scale was adapted from Lee et al. (2008). Example of the items included “I disclose to present my individual characteristics,” “I disclose to keep a close relationship with others,” and “I disclose to communicate with friends.”

**Self-disclosure type.** Previous research identified two types of self-disclosure: positive and honest (Kim and Lee, 2011). We adapt-

ed the scales from this study to capture both self-disclosure types: a five-item positive self-presentation scale ( $\alpha = 0.734$ ) and a two-item honest self-presentation scale ( $\alpha = 0.865$ ). Examples of positive and honest self-disclosure included: “I often choose and upload photos that make me attractive on Facebook” and “I don’t mind writing about bad things that happen to me when I update my status.”

**Consequences of self-disclosure.** Three scales were adapted from Lee et al. (2008) to capture different consequences of self-disclosure, including a four-item relationship management scale ( $\alpha = 0.886$ ); a three-item psychological well-being scale ( $\alpha = 0.901$ ); and a three-item habitual scale ( $\alpha = 0.893$ ). Example of each subscale included “I feel intimate with others after disclosing,” “I feel psychological stability after disclosing,” and “I feel uneasiness when I am not disclosing information on my blog.”

**Perceived social support.** Two scales were adapted from Zimet et al. (1988). One is a six-item scale that captured perceived social support from friends ( $\alpha = 0.886$ ), while the other is a three-item scale that captured perceived social support from family ( $\alpha = 0.795$ ). Example of items included “I can count on my friends when things go wrong” and “I can talk about my problems with my family.”

**SAD.** Two scales were adapted from Greca and Stone (1993) to capture social avoidance with strangers and friends. Four items measured social avoidance distress when encountering strangers ( $\alpha = 0.85$ ), and the other four items measured social avoidance distress when encountering friends ( $\alpha = 0.847$ ). Examples of items included “I worry about doing something new in front of other kids.”

## FINDINGS

The preliminary analysis shows that total participants comprised 376 students. 210 students were from a vocational school and 166 students were from a general high school, both located in Bangkok. 95% of the participants were between 16 and 17 years old. Participants engaged in various Internet usage activities including chat, chat room, bulletin board, blog, SNSs, and online games.

### Motives and Consequences for using SNSs among Adolescents

The findings reported next are based on regression models. To test hypothesis 2, adolescents’ motives and consequences for using SNSs, we conducted a mediation and moderation analysis. Psychological well-being is our dependent variable. The mediation analysis examines the influence of motive for self-disclosure on adolescents’ psychological well-being. To test Hypothesis 3, we used a moderation analysis to examine the role of SAD as the moderator of SNS usage influence on self-disclosure motivation among adolescents. (see Table I).

*H1* yielded a positive relationship between the use of SNSs and the psychological well-being of adolescents. In support of *H1*, the use of SNSs and psychological well-being of adolescents was related positively ( $\beta = 0.18$ ) and significantly ( $p \leq 0.00$ ).

*H2* revealed that a relationship between the use of SNSs and psychological well-being is mediated by motivation for Internet usage. In support of *H2*, the use of SNSs and psychological well-being of adolescents was moderated by the motivation for self-disclosure. The motivation for self-disclosure had a positive relationship with adolescents’ psychological well-being ( $\beta = 0.54$ ,  $p \leq 0.00$ ).

*H3* supported a moderator role of SAD on the effect of SNS usage and the motivation for self-disclosure. In support of *H3*, there was an interaction effect between the use of SNSs and SAD ( $\beta = 0.60$ ,  $p \leq 0.05$ ). Hence, the higher the level of SAD, the more adolescents are to disclose themselves when using SNSs.



Table I Findings – motivation for self-disclosure, self-disclosure types, and their consequences

Dependent variable	Independent variable	$\beta$	<i>p</i> -value	<i>F</i> -value	<i>R</i> <sup>2</sup>
<u>Hypothesis 2</u>					
<i>Mediation Analysis</i>					
Motivation: Self-Disclosure	The use of social network sites (SNSs)	0.27	0.00	27.94	0.07
Consequence of self-disclosure:	Motivation: Self-Disclosure				
Relationship management		0.62	0.00	225.97	0.39
Psychological well-being		0.54	0.00	152.54	0.30
Consequence of self-disclosure:	The use of social network sites (SNSs)				
Relationship management		0.17	0.00	11.13	0.03
Psychological well-being		0.18	0.00	11.62	0.03
Consequence of self-disclosure:	The use of social network sites (SNSs)				
Psychological well-being	Motivation: Self-Disclosure	0.03	0.00	74.34	0.29
		0.53			
<u>Hypothesis 3</u>					
<i>Moderation Analysis</i>					
Motivation: Self-Disclosure	The use of social network sites (SNSs)	0.29	0.00	12.06	0.08
	Social Avoidance Distress (SAD)	-0.52	0.01		
	SNSs * SAD	0.60	0.03		
<u>Hypothesis 4</u>					
Consequence of self-disclosure:	Positive Self-Disclosure				
Psychological well-being		0.51	0.00	98.258	0.26
<u>Hypothesis 5</u>					
Consequence of self-disclosure:	Honest Self-Disclosure				
Psychological well-being		0.48	0.00	113.13	0.23
<u>Hypothesis 6</u>					
<i>Moderation Analysis</i>					
Consequence of self-disclosure:	Honest Self-Disclosure				
Psychological well-being	Social Avoidance Distress (SAD)	0.51	0.00	41.55	0.25
	Honest Self-Disclosure* SAD	0.08			
		-0.11			

\*Only report significant value

**The influence of type of self-disclosure on the psychological well-being of adolescents.** We conducted a regression analysis to test the influence of self-disclosure type on the psychological well-being of adolescents with different levels of social avoidance distress.

*H4* revealed a direct positive relationship between positive self-disclosure and adolescents' psychological well-being. The findings supported *H4*; positive self-disclosure influences the psychological well-being of adolescents ( $\beta = 0.51, p \leq 0.00$ )

*H5* theorized an indirect positive relationship between honest self-presentation and the psychological well-being of adolescents. This effect is mediated by perceived social support. The findings rejected *H5*. The influence of honest self-presentation on adolescents' psychological well-being is not mediated by perceived social support.

*H6* posited that the degree to which the self-presentation increases psychological well-being in adolescents depends on the level of SAD. This hypothesis is partially supported: there is an interaction between an honest self-presentation and SAD. The higher the level of SAD, the more negatively the psychological well-being of adolescents who present themselves honestly is affected.

## DISCUSSION

Our study analyzed the influence of SNSs on the psychological well-being of adolescents with different personality traits. The first objective serves to clarify which type of adolescent is most attracted to the use of SNSs and if SNS usage affects adolescents' psychological well-being. We investigated the relationship between personality traits, motivation for using SNSs, and the consequences of using it on psychological well-being.

The findings show that adolescents' psychological well-being will increase if they are motivated to disclose themselves on SNSs and that adolescents with high SAD traits are more likely to have a self-disclosure motive. These results are consistent with previous studies that feature the compensation hypothesis. Under this hypothesis, individuals who lack social skills are more likely to engage in online communication to compensate for the lack of communication in an offline world. We found that adolescents with high social distress, or those who are nervous about talking to their peers, are motivated to disclose themselves more on SNSs. Hence, it is likely that they will do so to compensate for their low face-to-face communication competency. These adolescents can make social connections online, instead of face-to-face, with their peers, ultimately boosting



their psychological well-being, such as relieving stress or feeling more psychological stability and freedom.

We also examine the process of how different types of self-disclosure on SNSs led to psychological well-being in adolescents with different levels of SAD. We found that either type of self-disclosure—positive self-disclosure and honest self-disclosure—will result in the enhancement of psychological well-being in adolescents. Contrary to expectations, the trait of SAD moderated the effect of honest self-presentation on psychological well-being in the opposite direction. Instead of enhancing the effect via perceived social support, it resulted in a negative influence on psychological well-being.

### LIMITATIONS

We recognized several limitations in the current study. First, the data was collected in a single country, Thailand, hence questioning its generalizability to other countries. National culture influences how people think, feel, and behave. From an individualism–collectivism dimension, Thailand is highly collectivist, which reflects the importance people place on maintaining relationships with others in its society. According to the individualism index values (IDV) survey measured across 50 countries, Thailand is ranked number 39 with an IDV score of 20 (Hafstede, 2001). Hence, its low individualism could influence the effectiveness of SNS usage on improving the psychological well-being of people in the country. Future studies could explore individuals who live in different culture.

Second, the current study focuses solely on SAD. Several other personality traits could also influence the effectiveness of SNS usage on adolescents' psychological well-being. Future studies could investigate other personality traits that might influence the benefit or cost of engaging in social media.

Finally, the current study focuses only on late adolescents aged 16 to 17 years old. Facebook users have a diverse demographic background in terms of age, gender, and culture. Today, Facebook allows adolescents as young as 13 years old to register for the website. Future studies could include early and mid-adolescents to see the effects of SNSs on the psychological well-being of adolescents in other stage of development.

### IMPLICATIONS OF THE STUDY

The present study provides an understanding of the motivation and consequences of consumer engagement in SNSs that could help firms design appropriate relationship marketing tools that satisfy consumer needs. Digital media that enables consumer self-disclosure should be appealing to adolescents, especially those who lack social skills.

The current study is also beneficial to policy makers, educators, and parents. Nowadays, social anxiety is prevalent. Indeed, in the United States, Social Avoidance Distress (SAD) is the most common psychological disorder (Kashdan & Herbert, 2001) and can be spotted early in the developmental stage with an average age of onset of mid-adolescence. An online environment could provide a less threatening venue for socializing among adolescents. It enables users to control the message sent to the recipient and thus helps reduce physical symptoms such as sweating and trembling, cognitive symptom such as worrying about doing something embarrassing, and behavior avoidance. The current study shows that SNSs could be used as a tool that alleviates stress and enhances psychological well-being in adolescents as it serves their need to be connected, especially those with high social anxiety. Understanding the benefit of SNSs could help policy makers, educators, and parents design appropriate tools to help adolescents with social anxiety cope with and overcome it.

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# An Artifact Analysis on American Culture through Peanuts Comic Strips (1950 - 1999)

Nicha Tanskul, Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand

Yupin Patara, Sasin Graduate Institute of Business Administration, Chulalongkorn University, Thailand

## ABSTRACT

According to Kroeber and Kluckhohn (1952), culture consists of explicit and implicit patterns of historically derived and selected ideas, as well as their embodiments in institutions, practices and artifacts; cultural patterns, on the one hand, may be considered as products of action, and on the other, as conditioning elements for further action. Cultural psychologists believe that cultural content and its participating psyches are co-constructed and mutually constitute one another (Shweder, 1991). Recent works by various authors have supported these views and started to focus their analyses on the artifacts. Morling and Lamoreaux (2008) look at the tangible public representations of culture, such as advertising or popular text, as artifacts. The study found that these cultural artifacts reflect degrees of individualism and collectivism, which differ across Western and Eastern countries.

In another study investigating contemporary cultural aesthetic preferences, Masuda et al. (2008) demonstrated that the degrees of collectivism and individualism influenced preference towards the inclusion and exclusion of context in drawing and photographing tasks. Specifically, participants from collectivist cultures preferred holistic patterns of attention, resulting in the inclusion of context, while the participants from individualist cultures preferred analytic patterns of attention, resulting in the exclusion of the context (Masuda et al., 2008). Thus, the comparative study between art works from different cultures demonstrated that collectivist cultures prefer paintings that depict field information more than individualist cultures do (Masuda et al., 2008).

Another highly relevant study by Cohn et al. (2012) focuses on the framing of attention in Japanese and American comics. The results demonstrated that Americans tend to focus more on focal objects of a scene, while Asians tend to focus on the surrounding environment (Cohn et al., 2012). Hence, according to the results from these previous studies, an analysis of comic strips should enable us to reveal changes in American culture during the second half of the twentieth century. In addition, the analysis should specifically reveal the evolution of individualist and collectivist values within American culture during the second half of the twentieth century as well.

## METHODOLOGY

This particular study focuses on analyzing a randomly selected set of Peanuts comic strips from the year 1950 to 1999. Five strips from each will be randomly selected as the sample of analysis, resulting in 250 comic strips being investigated.

### Scope of Investigation and Analysis

The scope of the investigation and analysis can be divided into three major elements. The first element of the analysis focuses on the camera shot, which comprises the psychological distance, attention to categories, and scene type. The second element of the analysis focuses on the cultural theme, which comprises the specific cultural theme, individualism – collectivism and artifacts that appeared within strips. The third element of analysis focuses on how the comic strips, as cultural artifacts, reflect the events that occurred during the second half of twentieth century.

### First Element: Camera Shot and Scene Type Analysis

**Psychological distance of shot type** was investigated and coded as close up, medium distance, wide view or panorama view. The method of investigation and coding was adopted from Bang et al. (under review). Their research shows that the type of camera shot converges with psychological distance. A closer shot type would result in psychological closeness; while a further shot, type is psychologically distant. Psychological distance is related to the concept of construal level theory (Trope et al., 2007): Individuals construe objects that are psychologically near using low-level, detailed and contextualized features, while at a distance, individuals would construe objects using high-level, abstract and stable characteristics. The construal level can be induced using different modes of psychological distance, including temporal distance, social distance, spatial distance, and probability distance. In addition, recent research also shows that high construal levels or abstractness relates to holistic thinking style, which is a characteristic of collectivist culture, while low construal level or concreteness relates to analytic thinking style, which is a characteristic of individualism (Hong and Lee, 2010).

**Attention to categories** was coded as macro, mono, micro, or amorphic. The method of investigation and coding was adopted from Cohn et al. (2012). The number of shots in each attention category type per strip was counted and computed to reveal the proportion of each attention category type per strip. Each type of attention category is explained below:

*Macro:* Depict multiple active entities

*Mono:* Depict single active entities

*Micro:* Depict less than one active entity (as in a close up)

*Amorphic:* Depict no active entities (i.e., only inactive entities)

**Scene type** was investigated and coded based on the location where the story in the strips took place. The investigation of scene type should enable us to better understand the significance of each environment that shaped American children over the past 50 years.

### Second Element: Cultural Theme Analysis

**Specific cultural theme** was investigated based on the study of hermeneutics. According to the Hermeneutic model, texts are interpreted and reinterpreted in relation to the developing sense of the “whole” or to gain “holistic understanding” (Thompson et al., 1994). Language can provide meaningful perspectives on one’s cultural and personal history (Johnson, 1987). Hence, in this case, extracting the specific cultural theme emerging from text and scene in the strips should enable us to capture the sense of American culture during each period. The cultural themes investigated in this research cover cultural aspects such as the value of time and being success driven, caring, and expressive.

**The individualism–collectivism dimension** was also investigated. However, in this case, the investigation of the overall cultural theme of individualism and collectivism was derived from the analysis of the camera shots as well as the reinterpretation of the emergent cultural themes. Hence, individualism, in this case, should be portrayed through the “mono” attention to category, while collectivism should be portrayed through the “macro” attention to category. In addition, the specific cultural themes were reinterpreted as either individualism or collectivism based on Oyserman et al. (2002)’s definition. Thus, individualism would cover dimensions such as in-

dependence, individual goals, competition, uniqueness, privacy, and self-knowledge, while collectivism would cover dimensions such as relatedness, belonging, duty, harmony, adapting to context, and group work preference.

**Artifacts in the strips** were also investigated, since the artifacts that were presented in the strip itself should capture the cultural dimensions during that period. These cultural dimensions were derived from objects representing lifestyle values and preferences (Levy, 1981).

**Third Element: Mapping Artifacts with Events**

The third element focused on the fact that cultural artifacts are the result of the cultural psyche (Morling & Lamoreaux, 2008). Hence, comic strips should capture the history of significant events in American history. This will enable us to understand the dynamics between the political, economic and social environments in shaping American culture at each particular period.

**RESULTS**

**First Element: Camera Shot and Scene Type Analysis**

**Psychological distance of shot type.** No close-up shots were presented in this case. A majority of the scenes were at a medium view (68.8%), followed by a wide view (30.4%) and panorama view (0.8%). Hence, the results are in line with our hypothesis that American culture, which has an orientation towards individualism, prefers the exclusion of context. This result is shown in the prominence of the medium view. Further ANOVA analysis demonstrated that year had an influence on shot types ( $F_{4,245} = 8.072, p = .000$ ). Thus, in this case, the composition of shot types during the 1950s was significantly different from those of the 1970s and marginally different from the 1980s. The shot types during the 1960s were also significantly different from those of the 1970s and 1980s. The shot types during the 1990s were also marginally different from the 1970s. Table 1 clearly shows that the proportion of medium shots was highest during the 1970s and 1980s, while the proportion of wide shots was most prominent during the 1960s. Thus, the results of the shot type analysis suggest that orientation towards psychologically closeness, discrete concepts, and analytic thinking style were at their peak during the 1970s and 1980s. In contrast, during the 1960s, the orientation towards psychological distance, abstract concepts, and holistic thinking style was more prominent.

**Table 1 Psychological Distance Across Five Decades**

	1950s	1960s	1970s	1980s	1990s
Medium	62%	44%	90%	82%	66%
Wide	34%	56%	10%	18%	34%
Panorama	4%	0%	0%	0%	0%

**Attention to categories.** The attention to category analysis shows that, over the past 50 years, the proportion of macro scene type or multiple entities was 64.8%, while the mono type or single entities occupied 34.3% of the scenes in each strip, on average. Thus, the results of attention to categories do not depict American culture as being strongly individualistic, as was expected. Hence, if the culture is highly individualistic, then there should be more mono-type scenes, with a proportion of strips greater than 50%.

Nevertheless, the comparison across the five studied decades shows that the degree of individualism varied ( $F_{4,245} = 11.056, p = .000$ ). Further analysis shows that the degree of individualism reached its peaks in the 1970s. The degree of individualism in the 1970s was significantly higher than the degree of individualism dur-

ing the 1950s and marginally higher than the degree of individualism during the 1960s and 1990s. Hence, the results are quite congruent with the previous analysis on psychological distance. The detailed proportions of attention to categories for each decade are depicted in Table 2 below.

**Table 2 Attention to Categories Across Five Decades**

Scene Proportion	1950s	1960s	1970s	1980s	1990s
Mono	25%	27%	57%	41%	12%
Macro	74%	61%	43%	59%	88%

However, the interpretations of both psychological distance as well as attention to categories across the five decades of Peanuts comic strips should be approached with caution. The peak of the macro scenes and wide shots in the 1990s partly resulted from the health condition of the cartoonist Charles M. Schulz, who had suffered from Parkinson's disease since 1988.

**Scene type.** The scene type analysis shows that the majority of scenes in the strips took place in the back or front yards (39.6%), followed by inside a home (22.4%), on a sidewalk (10.8%), at school (8.0%), and on a baseball field (7.2%). When comparing scene types across five decades, the proportions of different scene types are not significantly different, except for the back and front yard scene type, which was significantly more prevalent in the 1960s than in the 1980s (62% vs. 30%). Thus, the significance of backyards and front yards of the house for American children seems to have declined.

**Second Element: Cultural Theme Analysis**

**Specific cultural themes.** The specific cultural themes that emerge from this study across 5 decades are shown in Figure 1. In Figure 1, the graph only captures the cultural themes that emerged in 5% or more strips. The most prominent cultural themes in this case were caring (18%), expressiveness (18%), directness (17%), sharing (13%), and control (11%). The prominence of these cultural themes shows the mix of both individualist and collectivist values. While caring and sharing represent collectivist themes, expressiveness, directness, and control represent individualist themes. The more interesting results came from the analysis across the five decades, which seems to reflect the evolution of American culture from the 1950s until the end of the twentieth century, as depicted in Figure 2. Thus, in this case, the results demonstrate that the shifts in American culture may be the result of changes in the political, economic and social conditions in American society.

**Figure 1 Overall specific cultural theme.**

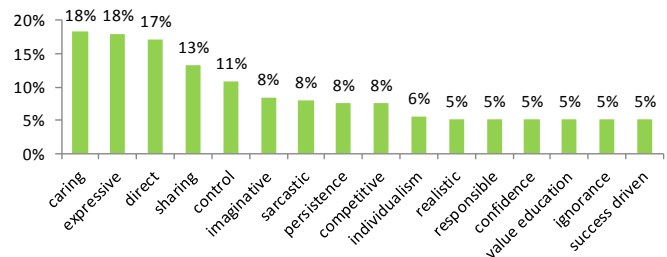
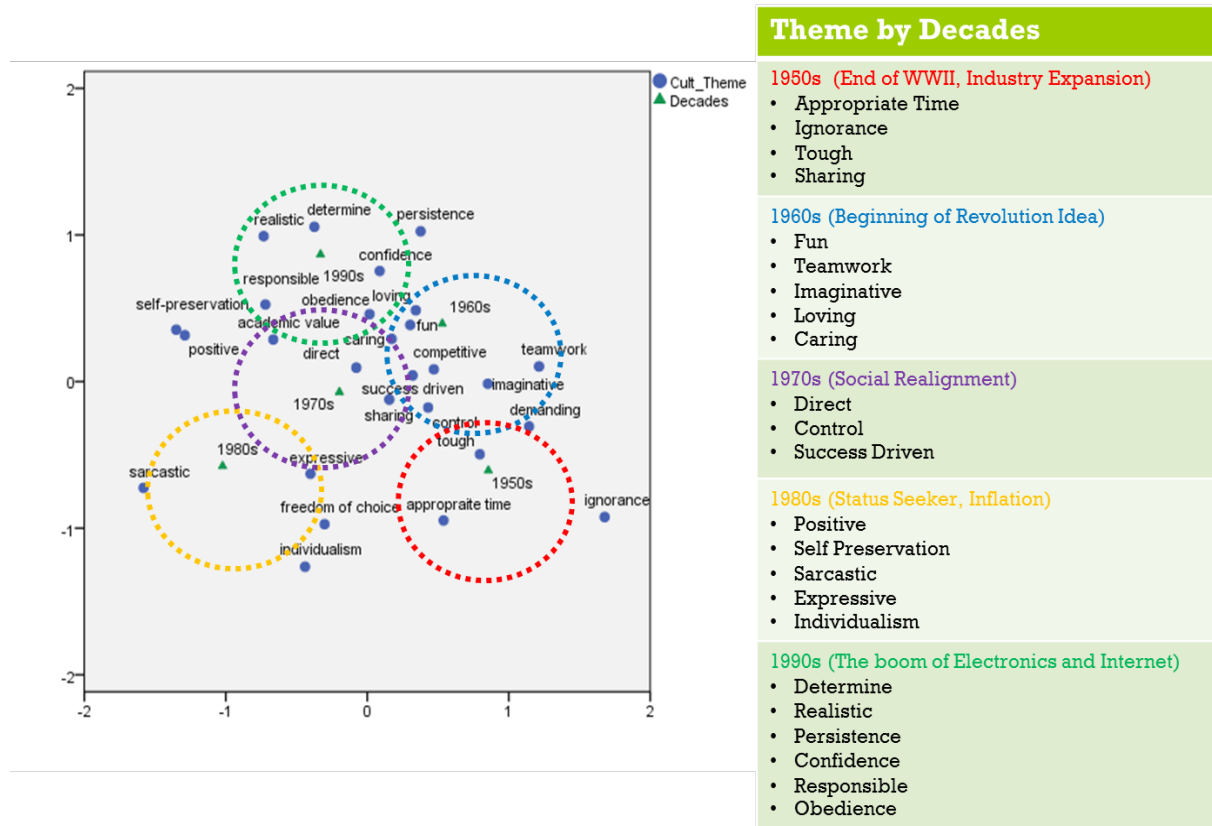




Figure 2 Specific cultural theme by decade via correspondence analysis.



**Specific cultural themes in the 1950s.** In the period after WWII, the political conflict between the US and USSR was highly salient. Americans were bombarded with the concept of the Cold War. During this period, American soldiers were sent to help South Korea from communist North Korea's invasion. The 1950s also captures the period of baby boomers, more than 76.4 million of whom were born between 1946 and 1964. During this time where, the industrial focus changed from building war materials to building cars, TVs, refrigerators, dishwasher, and bicycles. More than 4 million TV sets were sold in 1950. Additionally, the social segregation between blacks and whites started to dissolve during this period. Thus, during this time period, values such as time appropriateness (babies should be asleep by 6 p.m.), ignorance, toughness, and sharing are pronounced.

**Specific cultural themes in the 1960s.** Inspiration emerged during the 1960s. John F. Kennedy was elected as president; he represented youthful energy and the rise of new generation. He encouraged American youths to work for their country, as reflected in his statement "Ask not what your country can do for you, ask what you can do for your country." He also established the Peace Corps, which empowered American youth to make a difference in the world. This was also the period when Americans were involved in the Vietnam War and women started to ask society for their human rights, in terms of equal wages and job opportunities. In 1968, American citizens started to turn against the Vietnam War. Hippies also emerged during this period, believing in a peaceful world and everyone loving one another. Most of them were middle class and college aged. In this period, the first man landed on the Moon. Neil Armstrong stepped on the moon on July 20<sup>th</sup>, 1969. Thus, during this time period, values such as fun, teamwork, imagination, loving, and caring also appeared in Peanuts comic strips. It is interesting to see the pattern of culture

in comic strips mapped onto the cultural trends.

**Specific cultural themes in the 1970s.** The 1970s began with the Watergate Scandal during President Nixon's term. He was also the first president to resign from office. The American Energy Crisis also occurred during the mid-1970s, coupled with significant unemployment (8% in 1977) and high inflation (rising from 6% in 1977 to 10% in 1978). The consumer price index increased by an average of 9.2 percent per year from 1973 to 1982. Thus, Americans felt powerless and lacked self-efficacy during this period. President Jimmy Carter commented during this period that "Lack of confidence threatened to destroy American democracy." The Peanuts comic strips from this decade reflected the cultures that emerged to counteract these problems. As illustrated in Figure 2, 1970s was the period of directness, control, and being success-driven. Hence, these noticeable cultural themes may be the ways that American society copes with unstable environments and gain confidence over their ability to control their faith again.

**Specific cultural themes in the 1980s.** During the 1980s, the US had a conflict with Iran during the Hostage Crisis, which started in 1979. The 1980s were also when America entered a severe recession, during which businesses went bankrupt and productivity dropped sharply. The purchasing power of working-class American families had dropped to 1960s levels. This was also the period when President Reagan was in power. President Reagan, who has been called the "Great Communicator," wanted to maximize personal freedom and private enterprise while minimizing the role of government. By mid-1983, economic prosperity had returned. The gross nation product grew at 4% per annum from 1982 to 1988, and 17–18 million new jobs were created during Reagan's presidency. Additionally, inflation went down. Despite a blissful outlook, there were problems of income disparity behind the scenes and growing federal deficit, as well

as an increase in the crime rate by over 300% and violent crime rate by over 500%. In 1988, President Reagan visited Moscow, and in 1989, the USSR collapsed. As reflected in Peanuts comic strips, individualism became quite pronounced during this period. The cultural themes include positivity/optimism, self-preservation, sarcasm, expressiveness, and individualism. The positive environment helped to boost optimism; at the same time, the increased disparity and higher crime rate also influenced the concept of self-preservation and sarcasm.

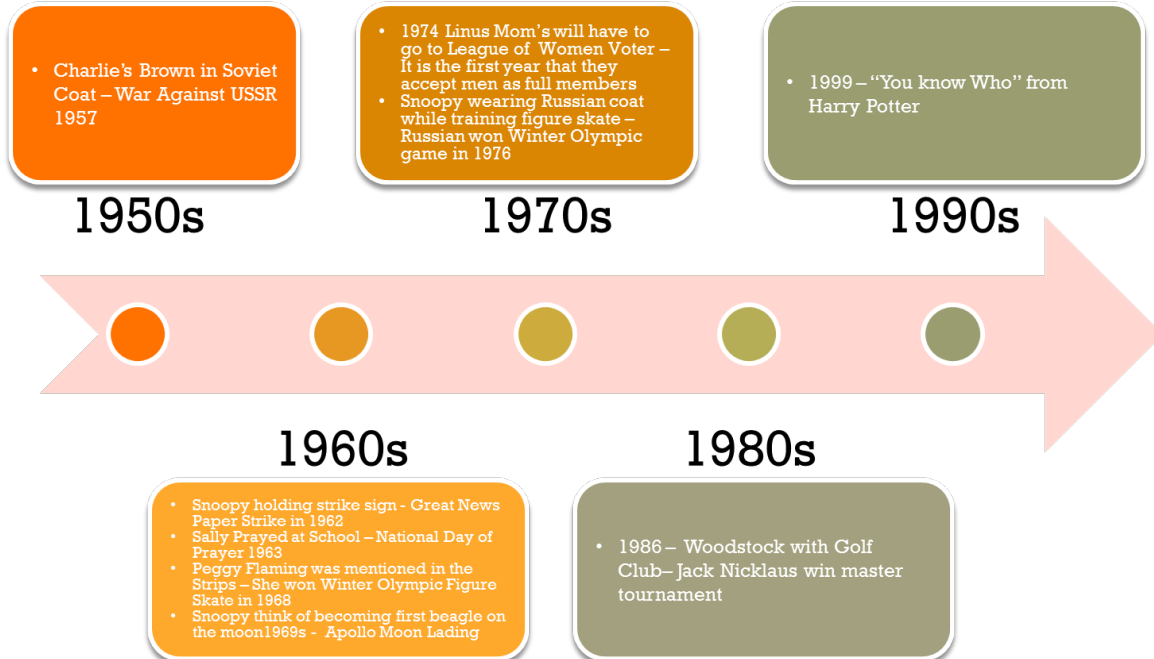
**Specific cultural themes in the 1990s.** The 1990s were a period of family devotion and good character. This value was adopted by President George H. W. Bush’s family. Also, the Gulf War took place and recession started to hit American society again. By 1992, all of the key economic indicators were retracting. Later, during the time of President Bill Clinton, there were also problems with domestic terrorism. Despite the fact that Americans were more prosperous, healthy, educated, and equal than ever before, there was also pessimism towards the downturn of religion values, as reflected through the higher rates of murder, violent crime, divorce, and abortion. It was also a time when personal computers were booming for Microsoft, Yahoo, and American Online. By 1998, about 98% of American homes had television sets, and two out of three had cable television. Personal computers were in 45% of all homes. 74 million Americans used the Internet by early 1999. Thus, when looking back at the political, economic, and social environment, it was not surprising that the cultural values such as being determined, realism, persistence, confidence, responsibility, and obedience emerged. These are important values in the development of the nation and to regain its moral balance.

**Particular analysis on individualism–collectivism.** Further analysis was done based on individualism and collectivism to further understand the relative strength of the orientation along this particular spectrum. The findings from the analysis of shot type, both in terms of psychological distance and attention to categories, suggested that the individualism orientation seemed to be more prominent during the 1970s and 1980s. The medium and mono shots were highest during these two decades. In addition, the type of cultural values that were prominent during these two periods, according to the dimensions classified by Oyserman et al. (2002) could be directly mapped onto domains that have been identified as individualistic in individualism–collectivism scales, such as independence, goals, competitiveness, and direct communication (direct, control, success driven) in the 1970s, and unique and direct communication (self-preservation, positive, expressive, and individualistic) in the 1980s. On the other hand, the collectivism orientation was strongest in the 1960s. The cultural values during this period can be directly mapped onto group orientation, relatedness, belongingness, and harmony (fun, teamwork, imaginative, loving, and caring).

**Third Element: Mapping Artifacts with Events**

The third element of the analysis focuses on the mapping the artifacts with events. The studies of Peanuts comic strips actually mapped well with actual events that happen, proving that cultural artifacts reflect historical events at the time, as shown in Figure 3 below.

**Figure 3**  
**Chart D: Cultural artifacts as reflection of important historical events.**



**1950s.**

1957: This strip illustrated a scene of Charlie’s Brown wearing a coat and hat resembling those from the USSR. During that time, the US was in the Cold War against the USSR.

**1960s.**

1962: The strip illustrates Snoopy holding a strike sign. During

this year, there was a great New York City newspaper strike from 1962 to 1963.



1963: The strip illustrates Sally talking to Charlie Brown about her prayers at school. John F. Kennedy the established National Day of Prayer in 1963.

1968: The strip mentions Peggy Flaming, who won the Winter Olympics in figure skating in 1968.

1969: This strip illustrates that Snoopy wants to become the first beagle on the moon. This was the year when Neil Armstrong landed on the Moon.

1970s.

1974: This strip illustrated Linus sitting on the back of his mother's bicycle, while his mother mentions that she needs to go to the League of Women Voters. In that year, the League of Women Voters started to accept men as full members.

1976: This strip illustrated Snoopy wearing a Russian coat while coaching figure skating. This was the year when USSR won a gold medal in Winter Olympic figure skating.

1980s

1986: The strip illustrates Woodstock carrying a golf club. This is the year when Jack Nicklaus won the Masters Tournament.

1990s

1999: The phrase "You know who" was mentioned in this comic strip. This phrase that appeared in the children's book *Harry Potter*. The first Harry Potter book was first published in the United States by Scholastic in October 1998.

## CONCLUSION

This artifact analysis revealed an important connection between cultural artifacts and culture. It demonstrated an important connection between institutions and practices in shaping culture. As demonstrated in the analysis, political, economic and social factors influence the cultural orientation. Furthermore, there is also evidence of the dynamics between the citizens and leaders of a country in directing the cultural values that the nation should strive towards. An unforeseeable force is working behind the scenes in establishing and influencing cultural values.

From an analytical perspective, the study of cultural artifacts not only helps us understand the differences between cultures across different nations, but it also helps us to better understand the evolution of culture within a single nation. It also shows us that culture is a dynamic concept and is not as stable as one would expect. A highly individualistic nation may not be as individualistic as it has been described through stereotyping. Thus, in order to study culture, researchers need to be able to look at culture through a clear lens without any presumptions, stereotypes, or biases in order to appreciate the culture that they would like to study more fully.

## LIMITATION AND FUTURE RESEARCH

Future research could expand the coverage of analysis to other comic strips that were popular during the time period of interest, in order to see whether the results would demonstrate a consistent pattern. Another point worth studying is to look at different types of artifacts and their ability to reveal culture. Comic strips seem to be able to track cultural dynamics better than art works due to their shorter production times and greater ability to respond to cultural changes. Hence, certain types of artifacts may be better at portraying cultural dynamics rather than static forces of the culture.

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## Appendix: Summary of the Overall Results

Elements in Analysis	Analysis Code	Results
<b>Psychological Distance (Bang et al)</b>	<ul style="list-style-type: none"> <li>• Close Up</li> <li>• Medium</li> <li>• Wide view</li> <li>• Panorama</li> </ul>	<ul style="list-style-type: none"> <li>• The near psychological distance or analytic thinking style and individualism is at peaks during 1970s and 1980s.</li> <li>• While during the period of 1960s, the psychological distance or holistic thinking style and collectivism is more prominent</li> </ul>
<b>Attention to Categories (Cohn et al)</b>	<ul style="list-style-type: none"> <li>• Macro-depict multiple active entities</li> <li>• Mono-depict single active entities</li> <li>• Micro-depict less than on active entity (as in a close up)</li> <li>• Amorphic – depict no active entities (i.e., only inactive entities)</li> </ul>	<ul style="list-style-type: none"> <li>• In 1950s and 1960s, American is more collectivism. However, the degrees of Individualism Culture has reached its peak during 1970s before turning back to more collectivism in 1990s</li> </ul>
<b>Cultural Theme Analysis</b>	<p>Use hermeneutics method to interpret and reinterpret the text in the comic strips. The theme that emerges were coded as follows</p> <ul style="list-style-type: none"> <li>• Individualism</li> <li>• Freedom of choice</li> <li>• Success driven</li> <li>• Time value</li> <li>• Caring</li> <li>• Tough</li> <li>• Sharing</li> <li>• Appropriate time</li> <li>• Obedience</li> <li>• Demanding</li> <li>• Discrimination</li> <li>• Competitive</li> <li>• Teamwork</li> <li>• Ignorance</li> <li>• Athletic</li> <li>• Persistence</li> <li>• Persuasive</li> <li>• Imaginative</li> <li>• Direct</li> <li>• Abstinence</li> <li>• Expressive</li> <li>• Control</li> <li>• Social affluence</li> <li>• Fun</li> <li>• Dirty salesman</li> <li>• Considerate</li> <li>• Brave</li> <li>• Academic value</li> </ul>	<ul style="list-style-type: none"> <li>• 1950s - ignorance, touch and sharing</li> <li>• 1960s – fun, teamwork, imaginative, loving and caring</li> <li>• 1970s – direct, control and success driven</li> <li>• 1980s – positive, self-preservation, sarcastic, expressive and individualism</li> <li>• 1990s – Determine, Realistic, Persistence, Confidence, Responsible, Obedience</li> </ul>



# Beyond Economic Return on Investment: Interpretation of Investor Practice through Cultural Capital Factor

Arunnee Punnaitinont, Faculty of Management, Kwon Keon University, Thailand

Pensri Jaroenwanit, Department of Marketing, Khon Keon University, Thailand

Nopporn Ruangwanit, Thammasat University, Thailand

## ABSTRACT

Making investments is another activity in which people are interested by using their own financial resources in their free time to create more value, including stocks, mutual funds, and/or other financial products based on their aptitude and interest (Shiller 1989). In general, anyone can imagine making simple investments. If anyone were asked, "What is investing from your opinion?" Basically, the answer would be, "Using money in the hope of making more money." This is called a "traditional investment" (Smita 2014). However, an investment can reflect the identity of investors through the practice to denote possessions. Therefore the meaningful of possession are a part of extended selves (Belk, 1988). When the investor possess some objects, they start with using in term of special (Price et al., 2000) or favorite (Wallendorf and Arnould, 1988) to possession. After become the possessors, they began to create meaningful during the possession which investors can carry multiple meaning with differing practice through their identity. Furthermore, the practice of investment is a behavior that can significantly interpret the expression of the identity of the investor during the time they are making the investment. The behavior can be caused by many factors which can influence their thinking and the process of their practice. The factors that can influence the senses can be physical factors, such as education, income, age, and gender, etc. (e.g. Surekha and Jyoti, 2012; Babin and Babin, 2001; Kahn, et al. 2002; Hausman, 2002) or cultural factors. The important factors that Abraham (2011) also mentioned are the cultural factors which can have a direct influence on human behavior. Kotler (2003) stated that a person's culture is regarded as the fundamental determinant of a person's wants and behaviors. Hence, the culture can determine the behavior of individuals. Therefore, the influence of the culture affects the behavior of investors as well.

Moreover, the cultural factors are also extremely influential in describing the features of the members of a society, and the culture can also be divided into the qualifications of investors. Therefore, an indication of the cultural differences within each society can be measured by the cultural capital resources that exist within each of the societies. Bourdieu (1984 [1979]), who is the theorist of the concept of cultural capital mentioned that "cultural capital" is inherited by privileged groups within a society and represents an accumulation of cultural knowledge, skill, and possessed abilities. Therefore, the investor, who has different investment practices, is partly a result of the cultural capital that has been received from their ancestor's cultural transmission, and investor also develop over time through individuals' interactions with various institution and changes in the life circumstances (Bourdieu 1986). On the one hand, the investment practice also can reflect the investor's cultural capital, which starts with the initial step of acquiring, then continues to maintaining and creating value along investment process until the end of possession, which can be examined through the interpretation of the researchers (John 1999).

However the cultural capital also plays major roles in new investors practice their investments. Investment practice and inherit meanings are varied in compliance with accumulate cultural capital of each investor. Investors may or may not follow all the steps depending on the meaning and engagement that has occurred during the

acquisition of their objects (Belk, 2010; Hemel and Brezet, 2008). Then, the investors use their favorite feeling to invest the objects from the positively valence meanings. Hence, the different behaviors take place in all contexts of activities, including the context of investment. This study focuses on the interpretation of the investor's practice and reflects the cultural capital that they have through all of the stages of investment to find out the practice for obtain beyond economic return as the practice contribution.

## LITERATURE REVIEW

### Theoretical Foundations

Mostly everyone start with the learning from the environment around them by interaction with others to create a cultural capital personal, the individual has learned steadily as people without the experience become an expert and have good taste, which a selection taste of them will reflect the self-identity (Bourdieu 1984; Holt 1998). From the possession consumer retain the objects and also give that emotion attachment (Schultz, Kleine, and Kernan 1989) is implicated in the extended self (Belk 1989).

### Investment Practice

When investment decisions are based strictly on investment profitability, firms should undertake all investments with a positive net present value (Alkaraan and Northcott 2006; Maritan 2001). The meaning of the investment is how to bring the money that has been collected to generate returns higher than savings. That has been the traditional meaning of investment. Whether seeking financial return or hedonic return, the investment activity, therefore, reaches the target that is expected. However, investors have different investment objectives, such as making investments for speculation, making investments for creating collections, or making investments that are popular and these investment behaviors will occur throughout each action. Kemmis and McTaggart (2005) mentioned that action research is a critical and self-critical process aimed at animating these transformations through individual and collective self-transformation. Therefore, for all practical purposes, it is an expression of its "self" and eventually can transfer a "self" onto the objects of investment. This has led to a study of the interpretation of the action taking place in order to find the meanings and reasons the investors have placed on the objects (Belk 1988).

Observing and interpreting the investor's practice is a study that examines what each investors does within his/her practice, what each investor thinks and communicates based upon the investor's understanding of the meaning of his/her practice, and what the investors relate to others based upon the condition of their practices. Thus, the action research can be explained within three parts as saying, doing, and relating (Kemmis and Grootenboer, 2007). Investment practice is the singular action that reflects the knowledge and ability of each investor, because each investor would have quite a high target from returns for various purposes. Accordingly, this study will concentrate upon the investors' practices in order to identify the patterns of expression and the reasons for investment through the ways that they invest and through the process of making the investments (Schatzki 2002; Joseph Dunne 1993). Through the interpretation of the cultural

capital with habitus, people become connected to their surroundings, and the practice can reflect diverse perspectives of investors (Bourdieu 1977, 1984), as well as can describe them as they invest.

### **The cultural capital related to investment practice**

According to the description above, in light of the investor's views and objectives about the investment, the investment practice can be influenced by many factors, as well as by the context of other practices. One of the important factors that can influence the expression of investors is the cultural factors. There are many researchers who define culture as "the sum total of learned beliefs, values, and customs that serve to direct the consumer behavior of members of a particular society" (Schiffman and Kanuk, 2010, p.348). Beliefs are formed by the accumulation of individual feelings, which consist of very large number of mental or verbal statements that reflect the knowledge and experience of the individual and determine his or her psychological behaviors (D. Cohen, 2007). According to their beliefs and faith, some investors invest in what interests them. This can be interpreted in a variety of ways, such as the investor who makes an investment with the belief that he/she will get the highest return, or the investor, who invests in an item so rare in order to obtain praise and/or flattery. However, the influence of culture can also be transmitted through the lifestyle of humans throughout the world (Chiu & Hong, 2006). When people learn and absorb the culture through habitus until the culture becomes a part of them, it is called "cultural capital".

Derived from his earlier concepts of 1968, Bourdieu completed the fieldwork for his inquiry into the relations between culture and class, and later published the information as *Distinction: A Social Critique of the Judgment of Taste* (Bourdieu, 1984). He explained that cultural capital can indicate the differences in behavior through individual tastes, knowledge, and skills, etc. Another perspective is offered by Bernard Lahire (2003, 2004), who discussed that cultural capital is the study of an individual's class position or social position which can be interpreted as the unifying principle of habitus. Within individuals of each class, there are inequalities in social hierarchy, economic resources, or even cultural resources. Their practice will be measured by taste, lifestyle, and education, which are the resources used to describe the cultural capital. Cultural capital of the each individual can be reflected through practical activities in daily life, whether it is consumption practice or investment practice, consumers or investors often use cultural capital resources that comprise the taste or knowledge to use in deciding to purchase or invest. Therefore, the cultural capital can reflect the identity of that person through their practice style.

From mention above founds that significance of cultural capital can explain the behavior of individuals from the behavior interpretation which is based upon the particular context of the practice of the investment can be linked to the investor's cultural capital.

### **Acquiring, Retaining, and Disposing of Investments**

From the concept of investment practice, the research will be interpreted according to the process from the acquisition of their satisfaction objects until disposal. Regarding the process of possession, Pierce, et al., (2003) stated that the model feelings of ownership are induced in the following three features: 1) controlling the entity (e.g., through possession), 2) becoming familiar with it (e.g., through actual or imagined use), and 3) investing the "self" into it as extended self (e.g., through identification). The practice through which investors express themselves is called the "acquisition behavior" which is described as the feeling that they legally owned these objects and could, if they wished to, sell them to others (Pierce, et al. 2003; Rousseau & Sherpling, 2003). Thus, the activities, that have occurred, must go through a link of thought and through the surrounding culture until

the objects has been obtained.

Depending upon the rarity of an object (including its value), some investors have different methods of acquisition, and for some the next step is to retain the item and to create value for it. According to Gordijn and Vliet (2000), the valued object is "a service, a product, or even an experience which is of economic value for at least one of the actors involved". Regarding retaining the value of each investment, each individual investor may have his/her own technique to maintain the value of the objects. For instance, some people invest in wines, build wine cellars, and gain vast knowledge about the traditions of winemaking and about the skills of wine tasting, while other investors may not be as interested. All of these practices can be linked to the individual cultural capital of the investor.

However, in the case of investing in order to possess objects, by implication, some events may lead to the process of disposing of the object. Belk (1988) states that disposition occurs when items no longer fit the ideal-self-image. However the practice, which occurs during the disposal process, can be interpreted in multiple ways which probably would not occur with all investors. Therefore, the behavior, which an investor applies to the conception of self-plus-possession, is a part of the expression of the extended self (Rochberg-Halton 1984; Belk, 1988). Some investors may dispose of the objects because they have found a new owner who can afford the things they have (Herrmann 1997; Price, et al. 2000). Hence, the practice of the investor can be interpreted as inequalities of the cultural capital, which they have, and are due to the fact that cultural capital refers to their own knowledge and skill resources (Ruth, Levitas 1998, 2004; Fairclough 2000). Therefore, it can be concluded that the behavior that occurs during the three steps above can be interpreted in various aspects and also reflect their cultural capital resources through their investment practice.

### **EMPIRICAL METHODS**

In brief, this research adopted a qualitative, interpretive approach based on key informants - three Thai investors living in Thailand. This produced emergent insight (Belk et al 1988) through the selection from a set of 10 depth interviews, this investigation seeks to understand the consumption phenomenon within the context of the investment by focusing on the expression of the investor's practice as it reflects their cultural capital. Depth interviews lasted 1 to 2 hr. and were conducted in the informants' homes. The practices are the standard reference points for behavior and cultural capital that exist (Bourdieu, 1984), and are often formulated in terms of social class and perspectives in various dimensions. In addition, the cultural capital resources were also incorporated as a measurement for interpretation in this study.

The longitudinal ethnographic research was used to collect the information in this study and to seek out interesting phenomena to examine through social and culture contexts (Walford, 2009) over the course of a long time period in order to see what people are practicing, as well as to see how they behave when they are performing their practice. By using interpretive studies to understand the phenomena through the meaning that people have assigned to them, this study will access reality through the social construction (Bright, et al., 2012). The investors began their investing behaviors by collecting objects that they mainly had inherited from their ancestors. These objects are full of meaning, values, and beliefs through many rituals in the culture (Yin 2003). However, each researcher's interpretation depends upon his/ her skill and information received from the key informants in regard to their various investment dimensions from their different practices.

By using narratives in this study, each informant tells his/her

story from the investment perspective (Langellier and Peterson 2004; Mishler 2006; Polkinghorne 2007; Wattanasuwan 2012). Through BNIM interview method is a method of in-depth interviewing that stimulates the ‘whole story’ or ‘long narrations’ and consists of an initial interview question which is followed by additional prompting by way of re-introducing points from the narrative (Wengraf 2001). The researcher will use the narratives to discover the information

through the complexity of actual human behaviors in which they are expressed naturally (McAdams 2006; Singer 2005). Three cases were selected that were representative of the interviews as a whole and that provided good illustrations of major findings.

Name	Invested Item	Cultural Capital	Extended Self	Beyond Economic
Uthai	Chanod beads (Talisman), Remade	He practices for over 40 years. He has much enough knowledge, skill and ready to possession.	He invests from a belief in the special of his objects because he has been lucky from the possession.	He chose to transmit to those who are ready to take care because he just wanted to remain valuable.

Name	Invested Item	Cultural Capital	Extended Self	Beyond Economic
Nisachol	Antique Fabric	She invests by her own self to learn from the original source until become expert in the object.	She feels proud every time she has been acclaimed by visitors who see the object from her private museum.	The value of an object is passed to the society for more knowledge further.
Ton	Doll collection	He learns during an investment and accumulates more knowledge until become professional in doll collection.	He did everything in order to get possession of these objects and created a collection in private zone that made him happy when he seen.	The returns from the sale of one from many pieces in the correction to those who really need it. It makes the remaining objects more valuable.

## INTERPRETATIONS AND DISCUSSIONS

This paper explores the investment practices of three informants; the results of their interviews have been organized into three emergent themes. In each theme, the researchers have investigated the phenomena where the primary reason investors acquire an objects is for its cultural capital rather than its monetary value. The a priori theme of investment is that most investors expect a return on their investment in the form of a monetary gain. In this study, the practices of the interviewed investors challenge this existing investment theory.

### Theme 1: Complicated Acquisition

How each individual invests depends on the uniqueness of that individual. Personal and individual preferences concerning investment reflect the status of the investor and determine whether they seek to invest in rare objects or objects that they are able to afford. Investing in rare and valuable objects sometimes requires a certain level of spiritual practice or social status in order to be able to take possession of the desired object. In this kind of investment behavior, the financial return is not the only goal of possession. In contrast, the key feature of the investment is the potential for the investor to receive spiritual returns or fulfillment of the “self.” These features are linked to the cultural capital of the investors. Therefore, the resources of cultural capital can be explained by the investor’s tastes, knowledge, and skills, etc. which are not the same for each individual (Bourdieu 1984; Lahire 2008). Hence, cultural capital is a resource through which a person can constantly learn to absorb more of their resources (Peterson and Simkus 1992; Peterson 2007). Cultural capital can be reflected through the above practice in order to achieve acceptable results and to ensure that the investors have the right to take possession of what they want to invest in.

### Seeking the Sophisticated

Uthai, the first interviewee, believes that the Chanod Tree has both sacred and magical powers that can protect himself and his family from harm. The Chanod Tree is located in a sanctuary belonging to the Khum Chanot temple and its beads only fall down during specific and special times.

*“Uthai: The sacred things that I took from the sacred tree are called Chanod beads. They are used for worship. After I picked them up I arranged the five aggregates to confirm that the family will get good fortune and to let the spirit who resides within the Chanod beads protect us. Our belief is true as the Chanod beads fell down.”*

*“Uthai: I also have a Remade. It is something sacred of the angels who guard in caves and chasms, in the earth or even the mountains are owned “... Landscape owner is keeping these things if you are not the practitioner, you cannot possess them. If you disobey and take it, it’s nothing auspicious. It will be like this”*

In the interview above, this practice is found to be associated with religious rituals. The derived items come from nature and that is the practice is sacred for the occupant. Uthai believes that there can be no prosperity or success if the sacred items are possessed without respecting them. This ritual practice is part of a cultural dimension and can reflect the investor’s cultural capital resources (Exline, et al. 2000). Enhancing the value of the objects regularly through ritual or prayer, which is believed to have many beneficial effects, will contribute to a greater monetary return as well. Researchers describe an emergent practice that happens like this as a ritualistic pattern (Rook 1985). Thus when selling the item, the price will be set higher because it has been made more sacred since its initial stage. His talismans will be different from the general items that can be purchased



at the market because his talismans have been imbued with more cultural capital through sacred ritualistic patterns.

#### *Acquisition from the Original Source*

Another informant describes the complexity of acquiring investment objects which she takes patience to seek the rarely and very valuable objects. Mrs. Nisachol stated that during her investment process, apart from inheriting objects from her ancestors, she also wanders to take objects from their original sources. This is hereafter discussed.

*“Mrs. Nisachol: Antique fabric has a meticulous weaving process, especially the oldest fabric that was woven in ancient times. I wandered off to find ancient Thai fabric from various villages in the Northeast region of Thailand, until I realized that each district has its own distinct weaving expertise. Some villages specialize in weaving and dyeing indigo and some villages specialize in ancient silk weaving. Therefore, each piece that I have the most unique designs, patterns which each of designs will have meaningful reflection from the emotions of the maker woven fabric...”*

From the interview, Nisachol hints at how lengthy and time-consuming her acquisition process is. Because she takes the time to search for and acquire objects from their original sources she is able to spin up their value. Meanwhile, during the process of acquisition, her story is building up to create a higher commercial value. It is found that this practice can reflect the story of the acquisition, which can be linked to a higher context of monetary return on investment.

#### *The Readiness of Possessors*

For the most sacred objects, the person who is acquiring the object must have a certain level of spiritual practice to be ready to possess it. Uthai explains this in his interview:

*“Uthai: ...From the sacred objects from the natural, If you are not the truly practice people, you cannot take it. If you take it without permission, then nothing is sacred to life. It will bring bad luck and bad things happen. However, I practice Buddhism for a long time, so [the spirits] allow me to gain possession of it properly...”*

Hence, the value of the objects starts with the acquisition stage which is then part of the advertising story during the possession. The story of the acquisition will be linked to the monetary return at the ends.

### **Theme 2: Enhancing and Value**

Regarding investments from a cultural perspective, the returns from the investments examined in this study are beyond financial. This is true due to the practices performed by the individuals, who possess these objects and make them sacred, and as a result, these objects inevitably become more valuable. In this stage the ritualistic pattern to increase the monetary value also adds the sacredness into the objects. The interview can be interpreted in 2 sections:

#### *Ritual to Increase Sacredness*

How investors maintain the value of the objects that they possess. They are not just investing in common objects but they are trying to build their own private collections in order to increase the value of the object by building its own museum. From the interviews of Nisachol and Ton are presented as following.

*“Nisachol: In addition I would like to invest in the Thai ancient fabric from various villages; I also took the cloth*

*placed on display in my own house. By doing a private display for textiles in the past era, including a show that is both ancient weaving machines such as various loom machines. The part of fabric is organized as the collection separate into groups. For students travelers or those passing frequented by visitors”*

*“Ton: ...It is a happy space that I have my doll collection in my bed room. I will sort as its collection like the set of Babied doll and the set of Sario. In my free time, I will take to comb the dolls hair, change a beautiful dress, and clean to make it look new and beautiful all the time ...the time in my bedroom. I do feel it myself most and happy to see all collection that I have accumulated...”*

Nisachol enhances the value of his objects by creating a private museum to let visitors know that the objects on exhibit are valuable and rare. The ancient objects will be presented and divided into their respective era with other ancient objects from that time. Because they are grouped together they can become even more valuable and this can increase their monetary value. For Ton, he created a doll collection in a place that is in his private zone. He will allow only those who have a passion for the same thing and have in-depth knowledge of the objects visit. He will not be open for all people to visit. Therefore, an object he has is perceived to be more valuable and interesting.

#### *Advertising Objects to Increase Value*

In addition Nisachol creates private museum collection of fabric and frequently she wears her favorite fabrics to show off her investment objects and also to tell the story of her objects, as she says in the following interview:

*“Nisachol: I love to wear my favorite Thai Fabric with a unique pattern, which represents the oldest of the fabric. When I wear it, I feel that there are magical and can mesmerize every eyes of other women come to admire and ask me how I got this fabric. I always wear a fabric the most important event which I would wear in a ceremony event in order to honor the place”*

From the interviews it can be seen that Nisachol works to increase the value of her fabric. By wearing these fabrics exclusively at important events the value of the fabric rises. The investment perspectives of Ton and Uthai will be explained in a similar way. Ton and Uthai choose to advertise their story on demand without the advertising of large groups like Nisachol. There are just people who know them and know that they possess items of value. People know they must ask permission to visit.

*“Ton: In the bedroom, I have my doll collection that is divided into proportion. Some of my friends who know me He likes to get into my bedroom to admire and someone asked to buy some pieces from my collection but I feel pity, so someone who is not really close . I cannot decide selling it (laughs)”*

*“Uthai: My follower knows that I possessed a sacred talisman and they know I have come up with great difficulty and very difficult to be able to possess it by yourself. Most of the time they know the story of these talismans very well and will come to purchase. I will be decide whether they have the right to possess these sacred or not”*

Therefore the process of maintenance is another step that is critical to enhancing value of each object. Each individual has a practical



way to maintain value that varies; it depends on the way that they will expose their investment objects. The cultural capital continues to accumulate. At the same time the monetary value also increase.

### Theme 3: Clearance Stage

Sometimes investors invest in rare artifacts that have historical or spiritual value. In the view of these investors, the returns are not only monetary; these items of historical and spiritual significance can also provide happiness to future owners and to society in general. Sometimes a return from investment is expected beyond an economic return, as Uthai states:

#### Readiness of Next Possessor

*“Uthai: Sometimes when a prospective owner has ethical behavior and prays as I do, I can feel that he is ready to take care of these sacred objects as well as I have. Sometimes I give them free without any dealing.”*

Therefore, the readiness of individuals who want to possess such sacred objects needs to be compatible to the sacredness of the objects as well. This clearance practice is referred to as self-transfer. In addition, individuals who come to receive an object must be willing to accept it.

#### Return in Social Contribution

A form of clearance that is beneficial to the public and that occurs beyond economic return can be demonstrated with Nisachol's loved and cherished Thai fabric, some of which she chose to display at the Thai National Museum. She reflects that doing so has provided greater contribution to the public, giving her a social return.

*“Nisachol: There are many government organizations that have come to ask me for my Thai fabric, wanting to re-locate it to the Thai National Museum to display local knowledge. I thought for a long time before deciding to sell to them. Finally, I thought that with the ancient fabric on display to educate students or anyone interested, it would be more useful and valuable than if it were with me ...”*

#### Disposal of Unoriginal Objects

Perspective in this section is provided from the clearance of unoriginal objects to increase the value of remaining objects. Ton's narrative about his doll collection provides an interpretation of this practice. Before deciding to sell any portion of his collection to others, he considers whether it is unoriginal or repetitive to the rest of his collection. By selling the unoriginal dolls, he will make the rest of his doll collection more valuable.

*“Ton: ...My friend who often comes to see my collection, she asks to purchase my doll collection. I will sell her only unoriginal pieces, of which I have more than 2. If I have only one, I will not sell, and I cannot, because I will feel disappointed after having to save money for a long time ...”*

According to the interviews with these three informants, it was discovered that from the acquisition stage through the clearance stage, each individual has their own behavior. While their behaviors vary, they have one thing in common. They each have faith in the objects in which they invested, and using their existing resources, they each endeavor to possess those objects. Their practices reflect investment in something beyond economical returns. Repeated practice will result in accumulation of value, until finally this value may be transformed into unexpected monetary returns during clearance.

## SUMMARY AND CONCLUSIONS

In summary, when the investor makes a decision to invest in certain objects, there are many influencing factors, such as societal, cultural, and religious. Such factors affect the thoughts and feelings of the investor, and these are expressed in the investor's practice (Pandey and Dixit, 2011). This study especially focuses on the study of practices that reflect cultural capital through the practice of acquisition which it can indicate their self-identity. Sometimes when they invest more enough, some investors may dispose their objects to others in order to make more valuable than keep it and also not sale for monetary return as priority. It is called “beyond economic return” and also challenge the perspectives found related to receiving returns in general investing. It also reflects cultural capital, according to the investor's style, tastes, and knowledge (Bourdieu, 1984; Bennett & Silva, 2006). The general practice of investing requires only certain periods of time (temporal) before a monetary return is achieved, but the informants in this study have shown a need for some ritualistic practice as an alternative to increase the value of their investments. However, the means of this alternative requires that the concept of cultural capital play a major role in the investment practice, making it different from the usual practice. Thus, exploring the concept of cultural capital can generate a new outlook for investment diversification, such as investing in ritualistic objects based on cultural perspectives (Brodwin, 2002; Collins & Evans, 2002, 2007; Simpson, 2004). The expected return will be beyond economic factors as the contribution from emerged finding, as the table below illustrates.

**Table 1 Expected Returns beyond Economic Factors**

No.	Practice of Key Informants	Description of Practice
1	The Greater Social Contribution	Nisachol had the opportunity to dispose her favorite Thai antique fabric to the national museum for the benefit of the public, which led to the increased value of her objects through the story she created from the periods of possession from the beginning.
2	Self to Self-transfer	Uthai's maintenance of ritual pattern by practicing seriously to the objects until transferring them to a person who is qualified to possess them. It is called to share self to self and whole story still exist.
3	Superiority in Having Unique Collection	Ton decided to sell their ubiquitous collection just to increase value for other the rest unique collection and also makes him feel superior to others around him. He proud that he has what others cannot have.

To conclude that the cultural capital is related to the investment practices by the researchers interpret the practice through each stage of investment in object that an investor interested and the cultural capital is also the one component of culture that can explain through the lifestyle and beliefs, in which monetary value cannot be measured in a quantitative way. However, it can be measured by the interpretation of the investor's practices in a qualitative way. Therefore, cultural capital is a factor that can control or determine the thinking and

behavior of individuals, including the context of an investment. In addition, cultural capital is the key factor for indicating the ability to invest in order to obtain a return that is beyond financial. In a way, it will be a “sense” that has arisen from the possession of the objects.

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# Consuming to Help—Post-Disaster Consumption in Japan

Sumire Stanislawski, Tokyo International University, Japan

Shuji Ohira, Chiba University of Commerce, Japan

Yasushi Sonobe, Toyo University, Japan

## ABSTRACT

An exploratory analysis of Japanese consumer behavior following the 2011 earthquake, tsunami, and nuclear accident disaster found that respondents preferred ethical (*ouen*) consumption to other helping behaviors, that the media played a significant role in shaping perceptions of safety, and that the type of empathy triggered led to differing responses.

## JAPAN AFTER 3.11

The Great East Japan Earthquake, tsunami, and nuclear accident disaster on March 11, 2011 (hereinafter referred to as “3.11”), wreaked havoc on the Tohoku region of Japan—an area whose economy is largely based on family-run fishing and farming. Not only were ports and farmlands destroyed by the tsunami, but the meltdown of the Fukushima nuclear plant also led to safety fears over Tohoku products, which devastated many livelihoods.

To help rebuild Tohoku after 3.11, businesses and consumers came together to help aid reconstruction efforts through ethical consumption (Ohira et al. 2014). This phenomenon was named *ouen* (aid) consumption by the media, and included cause-related marketing (CRM) and purchasing products from the Tohoku area. *Ouen* consumption flourished, in part, as a response to the perception that the people of Tohoku were suffering due to *fuhyo higai* (literally “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 underscores the importance of media in shaping perceptions. The widespread use of this term after 3.11 led to an understanding of consumers as potential perpetrators of damage against Tohoku people, while stressing media responsibility to avoid causing such damage (“Lecture Series” 2014). Some have criticized this for suppressing voices of real concern by re-framing debates as “misinformed rumors that cause damage” (ibid.). Indeed, media coverage using this term emphasized that avoidance of “safe” Tohoku products hurt people and called for “level-headed” responses. Yet safety fears over Tohoku products are not merely based on “misinformed rumors,” but are of actual concern (Kurihara et al. 2012).

This paper explores *ouen* consumption as a new form of ethical consumption. *Ouen* consumption’s potential risks and non-Western origin make it distinctive from ethical consumption studied to date. It stands in contrast to many ethical consumption alternatives that are perceived as “more natural” and/or “healthier” (e.g., Dobscha & Ozanne 2001) with suggestions of positive benefits for consumers. In fact, no other ethical consumption alternative poses such potential for negative health impact as a cost of helping solve social issues. In addition, most ethical consumption research has been based on Western cultures and practices (e.g., Harrison et al. 2005). By studying this new and novel practice, this paper helps to broaden the understanding of why consumers engage in ethical consumption.

## METHOD

As *ouen* consumption is a relatively new type of consumer behavior with little past research, a qualitative exploratory study was chosen to gain broad insights into the meanings behind this behavior. Past research in Japan found that about 20% of consumers were ethi-

cal consumers, with a higher percentage among women with children (Stanislawski et al. 2013). Mothers also have high concerns about food safety (Hughner et al. 2007) and were considered to be sufficiently motivated to have thought through the implications of *ouen* consumption. To obtain as broad a range of views as possible within constraints, we used a two-tiered purposive sampling. First, mothers in their thirties to fifties living in the Greater Tokyo area were recruited from an online research panel to answer survey questions about their ethical (including *ouen*) consumption behavior. Out of the 1392 responses, consumers with high and moderate past experiences were invited to join a focus group. Two groups of each category were interviewed on August 28–29, 2013, in Tokyo (see Table 1).

The semi-structured interviews, which lasted 2–2.5 hours, asked about the impact of 3.11 on consumption, as well as ethical consumption behaviors in general. This paper focuses on responses related to the impact of 3.11 and *ouen* consumption. Inductive thematic analysis was used on transcribed data to identify patterns across the dataset (Braun & Clarke 2006).

## FINDINGS

*Consumption as a substitute—convenience and skepticism.* Respondents shared that *ouen* consumption was a substitute for other helping behaviors such as volunteering and making monetary donations. All groups reported that consumption was an easier and more convenient way of helping society as compared to conventional charity.

*At the end of the day, it's just self-satisfaction, but I think it's good if I can contribute through shopping, to make up for not being able to go [volunteer]. (1B)*

*On TV they say that it's challenging because the number of volunteers is down... but, we can't just go off to volunteer and not take care of our homes... We can't do [it] because we don't have time, but we do want to be of some help to society. (2G)*

A common reason given for respondents’ inability to volunteer was the difficulty of being away from their homes for long periods. Volunteering is seen as something unfamiliar, time-consuming, and difficult to incorporate into their daily lives. Similarly, monetary donations were considered to require significant commitments that were beyond “normal.”

*You have to go out of your way to donate to a donation box. But, if you can do it through shopping, it's more casual. You buy what you want, and a portion is donated. Kills two birds with one stone. (1G)*

*I'm not a celebrity or a company, so my donation wouldn't be much money. In comparison, buying a product is more casual and accessible. (1D)*

Media coverage that highlighted large donations by companies and celebrities after 3.11 may have led to perceptions that donations need to be large in order to be effective. This reflects cultural unfamiliarity with volunteering and donations as compared to the West (Tsukamoto & Nishimura 2006, p. 579). In addition to the perceived



high burdens of volunteering and donating, the idea of monetary donations through non-profits was mired in skepticism. Yet such skepticism toward non-profits was countered by trust in big business. In fact, all groups reported trust in businesses over non-profits, though this tendency was higher in Group 2 where respondents lacked in-depth knowledge of non-profits and portrayed them to be “all the same.” Group 1 recognized that some non-profits were trustworthy, but still felt that due diligence was necessary when dealing with non-profits in general.

*Donations are so vague and you don't know where it goes. With CRM products, you know clearly where it goes. Some donations are clear where it goes, but I wonder if it's really being used [as intended]. (1L)*

*I think big business is better than the Japanese Red Cross [JRC]... I think a big company delivers in good faith. The JRC [...] had embezzlement. I trust big legitimate companies like McDonald's more than these organizations. Businesses have accounting audits as a checking function, so it's more trustworthy than the JRC. (2L)*

It is seen that Japan's non-profit sector has generally failed to establish familiarity and trust among respondents. Even the Red Cross—a globally recognized non-profit—suffered a loss of trust due to delays in payouts and embezzlement by an employee after 3.11. If consumers who engage in ethical consumption to help solve social issues lack knowledge and trust of non-profits, then average consumers are likely to be even less knowledgeable or sympathetic to them. In addition, media coverage of questionable activities related to donations after 3.11 may have enhanced this sense of skepticism. For example, stolen donation boxes, fraudulent donation collections, and other suspicious activities were reported in the news with calls for caution by the police: “In conditions where you're not sure whether donations are actually being used for disaster-victims, don't respond to calls for donations, and consult the police.” (“Donate Precious Metals” 2011).

*Defining “safety”—confusion in the aftermath and re-framing by the media.* In the immediate aftermath of 3.11, respondents were unsure about the safety of Tohoku products and avoided them. This fear was largely based on confusion of how “safety” was to be re-defined under the new circumstances. Subsequent media framing of avoidance of Tohoku products as “harmful rumor damage” (which by definition is not a legitimate worry) seems to have played a key role in changing respondents' minds about whether to consume Tohoku products. Respondents also have accepted market mechanisms such as tests of radiation levels as a signal for safety, and trust in these systems has replaced much of the worries and confusion surrounding Tohoku products.

*Right after the earthquake, my child was in first grade. No matter how much they said food from disaster-hit areas was OK, if they later said “actually, it wasn't OK,” it would be a problem. Right after the disaster I didn't buy vegetables from Fukushima [...] But now, I buy vegetables from Fukushima and don't really think about it. (1C)*

*I have children, so I wondered if the rice was OK and I avoided it... but now, they say it's OK, even on TV, so I buy rice from Fukushima without concern. [...] I saw on TV reports that people in Fukushima are struggling because of “harmful rumor damage” and I realized just trying to avoid [it] doesn't change anything. (1J)*

*[I] saw on TV that people were struggling because rice from Fukushima wasn't selling. The price was cheaper too, so I bought it... I bought it because it can't be that bad since it's being sold. (2G)*

Despite this general acceptance of the “safety” of Tohoku products, there are still some lingering safety concerns. Respondents who largely avoided Tohoku products legitimized this by explaining that they had small children, a response which was met with acceptance from the group. It seems that an understanding has developed that products from Tohoku are safe to consume by almost all members of society, except for those who are most vulnerable to any potential harm—pregnant women and small children. This shows that “harmful rumor damage” has not been blindly accepted, but is being weighed against the risks of real potential damage.

*Empathy—empathic concern vs. personal distress.* All respondents expressed empathy for those affected by the disaster, but the dominant type of empathy differed by group. Group 1 exhibited more empathic concern, “feelings of warmth, compassion, and concern for others,” while Group 2 expressed more personal distress, “feelings of anxiety and discomfort that result from observing another's negative experience” (Davis 1980, p. 85). When questioned how their shopping behavior changed after 3.11, Group 1 reported altruistic concern and their ability to help, while Group 2 emphasized self-focused distress and guilt. Group 1 shared how media coverage of 3.11 made them want to help those in need. They also believed that others shared this concern, and that together their actions would combine to make a difference.

*Watching it all on the news hurt my heart... it's such a small amount, but I thought if I can help just by shopping, then I want to [do so] as much as possible. (1B)*

*I try and do it even though [my efforts] are very small, because I think things will change if everyone does what they can. (1I)*

Responding to the same question, Group 2 responded with self-focused concerns. 2C and 2F mentioned how the lack of bottled water made their life difficult after 3.11, while others expressed fear for their own safety.

*How can you live when everything gets shut down? [...] I started to become aware of what you need to keep [in stock] in case of disasters. (2B)*

*You don't know when a big earthquake will hit Tokyo too. (2G)*

When probed, they moved beyond their own discomfort and began to express concern for those directly impacted. However, even then, their word choices highlighted how 3.11 caused them distress. Overall, their reactions to 3.11 were spoken of in a more negative manner, with references to feelings of guilt and helplessness, whereas Group 1 focused on more positive aspects, such as their personal ability to help—even if only a little.

*Right after the earthquake, on TV they said that things weren't selling because of “harmful rumor damage.” When chatting with other moms, we did talk a bit: “Do you think we ought to buy [to help] them?” But, I have a small child, so I avoided things from Tohoku and [surrounding areas]. If it's being sold it should be fine, but my husband and I talked about avoiding it. I don't buy things from there. [...] When there are lottery tickets or [other indirect ways to help] reconstruction, I do it partly because I feel guilty. For things to go back... because*

it's a region with lots of farmers and fishers, it won't go back to the way it was if people don't buy things. But, I can't bring myself to buy things from Tohoku. I feel bad about it. (2J)

"Since I don't volunteer, if the grocery store has an *ouen* fair or an *ouen* campaign, I buy more than I need... I buy things I don't really need." (2E)

It was seen that respondents' natural empathy toward a large-scale disaster combined with media coverage of "harmful rumor damage" to create pressure to support *ouen* consumption. So, when safety concerns or other reasons made it difficult for them to act on this in a meaningful way, it resulted in feelings of guilt. Unlike Group 1 respondents who incorporated *ouen* consumption as an activity that fit into their lifestyles in a sustainable manner ("do what I can" mentality), these respondents used *ouen* consumption as a way to alleviate their own emotional distress—which is unlikely to be sustainable in the long-term and is reflected in their lower past experience over the years.

### DISCUSSION

This paper analyzes *ouen* consumption—a new type of ethical consumption. It was found that the media strongly influenced Japanese consumers who chose consumption as a means to help reconstruction efforts after 3.11. Though confusion about the safety of Tohoku products resulted in avoidance immediately after 3.11, media coverage of "harmful rumor damage" re-framed such avoidance as misinformed and damaging behavior. Also, the very name "*ouen*" (aid) signals that such behavior helps support fellow citizens in need—clearly a "more ethical" alternative to perpetrating "harmful rumor damage."

Several cultural factors underlie the acceptance of *ouen* consumption as a legitimate form of helping behavior in the aftermath of 3.11. Unfamiliarity with and skepticism of non-profits has resulted in consumption being perceived as a more convenient, trustworthy, and effective alternative to traditional helping behaviors such as volunteering and donating, which are more commonly practiced (and researched) in the West (e.g., Reed et al. 2007). Also, trust in big business and marketplace institutions has helped overcome concerns about the "safety" of Tohoku products. Yet, for the most vulnerable segments of the population, pregnant women and small children, there is still lingering hesitancy toward consumption.

In line with past research that analyzed empathy and helping behaviors, we found that empathic concern for 3.11 victims led to helping behavior with an emphasis on other-focused altruistic motivations, while emotional distress led to behavior focused on alleviating discomfort for the self (Batson et al. 1987). In addition, those expressing more empathic concern had higher frequencies of *ouen* consumption. This potential relationship between the type of empathy and frequency of helping behaviors over the long-term merits further study.

Due to its exploratory nature, this study is limited. It only considered mothers who have engaged in *ouen* consumption, whereas others may have different perceptions regarding *ouen* consumption, "harmful rumor damage," and helping behaviors in general. While focus groups allowed for collection of diverse opinions, social desirability bias may have influenced discussions (though this was mitigated by grouping similar respondents). Future research can look at naturally occurring data (Silverman 2013) to test these findings. For example, analysis of mass media, personal blogs, and other media can clarify how the use of "harmful rumor damage" developed and influenced people's consumption after 3.11.

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**Table 1 Respondent Characteristics**

Group	Focus Group Session	Respondent ID	Age	# of Children	Age of Youngest	
Group 1: High past experience	1-1	1A	53	2	6	
		1B	45	2	17	
		1C	44	2	9	
		1D	33	1	1	
		1E	47	1	18	
		1F	56	3	18	
	1-2	1G	53	2	17	
		1H	41	1	3	
		1I	33	2	5	
		1J	37	2	9	
		1K	54	2	24	
		1L	44	1	19	
	Group 2: Moderate past experience	2-1	2A	40	3	7
			2B	55	2	21
2C			42	1	9	
2D			33	1	8	
2E			46	2	13	
2F			57	1	30	
2-2		2G	53	1	17	
		2H	46	2	17	
		2I	39	2	7	
		2J	36	1	2	
		2K	47	2	15	
		2L	59	2	21	

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# Passion, Goals and Word-of-Mouth Behaviour in a Classical Music Context

Eudora Tong, RMIT University, Australia  
Dr. Christopher White, RMIT University, Australia  
Professor Tim Fry, RMIT University, Australia

## ABSTRACT

In the words of D'Andrade (1992), in order to understand people, one needs to understand what leads them to act the way they do. In this regard, although the state-of-the-art Model of Goal-directed Behaviour (MGB) (Perugini and Conner 2000; Perugini and Bagozzi 2001) improved the Theory of Planned Behaviour (TPB) and amalgamates the automatic (past behaviour), affective (anticipated emotions), motivational (desires) aspects of decision-making and the role of goals to account for behaviour alongside other components of the TPB, it lacks in a consideration of intrinsic desires to explain why one goal is deemed more important than others and subsequently chosen (Perugini and Bagozzi 2001; Bagozzi and Dholakia 1999). Whilst the MGB perceives desires extrinsically To overcome the MGB's lack in evaluating the influence of intrinsic desires on behaviour, this study incorporates passion in the MGB as a manifestation of one's intrinsic desires. That is, desires would significantly predict passion since one's desire for a goal increases when the goal holds self-relevance and is valued for its meaningfulness and importance (Kopetz, Kruglanski, Arens, Etkin, and Johnson 2012). Hence, one's behaviour is perceived not only as based on its usefulness, pleasantness, or relative ease of accomplishment towards a goal (Perugini and Conner 2000), but also out of passion – i.e., its worth and importance to oneself (Vallerand 2008; Cardon, Vincent, Singh, and Drnovsek 2009; Murnieks, Mosakowski, and Cardon 2012). With passion-induced activities being personally relevant and important (Vallerand et al. 2003), the inclusion of passion is perceived to enhance the MGB by accounting for goal relevance, wherein the goal one is passionate about has a higher priority over other competing goals to result in that particular goal choice (Fishbach, Shah, and Kruglanski 2004; Kopetz et al. 2012). Therefore, the overarching question of this research is to explore the role of passion and goals in predicting marketing-related behavioural outcomes towards goal achievement, intrinsic desires instead entail in an activity becoming worth doing for its own sake (Nakamura and Csikszentmihalyi 2002) and desired as an end in itself (Davis 1984). This suggests that two forms of desires exist.

In support, Davis (1984) alluded to the existence of an intrinsic form of desires by distinguishing between appetitive desires (pleasure; occurring when one “simply” wants to do something without a reason to) and volitive desires (action; based on reasons). Additionally, Linstead and Brewis (2007) presented a two-sided understanding of desires as either based on a lack of something or as a non-instrumental flow of energy so that behaviour is not only the replenishment, accumulation or filling of gaps, but also, the squandering of excessive amounts of desire (passion/energy) available (Bataille, 1985). Therefore, intrinsic desires are unlike extrinsic desires as extrinsic desires desire something for its perceived conduciveness to something else one desires whilst intrinsic desires exist as an enjoyment/energy; without the necessity for a reason. In this regard, as consumers' goals are also based on subjective variables (Kangun, Otto, and Randall 1992; Johnson and Garbarino 1999), perceiving an intrinsic outcome to desire and goal relevance during decision-making is necessary.

This paper first reviews the literature on passion. Next, passion's relationships with desires and behaviour are demonstrated. After the justification for passion to be incorporated in the MGB has

been made clear, the paper presents a more comprehensive, revised version of the MGB by additionally integrating a measure of word-of-mouth behaviour. In the proposed model, participants' attitudes, subjective norms, anticipated emotions, perceived behavioural control, desires, intention, passion and word-of-mouth behaviour are operationalised in the context of live classical music concerts. Finally, the implications of passion for marketing strategy are discussed.

## Passion as an intrinsic construct

The intrinsic nature of passion can be justified in three ways. First, passion is defined as a strong inclination towards an activity that people like, invest time and energy in, to which they consider important (Vallerand et al. 2003; Baum and Locke 2004). Second, passion is associated with flow and intrinsic motivation, given highly passionate people's absorption at meaningful and important activities (Nakamura and Csikszentmihalyi 2002) and their autonomous internalisation and engagement in activities out of pleasure and enjoyment (Mageau et al. 2009; Vallerand 2008). However, passion's strong inclination and enduring identification towards an activity differentiates itself from flow and intrinsic motivation which are viewed respectively as a consequence of passion and stemming from the person-task interaction at a short-term level (Vallerand et al. 2007; Deci and Ryan 1985). Thus, passion is shown to be innate.

Third, Vallerand's three criterion deemed necessary for passion's development: selecting an activity choice that reflects one's identity and interest, perceiving the activity as important (value) and by having a greater internalisation of the activity represented in one's identity (Vallerand 2008, 2012; Mageau et al. 2009; Vallerand et al. 2003) justifies passion as an intrinsic construct. Accordingly, activity valuation is perceived as the intensity feature that underlies activity internalisation and the development of passion. Thus, interesting but unimportant activities (Vallerand 2012) are not the same as passionate activities that people are intrinsically motivated towards. In this regard, passion, as an intrinsic construct, is incorporated to account for the intrinsic expression of desire missing in the MGB.

## The relationship between passion and desires

Research has perceived passion as inseparable from the concept of desires. Just as desires are aspirant e.g., “to long or hope for”, passion is also perceived to function in relation to a lack - i.e., a passion for something or someone (Linstead and Brewis 2007; Bataille 1985). However, although synonymous to desire, passion is deemed a more intensified form of desires. Through terms such as zeal and intense longing, the fire of desire has been alluded to in studies of passion (Linstead and Brewis 2007). Further, whilst having or feeling desire appears more general, passion indicates a focused, powerful emotion (Cardon, et al. 2009), with Hume (1739, Section III, p. 413) stating: “...reason alone can never be a motive to any action of the will; and that it can never oppose passion in the direction of the will.” As such, this study perceives two manifestations of desires, first, intentions represent an extrinsic extension of desires and second, passion represents an intrinsic extension of desires. Therefore, this study proposes that:

*Hypothesis 1: Desires will be a significant predictor of passion.*



### The relationship between passion and behaviour

The influence of passion on behaviour has been examined across varied domains (e.g., music, sports, business, entrepreneurship), but these either focused on the outcomes of passion or measured brand passion in terms of brand love (Albert, Merunka, and Valette-Florence 2013; Carroll and Ahuvia 2006). Although Swimberghe, Astakhova and Wooldridge (2014) applied Vallerand's passion scale to brands, demonstrating that brand identification, not susceptibility to influences, predicts harmonious brand passion which in turn positively influences positive word-of-mouth behaviour and willingness to pay a premium price, formal  $R^2$  values were not displayed; neither did they distinguish susceptible influences from attitudes or consider the roles of effort and anticipated emotions in influencing behaviour. As such, Swimberghe et al. (2014) did not comprehensively incorporate the processes that account for how the initial attraction develops into passion, i.e., the socio-psychological antecedents of desire. Thus, the mediating effects of desires on passion have to be more deeply reviewed. In other words, the present study differs from Swimberghe et al's (2014) in that it evaluates passion towards an experiential behaviour rather than a non-effortful liking of a brand.

In general, higher levels of harmonious passion have been found to stimulate a significant motivational force to increase persistence in meaningful activities and behaviour as it entails in a flexible, pleasurable and adaptive engagement of the activity (Murnieks et al. 2012; Wang and Chu 2007; Amiot, Vallerand, and Blanchard 2006). By contrast, obsessive passion controls people so that they risk experiencing conflicts and other negative affective and cognitive consequences during and after activity engagement (Volpone, Perry and Rubino 2012; Philippe, Vallerand, Richer, Vallières, and Bergeron 2009; Ratelle, Vallerand, Mageau, Rousseau, and Provencher 2004). As consumers attend classical music concerts to gain hedonic experiences (Walmsley 2011, 2013; Pulh, Marteaux, and Mencarelli 2008) so that passionate activities tend to be leisure activities (Mageau et al. 2009) unlike goal-driven activities e.g., studying or mastering a statistical course (Leone, Perugini, and Ercolani 2004), negative anticipated emotions are perceived as irrelevant to the classical music context since people could choose to not go if attending a concert evokes negative anticipated feelings. Moreover, Perugini and Bagozzi (2001) noted negative anticipated emotions to be insignificant across different samples and research topics. Therefore, as understanding the development of harmonious passion is more appropriate for this study's context, obsessive passion will not be considered further.

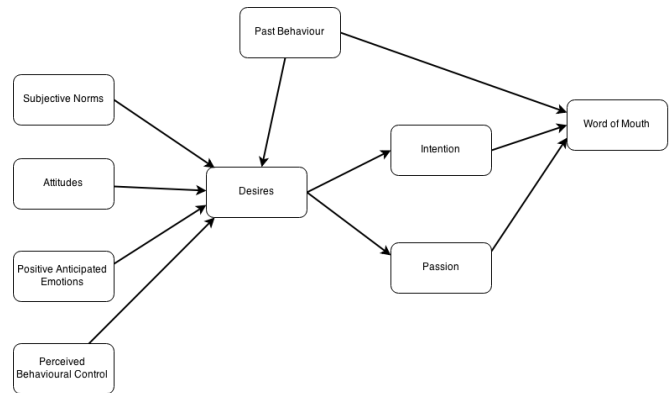
As word-of-mouth communication is the most successful means of promotion of the arts (Reichheld 2003; Bennett and Rundle-Thiele 2005, Radbourne 1999) and that the MGB does not explicitly define or measure behaviour in marketing terms, this study posits relevance in focusing on WOM behaviour. Word-of-mouth behaviour is perceived when consumers say positive things (Eisingerich, Auh, and Merlo 2013; Trusov, Bucklin, and Pauwels 2009; Boulding, Kalra, Staelin, and Zeithaml 1993) and recommend the organization or service to others (Zeithaml, Berry, and Parasuraman 1996). Therefore, this leads to the hypotheses that:

*Hypothesis 2: Passion will be a significant predictor of word-of-mouth behaviour.*

*Hypothesis 3: The passion model will explain more variance in word-of-mouth behaviour than the MGB.*

Figure 1 is the theoretical model proposed in this study and displays the relationship between passion and other constructs in the MGB

**Figure 1 The Model of Passion and Goal-Directed Behaviour (MPGDB)**



### METHODOLOGY

Web-based survey data was collected from fifteen organizations involved in the production and performance of live classical music concerts. These organizations ranged from large Symphony, Philharmonic, youth and community orchestras to key educational and media proponents of classical music. As such, the unit of analysis of focus for this study is the consumer of live classical music, i.e., clients of classical music organizations and people who have attended live classical music concerts before.

### SAMPLE AND SCALES

The fifteen professional music organizations assisted in the research by advertising the survey link in their weekly and fortnightly e-letters. In exchange, the aggregated result summaries from the study will be provided to them. Additionally, incentives were provided: Participants will receive a promotional code to an exclusive 20% discount on standard-priced concert tickets and a chance to win one of two double passes to another classical music concert. This resulted in a total of 444 useable questionnaires received. The scales used in this study were critically selected from high quality journal articles and adapted to suit a classical music concert context. Word-of-mouth behaviour (WOM) is measured on seven-point likert scales ranging from 1=Strongly disagree to 7=Strongly agree. The two WOM items were: I mention attending classical music concerts to others quite frequently and I've told more people about attending a classical music concert than I've told about most other entertainment events. Passion, Attitudes, subjective norms, anticipated positive emotions, desires, intention and perceived behavioural control were also rated on seven-point scales, with the scale content in line with Perugini and Bagozzi's (2001) study.

### ANALYSIS

After removing cases with missing responses, the measurement models were inspected using Confirmatory Factor Analysis in AMOS 22. Each of the constructs were purified on the basis of low factor loadings under 0.3, high standardised residual covariances, high modification indices and high correlations. The remaining assumptions of multicollinearity, outlying cases and nonnormality were addressed. In achieving Average Variance Extracted (AVE) scores ranging from .563 to .849 and Composite Reliabilities ranging from .785 to .944, the AVE scores and Composite Reliabilities were all greater than the recommended .50 and .70 respectively (Hair, 2006). Moreover, the AVE for each construct exceeded the squared correlations between each construct and all other constructs in the model attesting to discriminant validity thus. Construct validity was achieved.

Next, the structural relations between the constructs were examined for common method bias (CMB) using exploratory and confirmatory Harman's one-factor test. These results showed that CMB is not an issue in this study. In arriving at the most parsimonious and robust conceptualisation, we are now confident to address the hypotheses.

## RESULTS

The MPGDB produced a Chi-square of 602.851 with 237 degrees of freedom. The CFI was .951, NFI .922, RMSEA .059, indicating a good data to model fit (Hair, Black, Babin, Anderson, and Tatham 2006). As such no further model re-specification or modification was deemed necessary. Table 1 shows the estimates for the paths and the significant levels between the constructs. Hypotheses 1 and 2 are supported.

**Table 1**  
Standardised regression estimates,  
significant levels and hypotheses

	Parameter		Estimate	<i>P</i>	Hypothesis
Desires	<---	Attitude	.495	.013	
Desires	<---	Subjective Norms	.227	.005	
Desires	<---	Positive Anticipated Emotions	.163	.025	
Desires	<---	Perceived Behavioural Control	.183	.002	
Desires	<---	Past Behaviour	.196	.007	
Intention	<---	Desires	.780	.020	
<b>Passion</b>	<---	<b>Desires</b>	<b>.783</b>	<b>.010</b>	<b>H1 supported</b>
<b>Word-of-Mouth</b>	<---	<b>Passion</b>	<b>.775</b>	<b>.006</b>	<b>H2 supported</b>
Word-of-Mouth	<---	Past Behaviour	.160	.014	
Word-of-Mouth	<---	Intention	-.036	.557*	

\*Intention significantly predicted word-of-mouth when passion was removed (0.452,  $p < .006$ ).

To ascertain whether the passion model has better predictive ability than the MGB, it was compared with the MGB. The test of the MGB showed that the variance predicted by WOM was 27.6%. In turn, the variance predicted by WOM in the passion model was 62.9%. As WOM's  $R^2$  value is lower in the MGB compared to the passion model, H3 is supported; the MPGDB explains more variance in WOM than the MGB.

## DISCUSSION

A key question in attempting to understand consumers' behavioural responses towards classical music performances pertains to the role of passion. This study therefore set out to assess the impact of passion on consumers' word-of-mouth behaviour towards classical music concerts when placed within the MGB.

Beginning with an overview, the MPGDB in this context of classical music performances affirms the well-known MGB theory,

wherein attitudes, subjective norms, positive anticipated emotions, perceived behavioural control and past behaviour are key antecedents of desires. The strongest predictors of desires are listed in this order: attitudes, subjective norms, past behaviour and perceived behavioural control, with desires predicting both passion and intention. Past behaviour is clearly a valuable factor in goal-directed behaviour seeing as it directly predicts not only desires but also word-of-mouth behaviour. This study has also shown that passion significantly predicts word-of-mouth behaviour. This influence of passion on behaviour concurs with other studies on passion (Vallerand et al. 2003; Mageau et al. 2009) in that harmonious passion leads to motivational, enthusiastic and persistent behaviour and positive word-of-mouth on brands (Swimberghe et al. 2014).

More importantly however, this is the first study, to our knowledge, to combine the roles of passion and desires in a model of goal-directed behaviour and to examine the role of passion in the context of classical music performances. In consequence, the contribution of the present study is directed to two main areas. First, it adds knowledge to the domains of passion and psychology. In enriching existing passion research, there is now a direct relationship between desires and passion. Prior findings in the literature used the term 'desire' to subsume passion, perceiving passion as a synonym for desires. However, this study has shown that desires and passion are distinct constructs and that desires significantly predict passion. Hence, the association of passion with desires is made less ambiguous and credibly demonstrated in the passion model with good fit statistics. In light of the definite link established between desires and passion, future models on passion will now be able to incorporate desires as an antecedent to passion (Vallerand et al. 2003).

The MPGDB also makes a small but meaningful contribution to the Theory of Reasoned Action and Theory of Planned Behaviour as it evaluates behavioural consequences from both direct and indirect influences of behaviour. The MPGDB's measures more adequately reflect the behavioural selection process inherent to word-of-mouth behaviour to enhance the prediction of WOM as desires are now perceived as not the only missing motivational element to energise intentions (Perugini and Bagozzi, 2004). Instead, passion has been validated as an explanatory variable determining motivation to energise WOM behaviour.

The second main contribution of this study pertains to the MPGDB's capacity to more comprehensively account for the consumer decision-making process. In this regard, passion is evidenced to influence consumer decision-making, such that as consumers desire classical music performances more, their desires manifest into both intention and passion. Unexpectedly, passion removes the positive effects of intention on word-of-mouth when it is included in the MGB so that intention effects are no longer significant. As passion and intention were not highly correlated (0.6), high implied correlations were not responsible for the insignificant effects of intention. The apparent power of passion over intention therefore provides new insight into the prominent role of passion in guiding marketing-related behavioural responses. However, whether this phenomenon only pertains to word-of-mouth behavioural responses is still unclear. Thus, an avenue for future research could be to explore passion's relationships with other constructs e.g., switching behaviour. Overall, the result findings showed that the MPGDB explained more variances in word-of-mouth behaviour compared to the MGB, thus strongly justifying the incorporation of passion in the MGB.

## MARKETING IMPLICATIONS

To this end, marketers should realise that passion is a concrete and measurable construct that accounts for variations in consumers'

behavioural responses. In other words, should consumers not develop a harmonious passion for classical music performances, perceiving such activities as part of their identity and important to them in the first instance, the effectiveness of marketing strategies would be limited since these consumers may not value the pursuit of such services long-term (Vallerand et al. 2003). Moreover, as this study has shown, passion is positively related with word-of-mouth behaviour hence incorporating passion in marketing strategies is beneficial.

As such, important practical implications relevant to marketing strategies can be derived from the results of the study: how to encourage the development of harmonious passion and how to increase positive word-of-mouth behavioural responses. As attitudes and subjective norms were the two stronger predictors of desires, strengthening their relationships would lead to higher levels of desires, and in turn, promote passion. That is, to enhance consumers' attitudes towards classical music performances, marketers could endeavor to change consumers' current beliefs, add new beliefs, change the importance of their beliefs and change their beliefs of ideal classical music performances. In this manner, strategically repositioning classical music performances in consumers' minds will strengthen attitudes' relationship with desires. To enhance subjective norm's relationship with desires, the roles of aspirational groups and group influence strategies can be applied. Particularly drawing on normative and identification influences, targeting consumers' need for belongingness and gaining support from their significant others towards classical music performances would be beneficial.

However, in order for desires to manifest into passion and subsequent WOM behaviour, consumers must first value and identify with classical music performances. In other words, the identity of a concert audience must align with consumers' own self-identity such that the pursuit of classical music performances is done out of self-interest and not just because of external influences e.g., subjective norms, perceived behavioural control etc. Therefore, as "getting someone to do something will only be effective if an intermediate "getting someone to be" also takes place (Bianchi 2011), marketers must consider how classical music performances can be perceived as important and contributes to deep fulfillment to consumers (Floch 2001), in order to foster passion.

### LIMITATIONS

Although providing encouraging results, this study has its limitations. Foremost, with it being a result of convenience sampling, the results may not be representative of the population. Therefore, now that that applicability of the passion model has been demonstrated, future researchers could obtain more representative samples to study the similar and/or different effects of passion on positive behavioural responses towards classical music performances to verify our findings. Second, other loyalty behavioural responses exist that could be helpful to test: repurchase behaviour, customer voluntary participation, switching behaviour etc. (de Rooij 2013; Collier and Bienstock 2006, Zeithaml et al. 1996). However, as word-of-mouth communication is the most successful means of promotion of the arts (Radbourne 1999), we view this omission as a trade-off to probe more intensively into word-of-mouth behaviour. Additionally, other antecedents to passion e.g., identity may also be considered. Finally, future research could build a more comprehensive theoretical model which incorporates the moderating effects of demographic (age, gender, education level, occupation and socio-economic category), that could potentially influence positive behavioural responses towards classical music concerts.

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# “I will Give Gold, Silver and Gold Coins”, says Bride’s Mother: Ethnomusicology of Consumer Culture in the Ritual Songs in India

Ram Manohar Vikas, Institute of Rural Management Anand (IRMA), India

## ABSTRACT

Anthropologists argue that folk songs are mirror of the society. Holbrook and Hirschman (1982) contend that music is a vehicle through which the experiential aspect of consumption is expressed. This expression of desire is made through the different genres of music (Shankar 2000) from needle drop, used as a vehicle to express a desire of a product attribute (Scott 1990) to folk songs used in the political movements to express desire of a political change (Wang 1965). Wang (1965) contends that emperor Yui of Hsia dynasty gauged opinion of his subjects by listening to the folk songs and ballads. Since ritual songs are performed in a group it represents the desire of the society.

In consumer research desire (Belk, Ger and Askegaard 2003) and rituals (Bonsu and Belk 2003; Rook 2001) have been studied extensively. However, there are few studies on collective expression of desire. Moreover, usage of folklore in consumer research is less as majority of study has been conducted in the western countries in urban context. In developing countries a significant proportion lives in villages and folklore is an important medium of expression. Herkovits (1964) contends that folklore reveals aspirations, values and goals of a society and therefore study of folklore is important. Thus, my study of ritual songs would offer a new insight to the existing literature.

## DESIRE AND CONSUMER DESIRE

There is no agreeable definition of desire. Different disciplines use desire in different way. In economics desire is used for the word preference (Fullbrook 1996). In political theory the word will is used instead of desire (King 1987). Sartre has used imagination and consciousness for desire (Fell III 1965). Anscombe (1976) has used intention for desire. The other meanings attached to desire are concern (Roberts 2003), passion (Hume 1888), instinct or drive (Freud 1949), motivation (Hume 1888), wish and hope (Staats and Stassen 1985).

In consumer theory the conceptualization of utilitarian consumption is different from passionate or hedonistic consumption (Okada 2005). The former is assumed to be useful and the latter is considered as wasteful (Voss, Eric and Bianca 2003). This is because passion is more violent than desire (Deleuze 2001). It is like an instinct or drive (Freud 1949) often termed as biological in nature. The direction of passion is towards sensation than desire. The action itself gives satisfaction than the object for which action is performed. For example, the compulsive consumer gets satisfied because of the action of consumption is purchase of an object, than the object of purchase (Belk et al 2003).

Too much focus on passion, in the sense of personal gratification was critiqued by many theorists. Durkheim (1951) argued that the notion of indulging personal gratification leads to individualism and collectivity is threatened with disorder and disintegration. This further leads to anomie in the society and subsequently loss of the individual. Beyond the loss of individual and the disintegration of society it also leads to the ecological loss (Schor 1998).

So far the location of the object of desire was external to the body of the agent. As soon as the body itself became the object usage of the word desire increased. The theorists who use body to explain the word desire have been called postmodernists. Lash (1985, 2) contends that “postmodern is inextricably bound up with a theory of desire”. Lacan and other post-modernist theorists have defined desire

in the sense of sexual satisfaction. Satisfaction has been termed as discharge and pleasure as orgasm in the libidinal economy of Reich (Deleuze 2001). However, the satisfaction is not complete. The object of desire, *objet petit* in Lacanian terminology, is not the object that is the intentional object in traditional sense but cause of the desire.

The extant conceptualization of desire has missed the relational component and is very individual centric. However theorists also agree that society play an important role in influencing desire. Belk et al (2003) argues “Consumer desire is a passion born between consumption fantasies and social situational context” (Belk et al 2003, 327). In this article we will observe how socio-situational context itself expresses itself as collective desire. The article also shows how desires of different actors of the society interact. In this interaction there is also tension between different expressions of collective desires.

## METHODOLOGY OF STUDY

The study was conducted in a village in the state of Bihar in India. The author lived in the village for one year. The name of the local language spoken in the village is Bhojpuri (Tewari 1960). The majority of the population in the village is Hindu. The study was conducted by participating in the marriages in the locality to immerse in the reality (Thompson and Torester 2002). The women sing ritual songs in a natural way during the marriages (Henry 1988). Moreover, women sing ritual songs in a group. If one female forgets the other reminds. One can argue that ritual songs are like social memory (Olick and Robbins 1998).

The songs were recorded and transcribed. The lead singers were interviewed to understand the meaning of the songs (refer Table 1). Songs from *chapbooks* (Servan-Schreiber 2006) were also referred. Books published by Bihar Rastrabhasha Parishad and Bhojpuri Academy were also consulted for referential adequacy (Erlanson, Harris, Skipper and Allen 1993). The songs were analyzed by interpretive method. The validity and the credibility of the study methods were supplemented with peer interviewing and negative case analysis (Spiggle 1994). The negative case analysis was conducted on songs against dowry.

## Expressions of Desire

### *Material Desire of “the world of goods”*

O millionaire grandfather listen to my words

Your *Samadhi* (groom’s grandfather) is very bad he is asking Maruti in dowry

There is a room on the top of building that has a door

I will give Maruti and ask the driver to stay

O millionaire uncle listen to my words

Your *Samadhi* (grooms father) is very bad he is asking gold and jewelry in dowry

There is a room on the top of building that has a door

I will give Gold; I will give jewelry and ask the goldsmith to stay

O millionaire brother listen to my words

Your *Behanoi* (the groom) is very bad he is asking AC, cooler and TV in dowry

There is a room on the top of building that has a door

I will give TV; I will give AC and ask the technician to stay

(Informant A)

The women are complaining that there is a demand of high dowry from the groom's side. Modern gadgets like Maruti (popular car brand), air conditioner (AC), cooler (desert coolers), and are being demanded as dowry. The women know that the bride's father, uncle and brother are very rich and they can afford to fulfill the groom's demand. They make sarcasm by referring the groom, as driver because he wants a car, as goldsmith because he has affection for gold and technician because he has affection for TV and AC. However, they concede that the groom is worth enough to have his demands fulfilled.

Coolers and AC cannot be used in the rural areas because of the problem of electric power. However, lack of power is not impedance and the products are being desired. These goods are gifts (Mauss 1970) but beyond the realm of mere competitive display they form a part of an information system (Douglas and Isherwood 1979). Maruti, TV, coolers and AC are now important members of "the worlds of goods" (Douglas and Isherwood 1979) that communicate solidarity with the high middle class family in India and distinction (Bourdieu 1979) from the lower class. In India many households own a TV by the virtue of marriage (Varman and Vikas 2005).

#### *Desire of brands*

Putting the bricks made a Palace  
In that palace sleeps which king?  
Moving the *benā* (hand fan) the grandmother says smiling  
What gift will you give to your daughter?  
I will give elephant, give horse, a big palace and a Maruti with  
a driver  
Moving the *Bena* (hand fan) the aunty says smiling  
What gift will you give to your daughter?  
I will give gold, will give silver by enchasing *mohar* (gold  
coins)  
I will give a Tanisq bracelet studded with Diamond  
I will give *kangan* (bracelet) of pearl

(Informant A)

In this song the women of the family take pride in giving costly branded gifts. To get branded jewelry old golden coins, *mohar*, once treated as a family relic is being sold. The lead singer of this song is woman from a rich family and she is also educated. The song represents that offering dowry is not a curse. The bride's family is rich enough to give any gift to their girl. All symbols of richness like gold, diamond and pearl have been mentioned in this song. Maruti as a car brand has made an important influence on the society. It represents car. Even in the usual conversation it is the brand of the vehicle that is used to represent the vehicle.

The grandmother who is old is mixing both old and new means of conveyance. She wants to give both animals like elephant and horse as gift and also a Maruti car. The aunty who is more updated and modern says that she will give Tanisq, a high-end brand of jewelry and diamond, an object of desire in contemporary times (Chaudhuri and Majumdar 2006). In India sales of branded jewelry is only a very small percentage of the sales of non-branded jewelry but it is growing. Traditionally consumers purchase jewelry made by family goldsmiths than a corporate house.

#### *Desire of expression of love*

O Bride! how have you become so thin in your father's home?  
O Groom! I was worried that marriage day is far off  
O Bride! why didn't you made a phone call I would have come  
quickly  
O Groom! I could not make you call because my father was at  
home  
O Bride! why didn't you send me message (SMS) I would have

come quickly

O Groom! how could have I sent you message phone (mobile)  
was with uncle

O Bride! why didn't you send me Maruti I would have come  
quickly

O Groom! how could have I sent you Maruti my brother was  
at home

(Informant A)

In this song the conversation is between the bride and groom. It appears that both bride and groom know each other and have met before marriage. However, as per the tradition the bride and groom are not supposed to meet each other before marriage. In arranged marriage the bride and groom are two unknown people and the idea of meeting and conversation between the two is romantic.

Traditionally marriage is arranged by the parents of the bride and groom and neither of the two; either the boy or the girl, have any proactive role in choosing life partner. However, this song presents a very different picture. This song is an expression of desire. I was informed that with the advent of mobiles there are cases when brides and grooms talk to each other before marriage. This song also presents a picture of constraint on the girl's side. The girl wants to do many things but for the presence of the male members of her family. On one hand this song presents a modern picture it also put forward the remnants of the traditional patriarchal control.

#### *Desire of possession of relation*

O mother-in-law do not call groom yours now the groom is mine  
When the groom was in school he was yours  
Now he goes to the office in Maruti he is mine  
O mother-in-law do not call groom yours now the groom is mine  
When he was in dearth of money he was yours  
Now he brings bag full of money he is mine  
He can get me an ATM card he is mine  
O mother-in-law do not call groom yours now the groom is mine  
When he was in rags and old clothes he was yours  
Now he wears suit and tie he is mine  
O mother-in-law do not call groom now the groom is mine

(Informant A)

The women are telling the future mother-in-law of the bride to relinquish control from the ownership of her son. They contend that before marriage the son was hers but after marriage the son will be owned by his wife. The mother of the groom is no way near to the place where this song is being sung. Mother of the boy is not part of the marriage party that comes to the bride's house. Still, the mother of the boy is being addressed to. Indirectly the women are asking the groom to transcend from mother's son to responsible husband. Raheja and Gold (1994) has given examples of many folksongs in which the bride takes charge over the mother-in-law and on the husband through the songs.

The women through the song are advising the bride the bride to take control on commodities and over her husband to enjoy all the materialist things like car, money and clothes. The bride is indirectly being asked to take control of her husband as her father has paid a high sum of dowry. Offering hefty dowry is a sign of status. The groom also gets more dowries if his family status is high. Exchange of dowry has more than economic value. Dowry is also a social indicator of the quality of life both for the bride side as well as the groom side.

**Desire for Desire**

O Shiva! Abandon the primitive ways and adopt new fashion  
 Respected Shiva abandon *Jata* (hair locks) and adopt long hairs  
 After having long hairs you call yourself hero  
 O Shiva! abandon the primitive ways and adopt new fashion  
 O Bhola! (Shiva) do away with the Nandi bull and use Maruti  
 car

After sitting in Maruti car call yourself officer  
 Respected Shiva, abandon *damru* (hour glass shaped percussion  
 equipment) and use radio

After playing radio and tape call yourself hero  
 O Bhola ! Abandon the skin of deer and get into suit boot and tie  
 After getting into suit boot and tie call yourself a college student  
 (Informant B and D)

Shiva is a Hindu god worshipped for getting a nice husband. Shiva is also a god of potency. Hindu women offer prayer to Shiva just before marriage and request for a nice conjugal life. Shiva has a very strange depiction in Hindu mythology. He is black in color with ash painted body. His matted hairs locks are disheveled and is semi-nude clad in deer skin. He moves on a bull named Nandi which is not a very fast mover. Women in the prayer desire Shiva as husband. The groom is visualized as Shiva.

The women are not very happy with the way Shiva carries himself. They want him, Shiva, who they think as their husband to make some amends. They request him to change his hair style, ride Maruti instead of bull, and use cassette recorder and radio instead of *damru*. The women desire Shiva but they want him to have a modern outlook. There is an emphasis on a) the body; for example change in hair style and youthful appearance and b) the clothes, as two important dimensions of consumption (Kumar 2003). The dimensions enumerated in the song are the latest fashion, hair style, mode of conveyance, music system, dress, employment and appearance.

**The Dialogicality of desire**

To understand the expression of desire it is also important understand the pain of desire. Plato has defined pain in terms of passion as 'passion of soul'. This will help in understanding the negative effects that some of the desires expressed above are bringing into the society. In this context dialogicality is an important concept as contended by Markova (2003) "Dialogicality is the capacity of the human mind to conceive, create and communicate about social realities in the terms of 'Alter'". (Markova 2003, xiii). The alternate collective desire will help in understanding the validity of the collective desire expressed above.

The pain of desire is not expressed during the performance of the ritual songs during marriages as it is the occasion of happiness. However, the happiness expressed may not be the true and mere observation of the action will not help in understanding the reality. Women nicely adorned and happily singing ritual songs; the cacophony of sound boxes, children running around and intermittently also comparing redness of tongue after eating a betel leaf. Therefore a negative case analysis (Spiggle 1994) becomes important. The song below brings the negative effects of the collective desire expressed above. The informant of the song is a girl who is eldest among eight sisters. Her age is eighteen years and she belongs to a poor family.

When girl is getting married people ask for TV and vehicles,  
 If the demands are not fulfilled girl is getting killed by poison,  
 If I had known that you will be burnt in the fire of dowry,  
 I would not have committed sin by sending you *sasural*  
 (Husband's House),

The entire day you would have cried, in the night you would  
 have called O Mother!

You would have cried in agony while committing sin,  
 What shall I say of my fate O my darling daughter,  
 Why did you come to a house of a poor?  
 You made me lifeless while I am alive,  
 Who shall have done the crime of sending you *sasura*?  
 I should not have married you would have kept you unmarried,  
 I could have listened to the gossip of others but would have kept  
 my heart (the girl),  
 The greediness has changed the ethics and tradition,  
 Poison is being administered after bringing the lovely ones,  
 The rule of British was better than this,  
 I would not have committed sin by sending you *sasural*  
 (Informant E)

The negative consequences of dowry (Sharma 1993) are expressed in this song by the bride's mother. She contends that the bride has been killed because she could not bring TV and vehicle (the interpretation of vehicle among rural poor is a motor bike). The same objects that are desired by many in the society as evident in the songs above. It is not that this mother did not have desire of these products but she could not afford as she is poor. The desire of possession of products is hence termed as greediness but it also indicates that desire for certain specific products is there in the society though those desires have a negative consequence in this case.

The desire to change the relationship expressed in earlier songs have been questioned. The change in the social norms and relationships is represented in the sense of ethical behavior. The mother argues that earlier period; "British Rule" has been metaphorically used as sense of time in rural areas is in terms of event, was better. She actually means that social norms were in place and the relationship was not monetized. Death as a consequence of dowry was something unheard off. Oldenberg and Rao (2002) inform that the burning of bride for dowry was reported for the first time in India in 1984.

**DISCUSSION AND CONCLUSION**

In this study it is evident how desire is expressed through, the object, the agent and the social relationship. In the first dimension there are two sections; the specific material object and second, the brand of the object. The objects mentioned in the data are objects of desire of the contemporary society.

In India for certain items, jewelry in particular, brand was the local jeweler family. Every goldsmith had family as a client and not an individual as a client. The relationship between the jeweler and client was transferred from one generation to another. The relationship between the jeweler and client was based on trust and faith that was dictated by the history (Vidal 2003). However, the earlier structure has become weak (Karanth 1996) and brand which is assumed to be more secular is making inroads. The concept of gold jewelry as a quasi-money (Vidal 2003) has also been replaced. It is now an expression of desire, a desire for aesthetics and desire for empowerment.

As a member of the society the consumer desire is to change the relationship and social norms. The change is desired to happen in the basic unit of the society, the family (Karve 1968). The son is asked to break away from the mother and vice versa. Similarly when the pre-marital romance is desired there is a desire to transcend some of the norms that is there in the Hindu society as even today majority of the marriages in rural areas are arranged marriages. The norm of the arranged marriage is that both bride and groom should not have any contact. The expression of desire contrary to the norm is being expressed. There is a desire to have a verbal or digital contact before marriage.

The other norm that is questioned in the song is the patriarchy of father, uncle and brother. They are the impedance in the way between



the prospective bride and groom. It is also expressed that social norm of control on female has led to her poor health. The poor health can be metaphorically treated as poor treatment of feminine freedom by the male members of the family. The desire of freedom is expressed in the songs.

In this article I observe conceptualization of desire as a collective desire. It is important to understand the collective desire of a society to understand its locus of cultural movement. To understand collective desire one has to observe the ritual processes of the society. With the change in collective desire the rituals itself get changed as highlighted by Henry (2003). The change is made to satisfy the desire of being seen and part of the "dream world" (Williams 1982). The ritual processes become agency of cultural change and the site of ritual performance becomes the site of consumption.

The other important issue that has emerged in this paper is the study of folklore in understanding the collective desire. This is true in any part of the world but has a strong relevance in a country like India that has 70% of the population staying in rural areas and theorist invariably agrees on the rich folk traditions of the villages. This study gives a description of collective desire through ritual songs.

The description of the songs indicates a collective desire for things and the expression of desire indicate the active participation of consumers in the process of meaning creation of the objects of consumption. This is against the notion of many post-modernist theorists who argue that consumer is a passive agent and question his/her existential role in consumption (Elliot 1997). However, in these songs we observe that the desire of acquisitiveness (Russell 1969) is not expressed in the general terms but specific objects and brands important for social linkages (Wallendorf and Arnould 1988) are specified. This reflects the participation of agent in creating the meaning of the object.

These objects of desire also create a tension and there is an expression against them. Some of the ills prevalent in the culture have been attributed to the collective desire for possession of specific objects and brands. However, the dialectics of the two collective expressions of desire indicate the dynamics of cultural change in the Indian society.

The contribution of this paper to the consumer culture theory is in terms of study of collective expression of desire. In the era that is dominated by the identity politics many theorists argue that it is unfair to relate everything to identity (Olick and Robbins 1998). By bringing the concept of collective desire I have tried to explain the process of cultural expression.

**Table 1 Details of the informants**

Name	Age	Education	Gender	Economic Status
A	50	MA, BEd	F	Wife of a doctor
B	35	Inter	F	Wife of a factory worker
C	77	Literate	F	Wife of a retired policeman
D	30	Inter	F	Wife of a worker
E	18	Inter	F	One of the eight daughters of a poor Brahmin
F	65	BA	M	Retired Army Personnel
G	50	Illiterate	M	Peasant
I	40	Matriculation	M	Farmer/Worker
J	72	Middle School	M	Ex- Truck Driver

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# Defensive Postures Decrease Consumption Desire and Purchase Intention

Chun-Ming Yang, Ming Chuan University, Taiwan

## ABSTRACT

Similar to animals use postures to express dominance, humans use their bodies (often subconsciously) to communicate our emotions or attitudes. In addition, accurately interpreting such nonverbal postures serves as an essential foundation for effective social interaction in the consumption context (Sundaram and Webster 2000). For example, a child hugging a teddy bear means that she/he loves it (Hadi and Valenzuela 2014). Some authors argue that such body movements and postures are deeply rooted in evolution (Carney, Cuddy, and Yap 2010). However, it was not until recently that systematic efforts were made to investigate the influences of displaying these behaviors on individuals' responses.

The evidence gathered from embodied cognition literature suggests that bodily experiences shape feelings and attitudes (Niedenthal et al. 2005; Reimann et al. 2012). The factors influencing our bodily experience include ambient conditions (e.g., weight, temperature, brightness), approach-oriented behaviors (e.g., pushing, pulling, nodding, stroking, hugging), and postures (e.g., power posing, leaning, reclining, balancing). The former two factors have received considerable attention from consumer researchers in recent years, particularly in the sensory marketing field (see Krishna (2012) and Krishna and Schwarz (2014) for detailed reviews).

In contrast to the prosperity of ambient factors and approach-oriented behaviors, relatively limited efforts in both embodied cognition and consumer research fields have been devoted to understanding the effects of body postures. However, body postures have been reported to affect motivation (Friedman and Elliot 2008; Riskind and Gotay 1982) and activity in response to asymmetrical cortical emotion manipulations (Harmon-Jones and Peterson, 2009). Most relevant research has focused on the dominant posture (Bohns and Wiltermuth 2012; Carney et al. 2010; Yap et al. 2013; Huang et al. 2011). Research has indicated that these expansive postures may activate mental concepts and emotions associated with power, thereby causing people to engage in approach-oriented, dishonest, and risk-seeking behaviors. However, several alternative studies are noteworthy. Larson and Billeter (2013) demonstrated that certain postures, such as leaning back, can activate the concept of balance and thereby affect the preference of a consumer toward compromise options. Hadi and Valenzuela (2014) suggested that consumers who engage in an affectionate gesture (e.g., hugging) have attitudes that are more positive toward an anthropomorphized object. The research of Friedman and Elliot (2008), which is probably the most relevant to the current study, demonstrated that arm crossing led to higher performance in solving anagrams, and that this effect was mediated by increased persistence.

Although crossing one's arms may activate a concept associated with perseverance, it is also a defensive posture. When it is impractical or socially unacceptable to lean away from someone or something we dislike, we often subconsciously display defensive postures to establish a barrier between the external environment and ourselves (Navarro and Karllins 2008; Ward and Broniarczyk 2011). For example, we cross our arms over our chest when encountering a stranger, we use a backpack to shield our torso, or we cover our face when we feel scared. Someone exhibiting defensive postures typically suggests that she/he feels nervous, uncomfortable, refusing, suspicious, lacking trust, or sensing vulnerability (Smith-Hanen 1977). Thus, a defensive posture is an indicator of avoidance (Grammer 1990; Evans and Wener 2007). However does a defensive pose

make a person feel protected from external stimuli? Do such postures affect the response of a consumer to a target? Can we regulate our desire by displaying defensive postures? Building on the literature of embodied cognition, the goal of our research was to test whether displaying a defensive posture actually has a negative effect on consumer responses to a target. More specifically, we argue that merely executing a defensive posture toward a target can increase the feeling of being protected, which in turn translates into lower purchase intention and consumption desire. This argument is consistent with the findings from embodied cognition, which suggests that body movements serve as an implicit signal of our internal state and influence downstream responses (Balcetis and Cole 2009; Niedenthal et al. 2005). This paper proposes that the effect of posture on consumer responses is stronger (weaker) when a consumer faces vice (virtue) products, and still works even when a consumer's regulatory resources are depleted.

We contribute to the literature in several ways. First, the automatic activation of concepts and the automatic application of accessible concepts to downstream choices and behaviors were not disentangled in the embodiment literature (Schwarz and Clore 2007). This paper provides additional evidence to a growing body of knowledge based on the embodiment effects of body postures on self-control (Balcetis and Cole 2009; Hung and Labroo 2011). Our results are consistent with those in the literature, suggesting that a simple motor movement may have noticeable effects on self-control. Second, although most self-regulation research has concluded that resource depletion causes people to act irrationally and to become vulnerable to temptation (Baumeister et al. 1998; Hedgcock, Vohs, and Rao 2012; Vohs, and Faber 2007), little is known regarding how to help resource-depleted people. Psychologists and marketing scholars have sought to discover ways to help consumers to engage in self-control more effectively (Baumeister and Tierney 2011). We provide added insight to this field by introducing a simple but useful action; that is, displaying a defensive posture.

## STUDY 1

The first study had two goals: first, to demonstrate that a defensive posture can lower consumption desire in a consumer. Second, we posit that the effective strength of a defensive posture on consumption desire depended on the nature of the product. More specifically, we argue that the effects of a defensive posture are stronger for vice products than for virtue products. This is because previous research and observations from everyday life have supported the common intuition that vice products constitute a permanent threat to the accomplishment of the long-term self-regulation goals of a consumer (Geyskens et al. 2008). Thus, displaying a defensive posture may help consumers to shield themselves from temptation. However, for virtue products, such effects should be weak or diminished.

## METHOD AND PROCEDURE

A total of 100 (31 men and 69 women) undergraduates participated in an experiment on body posture and mental arithmetic in return for US\$2.00. This study had a 2 (body posture: defensive vs. control)  $\times$  2 (product type: vice vs. virtue) full factorial design, with random assignment to condition. After entering the laboratory, the participants were read a cover story designed to prevent self-perception effects. Self-perception effects arise when inferences are made regarding an observed behavior, and we attempted to prevent

this occurrence by providing the participants with a false explanation of body posture, thus diverting them from inferring that our posture instructions were used to activate associations related to protection or defensiveness. The cover story was modified from the research of Friedman and Elliot (2008).

All of the participants were asked to sit with their backs straight against the support of the chair, resting both hands flat on the table in front of them. The participants were then presented with a booklet containing 10 arithmetic operation quizzes. All of the quizzes involved simple two-digit calculations (e.g.,  $12 \times 15$ ) to avoid unwanted difficulties. The participants were directed to report their answers orally to the experimenter. We told the participants that they would know their performance results after completing the study.

Next, the participants were asked to place their arms in a different position to manipulate their body posture. The participants in the defensive posture were told to close both of their hands and to cross their arms, as demonstrated by the experimenter. The control participants were instructed to close both of their hands and to place their arms over their thighs. Again, the participants under both conditions were reminded to maintain their posture until the experimenter asked them to release the posture. The mental arithmetic task was then presented. Identical to the practice exercise, the test portion of the experiment contained 10 quizzes. The experimenter used a stopwatch to record the amount of time the participants spent separately in the exercise and in the real sections.

After completing the quizzes, the participants were informed that the laboratory would provide them with an additional reward, thanking them for their contributions and that we wanted to know how the participants felt about the additional reward. Under the vice (virtue) condition, a 150-calorie chocolate Oreo sandwich cookie (90-calorie Quaker granola bar) was presented. The participants then reported their desire to eat the cookie (granola bar) on a 9-point scale (1 = not at all; 9 = very much). The experimenter then instructed the participants to release the posture. The consumption desire rating served as the dependent variable.

In addition to desire, the participants were asked to indicate on a 9-point scale how fatigued they were (1 = not at all fatigued; 9 = extremely fatigued). We also captured the general mood of the participants on a 9-point scale (1 = very bad; 9 = very good). The participants finally rated a question regarding the degree to which the posture felt comfortable during the session (1 = very uncomfortable; 9 = very comfortable) and they completed a brief demographics survey.

## RESULTS

A preliminary analysis revealed no significant differences in fatigue level, mood, or level of comfort among the conditions ( $ps > .20$ ). As expected, the results of a two-way ANOVA indicated that the participants had a higher desire to eat toward the vice product ( $F(1, 96) = 7.62, p < .01$ ; see Table 1 for means) than toward the virtue ones. Moreover, the participants in the defensive posture had a lower desire rating ( $F(1, 96) = 6.86, p = .01$ ), comparing with their control counterparts. The results also indicated a significant interaction effect between body posture and product type ( $F(1, 96) = 9.71, p < .05$ ). Additional exploration indicated, under the vice product condition, that there was a significant difference in consumption desire between the body postures ( $t(49) = 3.17, p < .01$ ). However, no such difference was found in the virtue product condition ( $t(47) = .39, p = .69$ ). These results provided the evidence that posing a defensive posture may help consumers to resist temptations.

**Table 1** Statistic Summary

		Defensive Posture	Control Posture	Correction Condition
Experiment 1: Consumption Desire	Vice Product	4.04 <sup>a</sup> (1.46)	5.44 <sup>b</sup> (1.67)	
	Virtue Product	3.85 <sup>a</sup> (1.38)	4.00 <sup>a</sup> (1.38)	
Experiment 2	Smoking Desire	4.21 <sup>a</sup> (1.59)	5.27 <sup>b</sup> (1.55)	5.45 <sup>b</sup> (1.67)
	Feeling of Being Protected	5.20 <sup>a</sup> (1.37)	4.30 <sup>b</sup> (1.24)	4.04 <sup>b</sup> (1.03)
Experiment 3	Purchase Intention	High Depletion	4.07 <sup>a</sup> (0.89)	6.33 <sup>b</sup> (1.49)
		Low Depletion	4.25 <sup>a</sup> (1.45)	4.93 <sup>c</sup> (1.41)
	Feeling of Being Protected	High Depletion	4.77 <sup>a</sup> (1.32)	3.30 <sup>b</sup> (1.11)
		Low Depletion	5.11 <sup>a</sup> (1.57)	4.78 <sup>a</sup> (1.50)

Means with different alphabet in the same experiment differ significantly ( $p < .05$ )

Numbers in parentheses are standard deviations

## STUDY 2

Study 2 had several goals. First, we attempted to replicate the findings obtained in the previous experiment. A typical argument is that our findings may result from enhanced self-esteem by performing a defensive posture. A different but more natural defensive posture manipulation can rule out this alternative explanation. Second, as suggested by Hadi and Valenzuela (2014), a typical argument is that participants performing a defensive posture may be cognitively aware that the instructions they are provided represent defensiveness; thus, this mere conceptual activation may lead to a lower desire to eat (as opposed to it stemming subconsciously from the embodied posture). We included an additional correction condition to exclude this alternate. Third, in this study, we also indicated that the feeling of being protected mediated the relationship between body posture and consumption desire.

## METHOD AND PROCEDURE

Ninety (79 male and 11 female) undergraduate smokers participated in this study for US\$2.00. This study had a one-factor design (body posture: defensive vs. correction vs. control) with random assignment to condition. In this study, we used cigarettes as the tempting product. We recruited participants from campus bulletins, and a short lifestyle survey facilitated screening the respondents and disguised our true purpose.

On their arrival at the laboratory, the participants learned that the primary purpose of this study was to understand how the body posture influenced the weight evaluation of an individual. All of the participants were then asked to stand straight and were provided with a hardcover marketing textbook. Under the defensive and correction conditions, the participants were instructed to hold the textbook to their chests with both of their hands, as demonstrated by the experimenter. This position is ubiquitous in the daily life of a consumer, and is similar to holding a supermarket paper bag. The control participants were instructed to hold the textbook with both of their hands

and to place the book in front of their thighs. Again, the participants under all of the conditions were reminded to keep their arms in the set position until the experimenter asked them to release the posture.

The experimenter then told the participants that it would take 3 minutes to allow the posture to influence their weight evaluation. To use the time productively, the participants were encouraged to complete an unrelated survey on an antismoking advertisement campaign. We chose antismoking advertising because recent studies have indicated that merely exposing a smoker to smoking-related stimuli increases a smoker's desire to smoke. Here, we manipulated the difference between the defensive and correction conditions. Under the correction condition, we explicitly told the participants that their body posture was a defensive posture. If a demand-effects explanation had merit, then we expected both the defensive and correction conditions to lead to a significantly lower smoking desire as compared with the control condition. Conversely, if the reduced smoking desire subconsciously stemmed from the embodied posture, then we expected the smoking desire to decrease only under the defensive condition. A full-color antismoking advertisement was displayed on a 20" computer screen for 30 seconds. After viewing the advertisement, the participants were asked to report their attitude toward the advertisement, attitude toward smoking, desire to smoke, self-esteem, and feeling of being protected. The experimenter then instructed the participants to release the posture and to complete several additional items.

All relevant variables were measured using 9-point items, including 3 items for the attitude of the smoker toward the advertisement ( $\alpha = .78$ ), two items for the attitude of the smoker toward smoking ( $r = .72$ ), and one item for the desire to smoke (1 = "I do not want to smoke right now" to 9 = "I definitely want to smoke right now"). The self-esteem of the participants was measured using the Rosenberg self-esteem scale. A feeling of being protected was captured using 4 items adapted from the sense of vulnerability scale (Pitesa and Thau 2014). The participants were also asked to indicate their fatigue level, mood, and level of comfort.

## RESULTS

The results of a one-way ANOVA revealed nonsignificant differences in fatigue level, mood, and attitude toward the advertisement, attitude toward smoking, self-esteem, and level of comfort among conditions ( $ps > .17$ ). However, as expected, the effects of posture on smoking desire ( $F(2, 87) = 5.18, p < .01$ ) and the feeling of being protected ( $F(2, 87) = 10.95, p = .001$ ) were significant (see Table 1). An analysis of relevant contrasts confirmed our predictions: the participants under the defensive condition reported a lower smoking desire and a higher feeling of protection than the participants under other two conditions did ( $ps < .05$ ). However, there was no difference between the control and correction conditions ( $ps > .30$ ). These results ruled out the alternative explanation that a low smoking desire was driven by demand effects, suggesting instead that the process was likely subconscious. Because there was no significant difference between the correction and control conditions, we collapsed the data and applied a mediation bootstrap procedure. Upon specifying 5000 bootstrap resamples, the analysis confirmed a significantly indirect effect of posture on smoking desire through a sense of protection ( $\beta = -.30, SE = .19, 95\% CI = -.80 \text{ to } -.02$ ).

## STUDY 3

Although the previous two experiments have provided evidence that a defensive posture can help consumers to resist temptation by increasing the feeling of being protected, an unanswered question is whether such defensive postures remain effective even after the self-

regulatory resources of the consumer have been depleted. Psychology and marketing scholars have indicated that the ability to engage in self-regulation depends on the availability of particular resources (Baumeister et al. 1998; Hedgcock et al. 2012; Vohs, and Faber 2007; Vohs and Heatherton, 2000; Wan et al., 2010). This limited resource model claims that people possess limited resources that are depleted when they engage in a prior task that requires self-regulation and their ability to exercise self-regulation during a subsequent task often suffers because of the exhaustion of resources. As an example, behaviors that require deliberate regulation deplete regulatory resources and cause impulsive buying (Vohs, and Faber 2007).

Regarding the relationship between embodied cognition and self-regulation, the empirical findings of Hung and Labroo (2011) suggested that when people firm their muscles prior to exerting self-control, their subsequent self-control efforts are impaired, because their summoned willpower is exhausted. Evidently, motor movement is ineffective against self-regulation when resources are depleted. However, this research proposes that a defensive posture helps consumers to resist temptation even after a resource-depleting task. As Balcetis and Cole (2009) noted, bodily movements that activate a positive feeling, regardless of whether the activation is deliberate or spurious, might provide a resource for assisting in self-regulation. Because our previous study indicated that a defensive posture can increase a person's feeling of being protected and activates a positive feeling that can provide additional regulatory resources, we argue that a defensive posture helps consumers to resist temptation even when regulatory resources are depleted.

## METHOD AND PROCEDURE

A total of 110 undergraduate students participated in the study in exchange for a payment of approximately US\$3.00. They were randomly assigned to conditions in a 2 (depletion: low vs. high)  $\times$  2 (posture: defensive vs. control) between-subjects design. On arrival at the laboratory, the participants learned that there were two unrelated studies. The first study was used to evaluate the reading skills of college students. They were required to eliminate letters on a page of text from a consumer behavior textbook. Participants in the low-depletion conditions were asked to simply scan the text and to eliminate all instances of the letter "e." Those under the high-depletion conditions, however, were asked to eliminate all instances of the letter "e" in which it was neither adjacent to nor one letter away from another vowel. This manipulation is consistent with the procedure employed by other researchers (Baumeister et al. 1998; Wan et al. 2010). The participants were then asked to report how tired they felt after performing the depletion task on a scale ranging from 1 (not at all) to 9 (very much). As part of an ostensibly unrelated posture and weight evaluation experiment, the participants were then asked to execute the defensive (control) posture, as described in Study 2, and to maintain the posture until we asked them to release it.

The experimenter then told the participants that they were encouraged to complete an unrelated survey on a commercial evaluation. A 30-second Häagen-Dazs® commercial was played. After watching the commercial, the participants were asked to report their purchase intention and feeling of being protected. The purchase intention was captured using a scale ranging from 1 (not at all) to 9 (very much). The experimenter then instructed the participants to release the posture and to complete several additional items. All of the measurements were identical to those of the previous experiments, including physical fatigue, mood, and the feeling of being protected ( $\alpha = .94$ ).



## RESULTS

The participants under the high-depletion condition ( $M = 6.05$ ) reported feeling more tired than did their counterparts under the low-depletion condition ( $M = 4.96$ ;  $F(1, 106) = 15.65, p < .001$ ), regardless of whether the posture was defensive or control. Neither the posture nor its interaction with the depletion had a significant effect ( $ps > .10$ ). The results of the ANOVA also indicated that there were no significant differences among the conditions of physical fatigue and mood.

The purchase intentions of the participants were analyzed as a function of posture and the depletion condition. A significant effect was reported for both posture ( $F(1, 106) = 32.88, p < .001$ ) and depletion ( $F(1, 106) = 5.75, p < .05$ ). The participants reported a higher purchase intention when the posture was control rather than when the posture was defensive, and this difference was identical under the high- and low-depletion conditions. A significant interaction of these variables was found ( $F(1, 106) = 9.47, p < .01$ ) in the form predicted. Under the control conditions, highly depleted participants reported higher purchase intention than did their counterparts under the low-depletion condition ( $p < .01$ ). However, under the defensive condition, no significant difference was found between depletion conditions ( $p > .60$ ). A reversed pattern was observed while using the feeling of being protected as the dependent variable. Finally, we applied a mediation bootstrap procedure (Hayes 2013). Upon specifying 5000 bootstrap resamples, the analysis confirmed a significant indirect effect of posture  $\times$  depletion on purchase intention through the feeling of being protected ( $\beta = -.57, SE = .27, 95\% CI = -1.17$  to  $-.08$ ).

## DISCUSSION

In this study, we found that displaying a defensive posture may help consumers to resist temptations. This posture effect is stronger when the product is vice rather than virtue, and it is still effective even after the regulatory resources of the consumer are depleted. We also demonstrated that the feeling of being protected is the underlying mechanism. Although these findings provide novel insights into the effects of the embodied posture on downstream responses of consumers, several limitations and future research directions should be noted. First, because we conducted our experiments in the laboratory and deliberately manipulated body posture, future studies may want to replicate our findings in a more natural setting. For example, people leaving a supermarket may hold paper bags in front of their chest (i.e., a defensive posture) or carry a tote bag on their shoulder. We expect these natural postures to affect the consumer's responses in a manner similar to our findings. We focused our studies only on self-regulation, and left other domains unexplored. Another potentially compelling area to explore is the effects of body postures on prosocial behaviors. For example, can displaying a defensive posture hinder the effectiveness of charity advertising? Finally, an alternative direction for future research is to explore other postures. For example, can covering our faces shield us from temptation, in the same manner that it reduces our embarrassment (Dong, Huang, and Wyer 2013)?

This paper has implications for both practitioners and consumers. It is essential for practitioners to release or prevent defensive posture of a consumer. This can be accomplished by encouraging consumers to physically interact with the product, which may also produce an attachment to the product (Peck & Shu 2009). For consumers, it is useful to maintain a defensive posture while facing temptations. Holding a book or crossing the arms can help consumers to produce an immediate feeling of protection, which can help consumers to perform more efficient self-regulation.

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# Competitive Papers—Extended Abstracts

## The Effect of Motion on Food Appeal

Aner Tal, Cornell University, USA  
Yaniv Gvili, Ono Academic College, Israel  
Moty Amar, Ono Academic College, Israel  
Yael Halak, Ono Academic College, Israel  
Brian Wansink, Cornell University, USA  
Colombe Bomaleaur, Cornell University, USA

### EXTENDED ABSTRACT

Although many factors influence consumers' food choice and consumption, freshness emerges as a key driver of consumer evaluations of food (e.g., Heenan, Hamid, Dufour, Harvey, & Delahunty, 2009.) To evaluate freshness people use visual cues mostly (Péneau, Brockhoff, Escher, & Nuessli, 2007).

### Motion as a Cue for Freshness

The ability to automatically associate movement with freshness may be one such mechanism that has served humans well in primitive environments. In nature, there is a close association between food movement and its freshness. Living animals move, and healthy animals display more motion than do diseased or infected animals. Thus, the motion of animals is associated with meat freshness and quality.

The link between motion and freshness extends to plant-based food sources. Live growing edible plants, fruits, and vegetables move as they sway in the wind, fall or are picked from the tree. The instant they are plucked, separated from the ground or from the parent plant, they experience postharvest decay and lose their freshness (e.g., Irtwange, 2006). Interestingly, even some inanimate foods are fresher when in motion. Running water, for instance, is fresher than stagnant water because the latter enhance bacterial proliferation (e.g., Palmore et al, 2009), and chemical contamination (Rossignol-Strick, 1987).

However, the question arises whether the inference of freshness from movement would be overextended to the modern environment, where it no longer applies.

Hence, the following hypothesis:

- Hypothesis 1* Food will be rated as fresher when shown moving vs. still.
- Hypothesis 2* Food will be rated as more appealing when shown moving vs. still.
- Hypothesis 3* The relationship between food motion and food appeal will be mediated by it perceived freshness.

### Study 1

#### Methods

Participants (N = 105) were recruited online on Amazon Mechanical Turk. They completed the study in exchange for payment. We chose drinks as our stimuli since drink can easily and naturally be shown in movement even in still pictures, by being poured in glasses. Further, drinks are often presented as moving, being poured into glasses, in marketing communications. Participants were shown pictures of two orange juice brands and asked to evaluate them. The

pictures of each juice were similar but one juice was displayed being poured into a glass. The quantity of juice in the glass in both pictures was similar. The brand of orange juice was varied so as to distract participants from the true purpose of the studies.

Participants were randomly assigned to experimental groups, such that for half of the participants the juice being poured (motion) was displayed first, the still juice (control) second, and for the other the order was reversed. Since brand and order were not variables of interest, Tropicana was always displayed first, and Simply Orange was always displayed second.

After viewing each brand of orange juice participants were asked to answer "how appealing is the orange juice?" They answered on a scale of 1 (= not at all appealing) to 9 (= very appealing). They then viewed the other brand and answered a similar question.

#### Results and Discussion

We analyzed the results using a mixed model with juice brand / position as a repeated factor and the covariance structure specified as compound symmetry. The model included movement, juice brand/ position, and the interaction between the two. There was a significant effect of movement on how appealing the juice was rated as. Moving juice was rated as more appealing (M = 7.1, SD = 1.79) than still juice (M = 6.7, SD = 1.62). The effect was significant at a .01 level:  $F(1, 104) = 5.75$ . There was no interaction of juice brand or order on the effect, such that the interaction between juice brand and movement was not significant. Whether motion appeared first or second did not matter for our effects.

The results of study 1 indicate that food movement enhances food appeal, supporting H1.

### Study 2

#### Methods

Study 2 was a direct replication of Study 1 consisting of a new set of participants (N = 58) drawn from the same population. This time participants answered an additional question concerning their perceived freshness of the food, in addition to perceived food appeal. Specifically, participants rated how fresh they perceived the juice to be by answering the question "How fresh is the orange juice?" They rated freshness on a 9 point Likert scale anchored by 1 (= very unfresh) to 9 (= very fresh).

#### Results and Discussion

The results were analyzed using a mixed model, as before. Participants rated orange juice as more appealing when they saw it in motion (M = 6.84, SD = .54) rather than still (M = 6.38, SD = 1.76). The effect was significant at a .002 level,  $F(1, 55) = 9.78$ . Juice displayed in motion was also rated as fresher (M = 6.26, SD = 1.66) than still juice (M = 5.72, SD = 1.84). This effect too was significant at a .004 level,  $F(1, 55) = 8.75$ , supporting H2.

Following Krull and MacKinnon (2001), we tested the role of perceived food freshness as a mediator of the relation between food

motion and food appeal while measuring all variables at the food motion level.

The analysis shows that perceived freshness mediated the effects of motion on attractiveness, supporting H3. Thus, it appears that motion led participants to perceive food as fresher. This increase in perceived freshness due to motion is what in turn led to increased appeal of the juice.

The findings develop our understanding of how consumers assess food quality. They also contribute to our knowledge of how heuristic cues can lead to inferences of product quality, and how those cues may be misapplied beyond the circumstances where they genuinely apply.

The findings offer practical Implications - a potential avenue for promoting healthier eating, as marketers can employ motion to promote healthy eating in retail settings as well as cafeterias and other settings where food choices are made.

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# Consumer Response to Different Types of Empowerment Campaign Announcements

S. Sinem Atakan, Ozyegin University, Turkey

Xiaohan Wen, Koc Universit, Turkey

## EXTENDED ABSTRACT

Consumer empowerment, i.e. integrating consumers into a company's decision-making process, has become highly prevalent in recent years. In fact, the number of completed empowerment tasks grew from 0.04 million in 2008 to 291.8 million in 2011. These tasks range from creating new ideas for products (new product development-related) to designing slogans, logos or commercials for a brand (advertising-related). For example, while P&G, Starbucks, and BMW have launched customer empowerment campaigns to seek ideas for new product development, PepsiCo, Doritos, Heinz Ketchup, and Pizza-Hut have asked their consumers to make commercials or to come up with slogans for their brands.

Given these developments in the business world, recently academics have started to examine the consumers' responses to empowerment campaigns. Previous research reveals that consumers may change their perceptions of and behaviors toward the company or brand when they engage in (Chang, Chen, & Huang, 2009; Fuchs, Prandelli, & Schreier, 2010) or are exposed to the outcomes of (Schreier, Fuchs, & Dahl, 2012; Thompson & Malaviya, 2013) empowerment campaigns. These findings apply mainly to the later stages of consumer empowerment campaigns, where participating and/or non-participating consumers have the experience or knowledge about the actual empowerment process or the outcome of the process. However, we have limited knowledge of how consumers respond to the initial stage, that is the announcement, of a consumer empowerment campaign.

The investigation of the initial stage of campaigns is crucial to gain key insights into how to maximize the benefits of consumer empowerment campaigns from the very beginning since companies tend to invest considerably large amounts of financial resources at early stages of these campaigns to get media coverage and consumer attention. However, previous findings that reveal the psychological mechanisms and consequences pertaining to the later stages of consumer empowerment cannot be generalized to the early stages of consumer empowerment (e.g., the announcement). The elements shown to affect consumer responses at the announcement stage (e.g., psychological ownership that results from the execution of the product design or selection power) are absent during the early stages of consumer empowerment campaigns. Current research focuses exclusively on the announcement stage of an empowerment campaign.

Moreover, previous research does not take into account potential differences between new product development (NPD) - and advertising-related empowerment tasks. NPD-related tasks create direct benefits to consumers, such as improving the functionality of a product. However, advertising-related tasks tend to have mostly indirect benefits, such as enhancing the awareness or trial of the brand. Since previous research does not make a distinction between different types of empowerment tasks, we do not know whether the type of task a brand delegates to its consumers (NPD- versus advertising-related) differentially changes consumers' perceptions. This research fulfills this gap and sheds light on the differential impact of empowerment tasks.

Two experiments show that even the announcement of an empowerment campaign may change a brand's perceived customer orientation. In particular, Study 1 ( $n=125$ ) reveals that NPD (but not advertising-) related empowerment campaign announcements enhance

consumers' perceived customer orientation of the company. A three group (control vs. advertising-related vs. NPD-related empowerment campaign announcement) between subjects design indicated that the main effect of task type on perceived customer orientation was significant ( $F(1, 82) = 5.978, p < .01$ ). Participants in the NPD-related empowerment condition perceived the company as more customer oriented ( $M = 5.37$ ) than those in the advertising-related empowerment ( $M = 4.63; p < .01$ ) and control ( $M = 4.82; p < .05$ ) conditions. Furthermore, Study 1 investigated the mediating mechanisms and results indicate that campaign's perceived benefit affects the impact of task type on perceived customer orientation of the company.

Study 2 further investigates the boundary condition for the task type effect by examining whether perceived novelty of the campaign affects the perceived benefit of the campaign. A 2 (task type: NPD-related vs. advertising-related empowerment)  $\times$  2 (campaign novelty: high vs. low) between-subject design demonstrated that when the campaign novelty was high, perceived customer orientation through perceived benefit was not significant (indirect effect = .25,  $SE = .16$ ,  $CI_{.95} = \{-.08, .55\}$ ). However, when the campaign novelty was low, it became significant (indirect effect = .44,  $SE = .15$ ,  $CI_{.95} = \{.16, .75\}$ ). Only when the campaign is perceived to be common and not novel, task type influences perceived customer orientation through perceived benefit of the campaign. When the campaign is perceived to be highly novel, perceived benefit is high for both NPD-related and advertising-related empowerment campaigns. One explanation can be that consumers are overwhelmed by a highly novel empowerment campaign and pay more attention to the benefits pertaining to the campaign itself, but not the benefits related to the campaign outcome. Hence, when campaign is novel, the task type difference may be less pronounced.

Prior research has shown that customer empowerment may affect consumers' perceptions and behaviors toward the company or brand when consumers participate in or are exposed to the results of an empowerment campaign. The current research contributes to the customer empowerment literature by highlighting the impact of the initial stage of empowerment campaigns, by making the distinction between NPD- and advertising-related empowerment campaigns, and by revealing how the empowerment task type affects consumer perceptions. The findings show that even the announcement of an empowerment campaign enhances perceived customer orientation of a brand. In this sense, our results are in line with Fuchs and Schreier's (2011) finding that participating in an empowerment campaign enhances perceived customer orientation of a company.

Moreover, we show that the empowerment effect is stronger when the empowerment task is NPD- rather than advertising-related, since the perceived benefit of the campaign is higher. Beyond that, we find that campaign novelty may affect the campaign's perceived benefits. In a market where empowerment campaigns are perceived to be very novel, the task type effect is less pronounced. Our findings have significant implications for marketing practitioners who want to maximize the return on consumer empowerment campaigns.

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# Global Citizens are 'Greener': Impact of Globalization on Sustainable Consumption

Sharon Ng, Nanyang Technological University, Singapore  
Shankha Basu, Nanyang Technological University, Singapore

## EXTENDED ABSTRACT

Globalization and sustainability has become buzzwords in popular press. Globalization refers to an increased cross-border movement of goods, money, information and people (Arnett 2002) and sustainability refers to potential endurance of current human action and development (Khagram, Clark, and Raad 2003). However, the effect globalization has on a consumer's preference for sustainable products remains unexplored.

Prior research suggests that globalization can lead to a person having two distinct identities, a local and a global identity. We hypothesize a consumer's salient global identity (as compared to local identity) will lead to greater preference and willingness to pay for sustainable products. This is due to an increased sense of connectedness with the world.

To see if there was prima facie evidence to our intuition, we analyzed data from two multi-nation surveys. Analysis of the data from the World Values Survey 2014 revealed that people who see themselves as world citizen were more likely to identify themselves as someone who cares for the environment ( $N=67,968$ ,  $\beta=.21$ ,  $SE=.005$ ,  $t(67,966)=39.30$ ,  $p<.0001$ ). More specifically, and in the context of sustainable consumption, analysis of responses to a large scale 10-country survey conducted by the Institute of Asian Consumer Insights revealed that a stronger global identity is associated with greater support for environmentally friendly products ( $\beta=.26$ ,  $SE=.01$ ,  $t(6,871)=23.68$ ,  $p<.0001$ ). We next tested our hypotheses experimentally.

Study 1 experimentally replicated the above findings. Participants ( $n=200$ ) were primed either local or global identity using the method by Zhang and Khare (2009). Next participants saw comparative table of two refrigerators, one of them more environmentally friendly than the other. ANOVA revealed a significant effect of primed identity ( $F(1,198)=4.52$ ,  $p<.05$ ) on the premium participants were willing to pay for the greener product. Global identity led to a higher willingness to a premium ( $M=\$138.73$ ) for the environmentally friendly product as compared to local identity condition ( $M=\$92.07$ ). Also, ANOVA revealed a significant effect of the primed identity ( $F(1,198)=6.26$ ,  $p<.05$ ) on the attitude towards the brands with participants in the global identity condition displaying more favorable attitude (bipolar, lower score more positive;  $M=1.98$ ) towards the greener brand as compared to those in the local identity condition ( $M=2.41$ ).

Although people with a salient global identity may be driven to pay more for green products, a very high price difference may lead to a feeling of being exploited (Xia, Monroe, & Cox, 2004). Moreover, the belief that everyone is part of the same interconnected world should also lead such people to expect the responsibility of saving the world to be shared by them and the company. Therefore, a higher price premium for the green product should lead to lower preference for the product and the company. In study 2, participants ( $n=133$ ) were primed with local or global identity. They were then shown the same comparative table as in study 1. However, we assigned the prices to the refrigerators such that the price differential between the refrigerators was either high or low. ANOVA on attitude towards the product revealed a significant interaction effect ( $F(1,129)=5.21$ ,  $p<.05$ ) such that global identity led to lower attitude towards the more environmentally friendly brand

when price difference was higher ( $M=3.17$ ) compared to when it was higher ( $M=2.29$ ,  $F(1,129)=3.81$ ,  $p=.05$ ). This was not significant in the local identity condition ( $F(1,129)=1.50$ ,  $p>.1$ ). Next, ANOVA on perceived ethicalness of the brand revealed a significant interaction effect ( $F(1,129)=4.1$ ,  $p<.05$ ) such that global identity led to a greater perception of ethicalness for the more environmentally friendly brand when the price difference was lower ( $M=3.26$ ) as compared to when it was higher ( $M=2.41$ ,  $F(1,129)=2.87$ ,  $p<.1$ ). As in the findings for attitude, this was not significant in the local identity condition ( $F(1,129)=1.3$ ,  $p>.1$ ). As hypothesized, global identity leads to a lower attitude towards the brand and the company when the premium for environment friendliness was higher.

Ariely (2011, p235) suggested that one reason why people are nonchalant about doing more for social causes such as global warming is because they feel a lack of kinship with the victims. In this study, we test if highlighting the benefits of sustainability to the local community would make those with strong local identity more supportive of sustainability effort. Participants ( $n=155$ ), saw either an ad with a local frame or a global frame where the beneficiaries were the local or global community respectively. The feeling of connectedness with the beneficiaries and global identity were measured. Regression on the attitude towards the product advertised revealed a main effect of global identity ( $\beta=.36$ ,  $SE=.08$ ,  $t(151)=4.59$ ,  $p<.001$ ), a main effect of ad frame ( $\beta=-1.86$ ,  $SE=.75$ ,  $t(151)=-2.47$ ,  $p<.05$ ) and a significant 2 way interaction ( $\beta=.33$  95%,  $SE=.13$ ,  $t(151)=2.53$ ,  $p<.05$ ). Spotlight analysis revealed that global identity led to a more positive attitude towards the product when the ad frame was global ( $M=6.23$ ) as compared to when it was local ( $M=5.92$ ;  $\beta=.31$ ,  $SE=.16$ ,  $p=.05$ ). On the other hand, participants with a weaker global identity preferred the product marginally more when the ad frame was local ( $M=5.27$ ) as compared to when it was global ( $M=4.98$ ;  $\beta=-.28$ ,  $SE=.16$ , 1-tail  $p<.05$ ). Furthermore, mediation analysis using bootstrapping (Preacher & Hayes, 2008) revealed that the direct effect of global identity on the attitude towards the product was mediated by the feeling of connectedness with the beneficiaries (Indirect effect: .21, 95% CI [.12,.36]).

Together, these studies demonstrate that both, the chronically (preliminary data and study 3) as well as the situationally (studies 1 and 2) accessible global identity can lead to a preference and willingness to pay for environmentally friendly products. Our findings have multiple implications. We contribute to the relatively scarce literature on the psychological consequences of globalization (Arnett 2002, Chiu and Cheng 2007) as well as antecedents to sustainable consumption behavior. This research also opens up multiple avenues for future investigations. Future research can test whether these findings hold in large field settings as well as explore how global identity may lead to greater price-quality association for green products. With the expected increase in globalization, from our findings, it is possible to hope for higher adoption of green products.

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# Choosing One at a Time? Simultaneously Presented Options Lead to Normatively Better Choices Than Sequentially Presented Options

Shankha Basu, Nanyang Technological University, Singapore  
Krishna Savani, National University of Singapore, Singapore

## EXTENDED ABSTRACT

Imagine a person choosing health insurance plans in the year 2005. She would visit the websites of numerous insurance providers, one at a time, and choose the plan which she thinks best suits her needs. However, the process of choosing the plan is different in 2015. The person can visit [www.healthcare.gov](http://www.healthcare.gov) and see big table listing all health insurance plans that she is eligible for. In which case would the decision maker choose a plan best suited to her needs – when viewing the plans one at a time or when viewing them together?

The decision of whether to present options sequentially or simultaneously is a key element of choice architecture (Thaler & Sunstein, 2008). Researchers have investigated numerous elements of choice architecture that influence decisions (Johnson et al 2012). We investigate a key element of choice architecture that has received little attention in the past—the sequential versus simultaneous presentation of options.

Some literature exists on the advantages of viewing options together. Executives evaluated past decisions more favorably when they had made the decision across more number of options (Gemunden & Hauschildt, 1985). Similarly, participants, when choosing among hedonic products such as chocolates and wine, were more satisfied with their chosen option when they viewed the options together as compared to one at a time (Mogilner, Shiv, & Iyengar, 2013). On the other hand, sequential consideration of options can lead to serial position bias (Bruine de Bruin, 2005) and confirmation bias (Jonas et al., 2001). However, research in these areas do not investigate whether choosing among simultaneously (vs. sequentially) presented options may lead to normatively better choices – normativeness of an option being defined in economic terms.

In this research, we hypothesize that people are more likely to choose the normatively best option when they consider options simultaneously (as compared to sequentially). We hypothesized that when people are presented with such options simultaneously, how the options differ from each other on the specific attributes would become salient, leading the decision maker to deliberate more about the relative costs and benefits of the options on the different attributes. In contrast, when options are presented one at a time, people might be more likely to view options as holistic entities and compare their summary evaluations against each other, thus leading to less deliberation about how the options differ from one another on different attributes. Greater deliberation about the relative costs and benefits of the options would thus be one mechanism for why simultaneously presented options lead to more normative decisions than sequentially presented options.

In Experiment 1, participants ( $n=200$ ) made choices across 10 trials. Each trial had five non-dominated probability based options. Participants either viewed all the options together (simultaneous condition) or one by one such that they could go back and forth between choices (sequential condition). The normatively best option was the one with the highest expected value. The percentage of trials in which participants chose the option with the highest expected value formed the main dependent variable. A one way ANCOVA with option presentation as the independent variable and time taken for the task as a covariate revealed that participants made the best choice on a greater percentage of trials when the options were presented simul-

aneously as compared to sequentially ( $M_{\text{simultaneous}} = 37.5\%$ ,  $M_{\text{sequential}} = 44.1\%$ ,  $F(1,240)=3.91$ ,  $p = .05$ ,  $\eta_p^2=.02$ ).

Experiment 2 conceptually replicated these results with a different type of decisions, specifically, with risky options varying on expected value and variance of outcomes (with probabilities held constant). The experiment followed a similar paradigm as experiment 1. However, participants ( $n=294$ ) chose among five non-dominated options where different payoffs were assigned to a coin landing on either ‘heads’ or ‘tails’. The normatively best option in such choice sets is the option with the highest expected value, but with lower variance when expected value is held constant (Markowitz, 1959). A one way ANCOVA revealed that when options were presented simultaneously, participants chose the best option on a greater percentage of trials as compared to when the options were presented sequentially ( $M_{\text{simultaneous}}=62.66\%$ ,  $M_{\text{sequential}}=46.28\%$ ,  $F(1,291)=26.55$ ,  $p < .0001$ ,  $\eta_p^2=.08$ ).

Experiment 3 intended to test the robustness of the findings. Participants ( $n=201$ ) were presented with 9 choice sets (3 each of the above two types and 3 based on intertemporal discount rate). Furthermore, we included dominated options in this experiment. A one way ANCOVA revealed that when options were presented simultaneously, participants chose the best option on more number of trials as compared to when options were presented sequentially ( $M_{\text{simultaneous}}=64.35\%$ ,  $M_{\text{sequential}}=51.76\%$ ,  $F(1,198)=11.94$ ,  $p < .001$ ,  $\eta_p^2=.06$ ).

In Experiment 4, participants ( $n=200$ ) made choices across five coin-toss trials. After each trial, participants listed the thoughts they had while making the choice. The average number of words in the thought listing task indicated the amount of deliberation during the task (Patrick, Macinnis, & Park, 2007). Consistent with previous studies, participants chose the best option on a greater percentage of trials when they viewed the options simultaneously ( $M_{\text{simultaneous}} = 52.6\%$ ,  $M_{\text{sequential}} = 39.8\%$ ,  $F(1,212)=8.36$ ,  $p < .01$ ,  $\eta_p^2=.04$ ). Mediation analysis revealed that the direct effect of option presentation on the total number of normatively better choices made was mediated by the average number of words used in the thought listing exercise (Indirect effect = .13, 95% CI [.0067, 2702]).

Across four studies and using varied stimuli, we show that people choosing among multi-attribute options presented simultaneously (vs. sequentially) were more likely to select the normatively best option. We contribute to the highly important and relevant literature of choice architecture (Johnson et al. 2012) and the nascent literature on sequential and simultaneous option presentation (Mogilner et al., 2013). Our findings also suggest that for decisions in which there is a “right answer” from a policy perspective, policy makers should lead people to consider multiple options simultaneously. Future research can investigate boundary conditions to our findings such as individual differences in risk seeking and numeracy. Also the effect of option presentation on other choice architecture variables such as defaults and choosing ‘should’ options can be explored.

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# An Eye-tracking Investigation of the Price Label Layout Effect on Visual Attention and Choice

Svetlana Bogomolova, Ehrenberg-Bass Institute for Marketing Science, Australia  
Harmen Oppewal, Monash University, Australia  
Justin Cohen, Ehrenberg-Bass Institute for Marketing Science, Australia  
Jun Yao, Monash University, Australia

## EXTENDED ABSTRACT

Unit price, the price per standardized unit of measure (e.g., per liter), is one of the ‘tools’ consumers use to ease price comparison (Aaker & Ford, 1983). However, many retailers present unit price information non-prominently and at varying locations on the price labels (Miyazaki et al. 2000). This research answers the US Government call for evidence regarding the link between the unit price layout and consumer use of this ‘tool’.

We examine four aspects of the unit price layout: (1) font size; (2) position on the price label in relation to the retail price; (3) the presence of the verbal cue “unit price”; and (4) coloured (yellow) background. Larger font size has been shown to increase attention duration almost two-fold (Pieters & Wedel, 2004). Proximity of an object to another element of interest resulted in visual attention transfer (Pieters & Wedel, 2004). Verbal cue within a text improved learning outcomes (Johnson, Butcher, Ozogul, & Reisslein, 2013). Colour attracts visual attention as a result of bottom up processes (Orquin & Mueller Loose, 2013).

*Hypothesis 1: A more prominent layout, in the form of a larger font size, closer proximity to retail price, presence of verbal cue and coloured background, will result in increased visual attention to the unit price information during grocery choices.*

Consistent display of unit prices maximise the ease of usage (Miyazaki et al. 2000). This is in line with the learning theories (Rothschild & Gaidis, 1981) and the eye-tracking literature reporting more attention to familiar objects (Orquin & Mueller Loose, 2013).

*Hypothesis 2: Consistency (vs inconsistency) in the presentation format of the unit price information across categories will result in increased visual attention to the unit price information during grocery choices.*

A convenience sample of 200 consumers completed a grocery shopping task of nine categories; each category presented three products (a total of 1800 choice observations). The high quality photos of products and price signage displayed on a computer screen with a built-in eye tracker (Tobii T120) replicated realistically-looking supermarket shelf. The study employed a 2 x 2 between-subjects factorial design with factors: layout of unit prices (good vs. poor) and consistency (consistent vs. inconsistent) in the position of unit prices across product categories. The layout of unit price information was manipulated in terms of: position (close to the retail price vs away), font size (6mm font height vs 4mm), presence of the word “unit price” vs absence, and background colour (yellow vs none). The consistency of unit price format varied when the unit price information was in the same position as in a preceding category.

We specified a two-level linear model for the fixation variables (time to first fixation on any unit price and total fixation duration on unit prices) with the inclusion of random variances at both the individual level ( $i$ ) and the product category level ( $j$ ), as

$$(1) y_{ij} = x_{ij}\beta + u_i + u_{ij} + \epsilon_{ij}$$

where  $u$  denotes the random effect. Predictors were experimental factors and their interactions terms.

Displaying unit prices in a ‘good’ layout led participants to attending more readily and more frequently to unit prices, while position consistency only acted as a moderator by influencing the effect of layout on fixation duration. There was a significant three-way interaction of layout  $\times$  consistency  $\times$  inter-brand (i.e., (e)  $\times$  (d)) on the first fixation time such that for intra-brand categories the time is merely a function of layout (i.e., ‘good’ display resulted in fixating sooner on unit prices regardless of the consistency). Using bootstrap resampling method (Zhao, Lynch, and Chen’s, 2010), separate mediation tests for unit price presence, layout quality and position consistency, show positive and significant (95% CI excluding zero) indirect-only effects for all factors, suggesting the longer participants fixated on unit prices, the more they selected the lowest unit priced products.

The paper contributes to the marketing theory and practice by uncovering the role visual communication of price information in the supermarket environment plays in consumer choices, contributing to the discussion on bottom up vs top down cognitive processes through examination of visual attention.

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# Online Social Networking Increases Financial Risk-Taking

Eugene Chan, University of Technology, Sydney  
Najam Saqib, Qatar University, Qatar

## EXTENDED ABSTRACT

The use of online social networks such as Facebook, Twitter, and LinkedIn has grown exponentially over the past decade. There are likely both positive and negative outcomes of using such web-sites. In this research, we posit that online social networking increases financial risk-taking. That is, consumers who use social network sites such as Facebook, Twitter, and LinkedIn are more likely to take financial, but not other types of risks, compared to those who do not use such sites.

According to the cushion hypothesis (Hsee and Weber 1999; Weber and Hsee 1998), the social fabric of East Asian communities mitigates the adverse outcomes of financial risks that members could experience. In simple terms, members collectivistic societies can ask others in their social circle for support. From a sociological perspective, social capital, which sociologists define as the sum of resources that people accumulate through relationships with others (Bourdieu and Wacquant 1992; Coleman 1988), accumulated via social circles can increase well-being, lower crime rate, and even lead to efficient financial markets at the macro level (Adler and Kwon 2002; Bargh and McKenna 2004; Helliwell and Putnam 2004). We posit that people also accrue social capital from their online social circles from social networks such as Facebook, and the online social circles in turn act as a cushion to increase financial risk-taking.

Study 1 provided initial evidence for our hypothesis in a field setting. Participants completed a survey regarding their Internet usage habits and an ostensibly-unrelated study on investment decisions. Crucially, the order of the two sets of materials was counter-balanced. We found that participants who received the Internet questionnaire first and thus were primed with social networking would be more willing to take financial risks, and that their willingness to invest in a risky investment was correlated with social networking usage, compared to participants who received the Internet questionnaire after the investment task.

Study 2 replicated our initial findings in an experimental setting. We also tested our prediction further in two ways. First, we found that social networking only increased financial, but not other types of risk-taking. Second, we demonstrated that social networking increased financial risk-taking by mitigating the perceived adverse outcomes from taking such risks. Our mediation results suggested that social networking lowers perceptions of financial risks, thereby increasing the propensity to take such risks. Results from this study support our hypothesized effects taken together.

In Study 3, we demonstrated that it is the quality (weak or strong) of online social circles that leads to the effect. Indeed, if a person can not depend on his or her online social circle for financial or material assistance, the presence of the circle alone should not act as a “buffer” against possible financial losses. We further found that the number of Facebook friends did not mediate our effects, suggesting that the resources accumulated through online social circles does not lie in the latter’s quantity, but quality. That is, having a large group of friends may not necessarily be helpful, but having a perceived buffer from having a dependable or reliable – and thus strong (vs. weak) – group of friends is what’s important when needing financial or material assistance from financial losses.

Prior research has demonstrated a correlation between the use of such sites and lower inhibition regarding the posting of personal or private information online (Fogel and Nehmad 2009; Livingstone

2008). Yet, how social networking sites can affect particular types of risk-taking remains unclear. Our research posits an economic consequence of a ubiquitous online activity.

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# The Perceiver Effect of Consumer Innovativeness on Brand Evaluations

Joseph W. Chang, Vancouver Island University, Canada

## EXTENDED ABSTRACT

Extant research discusses the effectiveness of innovations typically from the corporate perspectives of innovation managers by correlating innovations with visible market performances. Some studies report positive effects of innovations on performance, while some others report negative relationship between the two. Despite the issue of mixed results, the correlation between innovations and market performances does exist. However, less is known about consumers' psychological organism (O) interpreting the casual relationship between the stimuli of innovations (S) and the responses of market performances (R).

Furthermore, research on innovation documents that the personality trait of consumer innovativeness is relevant to the adoption of high-tech innovations. Consumers with higher innovativeness have higher adoption rates of high-tech innovations (e.g., Tellis, Yin, and Bell 2009). As mental processes are the antecedent of physical consumption behaviors, factors affect the behavior of innovation adoption are likely to also affect brand perception. The different physical behaviors in innovation adoption suggest that the mental processes between high- and low-innovativeness consumers are different. Therefore, this research advances innovation research by investigating perceiver effects on innovative brand evaluations. We specifically examine how consumer innovativeness moderates the effect of inferior high- and low-level innovations on the innovability and quality of high innovative brands.

Based on the cue-diagnostics theory (Skowronski and Carlston 1987), inferior high-level innovation information is a non-diagnostic cue for innovation level and is a diagnostic cue for innovative brand quality. As brand innovability consists of the two dimensions of brand innovation-level and quality, the inferior high-level innovation information is a diagnostic cue for consumers' evaluations about innovative brand innovability. Specifically, inferior high-level innovations exert more negative impacts on low- (vs. high-) innovativeness consumers' perception about the brand innovability and quality of innovative brands. Therefore, inferior high-level innovations instigate more negative impacts on low- (vs. high-) innovativeness consumers' perception about the brand innovability and quality of innovative brands (hypothesis 1). Moreover, in comparison, inferior high-level innovations exert less negative impacts on brand innovability (vs. quality) as the negative impact of innovation quality is ameliorated by the positive impact of innovation level. Thus, innovative brand quality is more susceptible than innovative brand innovability to inferior high-level innovations (hypothesis 2).

In contrast, inferior low-level innovation information is a non-diagnostic cue for the innovation level of innovative brands and is a diagnostic cue for innovative brand quality. As brand innovability consists of the two dimensions of brand innovation level and quality, the inferior low-level innovation information is a diagnostic cue for consumers' evaluations about innovative brand innovability. Specifically, inferior low-level innovations exert more negative impacts on high- (vs. low-) innovativeness consumers' perception about the brand innovability and quality of innovative brands. Therefore, inferior low-level innovations instigate more negative impacts on high- (vs. low-) innovativeness consumers' perception about the brand innovability and quality of innovative brands (hypothesis 3).

A fictitious brand name, Appsung, was created based on the two major smartphone makers of Apple and Samsung for the ease of high quality association. The experimental treatments of innovative brand

(i.e., Appsung) and new innovation (i.e., Appsung V6) were cultivated with PC Home assessments. The high-innovability Appsung brands were portrayed as a smartphone pioneer (i.e., pioneering a few patented breakthrough innovations), whereas the high- and low-level Appsung V6 were delineated as breakthrough (i.e., with wireless charging and hyper processor) and incremental (i.e., with higher display resolution) innovations.

One hundred and sixty-four smartphone users of USA residents were randomly assigned to the 2 (consumer innovativeness: high vs. low) x 2 (innovation level: high vs. low) between-subjects experimental design. The participants were informed that the purpose of study was to investigate consumer opinions about smartphones. The participants started with reading and rating the quality and innovability about the Appsung brand, followed by a series of rating tasks including the quality and innovation level of the pre-launch Appsung V6, the quality of Appsung V6, the posterior quality and innovability of Appsung, and the consumer innovativeness measures. Prior and posterior brand quality was captured with the three-item brand attitude measure of quality, favorability, and desirability. The perceived brand innovability was identified with a seven-item innovation ability measures (e.g., Schreier, Fuchs, and Dahl 2012). The perceived innovation level was defined with the 9-item product innovativeness measure (Lee and O'Connor 2003). The consumer innovativeness was measured with the 10-item innovativeness scale (Tellis et al. 2009).

Waves of two-way ANOVA and simple effects tests were performed to verify the hypotheses. The results revealed that high-level inferior innovation instigated a little bit more, but insignificantly different, negative impacts on low- (vs. high-) innovativeness respondents' perception about the quality of Appsung. As a result, the first part of hypothesis 1 was not supported. Also, high-level inferior innovation instigated identical impacts on low- (vs. high-) innovativeness respondents' perception about the innovability of Appsung. As a result, the second part of hypothesis 1 was not supported. Moreover, the perceived quality of the Appsung was more significantly weakened than the innovability of the Appsung by the inferior high-level innovation of Appsung V6. Thus, hypothesis 2 was supported.

Furthermore, low-level inferior innovation instigated more negative impacts on high- (vs. low-) innovativeness respondents' perception about the quality of Appsung. As a result, the first part of hypothesis 3 was supported. Also, low-level inferior innovation instigated more negative impacts on high- (vs. low-) innovativeness respondents' perception about the innovability of Appsung. As a result, the second part of hypothesis 3 was supported.

In conclusion, the findings suggest that negative information about high-level innovations is common, and the failure of high-level innovations is forgivable, for both of high- and low-innovativeness consumers. In other words, negative high-level innovation information is not a diagnostic cue on high- and low-innovativeness consumers' judgment about the innovability and quality of innovative brands. In contrast, negative information about low-level innovations is uncommon, and the failure of low-level innovations is unforgivable for high- (vs. low-) innovativeness consumers. In other words, negative low-level innovation information is a diagnostic cue on high- and low-innovativeness consumers' judgment about the innovability and quality of innovative brands. The research findings are properly interpreted by, and thus reinforce, the cue-diagnostics theory.

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# The Impacts of Transgression Relevance and Severity on Endorsements

Joseph W. Chang, Vancouver Island University, Canada

## EXTENDED ABSTRACT

Extant research in endorsements mainly examines the impacts of scandals on consumers' attitudes toward tarnished endorsers and the endorsed brands (e.g., Bartz, Molchanov, and Stork 2013; Um 2013). Less is known about the impacts of scandal characteristics on endorsers and brands. Therefore, this study investigates the influence of scandal characteristics, specifically in severity and relevance, on consumers' attitudes toward brands and athlete celebrity endorsers in question. With an experimental study of two hundred participants and several pretests, we demonstrate that the impacts of scandals on endorsers and brands are a function of transgression relevance and severity. Severe scandals relevant to the professional expertise of athlete celebrity endorser are most detrimental.

Based on the cue-diagnostics theory (Skowronski and Carlston 1987, 1989), diagnostic cues are unexpected and extreme and, thus, receive more weight, and generate more impact, on the impression formation of a subject. Specifically, a positive diagnostic cue is more extreme to, and generates stronger positive impacts on, the negative category, yielding extremity and positivity biases. That is, a positive diagnostic cue is more influential, and activates more positivity biases, on the member of the negative category. The subject originally in the negative category is, thus, re-categorized as a member of the positive category because of the positive diagnostic cue. In contrast, a negative diagnostic cue is more extreme to, and generates more negative impacts on, the positive category, yielding extremity and negativity biases. That is, a negative diagnostic cue is more influential, and facilitates more negativity biases, on the member of the positive category. The subject originally in the positive category is, thus, re-categorized as a member of the negative category because of the negative diagnostic cue.

In general, an effective athlete celebrity endorser is expected to have a very positive image. Thus, transgression information is unexpected for an athlete celebrity endorser. Specifically, severe transgression information is unusual for an endorser and a more extreme cue indicating of a worse athlete celebrity endorser. Based on the cue-diagnostics theory, high- (vs. low-) severity transgression information is a more diagnostic cue exerting more negative impact on expertise and endorser evaluations directly and brand evaluations indirectly. Thus, high-severity transgression information instigates more negative impacts on the perceived expertise of athlete celebrity, which in turns weakens the evaluations of athlete celebrity endorsers and then the endorsed brands (hypothesis 1).

Moreover, extant research documents that information relevant to judgments is more influential (Ahluwalia, Unnava, and Burnkrant 2001). Thus, information highly (vs. lowly) relevant to endorser expertise is a diagnostic cue instigating more influence on expertise and endorser evaluations directly and brand evaluations. Thus, expertise-relevant transgressions instigate more negative impacts on the perceived expertise of athlete celebrity, which in turns weakens the evaluations of athlete celebrity endorsers and then the endorsed brands (hypothesis 2). As a result, severe and relevant transgression information is the most diagnostic cue for, and is most detrimental to, endorser and brand evaluation. Thus, transgressions, which are high-severity high-relevance, are most detrimental to athlete celebrity endorsers and the endorsed brands, followed by high-severity low-relevance and low-severity high-relevance transgressions, and then low-severity low-relevance ones (hypothesis 3).

Based on a pretest, doping and adultery were selected to represent the relevant and irrelevant transgressions, respectively. A fictitious NBA basketball celebrity, J. R., was portrayed with a statement mimicked the profile of the NBA celebrity of Kobe Bryant. Moreover, a fictitious brand of J-R signature shoes and a premier athletic shoes maker, Nibok, were portrayed with a statement mimicked Nike's LeBron 11 signature shoes endorsed by LeBron James. Four statements were developed and pretested to represent the four experimental conditions. One hundred and eighty-one U.S. residents participated in the 2 (severity: high vs. low) x 2 (relevance: high vs. low) between-subject experimental design. The participants were informed that the purpose of study was to investigate consumers' opinions about athlete celebrities. The participants started by rating the statements about J. R. athlete celebrity and Nibok's J-R signature shoes followed by rating the severity and relevance of a transgression statement and, then, re-rating J. R. and the J-R signature shoes.

Waves of two-way ANOVA and simple effects tests on expertise, endorser, and endorsed brand evaluations, respectively, were performed to verify the hypotheses. The analysis revealed that transgression severity weakened perceived expertise differently only when the transgression was high-relevance, which suggested that transgression relevance is more dominating than transgression severity on weakening perceived expertise (H1a and H2a supported). Further, the weakening effects of transgressions on endorser attitudes were exclusively determined by transgression severity. Transgression relevance was not influential on endorser evaluations (H1b supported; H2b not supported).

Moreover, for high-relevance transgressions, the high-severity doping weakened more brand attitudes than the low-severity doping and, for the low-relevance transgressions, the high-severity adultery weakened more brand attitudes than the low-severity adultery. Moreover, for the high-severity transgressions, the high-severity doping weakened more brand attitudes than the high-severity adultery, whereas, for low-severity transgressions, the low-severity doping weakened brand attitudes *identically* to low-severity adultery (H1c and H2c supported). In comparison, the high-severity high-relevance transgression (i.e., high-severity doping) weakened brand attitudes the most, followed by high-severity low-relevance transgression (i.e., high-severity adultery), and then the low-severity high- and low-relevance transgressions (i.e., low-severity doping and adultery). As a result, the third hypothesis was supported.

Furthermore, path analyses examining the casual relationship among transgression, endorser, and brand evaluations revealed that these three factors were all highly correlated. However, the correlation between transgressions and brand attitudes was decreased when the mediator of endorser attitudes was included, while the association between transgressions and the terminal variable of endorsed brand evaluations remained significant. The results indicated that the casual and effect relationship between transgressions and brand attitudes was partially mediated by endorser attitudes. In other words, the decrease in brand attitudes was directly caused by both transgression relevance and severity and the declining of endorser attitudes.

In conclusion, endorsed brand evaluations are moderated by transgression severity and relevance, whereas endorser evaluations are exclusively affected by transgression severity. In other word, transgression severity affects endorser and endorsed brand evaluations, whereas transgression relevance moderates endorsed brand



evaluations only. Specifically, severe and relevant transgressions are most detrimental to endorsed brand evaluations.

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# The Journey or the Destination: Asymmetric Impact of Process and Outcome on Service Evaluations

Aruna Divya T., Indian Institute of Management Bangalore, India  
Swagato Chatterjee, Indian Institute of Management Bangalore, India

## EXTENDED ABSTRACT

Studies in the past have pointed that individuals evaluate service encounters on two broad dimensions: outcome and process (Bitner, Booms and Tetrault 1990; Hoffman, Kelley and Rotalsky 1995; Keaveney 1995; Mohr and Bitner 1995; Smith, Bolton and Wagner 1999). While prior studies have identified how these two dimensions impact overall service experiences, satisfaction, loyalty etc., there has not been any systematic enquiry towards understanding how individuals process information related to these two dimensions. In this paper we propose information processing based explanation to understand how these two dimensions are evaluated. We draw theoretical insights from Construal Level Theory to primarily argue that process (vs. outcome) related attributes requires different construal frames to be evaluated.

## Conceptualization

Extant literature on service failures has identified Outcome and Process as two broad sources referring to 'what' and 'how' aspects respectively (Bitner, Booms and Tetrault 1990; Hoffman, Kelley and Rotalsky 1995; Keaveney 1995; Mohr and Bitner 1995; Smith, Bolton and Wagner 1999). Existing studies have also pointed that consumers evaluate these two aspects in systematically different ways. Few attempts were made to understand how individuals perceive failures pertaining to process or outcome of a service experience. Mental account based information processing and Prospect theory based responses to failures and success of process vs. outcome oriented service experiences have been explained in literature (Smith, Bolton and Wagner 1999, Kahneman and Tversky 1979; Tversky and Kahneman 1992).

But empirical support is still sparse on what impacts the asymmetric weights given to the two elements of service delivery and when do individuals assign more importance to the process attribute over the outcome attribute in their evaluation? In this paper we attempt to understand this question from insights of construal level theory.

## Theoretical Development

Construal Level Theory points out that any stimulus has two attributes: the central and the peripheral (Lieberman, Trope and Wakslak 2007; Trope and Lieberman 2010). Low construal level is associated with information processing pertaining to the concrete or central aspects of the stimulus and the high construal is associated with abstract or peripheral components of the stimulus.

In the context of service encounters, process of the service typically refers to the experiential aspects of service delivery and is more intangible in nature. We thus infer that individuals require information processing associated with low-construal to evaluate process oriented attributes of service encounters. Consequently, we also point out that evaluation of outcome oriented attributes require a high-construal information processing. Temporal proximity (distal) and psychologically near (distant) contexts are analogous to low (high) construal level information processing. We combine these arguments and develop our hypotheses that mention the effect of process and outcome related elements on the overall service evaluation.

*Hypothesis 1: Process (vs. outcome) oriented attributes of a service encounter are associated with low (vs. high) construal representation.*

*Hypothesis 2: In a low construal situation (temporal or psychological), individuals assign more importance to process (vs. outcome) in their overall service evaluation*

*Hypothesis 3: In a high construal situation (temporal or psychological), individuals assign more importance to outcome (vs. process) in their overall service evaluation*

## Methodology

### Data Description

We perform analysis using field data from an ecommerce website in the hospitality industry. We have considered consumers' feedback to publicly visible online media as our measure of service evaluation of the consumers. Our data source contains ratings in overall and attributes level such as sleep quality (Sq), value (V), cleanliness (C), location (L), rooms (R) and service (Se) for the hotels. Along with that the date of the travel, the date of the review and the type of travel (as a couple, on business, solo, with family, with friends) is also given in the reviews. We have coded visit type (VTN) such that for stays with family, friends or as a couple VTN=1 and it is 0 otherwise. The timeline of these reviews are from 2010 to till date. 40 hotels are randomly chosen from the database of the ecommerce website and all the consumer reviews of these hotels are collected, giving us a sample of 1594 reviews.

As temporal distance is closely related to construal level of individuals, the variable 'Time Gap' (TG), measured as number of days between date of travel and date of review, can be considered as a formative measure of construal level.

Similarly, the relationship between social and psychological distance and construal level suggests that the variable 'Visit type' (VTN), which is a dichotomous variable which taking the value of 1 when one visits with family, friends or as a couple and 0 otherwise, may also be considered as a formative measure of construal level as it also measures social or psychological closeness.

The attribute level variables were categorized using a pre-test with 40 individuals who suggested that cleanliness, location and rooms are outcome related variables and sleep quality, value and service are process related variables.

### Empirical Analysis

We have done regression analysis to find the direct effect of the attribute level variables on the overall evaluation and also the interaction effects of the construal level variables. The interaction effect of sleep quality, a process related attribute, and time gap has significant negative impact on overall ratings while the interaction effect of cleanliness, an outcome, and time-gap has a significant positive impact on the overall ratings. This suggests that low temporal construal leads to more importance to process related attributes; and

high temporal construal leads to more importance to outcome related attributes. The interaction effect of service, which is a process related attribute, and visit type has significant negative impact on overall ratings. So in low psychological construal level consumers give more importance to process related attributes, such as service etc. This can also be summarized as the association of process related attributes of service delivery with low construal and outcome related attributes with high construal.

## Discussion

We contribute to the literature on service evaluations by providing a theoretical lens to understand how the service encounters are processed at an individual level. Additionally, we point out avenues for service providers looking for delivering quality services to consumers. We particularly foresee an application in the domain of consumer provided feedback and reviews. The ability to understand contexts (here construal) that influence when consumers focus more on process (vs. outcome) related aspects of service encounters, will help managers to strengthen the positive elements of the service offering.

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# Gender Differences in Playing Digital Game-Based Electronic Books

Chih-Ping Chen, Yuan Ze University, Taiwan

## EXTENDED ABSTRACT

Nowadays, digital device ownership is rapidly growing. The Foreseeing Innovative New Digiservices study highlighted that Taiwanese tablet ownership was 7.7% in 2011 and is experiencing great potential growth (FIND, 2012). The top three uses of tablets in Taiwan are browsing web pages (41.7%), playing games (28.1%), and checking email (16%). Importantly, young adults value technology – particularly digital technology – for both education and entertainment. For example, games through a digital device help users employ a target language (e.g., English) in a real-life context where they learn by doing (Lee, 2000). It enhances all their language skills, as users are read, write, listen, and communicate in the target language. Historically, females prefer non-mental rotation games, whereas males prefer mental rotation games. It has been assumed that males are better than females when using their brains and skills for game play. However, digital devices offering many services can enhance the game-based learning experience and open new types of game play to attract and engage young adults in meaningful ways. The main objective of the research, therefore, aims to develop a broader understanding of whether gender differences already encapsulated in cultural values/social norms also constrain young Taiwanese adults' game type preferences when they play digital game-based English electronic books.

This article proceeds with a conceptual framework that reviews and draws on the literature that discusses play and gender and game type preferences. Previous studies showed that play is essential to human evolution and the ability of humans to adapt to new environments. However, play can be difficult concept to define, as it is a culturally socially specific concept. It has been argued that gender continues to exert a powerful structuring force on the distinctiveness of play and game culture. On the other hand, the number of female players has increased significantly, and a study conducted in Taiwan indicated that women's experience and actual motivation to participate in digital games differs (Liou & Gao, 2011). These prior efforts leave the present research to want to focus on gender differences, exploring what types of digital game-based English electronic books are likely to be played by young Taiwanese adults, particularly females, for cultural value/social norm reasons.

Many types of play are available in digital media. Yee (2007) categorized three game types: Achievement, which included advance, mechanics, and competition games; social, which included socializing, relationship, and teamwork games; and immersion, which included discovery, role-playing, customization, and escapism. The results indicated that male players scored significantly higher than female players on all the achievement components, while female players scored significantly higher than male players on the social components. Lucas and Sherry (2004) further identified three game types: Traditional, which included card/dice, classic board games, quiz/trivia, puzzle, and arcade games; physical enactment, which included fighter, shooter, sports, and racing/speed games; and imagination, which included fantasy/role-playing, action/adventure, strategy, and simulation. Based on their concepts and terms, traditional games typically do not require mental rotation compared to the physical and imagination games that often require mental rotation tasks for effective play. Lucas and Sherry (2004) claimed that traditional games were preferred by females, as they are "non-mental rotation games" while physical enactment and imagination games were preferred by males, as these games are "mental rotation games." Thus males ap-

peared to be better than females when using their brains and skills for game play. However, the more traditional cultural values/social norms considered as acceptable gender play behavior in digital game play are being challenged today. It is worth investigating in what ways this field has moved ahead to an application of digital game-based English electronic books on gender difference issues in a natural setting.

In methodology, qualitative data collection was the main method used in this study, namely, in-depth interviews. In total, fifty young Taiwanese informants were recruited in this research. The informants were instructed to freely play each type of digital game-based English e-books created by the research team for more than three months and then undergo intensive individual interviews. The game types for this research were identified by consulting previous research (e.g., ESA, 2014; Greenberg et al., 2010), digital game magazines, and popular gaming Websites. There are main five type games to be labeled as follows: traditional, achievement/physical, imagination, social, and simulation in this research. The data reported in this article were collected from June 2011 to May 2013. These interview transcripts were analyzed iteratively, initially examining them to draw out themes.

In findings and conclusions, it shows that both male and female young Taiwanese adults today have a greater opportunity to be exposed to a wider variety of digital game-based devices, options, and experiences. Play is something that they do because it is fun. The data indicate that young Taiwanese male and female game type preferences appear to differ, but young female views are on the move. They confess that digital game-based zones of freedom allow them to feel no threat or penalty for developing their brains and have fun while guiding active movement to new environments. Profoundly, the results of this research show that digital game-based English e-book playing contributes to decrease gender differences and is also a component for establishing new ways of thinking.

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# Self-Focused or Other-Focused Appeal? Impacts of Non-Profit Organization Type and Cultural Differences on Cause-Related Marketing

Pei-Chi Chen, National Sun Yat-sen University, Taiwan  
Chun-Tuan Chang, National Sun Yat-sen University, Taiwan

## EXTENDED ABSTRACT

Cause-related marketing (CRM) is a useful strategy by which companies link product sales to the support of a charity or cause (Varadarajan and Menon 1988). The growth and acceptance of CRM—and the expanding body of research on the subject—indicate that this trend has become a worldwide phenomenon (Andrews et al. 2014; Chang 2011, 2012; Koschate-Fischer, Stefan, and Hoyer 2012; Lafferty and Edmondson 2014; Lavack and Kropp 2003; Robinson, Irmak, and Jayachandran 2012; Subrahmanyam 2004). This current study focuses on two types of charitable appeals: self-focused and other-focused (Brunel and Nelson 2000; Chang 2012; Chang and Lee 2011; Chang 2014; Nelson et al. 2006). The self-focused appeal (also known as “self-benefit”) is aimed at egoistic motives, while the other-focused appeal (also known as “other-benefit”) aims at altruistic motives.

We draw two major observations from previous research. First, in CRM, the main interest for the consumer is still the product, but the charitable cause being supported may entice the consumer to choose one brand over another (Hawkins and Mothersbaugh 2010; Lafferty and Edmondson 2014). To our knowledge, limited attention has been given to the examination of how the type of Non-profit Organization (NPO type) impacts the effectiveness of CRM advertising appeals. NPOs can be classified into two types: egoistic and altruistic, known as “help-self” and “help-others,” respectively (Chang and Lee 2011). A help-self NPO provides services that the donors, themselves, may also find helpful should they need such services in the future. In contrast, a help-others NPO provides services that are not directly related to or immediately useful to the donors. These two NPO types differ in terms of the services they provide and their degree of self-relevance. Thus, we expect that the effectiveness of the CRM will be impacted by whether the advertising appeal is self- or other-focused.

Second, cultural values play a significant role in shaping a consumer’s personality and self-definition, and, therefore, affect which advertising appeals that consumer prefers (Aaker and Maheswaran 1997; Chang 2006; de Mooij and Hofstede 2010). Extant cross-cultural research on charities or cause-related marketing has focused mainly on individualism vs. collectivism (Aaker and Williams 1998; Duclos and Barasch 2014; Kim and Johnson 2013). We contend that the cultural dimension of masculinity/femininity impacts the effectiveness of CRM, given the different norms regarding who bears the responsibility for helping others (Hofstede 2001; Nelson et al. 2006). This particular aspect of CRM remains unexplored. The cultural dimension of masculinity/femininity has often been confused with individualism/collectivism. Collectivist characteristics are often based on interpersonal relationships (e.g., family), but the collectivistic perspective is not innately altruistic: individuals in collectivistic cultures have close relationships with in-group members only, and do not feel obligated to help out-group members (Duclos and Barasch 2014; Hofstede 2001; Nelson et al. 2006). Specifically, in feminine cultures, individuals feel responsible for the welfare of others, which means that the masculinity/femininity dimension is distinguished by ego enhancement, irrespective of any in-group or out-group distinction (Hofstede 2001; Nelson et al. 2006). Nelson et al. (2006) compared two individualistic, masculine countries and two individualistic, feminine countries and found that not all individu-

als in individualistic cultures resonated with the self-focused appeal. This finding highlights the importance of the masculinity/femininity dimension when examining egoistic/altruistic motives.

To fill the research gaps above, we address the following research questions: (1) which CRM appeal (self-focused vs. other-focused) should be adopted for each type of NPO (help-self vs. help-others), (2) how cultural orientation (masculine vs. feminine) affects consumer reactions to these two different types of CRM appeals, and (3) whether there is any interaction among the factors of NPO type and cultural orientation regarding their influence on consumer attitudes toward the two types of CRM appeals. This examination of how advertising appeal and NPO type interrelate with cultural values may help multi-national companies develop more effective CRM campaign strategies.

We designed and conducted a 2 (advertising appeal: self-focused vs. other-focused)  $\times$  2 (NPO type: help-self vs. help-others)  $\times$  2 (national culture: masculine vs. feminine) between-subjects study. The advertising appeals of self-focused or other-focused are manipulated by framing. Based on a pretest, we selected NPOs which care for the elderly to represent “help-self” organizations, and NPOs which help poor children to represent “help-others” organizations. A diverse group of Germans and Taiwanese participated in the experiment. Hypotheses were assessed using MANCOVA (multivariate analysis of covariance), with age, sex, attitudes towards helping others, and attitudes towards the charitable activity as covariates. We found a three-way interaction between advertising appeal, NPO type and national culture.

The findings highlight three major observations. First, when consumers perceive an NPO as having a help-self orientation, a self-focused appeal leads to higher purchase intentions and more favorable attitudes toward the sponsoring firm. This result fits into the congruent theory references in that people naturally form favorable judgments regarding information which is consistent with their perceptions (Eagly and Chaiken 1993; Taylor, Peplau, and Sears 2006). Second, NPO type plays an important role in CRM advertising. Corporations typically print CRM ads that focus on the product being promoted, relegating the NPO (i.e., the beneficiary) to a secondary role. This current study reveals that the NPO can be a key factor in determining the success of the CRM campaign. Third, the three-way interaction among advertising appeal, NPO type, and national culture was significant. The effects of the self-focused appeal on advertising persuasion are strengthened, when a help-self oriented NPO is chosen as a cause in a country with a masculine culture. The findings indicate that when the culture is masculine, the combination of a help-self NPO type and self-focused CRM advertising appeal enhance consumers’ purchase intentions and attitudes toward the sponsoring firm. In contrast, in a feminine culture, consumers will have a stronger purchase intention and a more favorable evaluation of the sponsor when a help-others NPO type is marketed via an other-focused CRM advertising appeal.

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# The Influence of Anthropomorphism on Product Attributes Processing and Consumer Preference

Echo Wen Wan, University of Hong Kong, Hong Kong  
Rocky Peng Chen, University of Hong Kong, Hong Kong  
Liyin Jin, Fudan University, China

## EXTENDED ABSTRACT

Anthropomorphism, defined as imbuing non-human objects with humanlike characteristics (Epley, Waytz, and Cacioppo 2007), is often adopted in marketing communications. Prior research has shown that specific appearance designs can enhance the effectiveness of anthropomorphism in marketing (e.g., when the grille of a car resembles the mouth of a friendly person). The current research goes beyond the specific physical attributes of specific products and documents a general elevated effect of anthropomorphism on consumers' preference for products with superior physical attributes (e.g., products with a more attractive appearance design or packaging design). Further, this research reveals a new mechanism that drives the influence of anthropomorphism on consumer preference. Specifically, anthropomorphizing a product prompts consumers to perceive the product in the same way as they perceive a person (i.e., by relying on a person's physical features). Consequently, product anthropomorphism increases the perceived importance of physical attributes in consumers' assessment of the product. In the next section, we review key findings in the literature and elucidate how and why anthropomorphism impacts consumer preference. Then we present three studies that test our propositions.

Recent research in marketing shows that anthropomorphism induces consumers to apply knowledge in human schema in processing information about products and brands. For example, Aggarwal and McGill (2007) find that product anthropomorphism leads consumers to evaluate the product based on human schema congruity. Consistent with findings in marketing literature, research in neuroscience shows that the same neural systems involved in making judgments about humans are activated when people make anthropomorphic judgment about non-human agents (Castelli et al. 2000). We thus posit that consumers are likely to use the way they comprehend a person to understand a product when the product is anthropomorphized. It is fairly common in our daily life that people form impressions about other people based on their physical appearance (Asch 1946). Person construal research by Freeman and Ambady (2011) shows that appearance cues, such as facial and body features, are often the first input that people access when they form impressions about other people. Empirical studies in the literature have demonstrated many cases that people rely on a person's appearance to make judgments in a wide range of contexts such as strategic games playing (Tingley 2014), criminal sentencing (Porter, Brinke, and Gustaw 2010), political voting (Antonakis and Dalgas 2009), and business practice (Gorn, Jiang, and Johar 2008). Based on prior research on anthropomorphism and person perception, we propose that anthropomorphizing a product would increase the importance of the physical attribute in consumers' product evaluation and choice. As a result, in a decision context involving the trade-offs between physically superior product and functionally superior product, anthropomorphizing the product would increase consumers' preference for products with superior physical (vs. functional) attributes. We first test the importance of physical attributes using the information search paradigm in experiments 1a and 1b, and then examine the downstream effect on consumers' product preference in experiments 2 and 3.

Experiment 1 served as an initial test of our proposition that anthropomorphism enhances the importance of the physical attri-

butes of a product using the information search task (Jacoby 1977). If anthropomorphism enhances the importance of physical attributes in consumer judgment and decision, we then expect that consumers would allocate more resources (e.g., money and time) to search information about the physical attributes when the product is anthropomorphized. We manipulated anthropomorphism using the method from Aggarwal and McGill (2007). Participants first read product introductions which were written either in first person language or in third person language. Next, participants proceeded to an information search task in which they need to allocate limited forum coins (experiment 1a) or time (experiment 1b) to view product information about physical attributes and functional attributes. Results of experiment 1 reveal that participants allocated more money (experiment 1a) and time (experiment 1b) to acquire information about physical attributes when the product was anthropomorphized.

Experiment 2 aimed to test the downstream effect of anthropomorphism on product preference. Participants were asked to describe a pack of cereal as either human or product, a method adapted from Aggarwal and McGill (2012). Next, all participants were presented with information of two options of packaged cereal involving the trade-off between the physical attribute and the functional attribute. Specifically, cereal A, the physically superior option, was rated as five-star for the package design and four-star for nutrition, whereas cereal B, the functionally superior option, was rated as four-star for the package design and five-star for nutrition. Then participants indicated their choice between the two options. Results of experiment 2 suggest that anthropomorphizing the cereal increased participants' choice share for the physically superior product option.

Experiment 3 aimed to replicate the downstream effect of anthropomorphism on product preference and to test the mechanism. The procedure was identical to experiment 2 except the following two changes. First, we used the laptop computer as the target product. Laptop A, the physically superior option, was rated as five-star in the appearance design and four-star in battery life. Laptop B, the functional superior option, was rated as four-star in the appearance design and five-star in battery life. Participants indicated their preference for the laptops on an eight-point scale (1 = strongly prefer A, 8 = strongly prefer B), which served as the dependent variable. Second, we added questions measuring the importance of physical attributes. In support of our hypothesis, participants in the anthropomorphism condition reported greater preference for the physically superior laptop than did those in the non-anthropomorphism condition. Moreover, a mediation analysis following Hayes (2012, Model 4) confirmed the mediating role of the perceived importance of physical attribute.

The present research contributes to the literature of anthropomorphism by documenting novel effects and mechanism for product anthropomorphism, and advances the understanding of consumer decision-making involving the assessment of a combination of physical and functional attributes.



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# Dealing with Structural Variance in Cross-Cultural Consumer Research

Yu Chen, State University of New York, US  
Ruben Chumpitaz, IESEG Paris, France  
Nicholas Paparoidamis, IESEG Paris, France

## EXTENDED ABSTRACT

It is widely acknowledged that the basis for cross-cultural investigation is measurement equivalence or invariance, referring to whether or not the measurement operations yield measures of the same attribute under different cultures or countries (Mullen 1995). Nevertheless, there has been limited research investigating methodological ways of dealing with data of metric variance in a cross-cultural context. Most cross-cultural consumer behavior researchers emphasize configural invariance (factor structures) as the indispensable precondition for cross-cultural comparisons. Metric invariance (factor loadings), the second step after configural invariance (Steenkamp and Baumgartner 1998), is supposed to be satisfied for the cross-cultural comparisons to be valid. Moreover, mean difference is the only signal that is assumed to be influenced by cultural differences—the “true differences between countries on the underlying construct or due to systematic biases in the way people from different countries respond to certain items” (Steenkamp and Baumgartner 1998, 78).

Nevertheless, there are “at least two forms of bias” in the statistical bias literature in psychological testing: a) measurement bias: the group differences in the relationship between a test and the latent variable to be measured, and b) predictive bias: the group difference in the relationship between a test and an external criterion (Millsap 1995).

## Research Proposition

Based on previous research, theoretical analysis, and an empirical study of consumer satisfaction with airline consumers from different countries, this research proposes that: First, measurement variance among groups should not be a stop sign for cross-cultural comparative research; second, cultural factors have an impact on predictive invariance and therefore, measurement invariance; more concretely, for countries under different cultural influence on the structures, there will be inconsistency between measurement invariance and predictive invariance, and mostly reflected in measurement variance if the predictive invariance is imposed; third, loyalty is another external predictor that could change the measurement invariance index; fourth, it is valid to group countries with the cultural codes and conduct cross-cultural analysis within culturally similar groups, or to group consumers based on their similarity with regard to some external impact factors.

The assumption of measurement invariance in cross-cultural research is that the measurement is consistent in different cultures or countries. As such, it proposes different levels of invariance—configural invariance, metric invariance, scalar invariance, factor covariance invariance, factor variance invariance, and error variance invariance (Steenkamp and Baumgartner 1998). Metric invariance is supposed to be an early step to verify the possibility of conducting the cross-cultural comparisons. A metric variant structure signifies that the factorial structure of the construct differs across countries (Steenkamp and Baumgartner 1998). As such, if a structure is metric variant, differences are supposed to exist between countries on the underlying construct or due to systematic biases.

## Exterior Predictors and Structural Invariance

On a larger scale, how the differences in interpreting and responding to questions may influence measurement invariance remains an under-investigated topic. The only exception in marketing literature is the consumers’ culturally different reactions to reverse-worded items (Wong et al. 2003).

The present research applies the Duality Theorem to illustrate that when factor covariance and external influencing factors coexist, predictable contradictory results between measurement variance and predictive invariance may occur. In the present study, the latter refers to cultural dimensions (notably uncertainty avoidance and power distance) and loyalty (notably action loyalty as expressed by loyalty program members). Thus, these factors are proposed that have an impact on measurement invariance.

## Empirical Study

In the present research, based on comparisons among five countries, we illustrate the cultural influence on consumer satisfaction measurement equivalence and the relative explanation. The study analyzes metric invariance (Steenkamp and Baumgartner 1998; Vandenberg 2002) that is a more restrictive invariance test, because this test imposes loadings equality constraints across the groups; the test’s acceptance permits significant comparisons of the weights given by respondents of the different groups. The research also examines slope invariance (Millsap 1995) as a predictive invariance test.

Alternative solutions for cross-cultural comparisons are proposed, as well as understanding the cultural impact on structural invariance and the remedies for metric variance.

## Method

### Data Collection

A European market research agency collected consumer data from five countries. The items and scales have been tested with principle component analysis and confirmatory factor analysis with good to excellent Cronbach’s alpha and other indexes.

A total of 2,599 completed surveys have been collected from airline consumers of five countries and have been used for the present study: 318 surveys have been collected from American consumers; 1,344 surveys have been collected from Belgian consumers; 229 surveys have been collected from Dutch consumers; 433 surveys have been collected from French consumers; 275 surveys have been collected from German consumers.

### Findings

The items and scales have been tested with principal component analysis and confirmatory factor analysis. Airline passengers’ consumer expectation and satisfaction variables contain three scales respectively: time (on-time departure and quickness to check in), personnel performance (presence, helpfulness, and promptness), and food (presentation and quantity). All three scales have excellent item factor loadings (, 72 to , 96) and good Cronbach’s alphas (, 68 to , 89).

The model has been tested first on the whole population sample. The two major indexes—measurement variance ( $\Delta df = 8, \Delta X^2 = 16, 8$ ) and predictive invariance ( $\Delta df = 5, \Delta X^2 = 6, 3$ )—are contradictory. Although there is measurement variance occurring from the data,

predictive invariance exists. A close look at the findings reveals that factor covariance ( $\Delta df = 14$ ,  $\Delta X^2 = 39$ , 7) is variant among groups. As such, there should be a predictor having an impact on predictive invariance. The fact that predictive invariance is imposed also leads to measurement variance. The predictive invariance might be related to one or more significant predictors.

#### Predictor 1: Cultural Similarity

A further analysis of the existing cultural indexes illustrates that French and Belgian cultures are very close ( $F = .009$ ,  $p > 0.98$ ) with regard to uncertainty avoidance and power distance, which are closely related to the two aspects of consumer satisfaction in the present study—attitude toward time and attitude toward personnel performance.

The findings also illustrate that American, German, and Dutch cultures are very close with regard to uncertainty avoidance and power distance ( $F = 0.209$ ,  $p > 0.65$ ).

Therefore, the five countries tested were grouped into two groups based on the criteria of cultural similarities (uncertainty avoidance and power distance) with regard to consumer satisfaction. Thus there are two groups—one group with French and Belgian respondents, and the other group with American, German, and Dutch respondents. For each group, we reran the measurement invariance analysis.

Similarities have been found among French and Belgian consumers: Multigroup analysis with AMOS was applied to test the differences between French and Belgian consumers with regard to their expectation and satisfaction levels. The indexes of the baseline model are  $X^2 = 541$ ,  $df = 126$ . When the factor patterns are constrained equal, the changes of the indexes are  $\Delta X^2 = 7.3$ ,  $\Delta df = 8$ ,  $p > .10$ . The results illustrate metric invariance of the structure as well.

Similarities also have been found among American, Dutch, and German consumers: Multigroup analysis with AMOS was applied to test the differences among American, Dutch, and German consumers with regard to their expectation and satisfaction levels. The indexes of the baseline model are  $X^2 = 757$ ,  $df = 237$ . When the factor patterns are constrained equal, the changes of the indexes are  $\Delta X^2 = 8.6$ ,  $\Delta df = 8$ ,  $p > .1$ . The results illustrate metric invariance of the structure.

#### Discussion

The findings illustrate that the first conclusion of measurement variance does not provide convincing evidence of the lack of structural invariance. On the contrary, the identification of the predictor—cultural dimensions—resolves the problem and helps advance the methodology application.

#### Predictor 2: Consumer Loyalty

Another predictor that might have an impact on consumer perception of expectation and satisfaction is consumer loyalty, since loyal consumers, especially action loyalty consumers, are supposed to overcome obstacles (Oliver 1997) and may have different expectations and perceptions of satisfaction.

Based on the findings of the present survey, we grouped consumers according to their action loyalty—whether they are members of loyalty programs or not. Thus, we have two categories of airline passengers—loyalty program members and others. We reran the analysis for each group independently.

The findings of the multi-country loyal consumer analysis illustrate that: first, the models are of good fit (RMSEA  $< 2$ , 15, CFI  $> .90$ ); second, invariance exists on all levels: Model 2 compared with model 1 shows insignificant increase of  $X^2$  (6, 5) with the increase of eight degrees of freedom. Similar insignificant increases of  $X^2$  are found on all other levels (Model3-2:  $\Delta X^2 = 6.3$ ,  $\Delta df = 5$ ,  $p > .1$ ;

Model4-3:  $\Delta X^2 = 4.3$ ,  $\Delta df = 1$ ;  $p > .01$ ; Model5-4:  $\Delta X^2 = 15$ ,  $\Delta df = 7$ ,  $p > .01$ ). The results exhibit good structural invariance, which is different from the structural variance among countries with both loyalty members and other passengers.

#### Discussion

The findings imply that structural invariance does exist for the model across all five countries, but only with loyal consumers. Such findings provide evidence of the “predictor” effect of the Duality Theorem. As well, it proves that structural invariance is under influence of very important “outsider” factors.

#### Conclusion

It is evident that in the social sciences, comparisons between groups of people constitute a large part of research, with groups defined in given moments in time or longitudinally by nationality, culture, gender, and race (Schmitt and Kuljanin 2008). This research stream is generated on the basis of an assumption stating that comparisons between groups are based on observed variables that assess the groups under scope, in the same way. If items measure the same latent variables and are related to the latent variables in the same way, any observed differences across groups can be interpreted as true differences in the unobservable latent variables. The validity of this assumption is assessed by tests of measurement invariance; more precisely, measurement invariance can be considered the degree to which measurements conducted under different conditions yield equivalent measures of the same attributes (Johnson and Meade 2007). According to previous research, if measurement invariance cannot be supported, differences between groups cannot be meaningfully interpreted.

This research advances methodological knowledge, as its findings provide alternatives for treatment of data that exhibit structural variance at the first invariance test. It is an important contribution addressing the methodological concern of the utility of large sample size cross-cultural data, the latter being constrained by the existing invariance conditions.

The present research echoes the Duality Theorem theory and proposes that certain predictors may be key factors in structural invariance and may make invariance and group comparison possible. Therefore, the present research provides remedies for data that are structurally variant on the metric level and propose a procedure of data retreatment.

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# Do Touch Screen Users Feel More Engaged? The Impact of Touch Interfaces on Online Shopping

Sorim Chung, University of California, Riverside, U.S.A.

## EXTENDED ABSTRACT

During recent years, one of the fundamental changes in online user environments is the input device which has moved from a mouse to a touch interface. However, little research has examined users' computer device types as part of online retail environments, and it is important to understand how using a touch interface influences or a mouse differs in online shopping experiences.

In offline retail environments, touch has been an important cue for purchase intentions and attitudes (Peck and Childers 2003). In online user environments, touch (i.e. touching computer interfaces) has a positive impact on perceived ownership (Brasel and Gips 2014) and students' engagement and performance (Enriquez 2010). Engagement leads to higher recall of commercials (Moorman, Neijens, and Smit 2007) and enhances satisfaction, trust, and commitment in a virtual brand community (Brodie et al. 2011). Product involvement level also affects consumer evaluations of products or services (Solomon 2013), however, little is known about how these device types and PIL influence online shopping experiences.

This study proposes a positive association between a touch interface and 1) shopper engagement among low involvement product shoppers and 2) purchase decision measures (product information recall, purchase intentions, product evaluations and satisfaction). The hypotheses also include a mediation effect of engagement between a touch interface and purchase decision measures.

Prior to the main experiment, a pilot study was conducted. The purpose of the pilot study was to determine 1) the appropriate product categories for online browsing and 2) the appropriate design and styles of test websites for the experiment to test in the main experiment. Sixty-two undergraduate students participated in a survey to receive course credit. Based on the results, clothing, computers and electronics were among the top five popular product categories that students reported shopping for online. For the website design and styles, students found the e-commerce websites using large visuals and simpler layout relatively pleasing and easy to use in terms of design and usability.

Study 1 had a  $2 \times 2$  between-group design (touch interface and mouse  $\times$  camera and sweatshirt). 127 college students were recruited through e-mail to participate in experiment sessions at a research lab, where each partitioned desk had a 22-inch touch screen monitor, mouse, and keyboard. All participants were randomly assigned to four conditions of 30–35 subjects. Two conditions browsed a camera website, and each condition used either a touch interface or a mouse. The other two conditions browsed a sweatshirt website, using either a touch interface or a mouse. Product types and website details were decided based on the results of a pilot study and on the findings of previous studies of touch interfaces (Brasel and Gips 2014). Sweatshirts were low involvement products (LOW), whereas cameras were high involvement products (HIGH). After browsing the site, participants completed a questionnaire on engagement, purchase decision measures and a few manipulation checks.

Study 2 also used a  $2 \times 2$  between-group design (touch interface and mouse  $\times$  high and low product involvement). Experimental sessions were held in the same lab with the same equipment and experimental conditions except for a few minor changes in the questionnaire and procedure. Unlike Study 1, this new study tested a single product category (camera) instead of two while manipulating the product involvement level separately to ensure the role of product

involvement and device types is replicated. Two different scenarios were used to manipulate the product involvement level, and each scenario was designed to induce either high (HIGH) or low involvement (LOW) toward the test product category.

Study 1 found a negative effect instead of the positive impact of using a touch interface as proposed. Touch interface users recalled brand names worse than mouse users, and this effect was significant among camera shoppers (HIGH) only ( $F(1, 123) = 5.67, p < .02$ ). Touch interface users were more engaged with their shopping than mouse users. As proposed, this effect was significant among sweatshirt (LOW) shoppers only ( $F(1, 123) = 5.70, p < .02$ ). Higher shopper engagement led to higher satisfaction with shopping, higher purchase intentions, and more positive product evaluations of product design and product availability ( $p < .05$ ). However, engagement level was not significantly associated with product information recall or product evaluation of prices, resulting in no significant mediation effect of engagement ( $p > .05$ ).

The significant findings from Study 1 were all consistent in Study 2 as well. Using a touch interface resulted in less accurate brand name recall than mouse users, and it was significant in the HIGH condition only as in Study 1. The positive association between touch interface users and engagement was also consistent in the LOW condition, and engagement level predicted product evaluation, purchase intentions, and satisfaction except for information recall.

In addition to the findings replicating the previous outcomes, Study 2 found several new effects as well. Along with brand name recall, touch interface users also did not recall price information as accurately as mouse users ( $F(1, 131) = 4.50, p < .05$ ), and this effect was significant in the HIGH condition only as in brand name recall. There was an additional main effect of touch interface, which resulted in higher purchase intentions than mouse users ( $F(1, 131) = 10.45, p < .002$ ). Finally, according to the Hayes' PROCESS macros (Hayes 2013), the mediation effect of engagement between touch interfaces and purchase intentions was significant. The effect size was within the 95% confidence interval that does not contain zero. The mediation effect of engagement was not significant in other associations. In both Study 1 and 2, the product involvement manipulation was performed successfully according to the manipulation check.

The findings of this study highlight the need to view a touch interface as part of online retail cues in addition to the traditional cues such as website design. The study also suggests that online retailers need to be aware of the device type that customers use to ensure the optimized shopping experience for different product categories as the device type matters to product information recall and purchase intentions.

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# The Cross-Modal Effects of Packaging Glossiness on Haptic Perception

Caroline Cloonan, ISG International Business School, France  
Gwenaëlle Briand Decré, LUNAM University, University of Angers, France

## EXTENDED ABSTRACT

Beyond web browsing, a large majority of individuals go web surfing in order to have a first contact with a retailer or a brand before purchasing offline. Online shopping leads to the discovery of the product, the brand or the retailer in a virtual manner in which sensory cues, like visual and auditory cues play a significant role since consumers can not touch or handle the items. While haptic exploration is critical in order to catch the touch sensation, visual sense is also adequate to evaluate the size or weight of an object (Klatzky, Lederman, and Matula 1993). According to Hine (1995), the visual and the material are the most important aspects of the packaging. As an important factor that affects consumer's evaluation, some researchers have focused on the haptic perception and have demonstrated that it is influenced by its visual through, for example, its brightness (Walker, Francis, and Walker 2010) or its color (Alexander and Shansky 1976). This mechanism, called cross-modal correspondence, allows consumers to get a haptic perception, without being able to touch an object, through other senses (For a review: Spence 2011). Indeed according to Fleming (2014), individuals are able to recognize, categorize and form haptic material properties through visual appearance.

In this article we focus on the effect of an understudied visual cue that is glossiness. Glossiness is an important feature as the attraction for glossiness is deep-rooted and a very human preference (Meert, Pandelaere, and Patrick 2014). If it takes less than a second to judge a material's glossiness (Sharan, Rosenholtz, and Adelson 2009), consumers do not perceived the glossiness *per se*, but they interpret a "set of simple proximal stimulus properties" that is correlated with glossiness. That is the perception of glossiness is a subjective evaluation made by individuals concerning a surface such as hardness or prettiness (Fleming, Wiebel, and Gegenfurtner 2013). Individuals are able to judge the glossiness that depends on both illumination (Motoyoshi and Matoba 2012) and specular reflectance (Fleming 2014). Consequently, marketers can easily manipulate the perception of a product's glossiness in many situations such as online retailing and advertising in which lighting environment is controlled.

The objective of this paper is to study the effect of the packaging's glossiness on haptic perception (i.e., lightness, thinness, warmth and roughness) as well as the evaluation of a product using two experimental studies.

Study 1 directly examines whether a glossy packaging material increases the product's attractiveness compared to a matte packaging material. Moreover the effect of packaging glossiness on haptic perception of the product is studied, that is to say the perceived product weight, roughness, warmth and thinness of the packaging material. Study 1 uses a one way between subjects design with two conditions (glossy *versus* matte packaging material). We used bottles of milk for study 1. There are two key results from study 1. First, we find strong support that individual preference for glossiness affects product liking and thus can be a useful feature when designing packaging. Secondly, the packaging glossiness can affect haptic perception. The perceived product weight, warmth, packaging thickness and roughness are higher with a matte packaging than a glossy packaging.

A second study aims to replicate the results of study 1 regarding the effect of the packaging material glossiness on the product liking, perceived lightness and perceived thinness of the packaging. Moreover, it examines the role of the net quantity declaration on the label. We chose shampoo in study 2, as it is a product category for which

glossiness and the net quantity statement can vary across products. Study 2 uses a 2 (packaging material: glossy vs. matte) X 2 (indication of product volume on the packaging: yes vs. no) between-subject experimental design. The indication of product volume on the packaging aims to test whether glossiness could systematically generate a perceived lightness even if the product volume is clearly indicated on the bottle. Multivariate analysis of variance revealed a direct significant effect of glossy versus matte packaging on the product liking. Respondents under the glossy bottle condition reported a higher liking rating than respondents under the matte bottle condition whether the label indicates the net volume or not. As predicted, compared to the matte packaging, the glossy packaging generated a lighter product perception and a thinner packaging perception whether the volume is indicated on the label or not. Finally a glossy packaging is perceived as smoother than a matte packaging. Human preference for glossiness (Meert, Pandelaere, and Patrick 2014) can be used by manager when it comes to design and display a product. Indeed, consumers report higher liking rate for products with a glossy packaging than a matte packaging. Our findings underlined the cross-modal effect of a visual glossy perception on haptic perception. Hence, a glossy packaging generates a perception of a lighter weight and a thinner packaging compared to a matte packaging. Moreover, a glossy packaging is associated with a colder product than a matte packaging. Thus glossiness allows consumers to infer product warmth. The analysis of the effect of packaging glossiness on perceived roughness indicates failures in "roughness constancy" (Ho, Landy, and Maloney 2006, 2007). This could partially due to consumers' associative learning that can affect object perception (Ho, Landy, and Maloney 2008). Thus it would be interesting to study the effect of glossiness on roughness perception for a product categories with more textured material (e.g., papers, clothing). Study 2 emphasizes the effect of glossiness on weight perception even if the volume is clearly indicated on the packaging. A glossy bottle is systematically perceived as lighter compared to a matte bottle whether the volume is indicated or not on the label. While we can expect that consumer will rationalize the weight perception with the volume indicated on the label, both experiments presented above demonstrate that a glossy packaging is more likely to be associated with a lighter product and a thinner packaging than a matte packaging.

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# Consumers' Representations of Social Media

Lana Jurdak, M.Sc. HEC Montreal  
Jonathan Deschenes, PhD, HEC Montreal  
Sylvain Senecal, PhD, HEC Montreal

## EXTENDED ABSTRACT

Over the last few years, social media has been studied by academics under different perspectives. They include topics such as the different degrees of usage of social networks (Hargittai and Hsieh, 2011), the relationship between personality traits and social media use (Özgüven and Mucan, 2013), the purchasing processes involving social media for specific activities such as travelling (Xiang and Gretzel, 2010), and social media engagement and its effect on online product purchase decision behaviors (Dhar and Jha, 2014). These studies contribute to our understanding of how consumers behave on or use social media but they generally overlook how consumers make sense of this universe.

In a general sense, some scholars have looked at the experience of the Internet and suggested that it can be used by consumers to extend one's identity and sense of self (Belk, 2013), present one's self to others (Schau and Gilly, 2003; Schlosser, 2005) and that it can be a source of freedom, information, empowerment or enslavement, fear and chaos (Joy, Sherry, Venkatesh and Deschenes, 2009). However, to our knowledge, no academic research has studied how consumers experience the specificity of social media scape. As individuals' perceptions have not been studied by a thorough exploration, we still cannot fully comprehend how consumers understand these media that they navigate on a regular basis. Consequently, the goal of this paper is to provide a detailed account of what social media represents to consumers. It provides a fundamental exploration of social media, of how it is perceived by consumers, and of what it involves in their lives.

In order to do so, we explore the metaphors evoked by consumers to express their perceptions of social media. Metaphors shape the way individuals think and act (Lakoff and Johnson, 2003). Researchers use metaphors to analyze consumers' dialogue as they convey meaning easily (Joy, Sherry, Venkatesh and Deschenes, 2009). For complex concepts in research, the process of eliciting metaphors is useful because it serves to represent a topic in its totality (Moser, 2000). Further, it helps to organize the data in a structural manner, give a new and creative perspective of analysis, and facilitates the emergence of deep feelings and emotions (Carpenter, 2008).

## Method

The ZMET method was used in this research, a technique by which researchers elicit metaphors with the use of imagery to analyze consumers' discourse (Zaltman, 1997). Images allow unconscious feelings and emotions about a topic to emerge (Zaltman, 1997). Ten in-depth ZMET interviews lasting approximately two hours were conducted with consumers of social media.

## Findings and Discussion

Findings highlight that consumers' representations of social media are complex and multi-faceted. Primarily, we observed that three deep metaphors (Zaltman and Zaltman, 2008) are central to consumers' perceptions: the metaphors of *connection* (the important need to connect with others physically, socially, or mentally, to belong and form attachments), *control* (the unconscious motivation to control themselves, other people, and situations, yielding a sense of empowerment when exerting control, or a sense of disorientation when losing of control), and *resource* (use of intermediate instru-

ments to achieve goals). These three metaphors are further refined through the lenses of the spatial-temporal continuum represented by *space* (social media representing an open area that is penetrated and navigated), *time* (evolution of existence and events in the past, present, and future), and *speed* (rapidity of movement). Together, the three metaphors and the spatial-temporal continuum present a multi-dimensional understanding of consumers' representations of social media.

The union of metaphorical and spatial-temporal dimensions used in this research provides an original way of looking at how consumers experience different aspects of social media platforms. Researchers may advance studies about specific social media platforms combined with the dimensions of space, time, and speed, to enhance precision about consumers' experiences with social media. The findings are valuable to managers of numerous domains for the purpose of enhancing online platforms according to consumers' needs and wants, as well as for the implementation of new strategies which can improve the customers' online experiences.

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# Controlled ‘Letting Go’: Young Women’s Alcohol Preloading Behaviour

Emma Dresler, Massey Business School, Massey University, New Zealand

## EXTENDED ABSTRACT

The pleasure principle, the idea that humans pursue pleasure is a fundamental psychological principle which forms the theoretical basis for the marketing concept of hedonistic consumption. Coveney and Bunton (2003) examined pleasure in relation to public health and distinguished between carnal pleasures and disciplined pleasures. Carnal pleasures are transgressive pleasures which are at odds with the norms of everyday life, whereas disciplined pleasures are the pleasures of moderation and control. The consumption of alcohol to the point of intoxication is a carnal in nature. Bakhtin’s theory of the carnival is based on the medieval European festivals in which revellers indulged in outrageous and transgressive acts as a temporary suspension of conventional structures and rules of everyday society. The world of the carnival was a collective euphoric experience, from which freedom of expression and association could be found (Hackley et al. 2013).

Preloading is the consuming of alcohol at a domestic residence prior to going out. This practice has become a widespread international trend amongst young people and is causing concern for public health professionals, who see it as risky drinking behaviour (Barton and Husk 2014; MacLean and Callinan 2013). However much of the research on preloading behaviour has been conducted on college students derived from the US and UK. A small number of studies have examined preloading in Australia (Foster and Ferguson 2013). This research applies the Bakhtin’s theory of carnival (Hackley et al. 2013), which operates through regularised pockets of hedonism according to restrict temporal and spatial boundaries, so as to legitimise the experience of communal festivity. Carnival is commonly regarded as transgressive of the normative order that is ideologically and physically imbedded in the structure of the city. This study was part of a larger research project designed to examine the social and cultural contexts of young people’s ritual alcohol consumption journey from sober, preloading, going out, recovery and sober. The final research questions for the preloading phase were as follows:

1. What discourses do young women draw on to construct their alcohol preloading behaviours?
2. How are these discourses used to construct young women’s preloading behaviours?
3. How do these constructions and positions influence practice and subjectivity with respect to their alcohol consumption journey?

There were 16 young women aged 18-24 years old participated in this study. All the participants had previous experience with alcohol preloading. The qualitative methodology was adopted to allow the researchers to not only understand the socially constructed phenomenon of the drinking journey, but also to explore why and how the young women behaved in the manner that they did. The interviews were recorded on an electronic audio recording device and lasted between 60-90 minutes. A semi-structured interview schedule facilitated the process to ensure that there was a degree of consistency between interview sessions and ensure that questions were asked in an appropriate order.

Thematic analysis was used to analyse the data from the interviews. An inductive, semantic approach to thematic analysis was selected, as this method supported the exploratory nature of the study

and ensured that the themes identified were strongly linked to the collected data (Braun and Clarke 2012). This approach involved initially analysing the data at a semantic level and identifying the surface meanings of what participants said. This subsequently moved to the ‘deeper’ thematic style of ‘circling and parking’ as an iterative process of moving back and forth over the data until ‘meaning-making’ occurs. To ensure further rigour, the data and resulting analysis, was member-checked by the three researchers.

The results indicated that during preloading, the young women transformed from the sober-self to the carnivalesque-self emphasising the negotiation and management of the binary constructs of individual/collective, insider/outsider, letting go/upholding the standards of behaviours, mundane/celebratory, order/chaos, and perceived risk/safety. Preloading was a complex, planned hedonistic ritual consumption phenomenon. The young women in this study described preloading as the most pleasurable part of their night out. It was where they consumed the majority of their alcohol to achieve the “desired” level of intoxication, only topping up with an occasional drink in the night time economy (NTE). A noteworthy finding was the extensive planning and management before engaging in the carnivalesque consumption. The young women felt that to enter the NTE they needed to be prepared to ensure that ritual would be pleasurable for all the participants. Furthermore, they could set aside the mundane aspects of their life and bond together in a safe environment before transition to the relatively unsafe environment of the NTE (Ritchie, Ritchie, and Ward 2009). The group intoxication involves both a physiopleasure from sensory experience and a sociopleasure from the feeling of inclusiveness gained by being in a group (Tiger 1992). The ideal state of intoxication is when everyone in the group is on the same level, and collectively experiencing the same “buzz”. The communal euphoria of intoxication enhances the growing pleasure in the anticipation and excitement about moving on into the nocturnal gala of the NTE.

The young women described a rational and careful risk and boundary negotiation to achieve the acceptable mixture of order and chaos in their carnivalesque consumption. The language used by young women to describe intoxication can be seen as calculated hedonism, a form of controlled ‘letting go’. The importance of control around the hedonistic consumption of alcohol suggests this belief needs to be acknowledged in interventions around their drinking. Attempting to persuade young women that their drinking behaviour is irresponsible and out of control, when they believe otherwise, will impact on the effectiveness of programs attempting behavioural change.

Preloading was the preparation for going out into the NTE. For the young women in this study it was a time of great pleasure. The focal of preloading activities were characterised by high levels of control, applying a range of strategies to ensure they enjoy the collective euphoria of carnivalesque alcohol consumption so as to come away from it unscathed to repeat the ritual. Drinking in young women is complex, and at times contradictory.

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# A Cross-Country Investigation of Organic Consumption Behavior: A Social Identification Perspective

Shuili Du, University of New Hampshire, USA  
Jos Bartels, Vrije University Amsterdam, Netherlands  
Machiel Reinders, Vrije University Amsterdam, Netherlands  
Sankar Sen, Baruch College, USA

## EXTENDED ABSTRACT

Consumer demand for organic products has been growing dramatically. Organic food sales in the United States generated approximately 31.32 billion USD in 2012, and is predicted to reach 42 billion USD in 2014 (Statista 2014). Furthermore, purchase of organic products now occurs among a wider range of demographics, with 81% of U.S. families reporting that they purchase organic products at least sometimes (Organic Trade Association 2013).

Prior research has examined consumer motives in organic consumption, such as the environmental and animal welfare concern, and the safety and health concern that motivate consumers to choose organic products over conventional ones (e.g., Hughner et al. 2007; Shafie and Rennie 2012); however, our understanding of organic consumption still remains limited. In particular, little has been known about the higher-level, consumer value- or identity-related drivers of organic consumption. Drawing upon the literature on social identity and identification (Ashforth, Harrison, and Corley 2008; Bhattacharya and Sen 2003), this study explores the extent to which organic consumption is driven by consumer social identity. We proffer the notion of “organic consumer identification” as the primary psychological substrate for the increasing consumer enthusiasm with, and consumer loyalty to, organic products. To the extent that individuals categorize themselves as organic consumers, organic consumption becomes a significant means to express their social identity.

This study provides several key contributions. First, our findings advance current understanding of organic consumption and elucidate an important psychological mechanism, organic consumer identification, which drives consumer organic product purchase. Second, this study examines various key determinants of organic consumer identification. We not only explore the relationship between superordinate consumer identity (i.e., being an environmentally conscious consumer) and subordinate identity (i.e., being an organic consumer), but also the effects of organic product-related beliefs on identification with organic consumers. Third, we examine the multifaceted roles of descriptive norms in driving identification with organic consumers. Last but not least, we empirically test our conceptual framework in six different countries, spanning Europe, North America, and Australia.

## Conceptual Framework

### *Organic Consumption as an Identity-Driven Behavior*

Identity is a self-referential description that provides contextually appropriate answers to the question “Who am I?” or “Who are we?” (Ashforth et al. 2008). The concept of identity helps capture the essence of who people are and why they do what they do. Consumption is often an identity-based behavior through which consumers fulfill their self-definitional needs, including self-enhancement and self-consistency (Bhattacharya and Sen 2003; Laverie et al. 2002; Reed et al. 2012). For example, consumers become loyal to brands or products with which they perceive a sense of belonging or oneness, and in turn, consumption of these brands/products become important means to express their social identity (Bhattacharya and Sen 2003).

In the context of organic product consumption, prior research shows that fundamental values of consumers drive their organic product purchase. In particular, research shows that transcendental values such as universalism and benevolence are very important for regular organic food consumers (Krystallis et al. 2012). For regular organic consumers, “organic consumption results from an ideology, connected to a particular value system that affects personality measures, attitudes, and consumption behavior” (Schifferstein and Ophuis, 1998; p.119). Certain core values have been found to be strongly associated with organic consumers, including universalism, benevolence, spirituality, and self-direction (Grunert and Juhl 1995; Fotopoulos, et al. 2003; Hughner et al. 2007). Organic consumers, due to their distinctive and central features (i.e., environmental friendly, health-conscious), are valid and desirable target for identification. The increasing popularity of organic consumption further enhances the attractiveness and salience of this consumer group’s identity (Bartels and Reinders 2010). Central to this study is the notion that individuals who hold positive beliefs about organic consumption will identify with a group of like-minded organic consumers. Such identification helps consumers to convey their social identity as a consumer – who they are and why they buy organic products.

### *Antecedents of Organic Consumer Identification*

*Environmental Consumer Identification.* We first examine the role of a related, yet higher-order identification, identification with environmental consumers, in driving organic consumer identification. Organic farming has a positive impact on environment, such as reduction of water contamination, enhanced biodiversity and overall better ecological well-being. Thus organic products constitute a subcategory of environmentally friendly products. As such, organic consumers share some of the positive connotations of environmental consumers, such as being ethical, environmental friendly and sustainable (e.g., Gil, Gracia, and Sanchez 2000).

In the broad context of environmental protection and sustainable development, there is a rapidly growing number of green, environmentally conscious consumers (Lin and Chang 2012; Straughan and Roberts 1999). Environmentally conscious consumers share several key characteristics, such as a strong concern for environmental welfare (Pagiaslis and Krontalis 2014) and greater environmental knowledge (Kang et al. 2013). Since identification can occur on multiple levels, and environmental consumers are a broader, higher-order consumer group than organic consumers, it is reasonable to expect that environmental consumer identification will be positively linked to organic consumer identification (Bartels and Hoogendam 2011). Due to the possible overlap and the connections between the identities of environmentally conscious consumers and organic consumers, we expect that,

*Hypothesis 1: Environmental consumer identification is positively linked to organic consumer identification.*

*Organic Product Familiarity.* Individuals’ perceptions and beliefs about organic products are likely to influence their identification with organic consumers. Drawing upon prior research on information processing (Alba and Hutchinson 1987) and identity-based con-

sumption (Du et al. 2007; Reed et al. 2012; Sen and Bhattacharya 2003), we examine organic product familiarity and organic product trustworthiness as potential antecedents to organic consumer identification.

Identification research points to the critical role of familiarity in building identification. Du, Bhattacharya and Sen (2007) find that consumer awareness and familiarity of a brand's social initiative is a key antecedent of their identification with the brand. Organic product familiarity leads to favorable attitudes toward organic products and organic consumers. Individuals thus are more likely to be attracted to the social identity of organic consumers, as such identity will serve their self-definitional needs including self-continuity and self-enhancement (Bhattacharya and Sen 2003). Relatedly, organic product familiarity also raises the identity salience of organic consumers by making positive, desirable traits of organic consumers (e.g., environmentally conscious) easily accessible in individuals' memory structures. Such identity salience increases the likelihood of individuals' identification with organic consumers (Reed et al. 2012). In sum, we expect,

*Hypothesis 2: Organic product familiarity is positively linked to organic consumer identification.*

*Organic Product Trustworthiness.* Positive associations of organic products will spill over to enhance the social identity of organic consumers. Accordingly, we expect that perceived trustworthiness of organic products enhance the trustworthiness perceptions of organic consumers, raising the identity attractiveness of organic consumers. Trustworthiness is the single most important characteristic of ideal members of interdependent groups or relationships (Cottrell, Neuberg, and Li 2007). Perceived trustworthiness of organic products and relatedly, of organic consumers, reflects the fundamental and enduring aspects of the social identity of organic consumers, and as such will stimulate identification with this consumer group.

There has been some empirical evidence that indirectly supports the positive relationship between perceived trustworthiness and identification. George and Chattopadhyay (2005) find that workers' trust in the management of an organization leads to greater identification with the organization. Stokburger-Sauer, Ratneshwar, and Sen (2012) show that perceived brand warmth, (i.e., beliefs that a brand is caring, trustworthy, and has the public's best interest in heart), a notion similar to trustworthiness, positively predicts consumer-brand identification. In sum, the perceived trustworthiness of organic products carry relevant meanings for the identity of organic consumers that pertain to these consumers' values and ethics, making organic consumers a more attractive and meaningful target for identification. Thus,

*Hypothesis 3: Organic product trustworthiness is positively linked to organic consumer identification.*

*Descriptive Norms of Organic Consumption.* Descriptive norms of organic consumption is relevant because they capture the social environment regarding organic consumption. High descriptive norms of organic consumption in one's social environment increase the visibility and salience of organic consumer identity. Individuals often focus on their immediate surroundings and social groups, contemplating the values and implications of salient and relevant social identities in their environment (Reed et al. 2012; Laverie, Kleine and Kleine 2002). Individuals will have greater breadth and depth of exposure to organic consumers if the descriptive norms of organic consumption in their social environment are high, making organic consumer identity and its attributes more accessible in their memo-

ries. Identity salience is positively associated with identification (Bhattacharya and Sen 2003). When the social identity of organic consumer becomes more salient due to high descriptive norms, it increases consumers' propensity to incorporate such social identity into their own identity. Taken together, we expect,

*Hypothesis 4: Descriptive norms of organic consumption is positively linked to organic consumer identification.*

*Moderating Role of Descriptive Norms of Organic Consumption.* In addition to having a main effect on organic consumer identification, descriptive norms are also likely to enhance the link from organic product familiarity and organic product trustworthiness to organic consumer identification. Bhattacharya and Sen (2003) argue that embedded relationships with a target for identification (e.g., a company or a brand, a consumer group) strengthen the link between identity attractiveness and identification. Relative to individuals in a social environment with low descriptive norms of organic consumption, those in an environment with high descriptive norms are more likely to be embedded in a social network consisting of organic consumers. For these individuals, through personal or symbolic interactions with organic consumers in their reference groups, positive beliefs of organic products (e.g., familiarity and trustworthiness) are more prominent and carry more weight in the identification process. In other words, given the same attractiveness of the social identity of organic consumers, high descriptive norms of organic consumption makes it easier and more important for individuals to categorize themselves socially in terms of organic consumers. Thus,

*Hypothesis 5: Social norms of organic consumption strengthens the link from (a) organic product familiarity and (b) organic product trustworthiness to organic consumer identification.*

#### *Outcomes of Organic Consumer Identification*

Organic consumer identification will engender a variety of favorable downstream outcomes such as consumer loyalty and organic product purchase. We expect that identification with organic consumers will trigger psychological loyalty to organic products. Organic consumers are, at least in part, defined by their actions of purchasing organic products; accordingly, individuals' organic consumer identification will cause them to express their commitment to the social group by a sustained, long-term preference for organic products over conventional products. Loyalty to and repeat purchase of organic products constitute the primary means for identified consumers to support the social group of organic consumers. As such, identification with organic consumers will drive not only psychological loyalty to organic products, but will induce individuals to repeatedly purchase organic products in spite of situational obstacles, such as higher prices and lack of insufficient marketing (Aertsens et al. 2009). Further, in line with the large body of research on intention – behavior link (e.g., Ajzen 1991; Oliver 1999), we expect psychological loyalty to mediate the link between organic consumer identification and organic product purchase.

*Hypothesis 6: Organic consumer identification is positively associated with psychological loyalty to organic products.*

*Hypothesis 7: Psychological loyalty to organic products mediates the link between organic consumer identification and organic product purchase.*

## Method

### *Sample, Procedures, and Measures*

To test our hypotheses, we conducted a longitudinal online panel study among consumers in the Netherlands, the United States, the United Kingdom, Canada, Germany, and Australia. Participants completed a self-administered questionnaire on organic product purchase and its antecedents. The data were collected in December 2010 (T1) and March 2011 (T2) by a professional market research company. In total, 3,083 participants completed the questionnaire at T1 and 1,939 at T2. In all countries, we instructed the market research company that our study samples should be representative of the specific country in terms of age and gender distributions.

We derive our measures for key constructs from relevant prior research. The measure for organic consumer identification is based on the multi-item scale of identification used in the prior literature (e.g., Mael and Ashforth 1992). Sample scales include, “when someone criticizes organic consumers, it feels like a personal insult.” “I experience a strong sense of belonging to organic consumers.” And “When I talk about organic consumers, I usually say ‘we’ rather than ‘they.’” Environmental consumer identification is measured using Bergami and Bagozzi’s (2000) visual scale of identity overlap. Sample items for organic product familiarity include, “I can recognize organic products among other regular brands.” And “some characteristics of organic products come to my mind quickly.” Sample item for organic product trustworthiness include “the likely quality of organic products is very high.” And “organic products are trustworthy.” Based on the research on descriptive norms (e.g., Cialdini, Kallgren, and Reno 1991), we have three items that measure individuals’ perceptions about how often their relatives/friends/colleagues buy organic. More detailed information about the measures are available upon request.

### *Hypotheses Tests*

We tested our hypotheses using multiple regressions with relevant interaction terms. To enhance the interpretation of the regression coefficients in moderated regression models, we mean-centered all continuous independent variables (Aiken and West, 1991).

H1 predicts that the superordinate level of identification, environmental consumer identification, will be positively associated with organic consumer identification. As expected, the coefficient of environmental consumer identification is significant and positive ( $b=.15, p<.01$ ). H2 predicts that organic product familiarity will be positively associated with organic consumer identification. As we expect, the coefficient of organic product familiarity is positive and significant ( $b=.23, p<.01$ ). Similarly, organic product trustworthiness is a positive predictor of organic consumer identification ( $b=.33, p<.01$ ), providing support for H3. H4 predicts that descriptive norms of organic consumption will be positively associated with organic consumer identification. In line with H4, the coefficient of descriptive norms is significant and positive ( $b=.30, p<.01$ ).

According to H5(a), descriptive norms also positively moderate the relationship between organic product familiarity and organic consumer identification. We find that the coefficient for organic product familiarity X descriptive norms is positive ( $b=.05, p<.05$ ). The positive coefficient for the interaction term indicates that the relationship between organic product familiarity and organic consumer identification becomes stronger when descriptive norms of organic

consumption are high and becomes weaker when the descriptive norms are low. Therefore, H5(a) is supported. In H5(b), we expect that descriptive norms will play a similar moderating role in the organic product trustworthiness and organic consumer identification. In line with H5(b), the coefficient for organic product trustworthiness X descriptive norms of organic consumption is positive ( $b=.07, p<.01$ ), suggesting that the organic product trustworthiness – organic consumer identification link becomes stronger as descriptive norms of organic consumption go up, providing support H5(b).

To test H6, we regress psychological loyalty to organic products on identification with organic consumer, as well as relevant consumer-specific perceptions and beliefs. As expected, the coefficient of organic consumer identification is positive and significant in predicting psychological loyalty to organic products ( $b=.61, p<.01$ ), therefore supporting H6. To assess the mediating role of psychological loyalty to organic products in the organic consumer identification – organic product purchase link, we first regress organic product purchase on organic consumer identification as well consumer-specific perceptions and beliefs about organic products. We then run another model with one additional independent variable, psychological loyalty to organic products. As we can see, in model 3, organic consumer identification is significant in predicting organic product purchase ( $b=.40, p<.01$ ). However, when loyalty to organic products is included in the regression model, the coefficient of organic consumer identification decreases significantly (from  $b=.40, p<.01$  in model 3 to  $b=.18, p<.01$  in model 4), while the coefficient of loyalty to organic products is highly significant ( $b=.37, p<.01$ ). These results are indicative of the mediating role of psychological loyalty to organic products in the relationship between organic consumer identification and organic product purchase, providing support for H7.

## *Discussion*

This study investigates consumer organic consumption. We find that organic consumer identification is driven by identification with a higher-order consumer identity, environmentally conscious consumer, as well as beliefs related to organic products (i.e., organic product familiarity and organic product trustworthiness) and social norms of organic consumption. This study contributes to the growing body of research on organic consumption in several key ways. Prior literature on organic consumption has predominantly focused on general consumer motives in organic consumption as well as on socio-demographic profiles of organic consumers. In contrast, our study reveals that organic consumption is driven by consumers’ social identity. More specifically, our study complements prior research by providing a theoretical account of identification-driven organic consumption behavior. Organic consumer identification occurs when a consumer’s self-concept contains that same attributes as those in the perceived identity of regular organic consumers, or when the identity of organic consumers becomes self-referential or self-defining. Our conceptual model is supported by survey results based on longitudinal responses from consumers in six different countries. Findings of this research provide important insights into antecedents and outcomes of organic consumer identification.

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# Liquid Consumption

Giana M. Eckhardt, University of London, UK  
Fleura Bardhi, City University London, UK

## EXTENDED ABSTRACT

In this paper we conceptualize a new form of consumption we call liquid consumption. A range of consumption phenomena has emerged during the last decade that require new ways of conceptualizing and thinking about consumer behavior, such as global mobilities (Bardhi, Eckhardt and Arnould 2012), the sharing economy and access based consumption (Belk 2010; Bardhi and Eckhardt 2012), digital consumption (Belk 2013); liquid organizations (Kociatkiewicz and Kostera 2014), the rise of fast fashion (Samsoie and Bardhi 2014), and liquid art (Bauman 2007c). These phenomena challenge the foundations of our existing conceptualization of consumer behavior, including the centrality of possessions and the dominance of ownership, the nature of relationship to objects (such as notions of attachment, commitment, and loyalty), the *raison d'être* of consumption communities, and the nature of value derived in consumption. To better conceptualize these changes, we propose using a liquid approach to understanding consumption, which is defined as having the following four characteristics:

1. No singularization of consumption objects. Consumers avoid identification with objects and are not necessarily looking to extend the self.
2. Situational value of consumption, which highlights the flexible rather than the solid, rigid or enduring nature of relationships or practices.
3. Use value dominates, in contrast to linking or identity value.
4. Dematerialization: a focus on the immaterial and access over ownership and possession. Value is placed on 'lightness,' in contrast to the economic, physical, emotional and social obligations/burden of ownership and materiality.

Liquid consumption is inspired by and anchored in the notion of liquid modernity, a social ontology of contemporary modernity put forth by the work of the sociologist Zygmunt Bauman (2000, 2005, 2007a, 2007b, 2011). Liquid modernity is a social condition where social structures are no longer stable or long-term, and thus cannot serve as "frames of reference for human actions and long-term projects" (Bauman 2007a, 1). It characterizes contemporary society as an age of individualization and uncertainty, dominated by instrumental rationality and fragmentation of life and identity. Liquid modernity is characterized as a chaotic continuation of modernity where a person can shift from one social position to another in a fluid manner. What is valued is flexibility, movement, lightness, access and speed rather than size, weight, fixity, ownership and locational control.

We propose that conceptualizing consumption as liquid has important implications for how we understand materiality, social distinction, the nature of consumption relationships, and consumer ethics. In liquid modernity, consumer identity is liquid and materiality needs to enable fluidity of lifestyle and movements between identity projects. Thus, we derive four implications for materiality: 1) the temporality of the relationship to materiality; 2) emphasis on use-value; 3) dematerialization and the increased value of access; and 4) emergence of liquid materiality. Further, we maintain that consumers are attached/anchored to practices rather than objects, and a liquid perspective is able to account for this shift. Liquid consumption also has important implications for understanding social distinction, one of the cornerstones of how we understand the purpose of consump-

tion within daily life. As an ontology, liquidity opposes the assumption of static social structures, including class. New forms of distinction have emerged. Bauman (2000) proposes that individual freedom rather than class has emerged as the axis of social distinction. Those who are free from commitments will gain stature in society, as compared to those anchored to people, places or things. Geographic mobility will also be key in defining the new elites. Network capital rises in importance (Urry 2007), and conspicuous consumption decreases in importance (Eckhardt, Belk and Wilson 2015).

Regarding consumer relationships, the new ontology suggests that liquid relationships are temporary, bonds are loose and guided by instrumentality without commitment. Ephemeral relationships to products and brands as well as among consumers are valued rather than traditional conceptualizations of consumer loyalty and commitment. Finally, with regards to consumer ethics, it is challenging to be an ethical consumer in liquidity. Morality and social structures are dissolving (Bauman 2000), and there is not a solid base of morals to turn to for guidance. In a liquid consumer culture, one's subjectivity is that of a consumer; one cannot escape being a consumer. Thus, one cannot be ethical as understood outside of consumer culture. To that extent, liquid consumption provides an explanation for the much discussed gap between attitudes and behaviors in the sphere of ethical consumption (Devinney, Auger and Eckhardt 2010).

A liquid view of consumption also has implications for a variety of other consumer research domains, such as consumer welfare, poor and disadvantages consumers, consumer governance, consumer surveillance, and how consumers use space. We unfold these implications and suggest a future research agenda that takes these into account. We also note that, contrary to Bauman, we do not see liquid consumption as an evolutionary imperative, and we recognize that some areas of the world and of consumption need to be solid to support a liquid lifestyle. We conclude by articulating the boundary conditions of liquid consumption and do not argue that all consumption is liquid. In sum, where the value lies in the consumption process is shifting, as is consumer subjectivity, and a liquid ontology is needed to understand and theorize these shifts.

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# The Complete Guide to Surviving That Long-Haul Flight: How Consumers Deal With Captive Consumption Contexts

Dr Stephanie Feiereisen, Cass Business School, City University London, UK  
Prof. Dr. Thorsten Hennig-Thurau, University of Muenster, Germany  
Prof. Vincent-Wayne Mitchell, Cass Business School, City University London, UK

## EXTENDED ABSTRACT

Consumer captivity is a highly relevant concept for consumer research, because many service situations have an element of captivity, as consumers are almost held captive due to high exit costs (for example, it is very difficult for consumers to physically leave during a long-haul flight, while getting a haircut, or while getting a comprehensive medical check-up). Understanding consumer captivity is essential for consumers and companies alike, because using inappropriate coping strategies or not using any coping strategy at all will likely result in a more stressful experience (Lazarus and Folkman, 1984). Despite the importance and prevalence of consumer captivity, limited efforts have been made in prior consumer research literature to conceptualize consumer captivity and understand the problems experienced by consumers in captive consumption contexts, along with the strategies consumers use to deal with these problems. In the present study, we focus on consumers as co-producers of their captive consumption experience (Pralhad and Ramaswamy, 2004) and seek to document what consumers do to keep themselves happy during the captive consumption experience by being prepared for it.

Overall, the present study identifies the lack of research on consumer captivity as a critical gap in prior work and aims to: 1) Conceptualize the concept of consumer captivity; 2) Identify the problems that affect consumers in captive consumption contexts, and 3) Develop a typology of the strategies consumers use to deal with captive consumption situations.

We draw on three main streams of literature to help rule out alternative explanations for the phenomenon of consumer captivity: the impact of waiting on consumers' perceptions (Miller, Kahn and Luce, 2008; Taylor, 1994), crowding (Machleit, Eroglu and Mantel, 2000; Machleit, Kellaris and Eroglu, 1994) and the coping literature (Lazarus and Folkman, 1984; Carver and Scheier, 1994). We define captivity as a physical constraint on consumers' activities that is characterized by costs of exiting as part of a (service) process in which consumers participate to obtain outcome-related benefits. Therefore, captivity is part of the service experience and is entirely distinct from waiting, defined as "the time from which a customer is ready to receive the service until the time the service commences" (Taylor 1994, p. 56) and often regarded as a barrier to goal achievement (May and Monga, 2014).

We used a thematic analysis (Braun and Clarke 2006) to develop a categorization of the problems faced by consumers, and solution strategies adopted in captive consumption situations via an analysis of online blogs and forums. Data were collected from 45 websites in three contexts: one high-captivity context (long-haul flights) and two medium-captivity contexts (hospital stays and long car trips). As we expect service contexts to range on a captivity continuum, the objective in using medium-captivity contexts was to show that our findings apply to a wide range of captive contexts beyond long-haul flights. Data were extracted, coded and analyzed using the NVIVO software.

Very rich, anecdotal accounts of personal experiences were encountered on the blogs and forums analyzed. Following this analysis, we developed a categorization of problems and solution strategies faced by consumers in captive consumption situations. The eight key problems faced by consumers we identified are: boredom, lack of

comfort, anxiety or fear, disturbances from others, feeling unhealthy, not looking as good as usual, worrying about disturbing other people around, and embarrassment.

Solution strategies were categorized into three broad themes: Pre-captive (with the aim to prepare for the captive situation), captive (to deal with the captive experience while the captive situation is unfolding) and post-captive (to deal with the consequences of the captive situation). Further analysis identified a set of sub-themes. Pre-captive strategies include 1) service-provider related strategies, such as booking a special seat, 2) logistic strategies such as packing certain accessories, and 3) pre-emptive physical/ bodily strategies such as adjusting sleeping habits before the flight. Captive strategies were divided into 1) entertainment strategies, such as doing puzzles, 2) productivity strategies, such as getting some work done, 3) physical/ bodily strategies, including applying moisturizing cream, 4) psycho-social strategies, including intentionally keeping a positive frame of mind, and 5) activity sequencing strategies, including systematically alternating between activities. Finally, key categories in post-captive strategies were 1) post-physical bodily strategies, such as going for an extra run, and 2) psycho-social strategies, such as managing one's expectations by expecting to feel bad after the flight.

This paper contributes to prior literature in several ways. First, we aim to contribute to theory development in consumer research by conceptualizing consumer captivity, which has received very limited attention in prior work (see Chen, Gerstner, and Yinghui, 2009 for an exception). In doing so we demonstrate how captivity is distinct from the concept of waiting (Hui, Thakor and Gill, 1998). Second, although the coping literature in consumer research and in experimental psychology has looked at coping strategies in negative service contexts (Miller, Kahn and Luce, 2008; Folkes, Koletsky, and Graham, 1987), no study has examined coping methods in the more common consumption orientated contexts. The present study fills in this gap in prior literature by looking at coping strategies in common captive consumption situations such as long-haul flights, or long car trips. Our findings show that the abundance of strategies used by consumers to deal with captive consumption contexts was not previously captured by existing coping models (Duhachek, 2005; Lazarus and Folkman, 1984). Third, we contribute to prior work in the service literature which has examined the effect of overbooking service capacity on the evolution of consumer transactions with the company (Wangenheim and Bayón, 2007), and how service failure affects consumers' attributions, affect and behavioral responses (Folkes, Koletsky, and Graham, 1987). Although useful, this stream of research takes a producer-centric view and conceptualizes consumers as the recipient of the company's activities. Contrarily, we acknowledge that consumers are actually active co-producers of their consumption experience (Pralhad and Ramaswamy, 2004), and aim to strengthen current understanding of the creative, customized solutions developed by consumers in captive consumption contexts.

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# To Share or Not to Share: What Drives SNSs Users' Intention to Share?

Pei-Wen Fu, National Sun Yat-sen University, Taiwan  
Chi-Cheng Wu, National Sun Yat-sen University, Taiwan  
Yung-Jan Cho, National Sun Yat-sen University, Taiwan

## EXTENDED ABSTRACT

Since the phenomenal success of Facebook, social network sites (SNSs hereafter) have become one of the most powerful media for market communications. This novel media is different from the traditional ones in many ways. Contrasting with traditional web sites that filled with pre-edited materials, SNSs are primarily composed of user-generated contents (UGC). Rather than pushing messages toward the audience, marketers strive to elicit words of mouth (WoM) from the uses of SNSs. Marketing literature has documented that WoM, especially from significant others, has decisive influence in consumers' purchasing decisions (Chevalier and Mayzlin 2006; Godes and Mayzlin 2009). SNS has exactly this distinctive feature in provoking WoMs and distributing them to closely related people. When companies create their fan pages on SNSs (e.g., Facebook), they strive to provoke positive WoMs from their fans, and this objective is primarily achieved by the sharing mechanism on Facebook. Therefore we believe that users' sharing behavior is critical to the success of social network marketing, and with this article we thus aim to investigate users' intention to share messages in SNSs.

U&G theory implies the fact that media users (or SNSs users) are goal directed in their behaviors (Katz, Blumler and Gurevitch 1974). Thus, media users usually seek out appropriate media and media content to fulfill their needs (Ko, Cho, and Roberts 2005; Zhang, Tang, and Leung 2011). Involving in online activity (e.g., sharing message) provides individuals several benefits, such as reputation gains (Tennie, Frith, and Frith 2010), self-promoting (Buffardi and Cambell 2008; Mehdizadeh 2010; Ryan and Xenos 2011), and social capital creation and maintenance (Ellison, Steinfield, and Lampe 2007). These social psychological incentives are intrinsic benefits (Cheshire 2007) that people experience when they involve in online activity. A growing body of research looks at how these non-monetary incentives influence individuals' online behaviors with either empirical approach or neuroscience (e.g., Ellison et al 2007; Ling et al. 2005; Cheshire and Antin 2008; Tamir and Mitchell 2012).

Specifically, three research domains identified the effect of non-monetary incentives on media uses. First, researches on Internet information pool (e.g., Wikipedia, Napster, and YouTube) indicated that the feedback mechanism provided social psychological incentives to users repeat contributing to online information, such as online reputation (Cheshire 2007; Cheshire and Antin 2008; Ling et al., 2005). Second, studies of SNSs use suggest that individuals perceived their social capital (Putnam 2000) created and maintained when using this new media (i.e., Facebook) (Ellison et al. 2007). Last, by using neuroscience approach, researchers identify the association between online activity involvement and brain regions activation (Meshi, Morawetz, and Heekeren 2013; Tamir and Mitchell 2012).

Sharing message is obviously a specific use of media. Though it is plausible to hypothesize sharing contents on SNSs as a goal (objective/purpose) driven behavior, less is known about what exactly drives people to share content online. Most literature has focused on users' "motive to use" SNSs (e.g., Joinson 2008; Taylor, Lewin and Strutton 2011); however, what drives individuals to use SNSs does not necessarily motivate individuals to share. In the virtual world, there are "lurkers" who observe passively but barely participate in discussion within their communities (Bishop 2007). The success of

social media marketing relies on the sharing behavior of consumers. It is critical to explore the motives to share of SNSs users.

We posit that psychological incentives are the key factors that drive SNSs users' intention to share. Based on the research of Alexandrov, Lilly, and Babakus (2013) on Word of Mouth (WoM) engagement behavior, we identified two rewarding motives: self- and social- rewarding motive. Self-rewarding motive helps individuals enhance themselves or distinguish them for others. For instance, uniqueness, self-enhancement, and self-affirmation are the motives that can be classified into self-interest motive. On the other hand, social-rewarding motive aims to make connection with others, such as social capital, social approval, and social-goal achievement. Besides, SNSs literature suggests that self-presentation (Ong et al. 2011) and social connection (Ellison et al. 2007) are the fundamental functions of SNSs. Although the literature mainly focused on SNSs users' usage, it implied the importance of self and social aspects of motives. Therefore, this study aims to explore SNSs users' sharing motives based on the above arguments. Specifically, we want to know "what kind of self- and social-rewarding motives can drive SNSs users sharing contents?"

Study 1 (n=22) apply focus group interview to explore SNSs users sharing motives and other potential constructs. The interview indicated six "sharing motives" that might drive individual to share on SNSs, twelve "message types" that are mostly seen on SNSs, and two types of "social capital focus" when sharing messages. We further classified six sharing motives into two types (self-interest motive and communal motive), and grouped twelve message types into three categories (commercial messages, lifestyle affairs, and personal opinions).

Study 2 (n=265) conducted an online survey to testify the relationships of our key constructs. Specifically, we posit that (a) self-interest motive drives users' intention to share commercial messages and personal opinions, whereas communal motive drives the intention to share lifestyles affairs and personal opinions, (b) the more users focus on bridging social capital, the more they have higher intention to share, and (c) social capital focus would moderate the relationships between sharing motives and sharing intention. The regression analysis showed that self-interest motive is positive correlated with intention to share commercial messages ( $\beta=.23, p<.05$ ) and personal opinions ( $\beta=.33, p<.001$ ), and communal motive is positive correlated with intention to lifestyle affairs ( $\beta=.30, p<.001$ ) and personal opinions ( $\beta=.21, p<.05$ ). Furthermore, bridging capital focus is positive related to intention to share lifestyles ( $\beta=.28, p<.05$ ), but not to intention to share commercial messages ( $\beta=.03, n.s.$ ) and personal opinions ( $\beta=.01, n.s.$ ). Finally, the data reveals the interaction effect of self-interest motive and bridging capital focus on intention to share commercial messages ( $\beta=-.24, p<.05$ ) and lifestyle affairs ( $\beta=-.20, p<.05$ ), but not personal opinions ( $\beta=.07, n.s.$ ).

Our research has several contributions. First, to our best knowledge, this is the first study focus on SNSs users' sharing intention. As we mentioned earlier, what makes individual use SNSs does not necessary drive them to share on SNSs. Besides, this issue is more critical for marketers. After all, "use motive" is the issue that platform managers should concern. Second, this study stresses on the importance of self-interest/ communal motive, message type, and social capital focus. Because using SNSs is a goal directed behavior,

users would seek appropriate contents to share and fulfill their needs (both self and social needs). Besides, strong and weak ties have different message diffusion effect. Message diffused in strong ties are more credible and influential for individuals decision making while weak ties helps messages diffused rapidly. Thus, knowing how SNSs users react when facing friends from different social ties is pretty important for marketers. Marketers can utilize our findings to manage the communication on SNSs. For example, releasing messages with unique style can effectively increase SNSs users' intention to share, especially for users who concern about close friends, because the messages can fulfill the need of self-enhancement. Besides, users who receive this message may perceive the message credible because the diffusion is basically within the strong social ties.

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# Conceptualizing Consumer Freedom: Liberating Shopping Practices among Moroccan Women

Delphine Godefroit-Winkel, Ghana Institute of Management and Public Administration, Ghana  
Samuel K. Bonsu, Ghana Institute of Management and Public Administration, Ghana

## EXTENDED ABSTRACT

Consumer researchers have considered the extent to which the market liberates or restricts freedoms (e.g., Firat and Venkatesh 1995; Varman and Vikas 2007). Some have argued that capitalism offers a false sense of freedom while taking advantages of opportunities to “imprison” consumers (Bonsu and Darmody 2008).

Recent studies have shown that consumers negotiate market spaces with the aim of setting themselves free from certain social strictures. For instance, Goulding et al. (2009) show how consumers suspend internal and external constraints with the help of promoters and DJs in clubbing experiences. Clubs represent market spaces that support a range of illegal practices and facilitate certain individual freedoms restricted by law and moral suasion. Tolerating these practices makes clubs and their clients active participants in the co-creation of spaces where consumers transgress socially constructed norms and experience a sense of positive freedom.

Recognizing that consumer freedoms are related to easy and pleasurable consumption activities (Rappaport 2000), this paper explores a newer understanding of the concept of freedom through the dynamics of new retailing forms in Morocco that have become a major avenue for consumer liberation from socio-historical constraints. That is, we seek to extend literature on the emancipatory potential of markets. Our research questions include: how does the market liberate consumers from social constraints? To what extent is such liberation itself a constraint on the social order? How do consumers appropriate market resources to redefine their identities and what are the implications for the broader social processes?

## Methodology

In pursuit of our objectives, we conducted a three-year ethnography of women and shopping in Casablanca, Morocco. We adopted a three-pronged approach to data collection: 1) long interviews with 61 informants, 2) observations of female shopping in the traditional souks and in the new malls and 3) textual analysis of media reports on the plight of women and their changing roles in the face of emerging retailing formats. We located our research among female shoppers in Morocco because their freedoms are restricted to culturally-defined roles. Analysis was conducted through a careful “reading” (Lutz and Collins 1993) of all data and interpretation informed by theory.

## Findings/Conclusions

Power and control of resources within Moroccan households are mainly by social assignment on the basis of gender. Shopping in Morocco has long been the preserve of males (Kapchan 1996), giving the male control over what is purchased and brought to the home. This is part of the male expression of power in the society. Our preliminary analysis point to the increasing importance of new retail forms (shopping mall, supermarket, department store) as primary sites for socio-cultural struggles and negotiations in Morocco where the subaltern fight their symbolic battles.

Our observations challenge the perceived notion of shopping as an act of altruism performed for the sake of others (e.g. Miller 1998). We suggest that Moroccan women see shopping as serious business that is intricately tied to their self-centered freedoms. The struggle for power in the supermarket that we observed has symbolic meanings that pervade the quotidian. To our informants, shop-

ping provides opportunities to forge a new collective identity that challenges the traditional identities defined for them in the broader society. Their efforts indicate a latent but powerful means of social change that supports inversion of the traditional roles reserved for males and females in the Moroccan society. Having been encultured into the broader context of traditional practices, Moroccan women pursue this inversion in a subtle way that recognizes existing social structures. For instance, the women are pursuing change while mas- saging the male ego – demonstrated, for example, in the seeming need for some informants to take their fathers, brothers, or husbands shopping with them. This way, the male does not feel the challenge to his traditional authority. To Moroccan women, shopping is freedom from socio-cultural strictures: freedom to shop, freedom to choose, freedom to be free! In the long run, the freedoms expressed through shopping in the new forms of retailing should allow consumers to (re)produce culture and contribute to the macro-structuring of society. On this basis, we propose that shopping is a matter of freedom that allows for extension beyond the immediate confines of the shopping experience.

Finally, freedom in this context draws on Rousseau (1791) and Adam Smith (1776) to suggest that individual freedom is best achieved through group activism. We suggest that while consumers pursue their self-oriented objectives of individual freedom, they facilitate a broader sense of freedom at the group level. This freedom is manifested in part through political expression. In this process, the market is a unique provider of spaces, where the subalterns find avenues to express their voices and participate actively, sometimes in a subtle way, to the construction of new social arrangements.

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# Taste Buds with An Agenda: Is Food Experience Affected by Consumers' Values and Beliefs

Aner Tal, Cornell University, USA  
Yaniv Gvili, Ono Academic College, Israel  
Moty Amar, Ono Academic College, Israel  
Brian Wansink, Cornell University, USA

## EXTENDED ABSTRACT

Food products are frequently associated with political ideology. Companies often get involved in politics via considerable spending on political lobbying and donations. Food companies specifically are heavy spenders, with recent years seeing rising expenditures. For example, in 2013 the American food industry spent \$70,162,260 on political lobbying (Center for Responsive Politics, 2014a, 2014b), and donated \$48,266,140 to politicians for the 2012 elections (Center for Responsive Politics, 2014c). Another example takes place in France where the growing number of Mediterranean kebab houses in classic heritage sites such as Blois has enraged the far-right National Front political party, who said in a statement that "The historical center of Blois, the jewel of French history, is turning into an Oriental city" (Reuters, 2014).

In the current article, we argue that political "tagging" of food products can influence product consumption *experience*. Specifically, associating food products with a political ideology one opposes harms experience, even though it bears no logical relation to product quality. If such alterations in product experience do indeed occur, that might indicate that people steer away from morally objectionable products not through a cold reasoned process but because the quality of such products is *subjectively lower*.

Where the political ideology conveyed by the firm conflicts with a person's own values, it may arouse moral-disgust (e.g., Haidt, McCauley & Rozin, 1994). Moral-disgust is built on core-disgust, a primitive emotion linked often to stimuli rejection related to food (e.g., Haidt, McCauley & Rozin, 1994; Rozin, Haidt & Fincher, 2009). However, over time the disgust reaction has generalized to broader stimuli rejection, such as the rejection of actions that are at discord with one's values and beliefs (Haidt, Rozin, McCauley & Imada, 1997). Given the link between disgust and food rejection, evoking disgust can affect the taste of food (Eskine, Kaciniak & Webster, 2012; Skarlicki, Hoegg, Aquino & Nadisic, 2013).

Across three experiments, we show that politically "tagged" food render food less tasty for those who hold contradicting political ideologies, and that moral-disgust mediates the effect. In experiment 1 (N=62), online panel participants were presented with a picture of a cookie and asked to imagine they are tasting it. Subjects were randomly assigned to either a Republican or Democratic donation condition, with each condition being told that they know the company producing the cookie has donated heavily to the Republican or Democratic Party, respectively. Then, participants' anticipated taste experience with the cookies was measured. The results show interaction between the party to which the company donated and people's support for the Republican party, such that Democrats rated the cookies as less tasty if the cookies were produced by a company who donated to the Republican party ( $F(1, 59) = 4.53, p = .04$ ).

In experiment 2 (N=180), we conducted a similar study as in experiment 1, but in a field setting with actual cookie tasting. Participants were presented with the same alternative scenarios as in Experiment 1, tasted an unmarked cookie, and rated its taste, as well as their political orientation (Democratic or Republican), using similar measures as in Experiment 1. We added a measure of participants' involvement with politics. As in Experiment 1, we found an interaction

between the party to which a company donated and peoples' support for the Republican party, such that taste evaluations were reduced when donations were opposed to participants' own political positions ( $F(1, 173) = 5.31, p = .02$ ). Participants who reported greater support for the Republican party reported enjoying the cookie less if told the company manufacturing the cookie donated to the Democratic party (vs. the Republican party), yielding a significant interaction between donation and political position. These results were stronger for those who expressed greater involvement with politics, yielding a significant three way interaction between donation, political position, and self-reported importance of politics ( $F(1, 173) = 4.65, p = .03$ ). Put together, the results of Experiments 1 and 2 suggest that alleged political orientation of a food company may alter people's taste perception if it conflicts their own political values.

Experiment 3 (N=62) examines the underlying mediating effect in the domain of political donations. The same procedure of Experiment 1 was applied with additional questions regarding the extent of disgust subjects experience with the donating food company. As expected we found an interaction between the party to which the company donated and people's political support ( $F(1, 59) = 5.93, p < .05$ ). Since in previous experiments we found that the majority of the population from this online panel mostly objected to the Republican Party, we chose to examine dDisgust mediation analysis in the Republican donation condition (N=30) shows. The results show a significant effect of support for the Republican Party on taste ratings ( $F(1, 29) = 4.36, p < .05$ ). Furthermore, mediation analysis using bootstrap test reveals that moral-disgust mediates the effect of political donations on food taste. Specifically, a bootstrap analysis with 1,000 resamples revealed that the 95% confidence intervals for the significant indirect effect excluded zero (from .07 to .72,  $B = .30, p < .01$ ).

Altogether, this paper illustrates that the association of food products with political or ideological beliefs influences taste, such that people expect and experience foods as tasting worse when the foods are associated with political positions or ideologies to which they oppose.

The results can offer several contributions to current literature. First, they demonstrate that moral-disgust can be aroused by beliefs and ideologies, rather than just actions. Second, they demonstrate that beliefs about elements associated with a product can affect its taste even when they are completely irrelevant to product quality, contributing to our understanding of taste experience. Finally, they provide further evidence about the links between moral-disgust and taste, furthering our understanding of the relationship between moral and physical disgust.

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# Taste the Self You Want To Be: Desire for Social Image Enhances Taste

Aner Tal, Cornell University, USA  
Yael Hallak, Tel Aviv University, Israel  
Yaniv Gvili, Ono Academic College, Israel  
Moty Amar, Ono Academic College, Israel  
Brian Wansink, Cornell University, USA

## EXTENDED ABSTRACT

Can desire for a particular identity improve the taste of food related to that identity? Across two studies, we show that those who desire a particular identity evaluate food products associated with the desirable identity as tastier. In study 1, participants rated the taste of products supporting a desired identity more highly for both brands and product types. In study 2, participants who wanted to be seen as athletic rated a sports drink as tastier. Importantly, that happened only if they did not already see themselves as athletic. In other words, people find foods tastier if those foods help establish a desired identity.

### Background: Identity and Choice

The choices we make are strongly influenced by our sense of identity. Our career, our life partners, and our hobbies are all affected by the social and personal identity we try to maintain. Everyday consumption choices as well as influenced by identity, as products and brands become part of how we define ourselves (Feirstein 1986; Rosenbaum 1972). In this, products in general and food products in particular can serve as part of a more general process of shaping and supporting a desired self.

People are generally motivated to create a favorable and consistent identity (Gecas 1982; Turner 1982). They actively participate in constructing and maintaining their identity (Berzonsky 1993) in their decisions and through a variety of processes such as encoding self-relevant information to maintain a coherent sense of self and reality, dealing adaptively with personal stressors and conflicts, and maintaining positive social relations with others (Berzonsky 1990; Epstein 1980).

### *Ideal, Future and Possible Selves*

Our choices are led not only by our current selves, but by possible selves – our ideas of what we might become, what we would like to become, and what we are afraid of becoming. Both current and possible selves change and motivate behavior (Markus and Nurius 1986) Accordingly, product choices and preferences may be driven not just by who one currently is but who they would like to become. In fact, choices and preferences might specifically aim at arriving closer to a desired identity.

Some attempts to get closer to the ideal future self are bound with personal consumption. Product choices help us express the people we would like to become. Our accumulation of possessions provides a sense of future as well as past, and tells us who we are, where we have come from, and where we would like to go (Belk 1988).

### *Aspiration Groups as Consumption Guides*

Ideal selves are used as a standard to which one can aspire. Aspiration groups - groups to which one *would like to belong* - can serve as one avenue to promote a desired self, since reference groups can be closely tied to one's self-definition (Brewer and Gardner 1996).

The products and brands that group members use are an easily observable characteristic that can serve consumers in order to identify members of groups they would like to feel part of (Elliott and Wattanasuwan 1998; Erdem, Swait, and Valenzuela 2006). Such

products can serve as useful tools to grow closer to a desired group and thus promote a desired identity.

Choosing or purchasing a particular product may help individuals signal either their identity or social differences, growing closer to a desired reference group and so supporting a desired identity (Berger and Heath 2007; Berger and Heath 2008; Bourdieu 1984; Tian, Bearden, and Hunter 2001). Consequently, people may imitate the consumption behavior of members of their aspiration groups (Simmel 1957; Van den Bulte and Joshi 2007; Van den Bulte and Wuyts 2007).

### *Social Influence on Food Choice*

Studies of food choice give some clues as to the influence of desired identity on taste. The culture in which one grew up has an important role in shaping taste preference (Rozin 1976). In general, peoples' social environment can play a meaningful role in shaping their taste preferences, such that people come to have different taste reactions to foods depending on the environment in which their tastes develop (Rozin 1990). The social environment interacts with intrinsic properties of the food to determine its palatability (Rozin and Vollmecke 1986).

### *How Moving Towards a Desired Identity Can Affect Taste: Taste Experience as Functional Pleasure*

Pleasure is known to be a function of need fulfillment (James 1890). The consumption of a food that's physiologically needed can resolve tension, and resolving tension by reducing a need state feels pleasurable (Fite 1903).

The functional perspective on pleasures argues that pleasure can essentially be seen as indicating usefulness to the organism (Cabanac 1971). Based on one's current state, particular physical stimuli can feel pleasurable or painful. For instance, if one's body is hypothermic, degrees of warmth that may be unpleasant in other situations can feel pleasant (Cabanac 1969).

This applies broadly in the domain of food. Food taste can generally be improved when it answers physiological needs.

Food taste is particularly enhanced when people are calorie deprived. For example, hungry participants show a preference for sucrose-sweetened drinks (Mobini, Chambers, and Yeomans 2007).

Fulfilling physical needs, then, results in pleasure. When food answers current needs, it would be experienced as tasting better (Cabanac, Chantal and Everett, 1997).

To date, no research has more directly demonstrated that answering mental needs can generate physical pleasure.

Some initial evidence attests that food might indeed taste better when answering psychological needs. Food tastes better when it matches one's values, such as power or hedonism (Allen, Gupta, and Monnier 2008), or aligning with one's political positions (Tal et al. 2014).

As argued above, we expect that if a brand can help alter one's identity to render it closer to a desired identity, it would be experienced as tastier.

*Hypothesis 1: Taste evaluation will be higher for consumers who desire an identity the product supports.*



*Hypothesis 2: Enhancement in taste due to a desired identity will be more pronounced if a person does not already see themselves as a member of the desirable identity.*

## Study 1: Identity Desirability and Taste Experience

### Methods

Participants (N = 41) were recruited online on Amazon Mechanical Turk, and completed the study in exchange for payment. They were presented with a list of eight food products and brands, and were asked to evaluate how desirable they found the identity tied with the foods. For this, they were asked to rate their identification with the consumer image tied to the product, measured by the item “how much do you identify with the type of person who eats/drinks it”, and the desirability of the identity tied with the product, measured by the item “to what extent do you want to be seen as the type of person who eats/drinks it”. Taste evaluation was measured by the item “how much do you enjoy the taste of this food. Participants rated the items on 9-point Likert scales ranging from 1 (= not at all) and 9 (= very much so).

Product categories included items such as energy bar, Greek yogurt and mineral water, while brands included Diet Coke, Red Bull, and Pabst Blue Ribbon Beer.

### Results and Discussion

We analyzed the results using a mixed model examining the effects of level of identification with and desire for identity tied to the product on taste. Each model controlled for the IV, food item type, and their interaction. The model used in each case was a repeated measures model with item type as the repeated factor. The covariance matrix was specified as unstructured.

There was a significant effect of identity on taste evaluation, such that people who identify more strongly with the those who consume the food, and so are likely to have a greater desire to be like them, evaluated this food as tastier. The effect was significant at a  $< .01$  level:  $F(1, 40) = 328.62$ . We also found a significant effect of desired identity on taste evaluation of the food, such that people who more strongly desired to the identity tied to the food evaluated it as tastier. The effect was significant at a  $< .01$  level:  $F(1, 40) = 374.81$ . The effect was robust to item type.

## Study 2: Tastes Like Being in Shape

Study 2 was designed to test whether the effect found in study 1 holds for online vs. merely for retrospective taste experience. This is important since in retrospective reports people may report on their *ideas* of how tasty they think a food is versus how tasty it *actually* was. Online reporting of taste is more likely to correctly reflect actual taste experience.

### Methods

Participants (N = 85) were college students who participated in the study as part of their course duties. They were asked to taste and evaluate a sports drink. The drink tasted was Gatorade prepared from powder. The powdered form was chosen as a less familiar version of a sports drink. The brand was presented to participants as they tasted the drink. Before they tasted the drink, it was described as a sports drink that is consumed mostly by athletes and people who exercise routinely. After receiving this explanation participants tasted a sample of the drink from plastic cups.

They then answered several questions about their experience of the drink as well as the desirability of a particular identity. Taste of the drink was measured by the item: “How tasty is this drink?” This

was measured on a scale of 1 (= not at all) to 9 (= very tasty). The drink’s perceived quality was measured by the item “to what extent do you think this drink is of high quality?” Participants rated this on a scale of 1 (= very low quality) to 9 (= very high quality). This supplementary measure was included to examine whether subjective taste evaluations would translate to participants’ evaluations of a product’s ostensibly objective quality.

Desirability of identity was measured by the item: “to what extent would you like to be perceived as part of the group of people who usually consume this drink?”. This was rated on a scale of 1 (= not at all) to 9 (= very much). Finally, current identity was measured by the item: “Do you perceive yourself as an athletic person?” Participants answered either yes or no to this question. They were also asked how thirsty they were just before tasting the drink, and if they had ever tried it before.

### Results and Discussion

We tested our hypotheses using a general linear model which included the effect of desire for identity as the type of person who would drink the drink, self-perception as an athletic person and the interaction between the two on taste experience and drink quality evaluation. There was a significant effect of desire for an identity on taste experience, such that people who aspire more strongly to possess the identity of those who consume the drink experienced the drink as tastier. The effect was significant at a  $.01$  level:  $F(1, 84) = 11.20$ ,  $\eta^2 = .11$ . We also found a significant effect of desire for identity on drink quality evaluation, such that people with stronger desire evaluated drink quality as higher. The effect was significant at a  $.01$  level:  $F(1, 84) = 7.49$ ,  $\eta^2 = .08$ . We found no significant main effects of self-perception as an athletic person on either drink taste experience or drink quality perception.

In support of  $H_2$ , we found an interaction between desire for identity and self-perception as an athletic person. Specifically, desire for identity was positively related to taste experience and drink quality evaluation only for those who did not already perceive themselves as athletic people:  $F(1, 83) = 8.32$ ,  $p = .01$ ,  $\eta^2 = .08$  for taste experience, and  $F(1, 83) = 3.89$ ,  $p = .05$ ,  $\eta^2 = .04$  for food quality evaluation.

These findings join those of the prior study in supporting the notion that products taste better if they support a desirable identity. Further, the current study shows that taste is improved only if one does not already feel that they possess the desired identity. This is because in such cases the drink serves the purpose of supporting the person’s motivation to build a desired identity.

## General Discussion

Foods associated with a desired identity are rated as tasting better, such that the more a person desires to be perceived as having a particular identity, the tastier he or they say products matching that identity are.

In our second study, participants rated a sports drink as tastier the more they wanted to be perceived as athletic people. This effect occurred for people who did not perceive themselves as athletic, but not for people who already perceived themselves as athletic. This demonstrates that products are rated as tastier the more they match a desired identity that one does not yet feel they possess. The study also demonstrated that subjective taste experience is translated into judgment of the products’ ostensibly objective quality.

Products appear to be used to attain a desired identity, rather than to support or maintain an identity a person already feels they have.

## Conclusion

Products taste better if they match an identity consumers desire. In such cases, the product is functional; answering one's psychological need to possess a desired identity. Pleasure is functional, providing reward when one acts in ways concordant with needs. When a food product can serve as a tool to build an identity one desires, the experience of the product is improved.

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# Time to Possess, Time to Progress: The Impact of Temporal Ownership on Time Perception

Yegyu Han, Korea University Business School, South Korea  
Sang Kyu Park, Korea University Business School, South Korea  
Yongjun Sung, Korea University, Department of Psychology, South Korea

## EXTENDED ABSTRACT

Indeed, the adage, 'Time is Gold', is rather axiomatic today. Scholars have long acknowledged that money is not the only scarcity in the world, and asserted that time is an ultimately scarce resource (Mogilner and Aaker 2009). Now, take a moment to revisit the gold metaphor, and ponder upon the question: whose gold is it? Though the metaphor implicitly assumes that time can be possessed, temporal dimension is theoretically not something that can be possessed (Radin 1986), and descriptions of time as a powerful force influencing many domains of life (Haan, Millsap, and Hartka 1986) further complicate drawing a polarized conclusion regarding temporal ownership. Nonetheless, time is often described both in a possessive framing (i.e., have time to ...) and in a narrative framing (i.e., is time to ...).

Considering that the temporal dimension is relatively fragile (Ebert and Prelec 2007), and that merely addressing time in an anthropomorphic perspective is demonstrated to alter perceptions of time (May and Monga 2014), it seems likely that linguistically portraying time in a possessive framing would similarly influence how time is mentally represented in the minds of individuals. In this sense, communicating time in a possessive framing may encourage people to think time as their possession, and its plausibility is further corroborated by the fact that the endowment effect also pertains to the temporal dimension (Hoorens, Remmers, and Van De Riet 1999). The elevated perceptions of possession and ownership of time may have important implications towards consumers' time spending decisions, given that the extant literature have fruitfully documented the increased feelings of responsibility arising from psychological ownership (Beaglehole 1932; Pierce, Kostova, and Dirks 2003).

Building on people's tendency to represent time both ways, the aim of this research is to identify the impact of perceived possession of time on subsequent consumer behavior. Specifically, feelings of ownership towards the temporal dimension are suggested to increase the responsibility of time usage relative to those who are not entitled the possession of time. The heightened responsibility is then proposed to lead consumers to minimize time loss arising from aversive events, but maximize time investment for desirable events, paralleling the notion that people are disposed to invest more time on a pleasurable event, and to spend less time on an aversive event (Tsai and Zhao 2011). Hence, the experiments were conducted to demonstrate the hypothesized impact of temporal ownership on multiple dimensions of time spending decisions.

Study 1A utilized advertisements with the two common linguistic representations of time to show its influence on perceived ownership. Participants from the U.S. were randomly assigned to one of the two following conditions: possessive (i.e., you have 24 hours) and narrative (i.e., there are 24 hours) framing of advertisement message. Afterwards, they responded to the ownership measures derived from a previous research (Peck and Shu 2009). ANCOVA with individual mood as a covariate revealed a significant main effect of advertisement message frame on perceived ownership of time as predicted ( $F(1, 47) = 4.53, p < .05$ ). Participants who were presented with a possessive frame of time showed greater ownership toward time compared to those who were given a narrative frame of time.

Study 1B illustrated the impact of increased ownership to consumers' responsible use of time. Respondents were allocated to either a possessively or a narratively framed scenario regarding time, and were asked to imagine that they purchased a pair of sneakers of their favorite brand online. They also indicated their likelihood of using expedited shipping service over the standard delivery option. Consistent with pretest results, participants felt greater ownership in the possessive condition compared to the narrative condition. More importantly, participants with an elevated sense of ownership of time seemingly demonstrated greater reluctance to use time irresponsibly by waiting and thus showed a greater likelihood of using the expedited shipping service ( $F(1, 35) = 4.14, p = .05$ ).

Study 2 aimed to extend the impact of time ownership and perceived responsibility to a different dimension by fixing the amount of time to be spent, and measuring differences in indulgent behavior. As theorized, responsible individuals were predicted to spend time in a more considerate manner by striving to achieve maximal outcome from the given time. Therefore, participants with greater ownership, manipulated by the same scenario employed in study 1B, were hypothesized to purchase a VIP ticket for a concert to make the most out of the running time unless its price is deemed inappropriate. The results yielded a significant interaction between time framing and price appropriateness on the likelihood of purchasing a VIP ticket ( $b = .33, t = 2.38, p < .05$ ). Decomposing this interaction revealed that among those who consider the price of the VIP ticket to be appropriate, participants with a sense of ownership towards time were more likely to buy a VIP ticket for maximum enjoyment. On the counterpart, no effect was observed for respondents who thought the price of the ticket to be inappropriate.

The converging evidence from the three studies suggest that describing time in a possessive frame increases psychological ownership and perceived responsibility for making use of time. The experiments demonstrated that people either minimize the time wasted or maximize the utility from a given time usage. In this regard, the second study is one of the pioneering attempts to dynamically demonstrate time spending decisions by concentrating on the desirability aspect. The findings are singular as the value-based explanation cannot fully account for the tendency to spend even more monetary resource for an already determined use of time.

The current article will join the stream of research on the qualitative perceptions of time, and enrich the literature on possession by demonstrating that perception of ownership can also occur for objects that are not obtainable and controllable. Also of particular interest, the framing effect on proprietorship was delineated to arouse responsibility regarding subsequent decisions. Since the article utilized advertisements and gauged intentions, practitioners can readily apply the implications to strategically adapt their marketing messages according to how their products help consumers use time responsibly.

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# The Facebook Mindset Effect: Incidental Exposure to Facebook Increases Consumers' Other-Focus and Promotes Conservative Product Choices

Christian Hildebrand, University of St. Gallen, Switzerland

Tobias Schlager, University of St. Gallen, Switzerland

Gerald Häubl, University of Alberta, Canada

Andreas Herrmann, University of St. Gallen, Switzerland

## EXTENDED ABSTRACT

This research extends the scope of prior work on consumers' path-to-purchase and demonstrates how incidental exposure to one channel *prior* to a choice task affects both consumer self-perceptions and choice in a subsequent channel. Specifically, based on a large-scale field study and subsequent experiments examining the underlying psychological process (in both field and lab settings), this research shows that exposure to the online social network Facebook prior to a choice task draws consumers' attention toward others and away from oneself. We show that this shift in consumer self-focus carries over to a subsequent choice task and attenuates consumer preference for unique product configurations and causes more conservative product choices, which has important implications for both consumers (e.g., larger choice regret) and companies (e.g., lower revenue streams).

The conceptual background of the current research is built around recent work on pre-shopping factors in consumers' path-to-purchase (Shankar et al. 2011; Verhoef et al. 2007), and the consequences of social network use on consumer preference and choice (Wilcox and Stephen 2013). A prominent finding in the latter research is that the online social network Facebook has a strong influence on (and to some extent amplifies pre-existing) self-presentation motives and induces a strong other-focus (Back et al. 2010). This shift in consumers' perspective toward others rather than oneself may have subsequent consequences on consumer preference formation and choice. The key proposition of the current research is that exposure to Facebook induces a perspective shift from the self toward others that may carry over toward subsequent choice tasks, causing a decrease of consumer preference for unique product options and ultimately more conservative product choices.

In Study 1, we examined the differential role of incidental Facebook exposure on customers' actual purchase in a subsequent car configuration context. We collected data over a time-span of 16 months from a large European car manufacturer and merged actual car configurations of the manufacturers' ordering system with on-site tracking data of the same manufacturer's online configuration interface. Predicting the number of configured car features (per hour) based on the percentage of Facebook referrers (per hour), we find that as the percentage of Facebook referrers increases, the number of configured car features decreases significantly ( $\beta = -1030.27$ ,  $t(4227) = 2.01$ ,  $p < .05$ ), in line with our proposition. This finding is robust even when testing nested models with a variety of control variables such as hour, weekday, and their interactions.

To mitigate the self-selection issues of Study 1, Study 2 randomly assigned prospective car buyers either to a control or Facebook condition (browsing their Facebook profile for five minutes). Both groups were measured on their current state of self-focus and their preference for unique product options, before both groups configured a car for themselves. Providing converging evidence for Study 1, Facebook exposure led to a significant decrease in the number of chosen add-on features ( $M_{\text{Facebook}} = 9.7$ ,  $M_{\text{Control}} = 12.5$ ,  $t(71) = 2.01$ ,  $p < .05$ ), and a serial mediation model with bootstrapped estimates revealed that this effect is fully mediated by a decrease in consumer self-focus, which in turn decreased consumers' subsequent prefer-

ence for unique product options, negatively affecting consumers' ultimate choice of feature-rich product configurations.

The key question of Study 3 was whether increasing consumers' self-focus (rather than other focus) can attenuate the negative effect of a Facebook mindset. A 2 (Facebook vs. control)  $\times$  2 (self- vs. other-focus) between subjects design mirroring the experimental setup of study 2 tested this hypothesis ( $N = 230$ ). In line with our theorizing, we found that inducing self-focus experimentally (by using an essay-writing procedure) attenuates the negative effect of Facebook exposure on both consumer preference for unique product options and the number of selected add-on features, revealing the predicted Facebook  $\times$  self-focus interaction ( $F(1, 226) = 5.04$ ,  $p < .05$ ).

Study 4 aimed at inducing self-focus unobtrusively by the choice architecture itself. Participants ( $N = 180$ ) were randomly assigned to a control, Facebook, or Facebook with preference learning condition. The latter was manipulated by answering a series of questions related to participants' favorite alpine sport (rock climbing, ski touring, etc.) prior to a choice task. All participants chose between a feature-rich and a feature-poor alpine backpack (counter balanced). In line with our prediction, the preference learning task effectively attenuated the negative effect of Facebook exposure on consumer self-focus, preference for unique product options, and the choice of a more feature-rich alpine backpack.

Study 5 was designed as a field demonstration in cooperation with a Swiss men's dress shirt manufacturer ( $N = 164$ ). Mirroring the previous experiments, participants either browsed their Facebook profile for five minutes or conducted a filler task before configuring their preferred shirt on the manufacturers' website. Choices were consequential as three randomly chosen participants received their configured shirt as part of a company lottery. The results in this natural field setting revealed that exposure to Facebook led to a significant decrease in the number of chosen shirt features ( $M_{\text{Facebook}} = 10.85$ ,  $M_{\text{Control}} = 11.46$ ,  $t(162) = 2.06$ ,  $p < .05$ ), and a serial mediation model with bootstrapped estimates revealed that this effect is fully mediated by a decrease in consumers' self-focus, and a decrease of consumers' preference for unique shirt options ( $\beta_{\text{IndirectEffect}} = -.046$ ,  $LL_{95\%} = -.105$ ,  $UL_{95\%} = -.007$ ). A comparison to a random sample of actual customers of the company ordering dress shirts in the same month ( $N = 161$ ) revealed that this effect was also robust relative to this natural comparison group ( $M_{\text{Facebook}} = 10.85$ ,  $M_{\text{PreviousCustomers}} = 12.48$ ,  $t(244) = 4.465$ ,  $p < .001$ ).

In summary, the current research extends three previously distinct streams of research: first, this work contributes to the recent call for a more holistic understanding of consumers' path-to-purchase in shopper marketing research, and demonstrates how incidental exposure to a preceding channel alters consumer perceptions and choice in a subsequent channel. Second, the current work contributes to the emerging research on social network use and its implications for consumer motives and behavior. However, the perspective of this research examined how social network use may carry over toward seemingly unrelated decisions and the products consumers choose in response. Finally, we contribute to recent work on product customization by demonstrating the psychological mechanism that drives

more conservative, less feature-rich product configurations which have not, to the best of our knowledge, investigated previously.

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# Psychological Contagion: Changing Evaluations without Contact

Yuansi Hou, The Chinese University of Hong Kong, Hong Kong

Yixia Sun, The Chinese University of Hong Kong, Hong Kong

Lisa C. Wan, The Chinese University of Hong Kong, Hong Kong

Wan Yang, University of South Florida Sarasota-Manatee, USA

## EXTENDED ABSTRACT

Contagion has been regarded as one of the biggest concerns for the foodservice industry (Tse, So, & Sin, 2006). Previous contagion studies mostly concern threats to food and sanitary safety, which are influenced by physical factors, external factors (e.g., disease) and food poisoning (Eves & Dervisi, 2005; Tse et al., 2006; Walczak, 1997; White, 1972). Apart from the physical contagion effect (Argo et al., 2006; Morales & Fitzsimons, 2007), another type of contagion effect would rather invisibly affect consumers' evaluations and behaviors, that is, the psychological contagion effect. As food items and consumers' demands are becoming more diversified, restaurant managers are faced with pressure to be innovative, and meanwhile embrace new, strange and foreign foods presented on the menus. Therefore, it is almost inevitable that a restaurant will offer dishes that make some people uncomfortable (e.g. internal organs for some Westerners, blue cheese for some Easterners), and these dishes could induce a psychological contagion effect, contaminating and influencing a consumer's evaluation of a dish. Such an effect can also be induced by the proximity of two items and/or images on a menu.

Lines, border, frame and confined area are all boundaries. The nature of boundary is the dictation of things belonging, and the senses of belonging results from the functional values of boundary, where boundary are able to tell you where to start and stop (Cutright, 2012), which can help you to process and focus on the elements in a given space (Burris and Branscombe 2005). Hence, elements located at different boundaries are considered to be separated and the mutual effect between these elements will be discouraged. Accordingly, boundary can be an effective way to block the contaminating effect elicited from the negative source object. Therefore,

*Hypothesis 1: Consumers will give a lower evaluation to a menu item displayed next to a picture of a negative source item than the one displayed next to a picture of a neutral source (control) item.*

*Hypothesis 2: Consumers will give a lower evaluation to a menu item that is placed next to a negative source item in the same visual boundary than to the one that is separated from the negative source item by a visual boundary.*

## Study 1

Study1 adopted a 2 (source item: positive vs. negative)  $\times$  2 (boundary: vertical vs. horizontal) between-subjects design. We chose Smelly Tofu as the negative source item and Steamed Tofu as the positive source item. A manipulation check showed that Smelly Tofu was rated below the middle point ( $M = 2.81$ ) while the Steamed Tofu was rated above the middle point ( $M = 4.02$ ). Another three dishes that are usually appeared on Chinese menus were selected, one target item (Cold Shredded Potatoes) and two fillers (Cold Lotus Root and Poached Enoki Mushroom). The source item was positioned at the top left corner, with the target at the top right corner next to the source. The two fillers were under the source and the target.

The boundary was manipulated by putting the source item and the target item on the same-colored or different- colored background. Specifically, in the vertical condition, the source item and the target item were in different colored zones, whereas in the horizontal condition, the source item and the target item were in the same colored zone. To make sure participants saw the source item before the target, they were asked to rate the dishes in a zigzag order.

The results revealed a significant interaction on the evaluation of the target ( $F(1, 55) = 4.03, p = .05$ , indicating that when the target and the source were in the same colored zone, the target next to the negative source ( $M = 3.49$ ) was evaluated lower than that next to the positive source ( $M = 4.81$ ;  $F(1,55) = 4.32, p < .05$ ) ( $M = 4.81$ ;  $F(1,55) = 4.32, p < .05$ ). However, no difference was found on the target when it was in the different colored zone with the source. Thus the color boundary eliminated the contagion effect. Thus, both Hypothesis 1 and Hypothesis 2 were supported.

Finally, we conducted a follow-up study to replicate the findings of Study 1 and to demonstrate the generalizability of the psychological contagion effect (regardless of the relative location of the source item and target item). The experimental design of follow-up study was identical to Study 1, except that follow-up study was conducted with a new target item, which was placed at a different direction of the source item: Cold Lotus Root (underneath the source item) replaced Cold Shredded Potatoes (on the right side of the source item). Consistent with the findings from Study 1, the results supported both Hypothesis 1 and Hypothesis 2.

## Study 2

Besides menu layout (e.g., different background colors used in previous studies), product packages could serve as boundary as well. Accordingly, Study 2 was conducted by using a type of product package, transparent plastic covers, as surrogate of boundary to extend the boundary effect. Moreover, to demonstrate the general applicability of the psychological contagion effect, a different food type, sushi, and non-students samples were used.

First, two manipulation checks were conducted. Results confirmed that Octopus sushi was a good representative of negative source item ( $M = 3.19, N = 84$ ). Moreover, by using the same measurements of boundary effect as the pretest, transparent plastic covers were agreed to be a boundary ( $M = 5.42, N = 41$ ). Therefore, the manipulation of negative source and boundary effect were both effective.

Second, an independent-sample t-test was conducted to test Hypothesis 2- that boundary could hinder the psychological contagion effect. The analysis supported the prediction and revealed a significant main effect of boundary ( $p < .01$ ). Specifically, when boundary was present (i.e., a transparent plastic cover wrapped the Octopus sushi), feeling of dislike was blocked by the boundary, and the evaluation of the target item was significant higher than when the boundary was absent (4.17 vs. 3.34). Hence, Study 2 utilized another strategy, using product packages as boundary, to supported Hypothesis 2.



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# Seeing Attractive Images of Females and Being Nicer

Xiuping Li, National University of Singapore, Singapore

Meng Zhang, The Chinese University of Hong Kong, Hong Kong

Feifei Huang, The Chinese University of Hong Kong, Hong Kong

## EXTENDED ABSTRACT

Marketers frequently use images of attractive women to attract consumers' attention. Prior research on this topic has been focused on two aspects: 1) whether and when using such images may be helpful in product promotion (Baker and Churchill 1977; Kahle and Homer 1985); 2) negative impact of these images on young women's well-being, such as eating disorders and depression (Grogan 2008; Cattarin et al. 2000). This paper investigates an effect of such stimuli on social interaction. We argue that young females exposed to images of attractive women are more likely to act prosocially as a strategy to protect their public images.

Previous research shows that incidental exposure to highly attractive images can induce lower satisfaction with one's physical attractiveness (Bower 2001; Richins 1991). And the positive relationship between an individual's physical attractiveness and social popularity or social acceptance is also well-documented (Brouwer 1990; Dion, Berscheid, and Walster 1972; Eagly et al. 1991). We further propose that seeing such images poses a threat to young women in terms of the extent they are judged favourably in the eyes of others, leading to a greater concern for their public self-image.

Literature on self-affirmation has shown that when an important aspect of self is under threat, people may engage in behaviors which help protect their self-view (Liu and Steele 1986). Pro-social behaviors have been shown to be an effective way to foster positive impressions in public (Bolino 1999; McAndrew 2002). Thus, we hypothesize:

*Hypothesis 1: The incidental exposure to images of highly attractive women can lead to a greater pro-social tendency among young females.*

Moreover, based on prior research on social signaling (Griskevicius, Tybur, and Van den Bergh 2010) and self-presentation behaviors (Argo, Dahl, and Manchanda 2005), a key indicator of a social signal motive is that the engaged behavior should be observable by others. We propose and test two moderators both varying the level of visibility of the pro-social behaviors: the public vs. private nature of the pro-social behaviors and how easily others can recognize the behaviors.

*Hypothesis 2a: When a pro-social behavior is conducted in public versus in private, seeing images of highly attractive women is more likely to lead to a greater pro-social tendency among young females.*

*Hypothesis 2b: When a pro-social behavior is more clearly recognized by others, seeing images of highly attractive women is more likely to enhance pro-social tendency among young females.*

One pretest and four experiments were conducted to test our hypothesis. In the pretest, it was shown that the exposure to images of physical attractive women heightens the concern for social acceptance.

Study 1, a field experiment, showed that the incidental exposure to the advertisements with attractiveness females led young females to donate more to help needy children.

Study 2 examined how participants would orient their behavior in social interactions in a lab setting. A total of 132 participants were randomly assigned to one of the three image conditions: attractive women condition, landscape condition, and average-looking women condition. The participants went through two tasks: picture evaluation and a decomposed game used in prior research to gauge participants' social value orientation (Messick and McClintock, 1968; Van Lange et al., 1997). Results showed that more participants in attractive women condition were categorized as pro-social, which was significantly greater than the counterparts in the other two conditions – landscape and average women condition.

Study 3 investigated the moderating role of the level of publicity. Eighty participants were randomly assigned to one of the two image condition: attractive women and landscape. Participants went through two tasks: first, they completed a picture evaluation task; and second, they were asked to indicate their tendency to engage in four kinds of activities: two public helping and the other two private helping. Results revealed that after viewing attractive women images, females were more likely to help in public setting than their counterpart. However, the effects of the pictures on private helping behaviors were insignificant.

Study 4 had a 3 (treatment condition: attractive women vs. baseline vs. gender priming)  $\times$  2 (visibility: high vs. low) between-subjects design and 97 female undergraduate students were recruited. In the baseline condition, participants did not view any pictures, and in the gender role priming condition, participants were asked to write their gender and gender's characteristics. In the second task, participants were shown a picture of a bag with a WWF logo and tagline. There was two versions of bag varying in the font size of the logos and taglines. The participants were asked to indicate their willingness to buy and frequency to carry it. A marginal significant interaction between the picture and "visibility" was observed. When the visibility of this pro-social behavior is high, participants in the attractive women condition were more interested in buying the bag than the other two conditions. However, when the visibility of this pro-social behavior is low, the trend was not observed. As for the frequency to carry the bag, we also observed a significant interaction between picture and visibility.

Our research shows that physical attractive women images lead young women to engage in more virtuous actions. They cared more about others' welfares in different scenarios and irrespective of the identity of the social other. However, these virtuous behaviors are not due to altruistic reasons, but are driven by an impression management motive.

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# The Impact of Power on Reliance on Feelings versus Reasons in Decision Making

Yunhui Huang, Hong Kong University of Science and Technology, China

Jiewen Hong, Hong Kong University of Science and Technology, China

Hannah H. Chang, Singapore Management University, Singapore

## 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 despite being an inherently social construct, power can translate directly into a psychological state that influences individuals' attitudes and behaviors. For example, it has been found that 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; Guinote 2007) and decreases attention paid to others (Goodwin et al. 2000; Lammers et al. 2013; van Kleef et al. 2008). Interestingly however, relatively less research has investigated the impact of power on individuals' decision making process. In this research we examine how power affects consumers' relative reliance on feelings versus reasons in making decisions. We propose that individuals who feel powerful (vs. powerless) would exhibit a greater relative reliance on feelings versus reasons in decision making.

Given the distinct attention focus associated with having or lacking power (Anderson and Berdahl 2002), we argue that the differential attention focus has implications for how consumers in different power states rely on feelings versus reasons in making judgments and decisions. Possessing power indicates that one is less dependent on others for resources, allowing one to pursue personal interests and goals desired by the self. As a result, high-power individuals tend to have a heightened focus on themselves (e.g., Anderson and Berdahl 2002; Galinsky et al. 2008; Guinote 2010). In contrast, lacking power indicates that one is dependent on others for valuable resources, making one more likely to attend to others' goals in order to achieve their own. As a result, low-power individuals tend to pay increased attention to others (e.g., Anderson and Berdahl 2002; Galinsky et al. 2006; Keltner et al. 1998). Past research has further suggested that feelings are more likely to be relied upon during decision making when individuals focus on themselves, because feelings inform decisions made for the self (vs. others; Hsee and Weber 1997; Raghunathan and Pham 1999) and are more salient under heightened self-focus (Scheier and Carver 1977). In contrast, logical reasoning is more likely to be relied upon in decision making when individuals focus on others, because taking others' perspectives involves complex cognitive reasoning (Epley and Caruso 2009). Taken together, we hypothesize that consumers in high-power states, who tend to exert greater self-focus, would rely more on feelings versus reasons in decision making compared to those in low-power states, who tend to exert less self-focus and more perspective taking. We test this prediction in four studies and find convergent support for our prediction.

To provide initial evidence for our hypothesis that consumers in states of high power are more likely to rely on feelings versus reasons than consumers in states of low power, experiment 1 manipulated power using episodic recall (see Galinsky, Gruenfeld and Magee 2003) prior to having participants indicate their relative preference between an affectively superior and a cognitively superior laptop. Consistent with our prediction, 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 2 replicated the result of experiment 1 using a word fragment completion task to manipulate power (see Magee et al.

2007). Furthermore, experiment 2 directly measured participants' relative reliance on feelings versus reasons in making the choice. Mediation analysis confirmed that the observed effect of power on the choice between an affectively superior and a cognitively superior option was driven by participants' differential reliance on feelings versus reasons during decisions.

Experiment 3 used a different method for testing the hypothesized effect. Hsee and Rottenstreich (2004) suggest that valuation judgments based on affect is less sensitive to the "scope" of the evaluative stimulus than those based on cognition. If high- (vs. low-) power states indeed promote a greater relative reliance on feelings, consumers who feel powerful should exhibit scope insensitivity whereas consumers who feel powerless should not. Participants were shown a one-day travel package containing either one or four tourist spots following power manipulation, and asked for their willingness-to-pay (WTP) for the package. Results showed that, in line with our prediction, the interaction between power and scope was significant ( $F(1, 139) = 5.30, p < .05$ ). For participants in the low-power condition, 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 those in the high-power condition, their WTP did not vary with the number of the spots ( $M_{4\text{-spot}} = 122.24$  vs.  $M_{1\text{-spot}} = 106.80$ ;  $F(1, 139) < 1, p = .36$ ).

Experiment 4 examined a downstream consequence of the hypothesized effect using a fit paradigm (Higgins 2005). To demonstrate that a fit between a consumer's power state and the decision strategy induced by this particular power state leads to increased valuation of the selected option, following power manipulation, participants were explicitly instructed to rely on either feelings or reasons in making their decisions. Consistent with our prediction, the analysis yielded a significant interaction effect ( $F(1, 137) = 4.50, p < .05$ ) such that participants in the high- (low-) power condition were willing to pay more for the chosen option when they made their decisions following a feeling-based (reason-based) strategy.

Our research contributes to the literature on consequences of power. While an extensive body of research on power investigates its consequences in a social context, this research is one of an emerging stream of studies that examine how power might have an influence on the intra-person decision-making processes. Our research also offers practical suggestions for designing advertisements. Campaigns with largely emotional appeals might be more effective for a high-power target audience (e.g., high-level managers); in contrast, campaigns promoting mainly functional attributes of the product should better target an audience in states of low power (e.g., lower-level employees).

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# Romantic Exposure and Sweet Food Consumption

Xiaojing Yang, University of Wisconsin - Milwaukee, USA

Huifang Mao, University of Central Florida, USA

Lei Jia, University of Wyoming, USA

Melissa Bublitz, University of Wisconsin - Oshkosh, USA

## EXTENDED ABSTRACT

Americans consume an astounding amount of sugar, gulping down the equivalent of 22.2 teaspoons (or 355 calories) of sugars per day. Given the redoubtable social and health consequences of sugar indulgence, it is crucial to understand when consumers are likely to fall prey to or sustain the temptation of sweet foods. Unlike previous research, which has focused mostly on food consumption in general rather than the unique contributors of the consumption of foods featuring primarily one of the basic tastes, this article examines how exposure to romantic stimuli (e.g., watching a romantic ad), an activity seemingly unrelated to food consumption, influences consumers' subsequent sweet food decisions between sweet and less-sweet options. Drawing from conceptual metaphor research (Landau, Meier, and Keefer 2010) and work on assimilation and contrast effect (Martin 1986), we predict that romantic stimuli exposure may increase or decrease consumers' likelihood of choosing sweeter food options, dependent on their romantic status (romantically involved or uninvolved).

Our main thesis that exposure to romantic stimuli may influence consumers' subsequent sweet food decisions is derived from recent research on conceptual metaphor, which argues that people sometimes resort to metaphorical thinking and recruit knowledge from a seemingly unrelated category to help them comprehend and decipher certain complex social phenomena (e.g., love, justice, power; Lakoff and Johnson 1989; Landau et al. 2010). Consider the metaphorical expression that is at the core our thesis—love is sweet: people's knowledge about the target category (the gustatory state of taste), which is closer to one's mundane life, transfers and affects their perceptions and understanding of the more elusive target category (love).

Ample research on conceptual metaphor has demonstrated the mundane target category (e.g., perceptual states) and the elusive social phenomenon in a conceptual metaphor can influence each other, casting important implications for judgment formation and decision making (Landau et al. 2010). Moreover, researchers have suggested semantic activation as a possible mechanism (Zhang and Li 2012). For example, to explain why consumers holding heavy objects judge the subject they are contemplating more important, Zhang and Li (2012) posit that perceptual systems (holding a heavy shopping bag) activate corresponding semantic concepts in the associate network (heavy, weight), which influence their judgments of the importance of the subject (an elusive social concept) through the metaphorical connection between weight and importance.

Though these insights suggest that exposure to romantic stimuli activates the concept of sweetness, which in turn makes consumers more likely to choose sweeter food options, work on assimilation and contrast predicts that the reverse can also be possible. According to work on assimilation and contrast (Martin et al. 1997; Kim and Meyers-Levy 2008), assimilation effect prevails when irrelevant contextual influence is incorporated into the judgments of the target, a situation more likely to happen when the boundary between the target and context is ambiguous and permeable. On the other hand, contrast effect takes place when the boundary between the target and its context is explicit and unambiguous. Because of the discernibility of the target from its context, consumers are capable of isolating

contextual influence in rendering a decision, resulting in a contrast effect. Importantly, researchers find that this isolation process is not necessarily conscious (Martin 2009); they also show that consumers' mental construal level (the level of abstraction with which to construe an object) determines whether assimilation or contrast is likely to prevail. Abstractness and ambiguity engender assimilation while concreteness and explicitness give rise to contrast (Kim and Meyers-Levy 2008).

Exposure to romantic stimuli is likely to render the semantic concept of sweetness accessible among both romantically involved and uninvolved consumers. However, the romantic stimuli elicit romantic experiences of various psychological distances for romantically involved vs. uninvolved consumers (Trope and Liberman 1998). On one hand, exposing romantically involved consumers to romantic stimuli is likely to bring their own romantic experiences to the forefront of their attention. These romantic experiences are idiosyncratic and relatively concrete, and thus the sweetness they experience is more specific (i.e., psychological). On the other hand, though exposing romantically uninvolved consumers to romantic stimuli also activates sweetness, this psychological sweetness is based on other people's romantic experiences and thus is more generic and abstract. Hence, the sweetness these consumers experience is more abstractly construed.

Romantically involved consumers possess a more specific and concrete understanding of their experienced sweetness after exposure to romantic stimuli, and thus the boundary between the target (sweet food consumption) and context (romantic exposure) tends to be unambiguous and impenetrable. Hence we expect a contrast effect of romantic exposure to take place among romantically involved consumers. That is, these romantically involved consumers should be less likely to choose sweet foods after exposure to romantic stimuli (contrast effect). On the other hand, the boundary between the context (romantic exposure) and the target (sweet food) becomes less discernable and more ambiguous among romantically uninvolved consumers, who tend to construe the romantic exposure and the engendered sweetness at an abstract level. Thus these romantically uninvolved consumers are more likely to incorporate sweetness activated by the romantic stimuli when making subsequent sweet consumptions. Hence, romantically involved consumers should be more likely to choose sweet foods after romantic ad exposure (assimilation effect).

Three experiments supported our theorizing that exposure to romantic stimuli makes romantically uninvolved consumers more likely to choose sweeter foods while renders romantically involved consumers more likely to choose less-sweet foods. Our findings are robust as we used various manipulations of romantic stimuli exposure (watching romantic vs. non-romantic ads, reading romantic vs. non-romantic stories, etc.) and different operationalizations of sweet food decisions (choice of sweet vs. less sweet foods; the amount of actual sweet consumption). The findings contribute to the food consumption literature by examining predictors of food consumption involving one specific taste (sweet) and also contribute to the conceptual metaphor literature by further investigating the mechanism and direction of conceptual metaphor on decision making (concept-

tual metaphors can produce either an assimilation or a contrast effect on decision making).

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# Flexibility Matters: The Effect of Exposure to High Variety on New Product Evaluations

Zixi Jiang, University of New South Wales, Australia

Jing Xu, Peking University, China

Ravi Dhar, Yale University, USA

## EXTENDED ABSTRACT

Imagine that a consumer goes on an online supermarket website: in one occasion he is presented with a large variety of clothes or books, while on another occasion, and he is presented with very few varieties. Then, he clicks into digital product category and sees a newly launched product, wireless speaker. Would the number of varieties in unrelated clothing or book domain displayed on the main page influence this consumer's purchase decision about the new speaker? Could incidental exposure to high variety prior to making an unrelated choice make the consumer more likely to accept new products? Although it may seem that such exposure to high variety in unrelated categories should have no significant impact on subsequent new product evaluation, this dissertation proposes otherwise.

Previous research has demonstrated that consumers' decisions are affected by how they perceive or interpret the variety of an assortment (Berger, Draganska and Simonson 2007; Hoch, Bradlow, and Wansink 1999; Kahn and Wansink 2004). Most of variety research focuses on the conscious information processing associated with variety in assortment choice. However, some recent research has demonstrated more subtle influences of the different categories or assortment structure on consumer behaviors (Mogilner and Iyengar 2008; Ülkümen, Chakravarti, and Morwitz 2010). For example, Ülkümen and her colleagues find that consumers exposed to narrow (versus broad) categories adopt different information processing styles and consider both salient and non-salient pieces of information in unrelated decisions. Building on this stream of research, we focus on the exposure to high variety impacts how consumers process information and their subsequent evaluations for new products.

In the manifestation of the experiments, we define variety as the number of distinct objects. Across five studies, we find that the exposure to high variety increases consumers' cognitive flexibility, and consequently enhances their evaluations of new products. Study 1a showed that exposure to high variety induced cognitive flexibility represented by increased category inclusiveness. Study 1b showed that exposure to high variety enhanced cognitive flexibility through another manifestation of cognitive flexibility, namely, associative links.

Study 2 provided evidence that exposure to high variety promotes favorableness toward new products. Furthermore, increased cognitive flexibility lead to an emphasis on improvements of the new feature, and more thoughts about new feature benefits of the new product.

Study 3 provided further mediation data that exposure to high variety promotes favorableness toward new products through increased cognitive flexibility. Study 3 also extended the generalizability of the results by testing the effect of exposure to high variety in another new product area—brand extensions. For the low-fit brand extensions, consumers exposed to high variety, due to boosts in cognitive flexibility, will be able to find more and ambiguous ways to link the parent brand and the extension. Thus fit perception will be higher and consequently extension evaluations will be more favorable for consumers exposed to high variety than for those exposed to low variety. We would expect no differences to emerge for high-fit brand extensions, where the connection between parent brand and the extension product is highly accessible, and cognitive flexibility is of little help. The results of Study 3 conformed to our predictions.

In Study 4, we explored another boundary condition, namely, ad message persuasiveness of new products. The new products can be advertised in a direct, easy-to-comprehend way, where specific attributes are presented, or in an indirect, hard-to-comprehend way, where the relationship between the focal product and other images are remotely related and require substantial relational processing. Consumers exposed to high variety, who are more cognitively flexible, should be up to the heightened challenge of understanding indirect ad messages and form favorable ad attitudes. On the other hand, consumers exposed to low variety, who are less cognitively flexible, should have difficulty seeing the relationship between the seemingly irrelevant images. For direct ad messages, in contrast, images are directly related to each other and the product, and minimal relational processing is necessary. Thus, for direct ad messages, consumers exposed to both high and low variety will find the ad message easy to comprehend and form similar ad attitudes. The results of Study 4 were consistent with these predictions.

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# Loneliness and Moral Identity

Jinfeng (Jenny) Jiao, The University of Iowa, USA

Jing (Alice) Wang, The University of Iowa, USA

## EXTENDED ABSTRACT

We examine how loneliness influences moral identity—the extent to which being a moral person is important to an individual’s identity. The extant literature has focused on the consequences of moral identity, such as how the centrality of moral identity affects people’s reactions to uncommon moral. In this research, however, we explore an important antecedent of moral identity—loneliness. Our paper is the first to show that loneliness will make consumers less likely to consider being a moral person as important to their identity. We further show that lonely people are less empathetic, and it is this reduced empathy that makes lonely people less likely to consider being a moral person as important to their identity.

Moral identity refers to the degree to which being moral is important for one’s identity (Hardy & Carlo, 2011). In this research, we follow the previous literature (e.g., Cameron & Payne, 2012) and focus on Internalization moral identity, examining how it is affected by feelings of loneliness. Loneliness refers to a complex set of feelings that occurs when an individual feels socially isolated: such undesirable subjective feelings of social isolation drive individuals to seek fulfillment of their needs (Hawley & Cacioppo, 2010). Whereas the majority of previous research has focused on the consequences of moral identity, we examine a particular *antecedent* of moral identity—feelings of loneliness. We propose that the mechanism responsible for lessening the importance of moral identity lies in empathy, which is a multidimensional construct with cognitive, emotional, and conditioning components (M. Davis, 2004). Our research follows the previous research (e.g., Einolf, 2008; Laufer & Gillespie, 2004; Niezink, Siero, Dijkstra, Buunk, & Barelds, 2012; Schroeder, Dovidio, Sibicky, Matthews, & Allen, 1988) and operationalized the construct of empathy with a measure of empathic concern. Specifically, we predict that:

*Hypothesis 1: Loneliness decreases moral identity.*

*Hypothesis 2: The negative impact of loneliness on moral identity is moderated by empathy.*

In study 1, we show that loneliness negatively affects moral identity, and that such an effect is mediated by empathy. In study 2, we manipulated loneliness and measured empathy and moral identity. We show that when participants were temporarily induced to feel lonely, they reported having reduced moral identity only when they experienced low empathy. For those who had high empathy, the temporarily induced loneliness did not reduce their moral identity. Finally, in study 3, we manipulated loneliness and empathy orthogonally and replicated the results of study 2. Specifically, when participants felt lonely, empathy boosted their reduced moral identity.

The objective of study 1 was to test our hypotheses that loneliness reduces moral identity (H1), and that the effect is mediated by empathy (H2). Undergraduate students (N= 290) first reported their felt loneliness to the 20-item (e.g., “how often do you feel completely alone”). Empathy was measured by using the empathic concern subscale of the Davis Empathy Scale (M. H. Davis, 1980). Participants also completed the 5-item Internalization subscale of the Self-Importance of Moral Identity Scale (Aquino & Reed, 2002). As predicted, the regression analysis revealed a significant influence of loneliness on moral identity ( $b = -.05, t = -7.22, p < .001$ ), such that

loneliness decreased moral identity. To test whether empathy mediates the effect of loneliness on moral identity, we conducted a mediation analysis, using loneliness as the independent variable, empathy as the mediator, and moral identity as the dependent variable. Results confirmed significant overall indirect effect of loneliness on moral identity (estimated mean indirect effect =  $-.01$ , BC 95% CI:  $[-.0201, -.0072]$ ). The results support our hypothesis that the negative effect of loneliness on moral identity is mediated by empathy.

Study 2 employed a loneliness (lonely vs. non-lonely) by empathy (continuous) between-subjects design, where loneliness was manipulated and empathy was measured. Undergraduate students (N = 167) were first randomly assigned to one of the two loneliness conditions (lonely vs. non-lonely). In the lonely (*non-lonely*) condition, participants were asked to write a time they felt very lonely (connected). Then they completed the empathy scale and the Internalization moral identity scale. The results showed a significant two-way interaction between loneliness and empathy ( $b = .11, t = 2.90, p < .01$ ), such that when empathy was low ( $-1SD$ ), temporarily induced loneliness led to a lower moral identity ( $b = -.52, t = -2.26, p < .05$ ). However, when empathy was high ( $+1SD$ ), the effect of loneliness on moral identity disappeared ( $b = .44, t = -1.92, p > .05$ ).

The objective of study 3 is to show further support for our hypothesis that empathy mediates the negative effect of loneliness on moral identity. The study employed a 2 (loneliness: lonely vs. non-lonely) by 2 (empathy: empathetic vs. control) between-subjects design, where both variables were manipulated. Undergraduate students (N = 277) were randomly assigned to one of the four experimental conditions. The loneliness manipulation was identical to those used in study 2. Then participants were randomly assigned to one of two (empathetic vs. control) conditions. In the *empathetic* condition, participants viewed 15 compassion-inducing images (Oveis, Horberg, & Keltner, 2010) and were instructed to feel empathy when viewing pictures. In the *control* condition, participants did not receive instruction to experience empathy, and they viewed 15 emotionally neutral scenic pictures. Consistent with the previous results, a 2 (loneliness) by 2 (empathy) ANOVA on the moral identity scores revealed a significant two-way interaction ( $F(1, 274) = 4.60, p = 0.01$ ), such that participants who wrote about a lonely experience had a higher moral identity when they made efforts to experience empathy ( $M_{\text{empathy}} = 6.29, SD = 1.12$ ) than when they did not ( $M_{\text{control}} = 5.47, SD = 1.18, t = 3.21, p < .001$ ). However, empathy did not affect moral identity in the non-lonely condition. Participants in the non-lonely condition had similar mean ratings of moral identity, regardless of the empathy manipulation ( $M_{\text{empathy}} = 5.71, SD = 1.35; M_{\text{control}} = 5.76, SD = 1.26, t = 3.21, \text{all } p > .10$ ). In study 3, we manipulated loneliness and empathy orthogonally and replicated the results of study 2.

Across the three studies, our results show converging evidence that empathy mediates the negative effect of loneliness on moral identity. As predicted, results showed that higher empathy could serve as a buffer and increase lonely people’s moral identity, which otherwise would be reduced by felt loneliness.

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# Continue or Give Up? How Publicity and Self-Monitoring Influence Goal Persistence

Jinfeng (Jenny) Jiao, The University of Iowa, USA

Cathy Cole, The University of Iowa, USA

## EXTENDED ABSTRACT

We examine whether the public or private nature of consumer goals affects goal persistence following initial goal failure. In particular, we explore the moderating role of self-monitoring. Across three experiments, we demonstrate that high self-monitors are more likely to persist following a public failure than a private failure. However, the public versus private nature of the goal does not affect low self-monitors' persistence. We also explore two boundary conditions for this effect by manipulating the timing of feedback and by testing the role of the perceived value of the incentive for achieving the goal. The article concludes with a discussion of theoretical and managerial insights from this work.

Every day, consumers engage in a variety of goal pursuit decisions (Bagozzi & Dholakia, 1999; Fishbach & Dhar, 2005; Koo & Fishbach, 2008; Zhang, Fishbach, & Dhar, 2007). On their way to goal attainment, consumers sometimes encounter failure, and are then left to decide – should they persist with goal efforts or abandon the goal altogether (Fishbach & Dhar, 2005; Fishbach & Finkelstein, 2011; Soman & Cheema, 2004)? We address questions about when and why consumers persist following failures by studying the interplay between goal publicity, self-monitoring and goal persistence.

Doing so allows us to make several contributions. First, while it is well established that public goals lead to greater goal persistence, little research explores whether this persistence holds even after a failure. We argue that publicity of goals can be a double edged sword, leading to either greater commitment towards or greater divesting away from goals (Gollwitzer & Sheeran, 2009; Parrott, Monahan, Ainsworth, & Steiner, 1998). Therefore, the impact of goal publicity on post-failure persistence is unclear. Second, while research explores the impact of a variety of individual differences that impact post-failure persistence, no research (to our knowledge) has explored the role of self-monitoring in this context.

**Private versus public goals and motivation.** Making goals public, which is defined as making significant others aware of one's goals, has a positive effect on goal persistence because it is easy to abandon a goal known only to oneself, but it is hard to abandon a goal that is known to others (Jones, et al., 1972; Pallak & Cummings, 1976; Salancik, 1977). One's motivation to avoid anticipated personal and social disapproval for failing to follow through with promised actions is one explanation for these effects (Parrott, et al., 1998). Furthermore, Bem's (1967) self-perception theory suggests that individuals who make a public commitment to an action may interpret the act of making a public commitment as a signal of their high motivation to engage in the promised action (Bem, 1967). Prior research has shown that public commitment leads to high levels of weight loss motivation (Nyer & Dellande, 2010), increased recycling behaviors and reduced gas and electricity consumption (Pallak & Cummings, 1976; Salancik, 1977).

**The role of self-monitoring.** We posit that goal publicity will not affect all consumers in the same way because not all individuals are equally influenced by social approval or disapproval. Specifically, we propose individual differences in self-monitoring will moderate the effect of goal publicity on goal persistence. Self-monitoring assesses the extent to which people regulate their own behavior in order to look good in the eyes of others (Snyder & Gangestad, 1986; Snyder & Simpson, 1984). High self-monitors attend to their environment and adapt to new situations, so that their behavior varies

across different settings. In contrast, low self-monitors are (relatively speaking) more consistent across different social situations and are generally oblivious to how others see them. Thus we expect that the motivating effect of publicity will be stronger for high self-monitors than low self-monitors, because the former will be especially concerned with the construction of their public selves (Gangestad & Snyder, 2000; Nyer & Dellande, 2010). Formally,

*Hypothesis 1: After a goal failure, the effects of goal publicity on goal persistence will be moderated by self-monitoring such that for high self-monitors public (as compared to private) goals will increase goal persistence, but for low self-monitors, goal publicity should have no effect on post-failure persistence.*

**Boundary conditions: feedback timing and incentive value.** Previous research indicates the importance of feedback in influencing subsequent goal (e.g., Finkelstein & Fishbach 2011). Previous research also examined whether people seek feedback strategically to motivate themselves (Finkelstein & Fishbach, 2012). In the current research, as this effect of failure is presumed to be driven by public failure, we predict that if failure feedback is not provided until after the decision about whether to continue or quit, the effect of goal publicity and self-monitoring on goal persistence will be attenuated. *Feedback* towards the goal leads to better performance toward a goal by informing the individual about the discrepancy between the goal and the performance (Fishbach & Finkelstein, 2011; Neubert, 1998). Therefore, we predict,

*Hypothesis 2: When consumers receive immediate failure feedback, we expect to observe the self-monitoring by goal publicity interaction specified in H1, but when consumers do not receive feedback, we expect that all consumer goal persistence will be attenuated.*

Incentive programs which offer consumers awards for achieving goals are effective in a variety of situations (Lee, Locke, & Phan, 1997; Schmidt & DeShon, 2007). For example, Schmidt and DeShon (2007) find that incentives offered for goal attainment determine how people resolve goal-performance discrepancies. As a result, we predict that if the perceived value of the incentive awarded for achieving the goal is low, the goal publicity by self-monitoring interaction will be attenuated because the social consequences of goal failure are lower for small than large incentives (Huang, Zhang, & Broniarczyk, 2012; Seta, Donaldson, & Seta, 1999). Therefore, when incentives for achieving goals are not perceived as valuable, even high self-monitors should care little about appearances, and persist less, even after failure. Therefore,

*Hypothesis 3: When the incentive for achieving the goal is perceived to be high, we expect to observe the self-monitoring by goal publicity interaction specified in H1, but when the incentive for achieving the goal is perceived to be low, the interaction of goal publicity and self-monitoring will be attenuated.*

We tested our predictions in three studies. Across the three studies, our results show converging evidence that self-monitoring moderates the relationship between publicity and goal persistence such that high self-monitors, but not low self-monitors, are more likely to persist at goals following failure in public than in private conditions. In addition, high self-monitors are especially sensitive to goal publicity effects, especially when they perceive the incentive for achieving the goal is valuable and when they have feedback about initial goal failure.

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# The Effect of Relational Bonds, Trust and Switching Cost on Customer Loyalty — The Moderating Role of Gender

Chi-Hsun Lee, Department of Business Management, National United University, Taiwan, R.O.C.

Etta Y. I. Chen, College of Management, Yuan Ze University, Taiwan, R.O.C.

Jui-Lien Su, College of Management, Yuan Ze University, Taiwan, R.O.C.

## EXTENDED ABSTRACT

Economic developments have intensified the competition among service industries. In response to this trend, research on relationship marketing has elucidated the importance of service providers in retaining customers and sustaining competitive advantages. Previous studies have investigated the relationship between relational bonds and trust (e.g., Lin, Weng, and Hsieh, 2003). However, few studies have explored the relationship between relational bonds and switching cost. Therefore, the current study integrated switching cost into a model including relational bonds, trust, and loyalty to clarify the effects of relational bonds on customer loyalty. According to the stimulus–organism–response paradigm (Woodworth, 1928), this paper discusses how service providers apply the three types of relational bonds (stimulus) to influence customer trust and perceived switching costs (organism) and ultimately promote customer loyalty (response). Moreover, men and women respond differently according to the type of relational marketing strategy used (Arnold and Bianchi, 2001). Hence, this study explored whether the relationship between relational bonds and trust is influenced by gender. The findings may be a reference for service providers endeavoring to optimize their resource management by applying the relational bond strategy that most suits customers.

This study proposed hypotheses according to relevant theories and literature, and surveyed customers of four banks in Taiwan. The customers were approached while waiting to be served or after being served and completed a questionnaire pertaining to their experience with the bank. Among the returned questionnaires, 328 valid samples were obtained. An analysis of the response data revealed that most of the respondents were men (54%). The age distribution was relatively even; the respondents aged  $\geq 30$  years, 31–40 years, 41–50 years, and  $\leq 51$  years accounted for 24%, 29.7%, 19.5%, and 26.8%, respectively, of the sample. Regarding educational attainment, most of the respondents had a university degree (52.4%); 19.6% of the respondents had a college or high school diploma.

In this study, the Cronbach's  $\alpha$  of all constructs achieved 0.8, except for that of the procedural switching cost construct ( $\alpha = 0.65$ ); thus, the reliability of the questionnaire content was acceptable (Nunnally, 1978). Regarding convergent validity, all constructs yielded high factor loadings (0.61–0.95) and were statistically significant. To examine the discriminate validity of the constructs, a chi-squared difference test was conducted for each pair of constructs by comparing unrestricted and restricted models. In all pair-wise comparisons, the two models differed significantly ( $p < .001$ ), and  $\Delta\chi^2(1)$  ranged from 72.83 to 474.37 ( $\Delta\chi^2(1)0.01 = 6.635$ ). Compared with the restricted model, the unrestricted model yielded a more favorable fit, thereby supporting the discriminate validity of the constructs (Anderson and Gerbing, 1988).

We analyzed the data by using structural equation modeling and AMOS Version 20.0 to determine the direct effects. The results revealed the following: (1) A relational bonding strategy positively influences customers' perceived switching costs: an included financial bonding strategy positively influences customers' perceived financial switching costs, a social bonding strategy positively influences customers' perceived relational switching costs, and a structural bonding strategy positively influences customers' perceived procedural

switching costs. (2) The three relational bonding strategies can promote customer trust in a service provider. (3) The customer perceived switching costs and the trust established by implementing relational bonding strategies can strengthen customer loyalty. (4) The effect of relational bonding strategies on trust differs between genders; the effect of financial bonding strategies and structure bonding strategies on trust are stronger for male customers than for female customers, and the effect of social bonding strategies on trust is stronger for female customers than for male customers.

This study effectively integrated switching costs into a model comprising relational bonds, trust, and loyalty to clarify the effects of relational bonds. The results revealed that the relational bonding strategies actively and passively influence customer loyalty through the intermediary variables of trust and switching costs. Therefore, service providers can flexibly apply these three relational bonding strategies to build customer loyalty. Moreover, the effect of relational bonding strategies differs between genders. Hence, financial bonds, which emphasize favorable price incentives, can be applied to target male customers who intend to pursue the most favorable product–price combination. Social bonds, which are based on social interaction and friendship, can be adopted to target female customers who enjoy interpersonal interactions. Finally, structural bonds can be created by providing practical and customized information or by offering solutions that facilitate decision-making to male customers who prefer to gather information before making decisions. Therefore, service providers can synergize with limited resources by targeting gender segments, thereby maximizing the effect of relationship bonding strategies.

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# The Ownership Distance Effect: The Impact of Traces Left by Previous Owners on the Evaluation of Used Goods

Jungkeun Kim, AUT University, New Zealand  
Sungeun (Ange) Kim, AUT University, New Zealand

## EXTENDED ABSTRACT

### Research on Used Goods and Research Question

A majority of the literatures regarding secondary markets have focused on the market system itself (e.g., Gabbott 1991), or have been investigated from the perspective of buyers (e.g., Brough and Isaac 2012). However, there is a lack of research investigating the specific exchange conditions that make used goods attractive from the perspective of buyers. In this situation of secondary markets, what is the impact of the traces left by previous owners on the evaluation of such used products? In this paper, we will answer the above question by using the ownership distance effect. We suggest that traces left by previous owners will increase the ownership distance between potential owners and used goods, resulting in decreased evaluations of such used goods from the buyers' perspective.

### Developing the Main Hypotheses

We define ownership distance as the "hypothetical distance between a potential buyer and a product." We also assume that people will like a used object more when the ownership distance between the previous owner and them is far rather than close.

The concept of the law regarding contagion suggests that the essence and properties of a person or an object (source) are transmitted to another object or a person (a recipient) through physical contact (Frazer [1890] 1959). When people believe that the source of contagion is negative, they also believe that the negative essence is transmitted to an object (Argo et al. 2006; Morales and Fitzsimons 2007).

Based on the research streams of psychological distance and the contagion effect, we expect that people will be less likely to prefer used goods with visually salient traces left by previous owners. When there are visually salient traces left by previous owners, people will perceive increased ownership distance between the object and themselves because people may consider used goods with salient traces as "contaminated" (Argo, Dahl, and Morales 2006). Moreover, they may experience difficulty in imagining the consumption of such used goods (Shiv and Huber 2000). As a consequence, the extended ownership distance will negatively influence their evaluation of the object. Therefore, we expect the hypothesis below:

*Hypothesis 1: The evaluation of used products will be lower when they have salient traces left by previous owners rather than when they do not. [The ownership distance effect]*

*Hypothesis 2: The perceived ownership distance between a potential buyer and an object will mediate the ownership distance effect.*

We suggest the boundary conditions of H1. Specifically, when the situation helps people reduce the impact of traces left by previous owners, the ownership distance effect will disappear or will be reversed:

*Hypothesis 3: The ownership distance effect will disappear or will even be reversed when the situation reduces the impact of traces left by previous owners.*

### Empirical Studies

Study 1 (n=114 undergraduate students) provides the basic phenomenon of the ownership distance effect in the context of selecting a used book. Specifically, 72 out of 114 participants (63.2%) chose the book with the three-star mark; only 42 participants chose the book with the previous owner's name (36.8%). Study 2 (n=71 adults) replicates the results in the context of choosing a house and provides empirical evidence of the significant mediation role of perceived ownership distance. Specifically, participants preferred a house when it had the abstract art picture rather than when the house had the family picture (i.e., when the house was highly salient in terms of a trace left by a previous owner).

Study 3 (n=111 adults) provides the boundary conditions of the negative ownership distance effect, in that the specific instrument (e.g., a free house cleaning service) could reduce the negative effect of traces left by previous owners for used products. Finally, study 4 (n=102 adults) provides empirical evidence of the positive ownership distance effect, in that people could prefer the product with highly salient traces of a previous owner when they believe that the traces could be helpful for them in obtaining their consumption goals.

### General Discussion

In this research, we investigated how traces left by previous owners influence the evaluation of used products from the perspective of potential buyers. Based on the psychological distance and contagion effect literatures, we propose the ownership distance effect, showing the negative effect of traces left on the evaluation of used products.

This research is important, both theoretically and practically. First, it contributes to our understanding regarding the consumption of used goods. Second, we suggest that the ownership distance effect is theoretically different from the contagion effect. Empirically, this paper successfully distinguishes the ownership distance effect against the contagion effect (Argo et al. 2008; Morales and Fitzsimons 2007) by testing the mediating role of perceived ownership distance and disgust in study 4. Finally and practically, this research may suggest a new way of encouraging the exchange of used goods (Bagozzi and Dabholkar 1994).

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# I Will Keep It Because I Choose It: The Influence of Decision Response Mode on Preference Persistency

Jungkeun Kim, AUT University, New Zealand

## EXTENDED ABSTRACT

In this paper, we explore the impact of different types of response mode (i.e., choice vs. rating) on preference persistency in a subsequent task. We define 'preference persistency' as the tendency to make the same decision, especially under the repeated decision task situation. For example, if people who chose brand X against brand Y in the initial decision showed a strong preference for the same brand X when a new option Z was available in the subsequent decision, they have strong preference persistency.

We mainly argue that participants who express their preference through a choice (vs. rating) task will show a higher tendency to keep the previously selected alternative (i.e., higher preference persistency) when they have an opportunity to switch to a new option in the subsequent task. We have predicted this expectation based on the connection between literatures concerning preference persistency in the repeated decision and decision response type.

What is the impact of the choice vs. the rating task in the initial decision of a trade-off on preference persistency in the subsequent task? Imagine that participants in the rating task condition are exposed to two equally attractive options and are asked to evaluate each option. In this situation, the evaluation outcome of the two options would be very similar because of the trade-off characteristics of the initial decision (Kim, Kim, and Marshall 2014; Luce 1998). Furthermore, the participants might consider these similar evaluation results as a weak preference for the selected option (Bither and Wright 1977; Dhar, Nowlis, and Sherman 1999). The weak preference from the first task could then induce low preference persistency in the second task (Chaiken 1980; Petty, Cacioppo, and Schumann 1983; Weber and Hansen 1972). On the other hand, participants in the choice task condition will experience a different decision. Based on the specific task of selecting over, they will choose one option over the other one overtly (Samuelson 1938; Richter 1966). In other words, the outcome via the choice task will be very different from the outcome via the rating task, in that one option was selected by the choice task, but the other option was not selected, regardless of the difference in attractiveness. Participants might regard this difference in preference through selecting over as a strong preference for the selected option (Bither and Wright 1977). Once more, the strong preference from the first task then generates high preference persistency in the subsequent decision (Chaiken 1980; Petty, Cacioppo, and Schumann 1983).

Our key prediction regarding the different roles of the choice vs. the rating task is closely related to the different functions of decision-making. Specifically, we suggest that the decision-making task itself has two important functions involved in expressing preference: (i) the choice task is related to the *preference-revealing function*, which we define as "articulating a person's internal/underlying preference for options through *selecting over*" (Samuelson 1938), and the rating task is related to the *preference-presenting function*, defined as "showing a person's preference based on the context or external request through *merely judging*" (Amir and Levav 2008; Warren, McGraw, and Van Boven 2011).

In conclusion, we expect different impacts regarding the choice and rating task on preference persistency. Precisely, based on the preference-revealing function from the choice task and the preference-presenting function from the rating task, we predict that the

choice task (vs. the judgment task) in the initial decision will enhance preference persistency in the subsequent decision.

Six empirical studies are designed to test the above prediction. In study 1, we basically established strong preference persistency from the choice [vs. rating] task and could exclude alternative explanations, such as the memory effect and the effect of time spent on the initial task. Study 2 showed that the choice task (vs. the rating task) increased preference persistency in the later task, regardless of the measurement type of preference persistency. Study 3 replicated the previous finding from the initial decision between different products, allowing us to exclude different processing styles (Payne, Bettman, and Johnson 1993) and the prominent effect (Tversky et al. 1998) as alternative explanations. Study 4 found that stronger preference persistency under the choice [vs. rating] condition, especially in the negative decision valence condition (i.e., common good and unique bad feature condition). Study 5 found that the effect of the choice and the rating task on preference persistency in the memory-based decision-making situation could exclude many alternative explanations based on stimuli-based decision-making, such as the suggested option effect based on stimuli order (Johar, Jedidi, and Jacoby 1997). Finally, study 6 found that the rejection task was quite similar to the choice task in terms of preference stability, in that participants in both the rejection and choice tasks generated higher preference persistency than those in the rating task.

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# The Effect of Option Framing on Consumer Choice for Service Options

Michaela Kreitmair, University of Erlangen-Nuremberg, Germany

Martina Steul-Fischer, University of Erlangen-Nuremberg, Germany

## EXTENDED ABSTRACT

Service providers like travel agencies or insurances often give consumers the opportunity to adapt a service according to their individual needs by offering additional options to supplement a base service. In order to customize a service, consumers could either add desired services to a base service (= opt-in framing) or they could delete undesired services from a fully-loaded package (= opt-out framing) (Jin, He, and Song 2012; Park, Jun, and MacInnis 2000).

Prior research focusing on physical products has demonstrated that consumers who build their bundle in the opt-out framing choose on average more additional options than their counterparts who conduct the choice tasks in the opt-in framing (Biswas and Grau 2008; Herrmann et al. 2013; Levin et al. 2002; Park et al. 2000; Park and Kim 2012). Due to the specific characteristics that distinguish services from physical products, the first goal of our research is to provide evidence on opt-in and opt-out effects for the service industry.

Furthermore, we investigate the differences in consumer choice behavior when hedonic and utilitarian additional services are offered in opt-in and opt-out choices. Previous studies have shown that consumers tend to choose the utilitarian option in opt-in choices, but prefer to keep the hedonic option in opt-out choices (Antonides, Bolger, and Trip 2006; Dhar and Wertenbroch 2000; Okada 2005). However, these studies investigated physical products only and mainly considered trade-offs between one hedonic and one utilitarian attribute or product. In contrast, our studies focus on services and examine consumer choice beyond the mere trade-off between two options. To our knowledge, no research has yet compared opt-in and opt-out framings for several hedonic and utilitarian service options.

In our two studies, participants were asked to build their own service package. In the opt-in framing, they could add hedonic and/or utilitarian services to a base service. Thus, participants had the opportunity to receive a gain of utility for a loss of money. Contrary, participants in the opt-out framing were free to delete the same hedonic and/or utilitarian services from a fully-loaded service package. They could make a gain of money by forsaking utility (Park et al. 2000).

In Study 1, we compared the effect of opt-in and opt-out framing for a pure hedonic service package (i.e., a hedonic base service plus hedonic additional services) with a pure utilitarian service package (i.e., a utilitarian base service plus utilitarian additional services). We chose a holiday package for the hedonic service offer and a car insurance package for the utilitarian service condition. Six hedonic services were available additionally to the hedonic base service of the holiday condition and six utilitarian services were offered additionally to the utilitarian base service of the insurance condition.

In Study 2, we extended the consumer purchase decision by making hedonic and utilitarian additional services simultaneously available. Thus, consumers did not only have to decide whether they wanted to spend additional money for additional hedonic or additional utilitarian benefits, but were also faced with a trade-off between hedonic and utilitarian options – especially when they had limited budget. We chose a holiday offer as the base service and defined six hedonic services and six utilitarian services as additional options. Participants were asked to build their own service package. The choice task was thereby presented either as an opt-in or an opt-out framing with or without budget goal.

Consistent with the findings from previous research for physical products, the results of both studies support that consumers choose more additional services when they are asked to delete services from a fully-loaded model compared to adding services to a base service. Thus, the stronger demand for options in opt-out choices opposed to opt-in choices is also valid for services.

In Study 1, we assumed that consumers would choose more (less) additional services in the hedonic opt-out (opt-in) choice tasks than in the utilitarian opt-out (opt-in) choice tasks. However, consumers did not respond differently to opt-in and opt-out choices across the two service categories. We supposed that purchase situations that involve only one service category do not cause consumers to think about the hedonic or utilitarian nature of an option. We conducted Study 2 based on the suggestion that consumers will be more concerned about the service type of an option when hedonic and utilitarian services are offered next to each other. Our results showed that consumers in the opt-in framing compared to the opt-out framing selected more utilitarian than hedonic additional services. This finding is in line with the argument that consumers prefer utilitarian to hedonic options in opt-in choices. For the opt-out choice, our data revealed that consumers chose approximately the same relatively high number of hedonic and utilitarian additional services. Moreover, Study 2 investigated opt-in and opt-out choice behavior in purchase decisions with budget constraints. We presumed that consumers who are faced with financial restrictions would first try to fulfill utilitarian needs before striving to fulfill hedonic wishes (Chitturi, Raghunathan, and Mahajan 2007; Maslow 1970). Therefore, consumers were expected to select more utilitarian than hedonic services independent from the choice condition. This expectation was fulfilled for the opt-out framing. Consumers in the opt-in framing, however, equally selected hedonic and utilitarian services, but chose in total one option less than their counterparts in the opt-out framing.

Our findings have important implications for service providers who offer additional services. First, consumers choose more additional services when they conduct the choice task in the opt-out framing compared to the opt-in framing. Second, consumer preferences for additional hedonic and additional utilitarian services depend on the type of option framing and the available budget. Thus, for service companies that offer hedonic and utilitarian services next to each other or next to the services from other providers, knowledge on consumer choice behavior in opt-in and opt-out tasks involving hedonic and utilitarian options is essential for sales success.

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# Is Leaving More Space Always Better? The Effect of Empty Space on Persuasion

Canice Man Ching Kwan, The Chinese University of Hong Kong, Hong Kong

Xianchi Dai, The Chinese University of Hong Kong, Hong Kong

Robert S. Wyer, Jr., The Chinese University of Hong Kong, Hong Kong

## EXTENDED ABSTRACT

People are frequently influenced by visual features of a message when they construe its implications. Although these features can often have little objectively to do with the message content, they can exert an influence in several ways. For example, font size and color and placement location can all influence the effectiveness of warning labels (see Argo and Main, 2004 for a meta-analysis). The readability of a message's visual features can exert an influence through its impact on ease of processing (e.g. Novemsky et al. 2007). Moreover, accompanying verbal information by pictures can affect the ability to integrate its implications (e.g. Adaval and Wyer 1998). In short, a wide variety of visual factors affect communication effectiveness.

The present study identifies a quite different factor that can influence the persuasiveness of a verbal message when it is conveyed in an advertisement or on the Internet: the amount of non-text, empty space that surrounds it. Although this factor is inherent in all communications that contain both pictures and words, people are usually insensitive to its impact. To our knowledge, no other studies have examined these possibilities. Some research has in fact concerned how people draw inferences from spatial cues (Santiago et al. 2007; Boroditsky 2000; Meyers-Levy and Zhu 2007). In contrast, our work focuses on the visual perception of space and not the subjective experience of it. As we discuss presently, the factors that mediate the effect of empty visual space are quite different from those that underlie the effects of the physical experience of space (or constraints on it). We assume that a statement surrounded by empty space conveys that there is "a lot of room" and this, in turn, activates more general concepts that there is room for doubt as to the validity or importance of the message content. That is, the communicator intends to convey message in a strong tone without doubt. Consequently, the message is less persuasive when it is surrounded by empty space than when it is not.

Four experiments confirm this prediction and the assumptions underlying it. Study 1 (N = 126) showed that an instruction to take a free pamphlet led to less compliance when the instruction was embedded in empty space (printed in same format at the center on a A4 [empty-space] or a A5 [no space] pasteboard stand) than when it was not (37.7% vs. 59.6%, respectively,  $B = .409$ ,  $Wald(1) = 5.94$ ,  $p = .015$ ). These findings suggest that spatial cues alter actual behavior in real-life settings.

In Study 2 (N = 94), participants were asked to evaluate ten statements selected from social media. Each statement was identical in font type, font size, text position, paragraphing and background graphics (see appendix 1). In no-space conditions, each quote was presented in a box whose borders surrounded the quote but contained no additional space. In empty-space conditions, however, the statement was contained in a box that has substantial empty space surrounding it. As predicted, participants evaluated statements less favorably in empty-space conditions than in no-space conditions (3.94 vs. 4.41, respectively;  $F(1, 92) = 4.37$ ,  $p = .039$ ). We also showed that empty space had little impact on the amount of processing of the message content (in terms of processing time, 145.6s vs. 136.7s for empty-space vs. no-space conditions respectively,  $F(1, 92) < 1$ ,  $ns$ ), but increased recall when the statements were surrounded by empty space (7.50 vs. 6.23, respectively,  $F(1, 92) = 4.37$ ,  $p = .039$ ). We argue the difference in recall was resulted from more counterarguing

in the empty space condition (Wyer and Frey 1983). This speculation was confirmed in Studies 3 and 4.

Studies 3 and 4 employed the same manipulation as in study 2. We specifically investigated in two domains – the avoidance of unhealthy foods and choosing warm romantic partner. As the findings indicated, empty space affects the disposition to counterargue with the statements. In study 3 (N = 76), participants liked unhealthy food more when the statements about avoiding unhealthy food were surrounded by empty space (5.91 vs. 5.48, respectively;  $F(1, 74) = 5.95$ ,  $p = .017$ ). They also reported counterarguing the messages to a marginally greater extent in empty-space conditions than in no-space conditions (4.74 vs. 4.08, respectively;  $F(1, 74) = 2.74$ ,  $p = .10$ ), but no significant difference in processing time (57.4s vs. 60.0s, respectively;  $F < 1$ ) and perceived mental resource (6.11 vs. 5.79, respectively;  $F(1, 74) = 1.25$ ,  $p > .20$ ).

In study 4 (N = 85), we further confirm that reduction in counterarguing was influenced by participants' inference of the strength of the message. When the message was presented in the absence of empty space, participants perceived the message as stronger (3.72 vs. 4.61 for empty-space vs. no-space condition respectively;  $F(1, 82) = 14.36$ ,  $p < .001$ ) and were less likely to counterargue its validity (4.49 vs. 3.81, respectively;  $F(1, 82) = 3.78$ ,  $p = .055$ ). Therefore, they were likely to be persuaded (4.02 vs. 4.94, respectively;  $F(1, 82) = 15.73$ ,  $p < .001$ ) and perceived warmth qualities (e.g. sincerity and trustworthiness) as more important for choosing romantic partner (5.33 vs. 5.52, respectively;  $F(1, 82) = 3.95$ ,  $p = .050$ ). Bootstrapping analyses evidenced this sequential relationships in a mediation pathway as follows: Empty Space  $\rightarrow$  Perceived Tone  $\rightarrow$  Counterargue Disposition  $\rightarrow$  Message Evaluation  $\rightarrow$  Beliefs on Choosing Romantic Partner (95%CI: -.0297 to -.0003, based on 5000 samples, excluding 0).

People's construal of the implications of a message goes beyond its literal meaning. Although this general conclusion is well established (Grice 1975; Higgins and King 1981), the effects of the physical context in which a message is presented have been less extensively investigated. The studies reported in this article provide intriguing examples of this influence. In doing so, we enhance the understanding about space associations (e.g. Meyers-Levy and Zhu 2007; Boroditsky 2000; Santiago et al. 2007) and extend the literature on persuasion. As opposed to the common conclusion that empty space is good (e.g. Pracejus, Olsen, and O'Guinn 2006), this research identifies a context in which lacking empty space can be desirable. This offers many practical insights on advertising and graphic design.

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# “It’s a Bit of a Mask, It’s Not Pure...It’s Not What I Thought”: How Doppelganger Brand Images Attack Brand Authenticity

Zoe Lee, University of Bath, UK  
Micheal Beverland, University of Bath, UK  
Joanne McCloskey, University of Bath, UK

## EXTENDED ABSTRACT

The search for authenticity is one of the cornerstones of contemporary marketing (Brown, Kozinet and Sherry 2003). Marketers invested heavily in advertising trying to project a sense of authenticity around their brands (Beverland, Lindgreen and Vink, 2008). However, little is known about the strength of brand authenticity given the rise of antibranding movement via anti-brand websites (Bailey 2004; Holt 2002; Krishnamurthy and Kucuk 2009) and brand focused parodies (Bergh et al., 2011; Zinkhan and Johnson 1994). Consumers and activists use these uncontrolled communication to project their discontent and exchange anti-branding information. Consider an ad for BP suggesting a better life with vision of beyond petroleum. Then imagine the same ad being parodied with a strong indication of ‘brown is the new green’. Consider Starbuck Corp’s brand being parodied reading “Evil Empire” and “Frankensbucks Coffee”. These alternative source cues provide a deliberate attack on the perception of what is real and genuine, hence perception of an inauthentic brand. Despite these damaging activities, there is limited research in understanding how negative brand images and stories affect perceived brand authenticity.

Extant research has focused nearly exclusively on management issues, whether to fight or walk away (Earle 2002; Fielding 2006; Mortimer 2008) and a few studies have focused on the outcome and the link between anti-branding movement and brand value (Krishnamurthy and Kucuk 2009). In this paper, we explore how consumers process doppelganger brand images which are described as ‘a family of disparaging images and meanings about a brand’ (Giesler 2012; Thompson, Rindfleisch and Arsel 2006). In the time of uncertainty, consumers try to relieve this by seeking authenticity in their daily lives in the brands they consume (Bruhn et al., 2012).

Prior research studies on authenticity show how consumers actively create personal brand meaning in order to achieve desired identity goals, such activities involves acts of imagination, suspension of disbelief, projection, selective information processing and negotiation of paradox (Beverland et al. 2008; Grayson and Martinec 2004; Kate 2004; Rose and Wood 2005). Research has also examined that consumers are less forgiving when trusted brand violates their emotional branding promises (Aaker et al. 2004) as it is viewed as inauthentic. Given the emergence of doppelganger brand image partly fuelled by emotional discontent with a brand, a key question that arises is how do loyal consumers process negative information projected by doppelganger brand images in relation to authenticity?

In this study, we used interpretive and qualitative research design, using semi structured in-depth interviews (McCracken 1988, Miles and Huberman 1994) to investigate informant’s life world, identity, intentions, desires and their association with marketing offerings (Thompson 1997). In total, 23 in-depth, face to face interviews were conducted with Dove consumers from various backgrounds at which point it was felt that ‘saturation’ (Glasner and Strauss 1967) had been reached. Informants were asked to share their perceptions of selected four Dove’s campaigns ranging from 2006 to 2013, and a brand parody; focusing especially on how these perceptions may have changed their perceived authenticity of the brand. To introduce the case, photo-elicitation techniques were used (Collier 1957). Each interview was transcribed and analysed following the interview and

initial themes and responses helped to inform the questioning of subsequent interviews (Strauss and Corbin 1998).

Our findings contribute in a number of ways. First, we extend our understanding on how consumers judge doppelganger brand images in relation to brand authenticity. We identify that in re-evaluating the brand authenticity, consumers use their original goals (control, connect and virtue) as an anchor to determine if the brand continues to be true, genuine and real (Beverland and Farrelly 2010). To understand the process of how consumers formed judgement on doppelganger brand images, our findings show consumers go through a four stage process such as ‘Selection of judgement criteria’, ‘Information search’, ‘Cognitive processing’ and finally ‘Outcomes’.

The need for judgement, which is the starting point of brand authenticity judgement process, arises due to exposure to doppelganger brand images. The degree of motivation generated by the need to make a judgement about the brand has an important effect on the consumers’ cognition. This means that high motivation promotes extensive information search and ‘rational’ evaluation; whereas low motivation favours the use of heuristics and other “short cuts” that can simplify those decisions (Kruglanski 2001). The lack of information available to assess the situation and alternative ‘authentic’ product can potentially force consumers to take cognitive biases in processing this negative information. In doing so, they tolerate the brand inauthenticity or transgression as they search for the information initially used to form the brand attitude (Pham and Muthukrishnan 2002). Following search and alignment model (Pham and Muthukrishnan 2002), it is not surprising how some consumers are more forgiving of the doppelganger brand images as they return to the root of the brand which is about ‘moisturising’. The doppelganger brand image which appears to attack the ‘real beauty’ and ‘self esteem’ campaign clearly has little effect on these informants. However, for other consumers which initial experience of the Dove is relate to ‘real beauty’, this doppelganger brand images is weighted more heavily.

Contrary to conventional understanding of consumer loyalty, we also find little evidence of loyal consumers strongly defending the brand. Dove used emotional-branding story to achieve competitive advantages and arguably successful in functioning as an authenticating narrative for consumers’ identity project. However, existing brand parodies on Dove causes loyal consumers to avoid Dove as the emotional branding promises are viewed as inauthentic. We find evidence that suggests a clearer transfer of previously positive relationships to predictably negative responses towards these images. However with the growth of anti-branding movement, it is more increasingly difficult for loyal consumes to avoid these images in mainstream media. Johnson, Matear and Thomson (2011) also argue that this self-relevance actually make consumer more vulnerable.

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# The Moderating Role of Responsible Financial Behaviors on Materialism and Subjective Well-Being: Theory Development and Cross-Cultural Replication

Ada Leung, Pennsylvania State University at Berks, USA

Jiayun (Gavin) Wu, Savannah State University, USA

Huimin Xu, The Sage Colleges, USA

Jeff Wang, City University of Hong Kong, Hong Kong

## EXTENDED ABSTRACT

Materialistic values, which often associated with financial stressors, are negatively related to satisfaction towards living standards and subjective well-being (Kasser and Ryan 1993; Shaw, Leung, and Wallendorf 2004; Wright and Larsen 1993). It becomes imperative to find plausible means to ameliorate the prevalent materialism's adverse effects on subjective well-being. The present research examined the role of responsible financial management behaviors in buffering such negative relationships. The research findings demonstrated that engaging in responsible financial management behaviors is an important means to increase one's subjective well-being.

Financial management behaviors can be largely conceptualized into six areas: cash management, credit management, capital accumulation, risk management, retirement/estate planning, and general financial management (Joo and Grable 2004; Porter and Garman 1993). Such strategic financial management behaviors such as paying off debt and having retirement plan are found to lay foundations for long-term personal financial well-being (Sorhaindo, Kim, and Garman 2003). Nevertheless, such a view, though utilitarian, appears to be restrictive when examining the implications of responsible financial management behaviors. Considerable evidence suggests that individuals who engage in responsible financial management behaviors experience favorable outcomes, such as improvement in work productivity (Kim 2004), marital relationships (Freeman, Carlson, and Sperry 1993), and physical health (Kim, Garman, and Sorhaindo 2003). Responsible financial management behaviors may also link to a person's happiness. Household heads in Britain who saved money consistently were found to be more likely to report a higher sense of well-being than those who did not save (Brown, Taylor, and Price 2005). More recently, responsible financial management behaviors are found to be positively related to college students' present sense of well-being in the U.S (Shim, Serido, and Tang 2012). However, the evidence linking responsible financial management behaviors to subjective well-being is still relatively scarce. In fact, the question of how responsible financial management behaviors might be related to happiness has been largely under-researched.

In this research, we argue that responsible financial management behaviors go further in improving people's happiness by buffering the negative association between materialism and satisfaction towards standards of living. Our theory of materialism and subjective well-being draws heavily from the model of life satisfaction theory in the quality of life literature, which theorizes a hierarchy model in which there are spillover effects between satisfaction with life domains and overall life satisfaction or subjective well-being (most superordinate domain) (Andrews and Withey 1976; Campbell, Converse, and Rodgers 1976; Sirgy 1998). We argue that individuals with higher level of materialistic value are likely to have lower satisfaction towards their standards of living (e.g., income, wealth, possessions). As satisfaction towards living standards is a critical determinant of individuals' overall life satisfaction, we expect materialistic individuals also experience a lower level of subjective well-being. Nevertheless, we hypothesized that those who engage in responsible financial management behaviors, such as continuously

delaying the consumption of goods, services, and experiences that delivers instant gratification, but instead acting conscientiously to attain long-term goals of financial security, are likely to improve their satisfaction towards standards of living, and ultimately increase their subjective well-being.

Findings from two studies (study 1: 257 randomly selected community sample in the U.S.; study 2: 408 college students in three cities in China) revealed that the negative association between materialism and satisfaction towards standards of living was stronger among people who exhibit lower and mean level of responsible behaviors, which in turn influenced their subjective well-being. Among those who exhibited the highest level of responsible financial management behaviors, there was no evidence of this process at work. We interpret this to mean that responsible financial management behaviors buffer the detrimental impact of materialism on standard of living satisfaction, which in turn increase people's subjective well-being. Those who are most susceptible to the negative impact of materialism are those who engage in few responsible behaviors.

In this research, we empirically tested and found support for the moderated mediated relationship via satisfaction toward standards of living, in agreement with the vertical spillover effect in the model of life satisfaction theory. Study 1 findings also suggested that individuals' overall subjective well-being is largely mediated by their satisfaction towards material life and other important life domains such as health, relationships with family members and spouse. Nevertheless, compared to other domain satisfaction, the satisfaction towards standards of living is among the most important determinants on people's overall subjective well-being, highlighting the critical role of responsible financial management behaviors in the pursuit of happiness. Study 2 largely replicated the findings in study 1. By replicating the research in contexts in which the citizens place more emphasis in material well-being and a younger sample in which the subjects tend to define self-identity through identification with possessions (Belk 1985), is a more conservative test in examining the hypothesized theoretical relationships as the link between materialism and subjective well-being is likely to be stronger, and the mitigating effects of behaviors are likely to be weaker.

It becomes imperative to instill financial education to the citizens so that they can engage in responsible financial management behaviors, for both utilitarian and pursuit of happiness reasons. Consumers who engage in responsible financial management behaviors are likely to achieve their financial goals, such as purchasing a house, becoming financially independent, achieving economic upward mobility, and even averting societal costs of yet another financial market meltdown. But more importantly, such proactive practices can improve people's subjective well-being, which result in a higher level of self-esteem and a more affirmative view about their own achievements in general.

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# Stay or Leave: Examining the Effect of Brand Identity Fusion on Consumers' Responses to Brand Transgressions

Jih-Syuan Lin, University of Georgia, USA  
Yongjun Sung, Korea University, South Korea  
Kuan-Ju Chen, University of Georgia, USA

## EXTENDED ABSTRACT

Brand transgressions, which are actions that violate implicit or explicit rules regulating product production and distribution, can undermine consumer-brand relationships and alter consumers' buying decisions, brand evaluations, and relationship strength (Aaker, Fournier, and Brasel 2004). Considering this, the current research applies the theoretical underpinnings of identification (Tajfel and Turner 1979; Turner et al. 1987) and identity fusion (Swann et al. 2012) to extend existing understanding of the impact of brand transgressions, investigating boundary conditions for self-brand identity connection variables that determine when brand transgressions will, and will not, undermine ongoing consumer-brand relationships.

Building on Lin and Sung (2014)'s empirical findings, brand identity fusion, which entails the merger of a consumer's personal and brand-related social identities in consumer-brand relationships, is considered a stronger predictor than brand identification in explaining consumers' attributional and cognitive biases in the face of brand transgressions. However, prior research (e.g., Bhattacharya and Sen 2003; Einwiller et al. 2006) suggests that the buffering effect of brand identification has its limits when brand information becomes extremely negative. Thus, this research examines the effect of transgression severity on consumers' coping strategies (i.e., exit, voice, loyalty, and neglect) to test and qualify the effect of brand identity fusion. Specifically, we predict that if a brand transgression is of a relatively major magnitude, the buffering effect of brand identity fusion on consumers' coping responses to the brand transgression may be limited.

In addition, several researchers have integrated self-brand connections with self-affirmation theory (Sherman and Kim 2005; Steele 1988). In particular, Cheng and colleagues (2012) found that affirming consumers' self-worth would reduce their subsequent desire to bolster their own self-worth by defending a product with which they identified following a brand transgression. Consistent with this idea, consumers who had self-affirmed were especially likely to diminish their support for a threatened brand, presumably because the affirmation manipulation undercut their motivation to enhance their own self-esteem by aligning themselves with the brand. However, theorizing about the tenet of identity fusion, a very different pattern may emerge for fused consumers. Contrary to the self-categorization theory's functional antagonism principle, fused consumers' personal and brand-related social identities may be active and salient simultaneously; activating either will amplify pro-relationship responses (Swann et al. 2012). Therefore, no breach should occur after self-affirmation tasks. Self-affirmations may reduce the self-threatening capacity and defensiveness by making fused consumers feel more secure in their self-worth (Sherman and Cohen 2002). However, fused consumers should continue to show favoritism toward the brand in trouble because their sense of who they are is thoroughly enmeshed with what the brand represents. Therefore, we predict that, in the wake of a brand transgression, a self-affirmation manipulation should not diminish the subsequent tendency for fused consumers to defend their brand following a transgression.

To test our predictions, we conducted two experimental studies to investigate the effect of self-brand identity connection variables on consumers' coping responses to brand transgressions. First, a 2

(transgression severity: moderate vs. severe)  $\times$  brand identity fusion (measured)  $\times$  2 (transgression types: personal-related vs. societal-related) between-subjects design was employed. The results of Study 1 showed that, regardless of transgression severity, highly fused participants were more likely to undertake constructive coping strategies and less likely to undertake destructive coping strategies than weakly fused participants, while controlling for brand identification. By contrast, greater brand identification was associated with more endorsement of exit responses following brand transgressions. Although the moderating effect of perceived severity has been documented in the literature, the nonlinear pattern of participants' reactions to brand transgressions was not evidenced in this study. As the irrevocability principle (Swann et al. 2012) suggests, once fused, participants tended to remain fused. The buffering effect of brand identity fusion is robust and directionally consistent even as transgression severity and types vary.

The Study 2 employed a 2 (affirmation status: affirmation vs. no affirmation)  $\times$  2 (transgression severity: moderate vs. severe)  $\times$  brand identity fusion (measured) between-subjects design. This study further evidenced that brand identity fusion was a stronger predictor than brand identification in explaining why some consumers exhibited pro-relationship behaviors following brand transgressions. The relationship-serving responses of highly fused participants persisted after their self-views were reaffirmed, regardless of transgression severity in most cases (except for voice). These findings suggest that once a brand flounders and personal selves of consumers are affirmed, fused consumers will reaffirm their commitment while identified consumers will tend to disassociate from the brand.

This research extends prior research by examining factors that qualify or limit the effectiveness of brand identity fusion and brand identification. It also demonstrates the motivational processes underlying consumers' coping responses to brand transgressions of different magnitudes, types, and product categories. Collectively, our findings offer converging evidence that brand identity fusion was more predictive of consumers' allegiance to brands following transgressions than brand identification. Fused consumers are capable of acting in ways that differ from the group prototype assumed from social identity perspectives. The powerful effect of brand identity fusion surpasses even the moderating effect of perceived severity that has been documented in the literature. Consistent with the identity synergy principle (Swann et al. 2012), this research further revealed that fused consumers expressed a high propensity to enact relationship-serving activities, even though they were able to find ways to protect their perceived integrity and self-worth without defending the brand in trouble. The ability to affirm alternative domains of self-integrity in the face of brand transgressions seems to help activate fused consumers' agentic personal self and, in turn, promote and amplify pro-relationship behaviors. More generally, it appears that while fused consumers continue to support a brand regardless, strongly identified consumers acted to protect their positive personal selves rather than the threatened brand. In conclusion, this research contributes to existing literature, highlighting core elements needed for strong brand relationships. Given the utility of brand identity fusion in predicting consumers' responses to negative brand experiences, more empirical

research is warranted to further investigate the nature and effect of brand identity fusion.

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# It Feels Good and Bad to be Fake: The Mixed Emotional Experience and Consequence of Using Counterfeits

Joyce Jingshi Liu, Hong Kong University of Science and Technology, Hong Kong  
Amy Dalton, Hong Kong University of Science and Technology, Hong Kong  
Jiewen Hong, Hong Kong University of Science and Technology, Hong Kong

## EXTENDED ABSTRACT

Over the past two decades, the market for counterfeit products – products that use a brand logo without a company’s permission – has grown over 10,000% (International AntiCounterfeiting Coalition 2014). To understand this tremendous growth, a burgeoning literature has investigated the psychology of counterfeit consumption and has identified several psychological antecedents (Wilcox et al. 2009) and consequences (Gino et al. 2010) of counterfeit consumption. Little research, however, has focused on understanding consumers’ experience when using counterfeit products. Counterfeit consumption is unique, particularly in the emotions it elicits. Thus, the current research seeks to examine the emotional experience of counterfeit consumption and the behavioral consequences of such emotional experience.

We hypothesize that counterfeit consumption elicits mixed emotions. Moreover, we conjecture that publically-consumed counterfeits (e.g. bags, shoes) elicit more mixed emotions than privately-consumed counterfeits (e.g. books, DVDs). While both public and private counterfeit consumption can elicit emotions associated with affordability and quality, only public counterfeits can additionally elicit emotions associated with social factors. For example, users of public counterfeit products may experience positive emotions arising from a product’s signaling value and negative emotions arising from the fear of social judgment.

Furthermore, we hypothesize that the mixed emotions arising from using counterfeits are mentally taxing. Experiencing mixed emotions may entail vacillating between different emotional states. Since switching mental states requires executive control and consumes regulatory resources (Hamilton et al. 2011), it is possible that experiencing mixed emotions also consumes regulatory resources. Moreover, experiencing mixed emotions is often associated with feeling psychological discomfort (Williams and Aaker 2002). People may attempt to reduce the psychological discomfort and such emotion regulation would lead to depletion of regulatory resources (Baumeister et al. 1998).

Three studies were conducted to test these hypotheses. Study 1 surveyed 54 pre-screened, self-reported counterfeit users. First, participants listed the types of counterfeits they have used and described how using each counterfeit typically makes them feel. Then, they rated the extent to which counterfeit consumption makes them feel mixed (mixed: feel both good and bad) on a five-point scale (1=not at all, 5=extremely). Research suggests that people experience different levels of discomfort when having mixed emotions (Williams and Aaker 2002). Thus, we also measured the extent to which participants feel discomfort (conflicted, bothered,  $\alpha_{\text{public}}=0.869$ ,  $\alpha_{\text{private}}=0.774$ ) on a five-point scale (1=not at all, 5=extremely).

Open ended responses show that more users reported feeling mixed when using *public* (e.g. bags, shoes; 16%) compared to *private* (e.g. books, DVDs; 4%) counterfeits. The mixed emotions associated with public counterfeit consumption arose from people feeling positive about having saved money but negative about the risk of social judgment. Results from the scale measures show that participants reported feeling more mixed ( $M_{\text{public}}=3$ ,  $M_{\text{private}}=2.56$ ,  $p=0.081$ ) and more discomfort ( $M_{\text{public}}=2.55$ ,  $M_{\text{private}}=1.76$ ,  $p=0.001$ ) when using public counterfeits than private counterfeits. Thus, results across

measures support that public, compared to private, counterfeit consumption elicits more mixed emotions.

Study 2 was an experiment in which participants imagined using a counterfeit, branded or non-branded product in a public setting. Participants reported the extent to which they feel “mixed” on a five-point scale (1=very slightly mixed or not at all mixed, 5=extremely mixed), and discomfort (conflicted and discomfort) on a seven-point scale (1=strongly disagree, 7=strong agree). Finally, they reported their general moral belief about using counterfeits on a seven-point morality scale (Wilcox et al. 2009).

Results show that counterfeit consumption elicited more mixed emotions ( $M_{\text{counterfeit}}=2.93$ ) than branded ( $M_{\text{branded}}=2.35$ ,  $p=0.008$ ) and non-branded consumption ( $M_{\text{non-branded}}=2.56$ ,  $p=0.09$ ). The latter two conditions did not differ ( $F<1$ ). Interaction between product condition and moral beliefs was nonsignificant ( $p=0.31$ ), suggesting that counterfeit consumption elicited mixed emotions irrespective of individual differences in moral beliefs about using counterfeits. Participants also reported feeling more discomfort in the counterfeit condition ( $M_{\text{counterfeit}}=4.04$ ) than the branded ( $M_{\text{branded}}=3.51$ ,  $p=0.009$ ) and non-branded ( $M_{\text{non-branded}}=3.43$ ,  $p=0.049$ ) conditions. The latter two conditions did not differ ( $F<1$ ). Consistent with our prediction, counterfeit consumption indeed elicits mixed emotions.

Study 3 tested our hypothesis that counterfeit consumption is mentally taxing and leads to regulatory resource depletion. Participants were assigned to either the branded or counterfeit condition from study 2. After imagining the scenario, participants reported the extent to which they feel mixed on a five-point scale (mixed, ambivalent, feeling good and bad at the same time,  $\alpha=0.75$ ; 1=not at all, 5=extremely). Then they performed a word-generation task to measure resource depletion. Previous research has used persistence at tasks to measure resource depletion (e.g. Baumeister et al. 1998). However, due to logistic reasons we limited the maximum time participants could spend on the task to five minutes. Consequentially, time spent was not an accurate measure of resource depletion because performance on the task may be confounded with the amount of time spent on the task. Thus, as a dependent measure, we calculated participants’ efficiency in correctly solving the task by dividing the number of correctly generated words by the number of minutes participants spent on the task (see Finkel et al. 2006 for a similar measure).

Results show that compared to branded consumption, counterfeit consumption elicited more mixed emotions ( $M_{\text{branded}}=2.74$  vs.  $M_{\text{counterfeit}}=3.65$ ,  $p<0.001$ ). Moreover, participants’ efficiency was lower in counterfeit consumption than branded consumption ( $M_{\text{branded}}=9.54$  vs.  $M_{\text{counterfeit}}=5.7$ ,  $p=0.053$ ). The mediating role of mixed emotions was tested by bootstrapping procedures (Preacher, Rucker, and Hayes 2007). The procedures generated a 90% confidence interval around the indirect effect with zero falling outside of the confidence interval (-0.0740, -0.0015), indicating that the mediating pathway was marginally significant. Thus, results provide evidence that counterfeit consumption elicits mixed emotions, which in turn leads to self-regulatory resource depletion.

The present studies contribute to the extant literature on counterfeit consumption by exploring the emotional impact of using counterfeits. We find that (1) using counterfeits elicits mixed emo-

tions; (2) this effect is pronounced for counterfeits used in public, which carry higher risk of social judgment; and (3) the mixed emotions elicited by counterfeit consumption is mentally taxing, which depletes self-regulatory resources. Our findings highlight the emotional cost and behavioral consequences of counterfeit consumption, and can potentially increase consumer welfare and provide managerial implications on reducing consumer demands on counterfeits.

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# Effects of Menstrual Phase on Consumer Responses to Genetically Modified Food

Maggie Wenjing Liu, Tsinghua University, China

Rui Chen, Tsinghua University, China

Yuhong Guan, Tsinghua University, China

Yuhuang Zheng, Tsinghua University, China

## EXTENDED ABSTRACT

The theory of evolution states that nature determines biological change and genetic selection, with individuals playing a role in the selection of good genes, especially in sexual (female) selection (Darwin 1871; Gangestad et al. 2007; Kokko 2001; Saad 2013). Research on evolutionary psychology contends that ancestral women only benefited from good genes during the fertility phase and devoted substantial energy and effort to fostering children (Thornhill and Gangestad 2008). Good genes selection theory believes that during the fertility phase, females pay particular attention to positive male characteristics and prefer men with fine genetic traits (Cantú et al. 2014). For instance, during the fertility but not the luteal phase, women appreciate more masculine faces (Penton-Voak et al. 1999) and deep male voices (Feinberg et al. 2006). This sexual preference is driven by a stronger good gene selection motive during the fertility phase (Cantú et al. 2014; Thornhill and Gangestad 2008).

Research on the preference for good genes has been limited to sexual selection where only human genes have been considered. Genetically modified organism (GMO) foods include plants and animals selected for good genes (Honkanen and Verplanken 2004); therefore, this research examines whether the preference for good genes affects women's preference for genetic benefits in other species such as plants and animals that humans consume as food.

Examining the effects of menstrual phases and good genes selection on Chinese consumer responses to GMO food is of particular interest. Chinese consumers have a specifically negative attitude towards GMO food (Silk 2014) and a strong cultural belief in the interconnectedness between food and the human body (Mulatu and Berry 2001; Shi and Zhang 2012). While household purchase decisions are often jointly made in Western countries; however, Chinese women as well as other East Asian females traditionally manage household budgets and food purchases (Ackerman and Tellis 2001). An AC Nielsen study conducted in seven Chinese cities revealed that over 70% of household purchases including food purchases are made by female shoppers (Ho and Tang 2006). Female consumer responses to GMO food is a crucial issue in a country facing enormous pressure of feeding 1.3 billion citizens. These factors render our research an opportunity to make important theoretical and empirical contributions.

This paper investigates the research questions that (1) whether and how female consumers' menstrual phases and good gene selection preference affect their responses to GMO foods and (2) the boundary conditions of the effect such as strength of food-body link lay beliefs. We present a literature review on good gene selection followed by the proposal of hypotheses. We conduct four studies to test our hypotheses and theory. Finally, we discuss the implications of our research.

This paper examined whether good genes selection preferences can be extended from human genes to genetic benefits from other species such as plants and animals that humans consume as food. We conducted four studies among Chinese consumers. Our findings showed that female Chinese consumers evaluate and behave more favorably towards GMO food during the fertility phase than during the luteal phase, an effect moderated by strength of lay beliefs in the food-body link. We provided process evidence and showed that

consumer perception of GMO genetic priority underlies the effect of menstrual phases on consumer responses to GMO food.

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# Moving Up or Down: Power Distance Belief and the Asymmetric Effect of Vertical Brand Extension

Xiaoyan Liu Jenny, Nanyang Technological University, Singapore  
Sharon Ng, Nanyang Technological University, Singapore  
Elison Lim, Nanyang Technological University, Singapore

## EXTENDED ABSTRACT

Vertical extension - introducing a new product in the same category yet at different price levels - is a very common practice to attract consumers varied in willingness to pay (Keller and Aaker 1992). In practices, around 65% of new product launches involve vertical brand extension (Dall'Olmio Riley, Pina, and Bravo 2013). Despite its importance, however, existing research has mainly focused on horizontal extension while research on vertical extension is sparse. Moreover, the limited research done on vertical extension has primarily focused on the impacts of brand and extension characteristics - such as brand quality, brand concept and extension distance (e.g., Kirmani, Sood, and Bridges 1999; Lei, de Ruyter and Wetzels 2008; Randall, Ulrich, and Reibstein 1998). To our knowledge, no research has examined the impact of cultural-orientation on consumer evaluation of vertical extension. Filling this gap in the literature, the current research examines how power distance belief affects consumers' responses to vertical extensions.

By introducing a new product at a higher or lower price level, vertical extension is uniquely different from horizontal extension in that it evokes a status consideration. Thus, to understand how consumers view vertical extension, it is important to know how they feel about the brand's potential status change due to changed price points. In this research, we propose that power distance belief (PDB) - the extent to which people expect and accept power disparity in an organization or in a society (Hofstede 2001) - will be an important factor that influences consumer evaluation of vertical brand extensions. Specifically, we argue that high PDBs, who value status more and have stronger desire for status enhancement (Oyserman 2006), will rate upward extension more favorably than low PDBs as it matches their mindset. In contrast, introducing a lower priced product will be less valued by high PDBs than low PDBs as perceived status denigration runs counter to their desire for status enhancement. Three studies were conducted to test the hypotheses.

Study 1a (N = 101) provided preliminary support for our arguments by showing that consumers were more likely to support an upward extension strategy as their PDB increased. In the cover story, participants were invited to help an automobile company choose between an upward extension plan of introducing a more expensive car and a downward extension plan of introducing a less expensive new car. After they indicated their preference, they completed the PDB scale. Regression analysis revealed that PDB showed positive impact on participant's preference to the upward extension plan ( $\beta = .48, t = 5.35, p < .01$ ).

Study 1b (N = 114) was a 2 (vertical extension: upward vs. control) between-subjects design with PDB was measured as continuous variable. Seiko was selected as the target brand based on a pretest. Participants were randomly assigned to either an upward extension condition or a control condition. In the upward extension condition, participants were shown a premium watch that priced significantly higher than its existing products. While in the control condition, a watch that was similar to its current products was shown. After answering the extension evaluation questions, participants' PDB was measured using a scale revised for previous research (Brockner et al. 2001; Hofstede 2001). Results showed a significant two-way interaction between brand extension and PDB on extension evaluation ( $\beta =$

$.72, t = 2.36, p = .02$ ). As expected, high PDBs evaluated the upward extension more favourably than low PDBs ( $M_{high} = 5.42, M_{low} = 3.91; p < .01$ ), while there was no significant difference in the control condition ( $M_{high} = 4.70, M_{low} = 4.82, p > .1$ ).

In study 2 (N = 93), we examined the effect of PDB on vertical extension evaluation by manipulation. Study 2 adopted a 2 (brand extension: upward vs. downward)  $\times$  2 (PDB: high vs. low) between-subjects design. First, PDB was primed by asking participants to write an essay to support or argue against a statement of inequality (Zhang, Winterich, and Mitta 2010). Next, participants were either told that a car company was about to introduce a more or less expensive new car. Results revealed a significant interaction between brand extension and PDB on extension evaluation ( $\beta = 1.57, t = 2.56, p = .01$ ). As expected, compared with low PDBs, high PDBs evaluated the upward extension more favorably ( $M_{high} = 5.49, M_{low} = 4.65; p = .07$ ) and the downward extension less favorably ( $M_{high} = 4.29, M_{low} = 5.03; p = .08$ ). More importantly, we further showed that consumers' different attitudes toward the new products impacted how they view the parent brand in the same direction.

In study 3 (N = 95), we tested the mediation process. The same design as study 1b was adopted with the only difference that a fictitious 4 star hotel was shown. In the upward (downward) extension condition, participants were told that the hotel was about to introduce a new 6 (2) star hotel. As expected, we found a significant interaction between vertical extension and PDB ( $\beta = .51, t = 2.46, p = .02$ ). Replicating the findings of previous studies, high PDBs rated the upward extension more favourably ( $M_{high} = 6.04, M_{low} = 5.36; p < .01$ ), and the downward extension less favorably ( $M_{high} = 4.44, M_{low} = 4.89; p = .06$ ). Mediation analysis showed that the impact of PDB on brand extension evaluation was mediated by the extent to which consumers perceive upward (downward) extension would enhance (impair) the parent brand (mediated effect = .48, SE = .14, 95% CI = .24 to .79).

The current research makes several notable contributions to the literature. First, our study expands existing research on vertical brand extension, by providing an initial empirical investigation of the impact of PDB on vertical extension evaluations. In doing so, our research will help to provide a new perspective of understanding how consumers evaluate vertical brand extension. Second, we also contribute to the culture literature by adding to the increasing stream of research on power distance. Previous research has mainly focused on the individualism-collectivism dimension while very limited attention was paid to the hierarchical dimension (Oyserman 2006; Shavitt et al. 2006). Managerially, our findings have direct marketing implications for marketers who are launching vertical brand extensions across multicultural markets.

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# Tablets Shoot Out: To iPad or not to iPad

Hui-Yi Lo, National Chung Hsing University, Taiwan

## EXTENDED ABSTRACT

Taken the Apple products as an example, they have introduced over 40 new products to the market in the last ten years, the most recent being the iPad. The iPad is a line of tablet computers and is a mixture of laptop and the iPhone. It is the newest technological advance from Apple Inc., released April 2010, in the rapidly evolving technology market. Compared to its competitors, the utilitarian features of iPads are not the most advanced, even though they are categorized as high-status goods. The price of iPads is generally more expensive than the same kinds of other tablets. However, it is observed that thousands of Apple fans are willing to spend time waiting for the newest product and some of them even queued up outside Apple Stores for days.

Most of innovations in technology are not like the Apple being successful in its i-product lines. Oftentimes marketing strategies and actions do not target the right consumer. How innovations are accepted? Much evidence has identified perceived innovation characteristics as predicting acceptance. However, perception of innovation characteristics and attractiveness, by definition, rely on the specific innovatory technology under test. Conversely, personality traits, which remain stable, and exert pervasive influence on decisions, are non-reliant on dimensions of particular innovative products, potentially providing a basis for adopting differential strategies and marketing techniques across technologies, according to traits. As such, a key issue within innovative technology research is how to identify a reliable model incorporating personality traits, to allow accurate prediction of purchasing behavior. This research is aimed to find out this question. Therefore, a conceptual model was proposed to investigate whether those personality traits influence the product perception and whether this perception predicts the iPad acceptance. The theoretical hypotheses are given as below:

- Hypothesis 1: An increase in novelty seeking will give rise to a higher level of positive toward acceptance of the iPad.*
- Hypothesis 2: Consumers who have a greater need for uniqueness will be easier to adopt iPads than those who have less of a need for uniqueness.*
- Hypothesis 3: The iPad with high degrees of PCI will allure consumers more easily than its counterpart.*
- Hypothesis 4: The iPad with more attractiveness perceived by individuals will inspire higher level of willingness to accept it.*
- Hypothesis 5: The relation between personality traits and acceptability of the iPad is strongly mediated by perceived the level of PCI and product attractiveness.*

The 721 participants completed an online questionnaire. The reasons of choosing iPad were 1) the observation of the industry of high-tech products shows that the Apple Inc. has made a great deal of efforts to develop innovative products; 2) the Apple introduced

the iPad in the year 2010 and successfully attracted consumers' attention. The iPad not only cause a wave in the tablet PC market but also became the leading brand in this market; 3) the new generation of iPad was made available in early 2014 and many consumers still want to get their hands on this product.

The mediation modeling (Baron and Kenny 1986) was used to answer our research questions. The results showed that perceived level of iPad attractiveness and its innovation characteristics did partially or fully mediate the influence of two personality traits (i.e. consumer novelty seeking and desire for uniqueness) on their acceptance of the iPad. Findings suggested that perceived level of iPad innovation characteristics and attractiveness influenced the consumers' acceptance of the iPad. Especially, when the people with salient need for uniqueness or novelty seeking consider the product is attractive, their acceptance toward the product will be increased saliently. Additionally, we also found that the effect of novelty seeking on product acceptance is mediated by attitudes towards innovative character and attractiveness. Thus, novelty seekers' favorable attitudes towards the innovative product will influence perceived attractiveness, thereby increasing willingness to adopt the product. For our study, the attitudes are reflected in the perceived innovation and attractiveness. Our results also indicated that the effect of novelty seeking on product acceptance is mediated by attitudes towards innovation and then attractiveness. Thus, novelty seekers' favorable attitudes towards the innovative product will influence perceived attractiveness, thereby increasing willingness to adopt the product. Taking into account the effect of attractiveness on adoption practices, marketers may want to work on improving the communication of attractiveness in the product. It could also help reduce the risk of rejection, which is especially important because developing a product is a huge investment in time and money. This insight would provide marketers with better skills to target the right consumer with specific marketing strategies and actions, which in turn would improve the viability of an innovation and increase the likelihood of its success.

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# Does it Matter Who Should be Blamed? Minimizing Customer Aggression When Service Failed

Jun M. Luo, Nottingham University Business School China  
Martin J. Liu, Nottingham University Business School China  
Ruizhi Yuan, Nottingham University Business School China  
Natalia Yannopoulou, New Castle University Business School, UK

## EXTENDED ABSTRACT

When a service fails, people tend to engage in blame attributions to assess who caused the poor service. Researchers have focused on various outcomes of these blame attributions, including customer satisfaction, customer loyalty, and company's engagement in recovery strategies (e.g. Wirtz and Mattila, 2004; Bejou and Palmer, 1998). Yet, there has been very little research assessing customer's emotional and aggressive behaviors as the effect of blame attributions in the service failure context. To bridge that gap, the first objective of this research is to examine how customers' blame attributions influence negative emotions and aggressive behaviors after service failures.

Second, attribution theory is limited to situations in which customers make causal inferences based on the information presented. However, the route of attribution would be altered when customers are skeptical towards the information. Customers' acquired disbelief towards the company claims lead them to blame the service failure on the company, resulting in greater levels of negative emotions and aggression. Therefore, this research represents the first attempt to propose the mediating effect of customer skepticism on blame attribution and negative emotions.

Additionally, the triggers for customers' aggressive behaviors are still not well presented (Hess, Ganesan and Klein, 2007; Reynolds and Harris, 2009), since not all consumers will be aggressive even if they have strong negative emotions after attributing the wrong-doers in service failure. People tend to perceive that they have more powers if they are in groups and their behaviors are more legitimized within groups, e.g. group complain when service fails. However, the perceived consumer empowerment in groups has not been investigated in consumer aggression context. Therefore, this study will contribute to the literature by introducing the moderating effects of customers' group empowerment with customers' negative emotion on aggressive behaviors. In addition, in the exchange setting like service context, how human beings interact with the others, and whether that interaction will influence consumers' perception of losing face is also worth the investigation, especially when dealing with Chinese consumers. Since face-losing is vitally important in Chinese society, when consumers feel that their face has been threatened by the others, e.g. service employees, thus, face-losing will be also elevate their negative emotions towards aggressive behaviors. To sum up, the third contribution of the current study is to introduce moderating effects: group empowerment and face in customers' negative emotions and aggressive behaviors. Thus, we hypothesize as:

*Hypothesis 1: Negative emotions mediate the relationship between attribution of blame and customers' aggressive behaviors.*

*Hypothesis 2 Skepticism mediates the relationship between attribution of blame and customers' negative emotions.*

*Hypothesis 3: The relationship between customers' negative emotions and aggressive behaviors is stronger when customers feel empowered within groups.*

*Hypothesis 4: The relationship between customers' negative emotions and aggressive behaviours is stronger when customers' face is threatened.*

We used Partial Least Squares Path Structural Equation Modeling (PLS-SEM) method to estimate the structural model. Harmon's one-factor test and marker variable technique were used to examine common method bias. The results suggested that no common method bias in this study. We distributed online questionnaires via Quatrics (www. Quatrics.com), and 180 questionnaires were used for data analysis. All measurements adopted from previous literature used a 7-point Likert scale. We followed Devillis's (2003) scale development process to develop a new construct group empowerment. We assessed the model's performance by examining its convergent validity and discriminant validity. For convergent validity, we examined the average variance extracted (AVE) and composite reliability. All of the constructs meet the criteria—AVE >0.50 and composite reliability >0.70 (Hair et al., 2014). We also examined discriminant validity through indicators' cross loadings and the comparison of the square root of the constructs' AVE.

We further used path coefficients to represent the hypothesized relationship between constructs. Our results suggested 50.34 % explanatory power for the dependent variable. Our data suggested that when company should be blamed for the service failure, negative emotion mediates the relationship between attribution of blame and customers' aggressive behaviors. And when consumers are skeptical towards company claims of the failure, they are more likely to generate negative emotions (supporting H1-H2). Furthermore, our results suggested the significant interactive relationships between negative emotions, group empowerment and face toward customers' aggressive behaviors (supporting H1-H2).

This research focuses on how customers' attributions of blame and skepticism affect their emotional and behavioral responses to a company's service failure. The results extend the literature in three ways. First, our results extend the existing literature on service failure by indicating that customers' negative emotions mediate the relationship between customer's blame attribution and aggressive behaviors. After a service failure, customers first establish whether the company is to be blamed. Once they determine to blame the failure upon the service company, customers form negative emotions and thus, these emotions will have consequential impacts on their aggressive behaviors. Second, this research represents the first attempt to investigate the mediating role of customer skepticism in the service context. Third, this research extends the literature by introducing group empowerment and face-losing as moderators in strengthening negative emotions and aggressive behaviors.

These findings of this research also have several important implications for service operators. Primarily, when a service failure is not due to the firm's wrong-doing, companies should make sure cus-

tomers know the exact causes for the failure. Moreover, companies should let customers know when the action has been taken to prevent the failures and maintain well-developed service recovery strategies to alleviate customers' negative emotions as well as customers' aggressive behaviors. Additionally, to further reduce customers' emotional and aggressive behaviors, service companies should inhibit the development of skepticism by adopting appropriate marketing communication strategies to enhance the credibility of their claims. Furthermore, service companies should pay special attention to consumers' group behaviors. Actions can be taken to tackle individual consumer's needs instead of letting them carry out the collective actions. Finally, when dealing with Chinese consumers, employees in the service exchange settings should bear in mind their norms of not losing face in the public.

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# The Roles of Legitimacy Concerns, Authenticity and Income Level in International Supermarkets

Jun M. Luo, Nottingham University Business School China  
Martin J. Liu, Nottingham University Business School China  
Ruizhi Yuan, Nottingham University Business School China

## EXTENDED ABSTRACT

Supermarkets like Carrefour, Wal-Mart and Tesco have been expanding their operations for over 30 years. One of the important challenges they face is how to balance their positions to offer localised products and service but at the same time maintaining their international brand image to be different than the retailers in the local market places. For example, Tesco's Chinese operations have suffered significant slowdown and been acquired by China Resources Enterprise (CRE), a local Chinese retailer, to explore better local expertise (Tesco PLC, 2013). Anecdotal evidences suggest that losing this balance would result in challenges in international expansions. In another word, how to balance sources of legitimacy and achieving perception of authenticity by maintaining their connections to the home country images has utmost importance and have not been explored to sufficient depth in current literature (Liu et al., 2015).

The purpose of the extant study is twofold. Firstly, we extended the institutional theory by suggesting legitimacy mediates store image and store loyalty, both behavioral and attitudinal. Secondly, our result suggests that perception of authenticity would further mediate the relationship between legitimacy and loyalty. Finally, income also moderates the relationship between authenticity and store loyalty.

## Conceptualization

### *Institutional Theory: the Mediating Role of Legitimacy, Authenticity and Income*

Store image plays an important role in the internationalization. It indicates that retailer companies need to be aware of the significance of the store image and the components of the store image and make decision carefully on the issue of whether to adopt the similar image when they entry into new markets. In addition, the evidence of the relationship between legitimacy and store choice or support has indicated that legitimacy may have effect on store loyalty since store choice or support is a kind of purchase intention which is part of store loyalty (Bloemer and Odekerken-Schroder, 2002). However, since purchase intention may be misled by inertia, we extend the model to attitudinal loyalty. Thus, we further extend the test to exam the relationship to loyalty and put forward following hypotheses. We hypothesize as:

*Hypothesis 1: Legitimacy mediates the relationship between store image and store loyalty.*

Authenticity, a subjective perception based on people's own experience, may influence the perceived value (Chiu, Hsieh and Kuo, 2012; Liu et al., 2015). Specifically, Sweeney (2001) further indicates that genuine value delivered to customer may make their perception of the supermarket more authentic. Such value can be transferred through their products and their retailing concept. Such strategy may contribute to its further development and affect the store loyalty. Therefore:

*Hypothesis 2: Authenticity mediates the relationship between legitimacy and store loyalty.*

Income is positively related to consumers' routine expenditures for various products and services, consumers' online shopping loyalty (Keaveney and Parthasarathy, 2001) and customer duration time. Thus, we could expect that income has a positive impact on repurchase intention and customer loyalty. In that, consumers who have higher income will strongly increase their perception of seeking for the authentic cues, thus, that will strengthen their loyalty.

*Hypothesis 3: The relationship between authenticity and customer loyalty is stronger when consumers have more income less those have less income.*

## Methods

We randomly distributed 1000 questionnaires to consumers, and a total of 170 questionnaires were returned, yielding a respond rate at 17%. After deleting 19 incomplete questionnaires, 151 questionnaires were used for data analysis.

Store image measures were adopted from Burt and Carralero-Encinas (2000), legitimacy measures were adopted from Handelman and Arnold (1999), authenticity measures were adopted from Das, Datta and Guin (2012), and store loyalty were adopted from Bloemer and Gaby (2002) and Julander et al (2003). All of the measurements have factor loadings above 0.7 (Hair et al., 2014).

## Results and Discussions

All hypotheses were supported. Our results contribute to existing body of literature in institutional theory by demonstrating that legitimacy mediates store image and store loyalty. Additionally, authenticity has a positive effect on store loyalty via legitimacy, because authenticity can be seen as a strategic weapon to increase the customer value and further help to attract and retain the customers. Finally, the relationship between store image and store loyalty is stronger when consumers have higher incomes.

The significance of the relationship between store image and legitimacy/authenticity could help the manager to improve legitimacy and authenticity and further improve the performance. Legitimacy is viewed as the congruence between the organization practice and social norms. Identifying legitimacy as a mediating factor is important for manager to improve the store loyalty. Further, since authenticity is also an important indicator for customer loyalty, managers need to strength such connection by adjusting its store image. For example, foreign supermarket can increase its foreign appeal to increase its authenticity and compete with local supermarket. In addition, retailer can further build its brand legitimacy to gain further cultural authenticity.

One of the limitations of the research is the measurement of the authenticity. The measurement used is a general perception of the authenticity which can be used in many contexts. Therefore, further research can develop specific measurement of the authenticity for the supermarket. In addition, this research has concentrate on the degree of authenticity as the independent variable, with no distinction being made between different types of authenticity. Further research could analyse the effect according to different types of authenticity and explore which one is important in retail sector.

### Acknowledgement

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# When Keeping it Simple Isn't Stupid: The Cost of Olfactory Complexity

Shilpa Madan, Nanyang Technological University, Singapore

Elison Lim, Nanyang Technological University & Institute on Asian Consumer Insight, Singapore

## EXTENDED ABSTRACT

Extant sensory marketing research demonstrates several benefits of pleasant scented environments, including mood enhancement, increased time spent, improved perceived value of offerings and boosting memorability. While controlling for attributes such as pleasantness and intensity, the impact of a third scent dimension, complexity, is often overlooked. However, custom-developed, signature, complex scents for hotels, casinos, retail chains, malls etc. are now a norm in the industry. Not only do they positively impact shopper attitude and behavior, but also help create strong brand associations with the service under consideration. Hence, complex, hedonically pleasant scents are frequently present in situations where various types of tasks are performed, and decisions are made. We investigate this under-explored dimension of scent complexity to highlight the negative impact of complex scents on task performance. This effect is replicated across multiple domains. We argue that complex scents (vs. simple) require greater cognitive elaboration, thereby depleting resources available for a subsequent task, thus lowering performance. Across four studies, we replicate this effect in multiple cognitive tasks that mirror some of the activities consumers perform in a retail/services context. Further, we posit that a familiar, even though complex stimulus will not invite significant cognitive elaboration, as it is perceived to be commonplace and routine. This lack of elaboration will result in adequate resource availability for the next task, thus attenuating the negative effect of complexity on task performance. Hence, familiarity will moderate the above effect.

The concept of physically differing scent structures or composition is labeled as scent complexity (Hermann et al. 2013). A scent can be composed of single or multiple ingredients or raw materials (Reber, Schwarz, and Winkielman 2004). For example, lime and rose are simple scents with a single ingredient. A combination of two or more simple scents yields a complex scent (i.e., scents containing multiple ingredients).

Participants for all studies were students from a large university. We collaborated with a leading fragrance house to develop the scents for this research and conducted extensive pre-tests to identify two pairs of scents that belonged to the same olfactory family (citrus) and differed significantly on complexity, but not on pleasantness and intensity, the two other dimensions that have been shown to impact consumer behavior. Complexity was measured using a new proposed scale, in line with the definition of scent complexity mentioned earlier. Study 1 explored the main effect of scent type (simple, complex) on performance in a name generation task (adapted from Galinsky et al. 2008). Forty participants responded to a few questions about the scent (pleasantness, intensity and complexity) before moving on to an ostensibly unrelated task where they were asked to generate new brand names for two different product categories (pain relievers and tablet computers). As hypothesized, subjects in the simple scent condition ( $M_{\text{Simple}}=4.00$ ) generated significantly more correct names than the subjects in the complex scent condition ( $M_{\text{Complex}}=1.95$ ,  $F(1,38)=15.22$ ,  $p<.05$ ).

Study 2 replicated the above effect in a different context, by measuring performance on the Embedded Figures Task (Witkin 1971) that required subjects to find a simple shape within a complex figure. We chose this task to act as a proxy for the extensive search shoppers sometimes do in cluttered supermarket shelves to find a particular product. Number of correctly identified shapes formed the

dependent variable. As hypothesized, subjects in the simple scent condition ( $M_{\text{Simple}}=18.8$ ) were able to find significantly more number of figures correctly than in the complex scent condition ( $M_{\text{Complex}}=13.4$ ,  $F(1,67)=10.41$ ,  $p<.05$ ).

Study 3 explored the impact of familiarity on the link between scent type and task performance. Scent type (simple, complex) was manipulated and familiarity was measured. To enhance the generalizability of our findings, and to ensure that the effect on task performance is due to underlying complexity and not attributed to a specific scent, we exposed the participants to two scents. Both scents were either simple (lime simple and orange simple) or complex (lime complex and orange complex). After evaluating both scents on pleasantness, intensity and complexity, the participants were asked to move on to the subsequent tasks. Further, Study 3 measured performance across two consecutive tasks to explore the time-decay effect of scent complexity. The first task was a verbal insights tasks (Nielsen et al. 2008), followed by a pattern recognition task (adapted from Ashton-James and Chartrand 2009). Main effect of scent type was significant in the expected direction ( $p<.05$ ). More interestingly, the interaction between scent type and familiarity was significant,  $F(3,70)=4.69$ ,  $B=0.44$ ,  $p<.05$ . Main effect of familiarity was not significant ( $p>.1$ ).

Study 4 manipulated familiarity (high, low), thus providing further conceptual clarity between complexity and familiarity as different constructs. We used an existing complex scent, pre-tested to be low on familiarity. In the high familiarity condition, subjects were given more information about the scent (vs. no additional information in the low familiarity condition). For assessing impact on task performance, subjects were asked to find several hidden words in a maze of words in a given time span (Trimpe 2003). As expected, participants identified significantly more words in the high familiarity condition ( $M_{\text{High}}=9.6$ ) than the low familiarity condition ( $M_{\text{Low}}=7.30$ ,  $F(1,58)=4.46$ ,  $p<.05$ ).

This research makes several contributions to scent literature. First, it explores an under-investigated, but extremely relevant dimension of scent complexity. Second, this research provides a potential alternate (cognitive) explanation for the impact of scents on consumer behavior – which has thus far been attributed primarily to (affective) mood enhancement. Third, we sought to clarify the conceptual distinction between scent complexity and familiarity. More interestingly, the research offers interesting implications for consumer well-being, such as less optimal performance in retail and service environments. However, the finding that familiarity attenuates the negative effects of complexity on task performance restores consumer agency and puts them back in control. For future research, a clear next step is to uncover the causal mechanism behind the effect. Further, to enhance the external validity and practical relevance of the findings, it is important to demonstrate the effect in field studies.

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# Pursuit of Beauty: The Cultural Divide

Shilpa Madan, Nanyang Technological University, Singapore

Shankha Basu, Nanyang Technological University, Singapore

Elison Lim, Nanyang Technological University & Institute on Asian Consumer Insight, Singapore

Sharon Ng, Nanyang Technological University & Institute on Asian Consumer Insight, Singapore

## EXTENDED ABSTRACT

Human beings have always coveted beautiful objects, but the obsession with looking good is touching new heights with double-digit growth in cosmetic, skin care and plastic surgery industries across the world. Existing research suggests that standards of beauty are not universal, but culturally defined (Hamermesh 2011). In this paper, we focus on the cultural antecedents and drivers of the pursuit of looking beautiful.

Evidence from popular culture suggests that in highly collectivist societies, the rulebook for what is considered is beautiful, is not only clearly in place but is also extremely strict. We argue that driven by adherence to norms, interdependents are more likely to conform to these narrow ideals of beauty. Specifically, interdependence leads to greater motivation to conform and live-up to the standards of the in-group (Bond and Smith 1996). Prior research suggests that this need to adapt and fit-in leads to extensive social comparison (White and Lehman 2005), thus making the ideal standards salient and concrete in their minds. This further results in clear discrepancy between current state and aspiration (Kitayama et al. 1995) and self-criticism/dissatisfaction due to greater self-ideal discrepancies (Heine and Lehman 1999). Hence, we hypothesize that effect of interdependence on usage of appearance enhancing tools will be mediated by conformity and self-discrepancy, i.e. the gap between the ideal beauty standard and actual self-image. Specifically, interdependents' need to conform to the strict standards will make them feel more "discrepant", or not living up to the ideal, thus driving usage of enhancement products that can help reduce the perceived gap between ideal and actual self.

We test the above hypotheses across three studies with women in the age group of 18-35 years. Study 1 was conducted with Indian and US participants, Study 2 with US participants and Study 3 with Indian participants. All participants were recruited through MTurk.

To establish that definition/standards of beauty are more concrete/stricter in the minds of interdependents, we ran a cross-country pilot test with Indian and US participants. Participants were presented with a list of 23 attributes that are common markers of beauty (e.g. large eyes, sharp nose, glossy hair, even complexion etc.) and asked to choose all the attributes that are mandatory for a woman to be considered beautiful in their culture. Intuitively, higher number of attributes chosen indicates stricter standards of what it takes to qualify or be considered as 'beautiful' in that culture. In other words, more the number of attributes that define beauty, the harder it becomes to match up to those definitions. Poisson regression revealed that participants from India (high interdependence) considered more attributes ( $M = 9.6$ ) to be mandatory for a woman to be considered beautiful as compared to those from US (low interdependence;  $M = 7.7$ ; Poisson  $b = -.22$ , Wald Chi Sq. = 5.0,  $p < .05$ )

Study 1 investigated the impact of interdependence (high interdependence: India, low interdependence: USA) on the usage of image enhancing tools such as filters on smartphone apps to make 'selfies' appear more beautiful than the person actually is. These apps are perfect for a quick makeover to get flawless complexion, feature enhancement for bigger, brighter eyes, sharper nose, angular jawline, removing dark circles, whitening teeth, and even applying make-up. We conceptualized the dependent variable as the likelihood of using filters or image enhancing apps to make photos look more attractive

using a five-item scale ( $\alpha = .93$ ). As hypothesized, Indians are more likely to use image correcting filters and tools to enhance their photographs, compared to Americans ( $M_{Ind} = 4.8$  vs.  $M_{USA} = 3.75$ ,  $F(1, 79) = 8.233$ ,  $p = .005$ ,  $\eta_p^2 = .094$ ).

Study 2 followed the same paradigm as Study 1 while measuring interdependence (Singelis 1994). To explore the underlying mechanism, we also measured conformity (Mehrabian and Steffl 1995) and appearance related self-discrepancy with an adapted version of Body-Image Ideals Questionnaire (Cash and Szymanski 1995). As in Study 1, interdependence scores significantly predicted usage of image enhancement tools ( $b = .43$ ,  $t(138) = 2.56$ ,  $p = .012$ ). Further, we found support for the mechanism causing this effect through Hayes (2012) Model 6 (boot strapped serial multiple mediator model) with conformity and self-discrepancy sequentially mediating the link between interdependence and usage of appearance-enhancement tools ( $95\%CI = .037, .219$ ). We also replicated the results from the pilot study and found that higher interdependence leads to a higher number of mandatory attributes for being considered beautiful (Wald Chi Sq = 131,  $p < .05$ )

Study 3 replicated the effect from Study 2 in a different context by using purchase intention (scale adapted from Stafford, 1998) for a complexion correcting skin cream. Given the causal mechanism of self-discrepancy in Study 2, we hypothesized that interdependents' (positive) attitude towards the cosmetic product will be driven by their perceptions about the product's ability to minimize the gap between ideal and actual self. Conceptualized as product's ability to reduce discrepancy, this was measured using the scale from Bower (2001). As hypothesized, interdependence again significantly predicted the usage of the complexion correcting skin cream product ( $b = .53$ ,  $t(118) = 4.52$ ,  $p = .00$ ). Further, mediation through product's ability to minimize self-discrepancy was found to be significant ( $95\%CI = .241, .625$ ; Hayes 2012). Hence, interdependents' attitude towards the product is driven by the extent it can help minimize self-discrepancy, the gap between actual and ideal self.

Our work contributes to theory by examining the nuances of cultural variables in the underexplored domain of beauty. Further, we leverage the self-discrepancy theory in an appearance context to explain the causal mechanism driving the effect. Practically, a sharper understanding of cultural antecedents on the quest for beauty has strong managerial implications for the \$265 billion industry (by 2017). More importantly, our findings offer pervasive implications for consumer well being. With more women taking increasingly drastic steps to conform to strict beauty ideals, insights from this research can be leveraged to find ways to minimize self-discrepancy, thereby reducing the prevalence of extreme measures such as plastic surgery, in the pursuit of looking beautiful.

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# Idealized Body Image and Social Media Effects on Young Male Consumers: An Exploratory Study

Angela Ka Ying Mak, Hong Kong Baptist University, Hong Kong  
Wonsun Shin, Nanyang Technological University, Singapore

## EXTENDED ABSTRACT

Body image is a multidimensional concept that has been extensively examined in a number of relevant measures (Yanover and Thompson 2009), which involves cognitive, affective, and behavioral aspects (Wertheim, Paxton and Blaney 2009). In particular, media effects have been the central focus of studying thin-ideal perceptions and body image behaviors in consumer psychology, health communication, and media literature. The effects of the media on body perceptions rarely occur in isolation, but it is often a function of contexts and “differential-susceptibility variables” (Valkenburg and Peter 2013, p. 226). Psychological processes, such as social comparisons, mediate the effect of social media uses on body image concerns (Perloff 2014).

Social media are considered as the domain of peers, and peer comparisons are highly salient to youth (Steinberg 2008). Research shows that there is a meaningful association between one’s Internet exposure and his/her thin-ideal internalization (Tiggerman and Slater 2013). Although little is known regarding media effects on male body dissatisfaction compared to females’, research has reported positive associations between consumption of media, such as magazines emphasizing health and fitness, body dissatisfaction, and the use of muscle-enhancing supplements (Levine and Chapman 2011). In response to Perloff’s (2014) call for a theoretically-driven research on processes and effects of social media on body image and self-perceptions, this paper aims to explore the role of social media in idealized body image concerns specifically among young male consumers. Among the key relevant concepts, such as image perception, social comparison, susceptibility to peer pressure, and social media uses, we want to find out how social media, along with other pertinent factors (susceptibility to peer influence and exposure to idealized body image on advertising) are associated with young male consumers’ engagement in body-image building activities. Based on the literature, we pose the following hypotheses:

*Hypothesis 1: The more a young male consumer uses social media, the higher the intention to take up body-image building activities.*

*Hypothesis 2: The more a young male consumer is susceptible to peer influence, the higher the intention to take up body-image building activities.*

*Hypothesis 3: The more positive perceptions of a young male consumer toward the idealized body image ads, the higher the intention to take up body-image building activities.*

We also aim to understand relative contribution of each potential antecedent to young male consumers’ intention to undertake body-image building activities. Thus, we ask:

**RQ1:** Which is the best predictor to a young male consumer’s intention to take up body-image building activities?

Respondents of our online web survey comprised of male undergraduate students of a local university in Melbourne, Australia, aged 18-22 ( $n = 82$ ; 53% Caucasian). Key measures in our survey

include social media uses (Pew Internet 2012), susceptibility to peer influence (Mangleburg and Bristol 1998), perception of idealized body image ads (Chia and Wen 2010), and moderate and intensive body-image building activities (Chia and Wen 2010). All measures are strongly reliable, with Cronbach’s alpha ranging from .79 to .91.

To test the hypotheses and research question, we ran zero-order correlations and conducted a hierarchical multiple regression analysis. The correlation results do not support H1. Social media use on body image is negatively associated with one’s intention to engage in moderate body-image building activities. General or socializing social media use is not related to one’s intention to engage in moderate body-image building activities. Furthermore, general social media use and social media use on body image are negatively associated with one’s intention to engage in intensive body-image building activities. The correlations, however, support H2, revealing significant and positive associations between both types of peer influence susceptibility (normative and informative) and both types of body-image building activity intention (moderate and intensive). H3 was partially supported for moderate body-image building activities and fully supported for intensive body-image activities.

Controlling for respondents’ age and ethnicity, the strongest predictors of the intention to take up moderate body-image building activities (i.e. go on a diet and go to the gym regularly) were the susceptibility to informative peer influence and the attitude toward idealized body image ads. Inversely, using social media on body image-related concerns emerged as the strongest predictor of young male consumers’ *not* taking intensive body-image building activities (i.e. take diet pills or steroids, have a plastic surgery, go to the slimming center, and go for a facial).

Responding to Perloff (2014) calls for a theoretically-driven research on processes and effects of social media on body image issues, our study provided some explicit relationships that explain different consumer behavior processes. The degree to which one is willing to engage in body-image building activities (moderate vs. intensive) is predicted by different types of factors. Moderate intention (which is more commonly found among the respondents) is more a function of image perceptions pertinent to idealized body image ads and susceptibility to informative peer influence, whereas intensive (or extreme) intention is more a function of social media use. One interesting observation from our exploratory study is that young male consumers may be more aware of the socially undesirable perceptions of intensive body image building activities through social media use. Another interesting fact is that susceptibility to peer influence plays an important role in one’s willingness to engage in body image building activities. While susceptibility to peer influence has been examined in the context of consumer skepticism and consumption behaviors, it has rarely been examined in the context of body image perception and intention. It adds useful insights to the literature of both body image and consumer behavior.

While the sample size is small, this exploratory study takes a closer look at the relationships and effects of the social media toward body image concerns among young male consumers by developing key measures and identifying key predictors. It also serves as the first step of building a process model on social media effects in body image research. Future research can replicate the study to collect a much larger sample to verify the social media effects on young male

consumers and compare with young female consumers and see if there are any significant differences in consumption process. Also, culture and ethnicity play a critical role in body image research (Prieler and Choi 2014). Future studies can include different samples across several countries to do a comparison.

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# Please turn off the lights: Perception of Firms' Environmental Efforts as Green or Greed

Aradhna Krishna, University of Michigan, USA

Brent McFerran, Simon Fraser University, Canada

Wenbo Wang, Hong Kong University of Science and Technology, Hong Kong

## EXTENDED ABSTRACT

Firms' environmentally friendly actions often involve effort on the part of consumers (e.g., asking hotel patrons to turn off the lights when leaving the room), and in fact save the firm money. This research examines how and when consumers perceive firm conservation efforts as acts of "green" versus "greed" (or some combination thereof). We show that consumers can attribute the same firm activity (e.g., asking patrons to save electricity) to green (versus greed) motives. We show that consumer attributions depend on (a) a firm's price image, (b) signals of consumer-effort salience (e.g., a note reminding consumers to save electricity to help the environment), and (c) other signals of a firm's (costly) commitment to the environment. Further, we demonstrate that these attributions are highly consequential, in that they predict actual consumer conservation behavior, as demonstrated in a field experiment.

In the current environment featuring climate change, frequent natural disasters, and an increasing population, firms and consumers both have an increased focus on sustainability. For firms, it is increasingly important to be perceived as being environmentally friendly.

Consumer environmental concern is at a historical high, and many firms now offer products that are (or positioned as) friendly to the environment. Importantly, while many environmental efforts firms undertake cost additional money (e.g., using organic ingredients, making parts recyclable), others result in a cost savings for the firm (e.g., asking hotel patrons to re-use their towels, reminding consumers of saving electricity). The question we explore in this research focuses on the latter case, and examines when consumers construe a firm's efforts to be environment-saving (green) versus money-saving (greed)? Importantly, we document how and why these attributions drive consumers' actual green behavior using data from a field experiment.

## Conceptual Background

Marketing researchers have called for more research into sustainable products and services (e.g., Mick 2006), and indeed in recent years environmentally friendly products and services are a focus of increased attention in the literature (e.g., Goldstein, Cialdini, and Griskevicius 2008; Griskevicius, Tybur, and Van den Bergh 2010; Leonidou, Katsikeas, and Morgan 2013, Trudel and Argo 2013; White and Simpson 2013). Such studies are varied, but they generally seek to examine how to increase green behavior among consumers, or consumer reactions to ethical firm offerings. What they do not generally assess is how green a firm is

Put another way, what attributions are drawn about a firm from its behaviors?

Attribution theory (Calder and Burnkrant 1977; Eberly et al. 2011; Heider 1958; Kelley 1967; Weiner 1980, 2000) is a broad framework that aims to explain humans' fundamental need to understand the underlying causes and motivations of behavior. Specifically, the theory's central tenet is that people attach meaning to others' behavior in an effort to arrive at causal explanations for events. For instance, individuals use information about others' overt behavior as a basis for inferring enduring personality traits (Jones and Davis 1965). Additionally, attribution research consistently shows that individuals infer the (unobservable) intentions of others based solely

on their (observable) actions, an effect so robust it has even been shown in one year olds (Vouloumanos, Onishi, and Pogue 2012).

Marketing tactics also can swiftly cause consumers to make attributions about motives (e.g., "Why does this company want me to complete a survey?", see Folkes 1988). Research consistently finds that consumers exhibit a high degree of skepticism to marketing tactics, and that they are aware of the profit motive of firms generally (Friestad and Wright 1994; Campbell and Kirmani 2000). Knowing that firms are highly motivated by the bottom line, many consumers have an especially keen cynicism towards firms when they profess to do good (e.g., Karnani 2011). Greening inputs and outputs is expected to cost money, and consumers expect green products to cost more, generally because in the marketplace, they do.

What then happens when a firm links environmentally friendly efforts with monetary savings to itself? We propose that consumers can attribute these efforts as being of a noble (green) or more sinister (greed) motive, or some combination. Crucially, we expect that how green (or greedy) a firm is perceived to be will depend in part on its price image. Green products are generally more expensive than non-green products (Dale 2008; Luchs et al 2010), and high prices are a common barrier to green product adoption (Trudel and Cotte 2009), suggesting that consumers associate a high price with green products (Yuan, Rajan, and Krishna 2013). We propose that that the preponderance of higher priced green products creates a natural correlation in people's minds between high price and green effort. Furthermore, we expect this correlation will also create a reverse inference on the part of consumers – that high priced products are more green, or, put another way, lower priced goods and services are less likely to be green. This hypothesis is based on considerable other research showing that strong mental associations between two stimuli can result in consumers inferring causal effects in both directions (e.g., Lee and Schwarz 2012; King, Hicks, and Abdelkhalik 2009; Pieters 2013). Thus, we propose that:

*Hypothesis 1: Consumers will ascribe a more green (versus greed) motive to cost-saving, consumer-driven green efforts of high (versus low) priced firms.*

We expect H1 to be moderated by how clear (or salient) a firm makes the effort required on the part of the consumer. When the required consumer effort involved in the firm's green behavior is made salient (e.g., through a hotel card asking consumers to save electricity), it is more likely to generate counter-arguing or activate persuasion knowledge (Friestad and Wright 1994), leading consumers to focus on the profit-perspective of the firm and infer more sinister ("greed") motives. Since the higher priced firm is charging more, consumers may expect the firm to take care of conservation without expecting help from them ("when they are charging so much, don't they have the money to be green?") or expect that the firm is being petty ("why should I do the work for them to be green, if it's just saving them money?"). Once consumers start questioning the firm's environmental efforts, it should be more detrimental for the higher priced firm. On the other hand, we hypothesize that consumers do not expect a low priced firm to be green (but they do expect them to try to save costs). Thus,

*Hypothesis 2: When the high priced firm makes consumer efforts in its green acts salient (versus not), there is a greater attribution of greed (versus green) for such efforts compared to when a low priced firm does so, (i.e., we expect an interaction between salience of consumer effort for green acts and the price image of the firm on greed-green attribution).*

However, multiple cues are often present that consumers can use to infer how environmentally friendly a firm is. Most firms have a combination of behaviors that are friendly and unfriendly, or costly to the firm versus cost saving. For instance, Wal-Mart has long been criticized for its usage of fossil fuels in the production and shipping of goods from China, but it has also pressured suppliers to green their practices (Rosenbloom and Barbaro 2009). We expect that if the firm engages in environmentally friendly behavior that has an obvious cost to the firm, consumers' metacognition regarding firm motive will be diminished and consumer skepticism towards firm messages for behavioral compliance will also be diminished. As such:

*Hypothesis 3: Firms' costly environmental effort will moderate the interactive effect of firm price image and consumer effort salience on greed-green attribution.*

Importantly, we expect effects of our focal variables on actual downstream resource conservation. Making consumer effort more salient (e.g., by asking them to conserve) should remind consumers about environmental damage and how they can reduce it; thus, if asked to help, it is likely that consumers will do so -- more so than if they were not reminded. As such:

*Hypothesis 4a: Higher consumer effort salience will result in more actual consumer green behavior.*

Additionally, we expect this effect on behavior will be driven in part by how green (versus greedy) consumers perceive the firm to be. Research consistently shows that people like to help entities that they have positive feelings towards (e.g., Lee, Winterich, and Ross 2014). As such, we expect:

*Hypothesis 4b: Actual consumer green behavior will be a positive function of consumer's greed-green attribution of the firm – the more consumers attribute green motives for a firm's environmental effort, the higher will be their actual green behavior. In other words, greed-green attribution will mediate the interactive effects of firms' costly environmental effort, firm price image and consumer effort salience on consumer green behavior.*

## Pilot Studies

We ran two lab-based scenario studies in U.S. and Hong Kong as a test of H1 and H2. Undergraduate participants (n=197 for the first and n=175 for the second) imagined that they had just checked into a hotel. We varied the price and whether or not a card was placed in the bathroom ("please reuse the towel to save resources"), making these 2(price: high vs. low) x 2(green effort: present vs. absent) between-subjects designs. We create a single item Green-Greed scale to measure the green versus greed attribution: "In my opinion, this hotel (1) is totally committed to going green; (4) will do green acts

that will save them money; (7) is just cheap and is using "going green" as an excuse to save money." In both studies, the low-priced hotel was perceived as being greedier than high priced hotel – a main effect. We also found that consumers perceived the high priced hotel as being more greedy (versus green) if they had an environment card versus when they said nothing at all; for lower priced hotels, the card had no effect on attributions – an interaction effect.

These studies show consumers make attributions about the motives underlying a firm's conservation efforts, and that these motives depend in part on the actions taken by the firm (such as reminding its patrons to reuse towels), but also on the price image of the firm. Interestingly, higher priced firms are seen as more green (less greedy) in their conservation efforts, meaning that all else equal, consumers deem these firms more genuine in their environmental efforts. This may be because they view a natural correlation between greenness and price in the marketplace, where green products cost more. We demonstrate the reverse inference here: higher priced firms are seen as more green, an interesting effect in itself. Further, the interaction effect we show supports the notion that high and low price image firms are viewed differently for asking consumers to conserve resources that save the hotel money: high priced firms are seen as greedier for doing so, whereas it has no effect on consumer perceptions of low priced firms. The latter are always seen more motivated by cost savings.

Next, we sought to examine if our green-greed attribution (and its antecedents) are consequential in that they predict actual consumer green behavior, tested in a field experiment.

## Field Experiment: Hotel Room Electricity

In addition to testing actual green consumer behavior, we sought to examine another moderator of the greed-green attribution effect – visible costly environmental effort on the part of the firm. Specifically, we test if the "greed" attribution activated by the usage of such cards by high priced firms can be mitigated via visible costly environmental effort on the part of the firm. If so, it would suggest that consumers' green behavior could be boosted as well. We examine a condition under which consumers can observe the firm *also* expending its own money for environmental savings, rather than suggesting the consumer bear the sole burden (testing H3).

### Subjects and Design

This experiment utilized a 2 (price image: high vs. low) × 2 (salience of consumer effort: high vs. low) × 2 (presence of costly commitment to the environment by the firm: present vs. absent) between-subjects design. The study took place in two different hotels, and participants (N = 281) were from a large e-commerce company. Participants were assigned to the two hotels according to workshop themes not relevant to the study (not performance). The two hotels, while under the same parent brand name, differed substantially in price (about US \$125 vs. \$37).

Within each hotel, we employed two manipulations using random assignment. To manipulate salience of consumer effort, we had a *note* and a *no note* condition, similar to our past studies. In the *note* condition, at the main power buttons (one near the door of bedroom, one near the bed) we placed a small note that read: "To save the environment, we encourage you to save electricity. Please turn off air-conditioning, kettle, lights, TV, etc. when not in use" with a footnote saying "Please set the thermostat above 25°C when cooling" and "Please set the thermostat below 20°C when heating". Note that the thermostat settings of 25°C (77°F) and 20°C (68°F) are common benchmarks suggested by numerous hotels in China. When this study was carried out, the outside temperature was 24-34°C (75-93°F). We expected the high temperature to motivate subjects to use air condi-

tioning in their room so that we could observe variance in the degree of electricity saving across subjects.

To manipulate presence of costly environmental commitment by the firm, we had two conditions, marked by an expensive, environmentally friendly item (*bamboo* toothbrush), and less costly, environmentally unfriendly item (*plastic* toothbrush). We manipulated the presence of a firm's costly environmental commitment by placing one of two toothbrushes in the bathroom -- a regular plastic toothbrush in a plastic sleeve package (as is the standard practice in local hotels) or a toothbrush made of bamboo, placed instead in a recycled paper box package. The bamboo toothbrush signals that the hotel is committed to environmentalism and is willing to spend for it; it costs approximately five times more than a regular plastic toothbrush.

To minimize contamination resulting from subjects from different conditions visiting each other's rooms, we placed different conditions on separate hotel floors. All participants stayed in rooms by themselves (one person per room).

### Materials and Procedure

Participants checked into their hotels on the evening of the first day (day 1). They were out of their rooms for their workshop during day 2 until the evening. On the morning of day 3, all participants attended a concluding session of the workshop where they were asked by the company to take a survey about the hotel and then a separate survey about the workshop. The first survey our survey, and the cover story was providing hotel feedback. The second survey was not related to our study. After completing the survey, participants checked out of the hotel, at around noon on day 3. Electrical usage was assessed unobtrusively (details below).

### Measures

**Greed vs. Green Attribution.** We decided to use a three-item measure for greed-green attribution with higher numbers denoting more greed. The first of these items was identical to the one used in the pilots. The other items were "In my opinion, this hotel... (1) is simply trying to make more profit and being environmentally friendly is a way to do that; (4) will engage in environmentally friendly behaviors that do not threaten profits; (7) is truly committed to environmentally friendly practices"; and "(1) is really only trying to cut costs and using sustainability as an excuse; (4) will do sustainable acts that do not cost additional money; (7) is completely dedicated to sustainability." The items were reliable ( $\alpha = .95$ )<sup>1</sup>.

**Actual Electricity Usage.** From each room's smart meter, we collected actual electricity usage from 10am on day 2 to 10am on day 3 ("usage" in Kilowatt hours). In addition, we also collected daily-level electricity usage for each room for additional 30 days: 15 days prior to our experiment and 15 days afterwards. By averaging the electricity usage over these periods, we computed a daily "benchmark usage" for each room ("benchmark usage" in Kilowatt hours). This benchmark usage is later used as a covariate in ANOVAs and regressions, controlling for room specific reasons, such as room size, direction of exposure, and efficiency of the electrical equipment, all of which may affect a participant's actual electricity usage.

### Results

For brevity we do not report here, but manipulation checks confirmed that the price, card, and toothbrush manipulations worked as intended.

**Greed vs. Green Attribution.** An ANOVA revealed a significant main effects of price (supporting H1) and costly-environmental effort by firm (if a firm visibly spends money on green effort, it is

attributed as being more green, compared to one that does not), and two way interactions interaction between price and salience of consumer effort (marginal), price and costly environmental effort by firm, salience of consumer effort and costly environmental effort by firm ( $F(1, 267) = 8.00, p < .01$ ). However, these effects are all qualified by a significant three-way interaction ( $F(1, 267) = 6.01, p = .015$ ).

Decomposing the three-way interaction: when there is no visible presence for the firm engaging in costly environmental efforts (plastic toothbrush), we find the same price  $\times$  effort interaction pattern found in our previous studies ( $F(1, 136) = 11.44, p < .01$ ). Consumers attribute the high priced hotel as being significantly more greedy (vs. green) when it placed a note suggesting patrons save electricity as compared to when it did not ( $M_{\text{no note}} = 3.01$  (SD = 1.13) vs.  $M_{\text{no note}} = 4.15$  (SD = 1.12),  $F(1, 68) = 18.03, p < .01$ ). However, for the low priced hotel, the green effort did not change attributions ( $M_{\text{note}} = 2.18$  (SD = 1.03) vs.  $M_{\text{no note}} = 2.10$  (SD = .97),  $F < 1$ ). These effects fully replicate the previous studies' results and support H2.

On the other hand, when there was a visible signal for the firm engaging in costly environmental efforts (bamboo toothbrush), the price  $\times$  effort interaction was no longer significant ( $F < 1$ ) and only a significant main effect of price emerged ( $M_{\text{low}} = 4.35$  (SD = 1.19) vs.  $M_{\text{high}} = 4.80$  (SD = 1.13),  $F(1, 131) = 4.99, p < .05$ ), suggesting the high priced hotel was perceived as being greener than the low priced one -- whether or not it places a note urging consumers to save electricity. Thus, when firms show they are earnest about the environment and put money behind such efforts, consumers do not attribute the hotel pressing the consumer to conserve energy as being so driven by greed. These results support H3.

**Actual Electricity Usage: Total Effect of price and salience of consumer effort.** We collected the actual electricity usage (in kWh) across participants (higher numbers reflect more usage. An ANCOVA on electricity usage showed a marginally significant main effect of toothbrush (less electricity used when the hotel had visible costly environmental effort), a significant two-way interaction between salience of consumer effort and visible costly environmental, and a marginally significant three-way interaction ( $F(1, 266) = 2.913, p = .089$ ).

Decomposing this three-way interaction, in the bamboo toothbrush condition, we see that reminding people to save electricity (note condition) reduced actual electricity usage ( $M_{\text{no note}} = 4.98$ , SD = 1.90 vs.  $M_{\text{note}} = 4.36$ , SD = 1.66;  $F(1, 131) = 4.14; p < .05$ ), irrespective of price image of the hotel. In contrast, in the plastic toothbrush condition, reminding people to save electricity (note condition or high salience of consumer effort condition) did not significantly reduce electricity usage in the low priced hotel ( $M_{\text{no note}} = 4.78$  (SD = 1.71) vs.  $M_{\text{note}} = 4.46$  (SD = 1.72),  $F < 1$ ), and seemed to backfire and (marginally significantly) increase electricity usage in the high priced hotel ( $M_{\text{no note}} = 5.25$  (SD = 1.70) vs.  $M_{\text{note}} = 6.04$  (SD = 1.92),  $F(1, 68) = 3.29; p = .07$ ). These results are consistent with H3. We also interpret these results as suggestive of the importance of consistency between a company's own green behavior and that which it asks its customers to engage in. Consumers acted greenest when they observed the firm also doing so.

**Direct and Indirect Effects of salience of consumer effort on actual electricity usage (moderated-mediation model).** The direct and indirect effects of salience of consumer effort (the note) on actual electricity use may be in the opposite directions. On one hand, consumers may comply with the message on the note, and resource usage may decrease (*Direct effect* -- H4a). On the other hand, the salience of the message can activate an attribution of greed in the case of high priced firms (H2), which could negatively impact re-

<sup>1</sup> Using only the first item instead of the multi-item measure produces identical results.



source conservation (*Indirect effect* – H4b). However, this (negative) indirect effect may be muted when firms have visible costly environmental effort (H3). We test these two potential drivers of electricity usage.

We find that greed-green attribution mediates the effect of the three-way interaction on actual electricity usage. The three-way interaction predicts attribution ( $B = -.17, p < .05$ ), and that the latter predicts electricity usage in the full dataset ( $B = -.47, p < .01$ , supporting H4a).

Examining the signs of the coefficients gives more insight. Looking at the direct effect, we find that the salience of consumer effort (i.e., the note) directionally reduced electricity usage in the full sample, but the effect was not significant ( $B = -.11, p = .23, 95\% \text{ CI: } -.3028, .0746$ ). Next, in order to test the effect of costly firm commitment, we examined the indirect effects of salience of consumer effort on electricity usage separately for the plastic and bamboo toothbrush conditions. First, when firms show no visible costly environmental efforts (i.e., plastic toothbrush), salience of consumer effort in the case of high priced hotel leads to an attribution of greed, which further (ironically) increases actual electricity usage ( $B = .27, 95\% \text{ CI: } .1498, .4350$ ); an effect not present for the low priced hotel ( $B = -.07, 95\% \text{ CI: } -.2098, .0573$ ). These results support H4b. On the other hand, when firms show visible costly environmental efforts (i.e., the bamboo toothbrush), the indirect effect of salience of consumer effort on electricity usage (through green-greed attribution) is no longer significant, both for the high ( $B = -.02, 95\% \text{ CI: } -.1350, .0971$ ) and low priced hotels ( $B = -.04, 95\% \text{ CI: } -.1350, .0971$ ).

These results are predicted by H3 because a necessary condition for the indirect effect of salience of consumer effort on electricity usage is having the interactive effect of firm price image and consumer effort salience on greed-green attribution. When firms show visible costly environmental efforts, the interactive effect of firm price image and consumer effort salience on greed-green attribution is no longer significant. Urging consumers to save resources (by a note) no longer increases greed attribution for the high priced firm. Hence, the (negative) indirect effect of salience of consumer effort on electricity usage is no longer present. Combining the direct and indirect effect, the total effect of salience of consumer effort on electricity usage is also not significant when there is visible costly environmental effort by the firm ( $M_{\text{note}} = 4.81 \text{ (SD = 1.87)}$  vs.  $M_{\text{no note}} = 5.00 \text{ (SD = 1.80)}$ ,  $F < 1$ ).

### Discussion

This study replicates our attribution effects from the pilot studies. We also show that this attribution predicts actual green behavior on the part of consumers. We document that consumers' green behavior is sometimes enhanced as a function of salient green behavior reminders (e.g., a note to conserve electricity), but that the same reminder can also increase a greed attribution for a high priced firm and thereby indirectly reduce consumer compliance. However, the latter (negative) effect is eliminated if there are visible costly signs of the firm's environmental commitment.

We show that the attributions of greed, and their associated negative effect on consumer green behavior can be attenuated when the firm demonstrates to consumers its environmental commitment in some other way. This is important since it represents an optimal outcome for firms as well as for the environment. In closing, we hope that this research will spur further investigation into environmental efforts, attributions and behaviors, with a view to increasing environmental efforts both on the part of consumers as well as on the part of firms.

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## Blinding Us to the Obvious?

### The Effect of Statistical Training on the Evaluation of Evidence

Blakeley B. McShane, Kellogg School of Management, Northwestern University, USA

David Gal, College of Business Administration, University of Illinois at Chicago, USA

#### EXTENDED ABSTRACT

Null hypothesis significance testing (NHST) is the dominant paradigm in academic training and reporting in the biomedical and social sciences [Morrison and Henkel, 1970, Gigerenzer, 1987, Sawyer and Peter, 1983, McCloskey and Ziliak, 1996, Gill, 1999, Anderson et al., 2000, Gigerenzer, 2004, Hubbard, 2004]. A prominent feature of the NHST paradigm is the enshrinement of the eponymous null hypothesis, which typically posits that there is no difference between two or more groups with respect to some underlying population parameter of interest (e.g., a mean or proportion). Pitted against the null hypothesis is the alternative hypothesis, which, in typical applications, posits that there is a difference between the groups. Standard practice involves collecting data, computing a  $p$ -value which is a function of the data and the null hypothesis, and then retaining or rejecting the null hypothesis depending on whether the  $p$ -value is respectively above or below the size  $\alpha$  of the hypothesis test where  $\alpha$  is conventionally set to 0.05.

Despite the overwhelming dominance of the NHST paradigm in practice, it has received no small degree of criticism over the decades. Consider, for instance, the following passage from Gill [1999]:

It [NHST] has been described as a “strangle-hold” [Rozenboom, 1960], “deeply flawed or else ill-used by researchers” [Serlin and Lapsley, 1993], “a terrible mistake, basically unsound, poor scientific strategy, and one of the worst things that ever happened in the history of psychology” [Meehl, 1978], “an instance of the kind of essential mindlessness in the conduct of research” [Bakan, 1966], “badly misused for a long time” [Cohen, 1994], and that it has “systematically retarded the growth of cumulative knowledge” [Schmidt, 1996]. Or even more bluntly: “The significance test as it is currently used in the social sciences just does not work.” [Hunter, 1997]

Clearly NHST is not without its critics.

Despite this widespread criticism, relatively little attention has been devoted to whether researchers are in fact misled by the NHST paradigm in their evaluation of evidence. However, exceptions exist. For instance, it is well-known that statistical significance and practical importance are often confused; indeed, this confusion is so rampant that, to preempt it, introductory statistics textbooks repeatedly affirm, with a frequency rivaled only by declarations that correlation does not imply causation, that statistical significance is distinct from practical importance [Freedman et al., 2007]. Another ill effect of the dichotomization of results into statistically significant and not statistically significant is that researchers treat results that attain statistical significance as evidence for an effect while they treat results that fail to attain statistical significance as evidence of the absence of an effect. Gelman and Stern [2006] have discussed one important implication of this practice, namely that researchers commonly infer that two treatments are significantly different when one treatment attains statistical significance while the other fails to do so. In reality, the two treatments may have a statistically similar effect, or as Gelman and Stern [2006] conclude, “the difference between ‘significant’ and ‘not significant’ is not itself statistically significant.”

In this paper, we investigate one way in which the NHST paradigm may lead researchers to misinterpret evidence. In particular, given the focus on NHST and the concomitant dichotomization of results into statistically significant and not statistically significant in academic training and reporting, we hypothesized that researchers—despite general knowledge that the conventional 5% level of statistical significance is arbitrary—tend to think of evidence in dichotomous terms: evidence that reaches the conventionally defined threshold of statistical significance (i.e.,  $p < 0.05$ ) is interpreted as a demonstration of a difference whereas evidence that fails to reach this threshold is interpreted as a demonstration of no difference. In fact, evidence is more accurately viewed “as a fairly continuous function of the magnitude of  $p$ ” [Rosnow and Rosenthal, 1989] and the conventional 5% level of statistical significance (and the concomitant dichotomization of results into “significant” and “not significant”) is arbitrary.

To systematically examine whether researchers might be led by the notion of statistical significance to misconstrue evidence, we surveyed researchers across a wide variety of fields (including medicine, cognitive science, psychology, consumer behavior and quantitative marketing researchers, and economics) regarding their interpretation of data. Researchers were presented with a scenario like the below:

- *A study aimed to test how different interventions might affect terminal cancer patients’ survival. Participants were randomly assigned to one of two groups. Group A was instructed to write daily about positive things they were blessed with while Group B was instructed to write daily about misfortunes that others had to endure. Participants were then tracked until all had died. Participants in Group A lived, on average, 8.2 months post-diagnosis whereas participants in Group B lived, on average, 7.5 months post-diagnosis ( $p = XXX$ ).*

We then asked researchers questions pertaining to:

- Descriptive statements: Speaking only of the subjects who took part in this particular study, the average number of post-diagnosis months lived by the participants who were in Group A was *greater / less / no different* than that lived by the participants who were in Group B. We also included an option indicating it could not be determined based on the data.
- Likelihood judgments (for this question, the outcome was presented in terms of a recovery probability rather than months lived post-diagnosis): A person drawn randomly from the same patient population as the patients in the study is *more / less / equally* likely to recover from the disease if given Drug A than if given Drug B. We also included an option indicating it could not be determined based on the data.
- Treatment choice (for this question, the outcome was presented in terms of a recovery probability rather than months lived post-diagnosis): I prefer Drug *A / B*. We also included an option indicating indifference.

In presenting these results, we varied whether the  $p$ -value presented was below or above 0.05. We also presented some of our respondents with a posterior probability based on a Bayesian calculation. A substantial majority answer these questions incorrectly when the  $p$ -value presented is above 0.05 though this effect is attenuated for choices and when the posterior probability is presented.

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# Increasing the Efficacy of Exchange Offers: Effect of Message Framing, Promotion Bundling and Product Category on Exchange Offer Efficacy

Preetha Menon, Symbiosis Institute of Business Management, India

## EXTENDED ABSTRACT

An exchange offer is a sales promotion tool that allows customers to give in their used goods in exchange for a new one. The success of an exchange offer lies in the way it is designed and communicated to its audience. This paper studies the effect of positive and negative message frames, with single or bundled promotions for hedonic and utilitarian products in the context of exchange offers.

Message framing, which is the construction of communication in a way that elicits desired results, is at the crux of any promotion communication (Thaler, 1983) and the principles of 'approach' and 'avoidance' lay down the foundation for message framing. The approach-avoidance motivation theory contends that individuals have a fundamental tendency to approach positive valence messages and avoid negative valence messages (Elloit, 2006). An alternate explanation for the framing effect is that individuals evaluate messages relative to referents using a value function (Kim, Kim and Rao, 2011). This means that the message frames are evaluated based on a context and not on a generalist principle of approach and avoidance.

*Hypothesis 1a: According to the approach-avoidance model, a positive valence frame "buy the new... in exchange..." will be preferred over a negative valence frame of "why own an old and outdated... exchange for..."*

*Hypothesis 1b: According to the reference dependant model, a negative valence frame of "why own an old and outdated...exchange for" will be preferred over a positive valence frame "buy the new...in exchange..."*

One of the goals of this research is to examine which of these hypotheses are supported when messages are positively or negatively framed.

Another aspect of an effective promotion is the design of the offer. The exchange offer can be designed in a way that offers a utilitarian/monetary benefit like a cash discount, a hedonic/non-monetary benefit like a free gift, a choice between the two or a combination of the two kinds of benefits also known as a bundled offer (Menon and Vijayaraghavan, 2013). Chandon et.al. (2000) demonstrate the effectiveness of combining the product benefit with the promotion benefit, pairing a utilitarian product with a utilitarian benefit and a hedonic product with a hedonic benefit. Most durable products have some utilitarian benefit but may or may not possess hedonic benefit. In that sense, a whole new set of products arise which may be high on utilitarianism but could be either high or low on hedonic benefits. Aligning these new category of durable products with a suitable promotion would mean that products that are high on utilitarianism and hedonism must use a bundled offer that bundles a monetary and non-monetary offer, whereas products that are pure utilitarian must use a pure monetary offer.

*Hypothesis 2: For High Utilitarian and High Hedonic (HUHH) products, bundled offers will be preferred over single offers*

*Hypothesis 3: For High Utilitarian and Low Hedonic (HULH) products, single offers will be preferred over bundled offers.*

This study considers these two categories of products and seeks to find the ideal product category-promotional benefit combination.

A pretest with 16 different durable products helped in classifying products into four categories – high utilitarian-high hedonic(HUHH), high utilitarian –low hedonic(HULH), low utilitarian – high hedonic (LUHH) and low utilitarian – low hedonic (LULH). For the purpose of this study, camera in HUHH and travel bag in HULH were chosen based on the subject knowledge of participants (Mitchell and Dacin, 1996).

Study 1 (N=105) was conducted amongst participants with prior experience in buying and using the products chosen for the study – camera and travel bag. The participants saw two advertisements, one with a positive message (buy new) and the other with a negative message (exchange old) and had to state their preference between the two. They were randomly assigned to 4 groups, and saw advertisements in pairs (Group1:Ad1-Ad2; Group2:Ad3-Ad4; Group3:Ad5-Ad6; Group4:Ad7-Ad8) (see Fig. 1).

All four groups preferred the 'buy' frame over the 'exchange' frame irrespective of product category (camera/travel bag). Furthermore, the difference in choice of 'new' over 'exchange' was found to be significant. Moreover, the respondents who preferred the 'buy' frame also gave higher rating to the ad appeal of their chosen advertisement (single item - 7 point scale). A 'buy' frame which depicts positive valence has more appeal over the negative valence frame of 'exchange'. It means that the frame of the ad is independent of the product category (camera/travel bag) and the subjects show a clear pattern of preference across product categories. This is in line with past studies (Srivastava and Chakravarti, 2011)

Study 2 (N=103) was conducted to test for the effect of single (cash discount) and bundled (cash + free gift) offers on preference of the exchange offer. The participants were randomly assigned to four groups and saw advertisements in pairs.

For the hedonic product (camera), more hedonic (bundled) offers were preferred over utilitarian (single) offers and the differences are significant. Also, bundled offers have higher mean offer appeals as compared to single offers. However, this difference dwindles and reverses for utilitarian products. Although there is difference in group means for group 3, the difference was insignificant. For group 4, the preference reverses and is significant. This reversal in consumer preference is a function of message frame and the product category.

In conclusion, positive valence messages are preferred over negative valence messages across product categories and exchange offer designs. However, the preference for exchange offer design is dependent on the product category and the message frame. Bundled offers are preferred over single offers in a 'buy' frame for both HUHH and HULH products. However for HULH products, bundled offers are preferred over single offers for 'buy' frames and single offers are preferred over bundled offers for 'exchange' frames. This study has implications for managers who wish to improve the efficacy of the exchange offer communication and its design.



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# The Factors That Affect Donation Advertising Effectiveness: An Experimental Research on Felt Ethnicity towards In-Group and Out-Group from Young Americans' Perspectives

Emi Moriuchi, Fort Hays State University, USA  
Christina Chung, Ramapo College of New Jersey, USA

## EXTENDED ABSTRACT

When natural disasters happen, the media's role is to convey the cries of victim. Although donating to a good cause is an "incontrovertible part of the American consumer's life" (Brooks, 2006), Winterich, Mittal and Ross (2009) assert that "though volitional, donations to domestic versus international causes seem to differ." Part of the reason for these differential donations may be that victims of Sandy are seen as belonging to an in-group, whereas victims of the Japanese Tsunami are seen as belonging to an out-group (Cuddy, Rock, and , 2007; Kogut and Ritov, 2007). In addition, with the power of advertising, in-group and out-group donors perceive a different "need" to donate to the respective groups of victims (domestic vs. international). However, it is unclear the type of message that differentiates individual's donation behavior. This study seeks to further the understanding of prosocial behavior by exploring the motivation behind donation, attitude towards helping others, one ethnic identity, and one's attitude towards different types of donation ads (e.g. message) and their impact on charitable donation advertising effectiveness that is tied to one's ethnic identity.

Although TPB has been applied in past research such as organ donation (Hyde and White, 2009), volunteering time (Warburton and Terry, 2000), and blood donation (Armitage and Conner, 2001), TPB has not been widely applied in monetary donation advertising effectiveness. Based on the TPB theory, we argue that the TPB variables are important in predicting donation intentions and may differ for different donor groups (e.g. in-group vs. out-group). In past research, among other factors that influence monetary donations to charitable organizations, motives and attitudes were identified as predictors of donation behavior (Green and Webb, 1997). It is of interest to draw more fine-grained distinctions between the different types of donation situation (domestic versus international) and an individual's perception towards donation have an impact this interconnected society.

Hyde and White (2009) argued that personal influence is clearly relevant for donation behavior and this personal influence maybe in the form of one's self-identity which may be relevant to one's ethnic identity. This suggests that any cue that highlights their ethnic identity (e.g. country-of-origin, in-group members) will potentially play a role in determining one's donation behavior.

Self-concept is defined as what an individual belief about himself or herself, which includes the attributes of who and what the self means to this individual (Baumeister, 1999). According to Grubb and Grathwohl (1967), self-concept is of value to an individual and the behavioral outcome will be focused toward the protection and enhancement of self-concept. They claim that the consumption behavior of this individual will be directed toward enhancing self-concept through the consumption of goods as symbols. This suggests that individuals who have a positive self-concept, the likelihood of any donation advertising for an in-group would be higher.

In summarizing the previous literature, two main research gaps are identified. Charitable organizations are no longer just seeking help within the country; rather they are extending their donation effort to overseas donors as well. However, studies that consider cultural factors are lacking. Second, little research has focused on the interactive effects of framing and evidence on situation (in-group vs. out-group). Self-concept which ties back to how an individual per-

ceives themselves, will have an impact on the level of bias towards in-group and out-group.

*Hypothesis 1: Attitude towards helping others is positively related to donation control beliefs and donation motivation.*

*Hypothesis 2: Donation control beliefs are positively related to donation confidence and donation behavior on ethnic identity.*

*Hypothesis 3: Donation motivation is positively related to donation confidence and ethnic identity on donation behavior.*

*Hypothesis 4: Donation confidence is positively related to advertising effectiveness.*

*Hypothesis 5: Ethnic identity on donation behavior is positively related to advertising effectiveness*

*Hypothesis 6: Self-concept (e.g. in-group vs. out-group) moderates the relationship between ethnic identity on donation behavior and advertising effectiveness.*

*Hypothesis 7: Self-concept (e.g. in-group vs. out-group) moderates the relationship between donation confidence and advertising effectiveness*

Six variables were measured to test the hypotheses. One hundred-seventy undergraduate college students participated in the survey. For experimental treatments, each subject randomly received one of four versions (America disaster screens with factual message, America disaster screens with emotional message, Japan disaster screens with factual message, Japan disaster screens with emotional message). For manipulations check, two sets of items (country and message types) were used to verify the manipulations of the advertising messages. These results indicate a success of the intended manipulation.

Cronbach's Alpha shows that all scales had internal consistency. All measures demonstrated reliability with alpha values of .89 and greater. A Confirmatory Factor Analysis (CFA) was conducted to test the overall validity of the measurement model. The CFA results showed a good model fit for a 25-item model, with  $\chi^2 = 437.64$ ,  $df = 260$ ,  $p = .000$ ; CFI = .95; RMSEA = .06; NFI = .88; TLI = .94. Also, the results supported the construct validity of the measurement model. Metric invariance between US disaster and Japan disaster data was examined. First, the two groups were fitted separately with no equality constraints imposed. Overall, the unconstrained or "totally free" (TF) model fit reasonably well, with  $\chi^2 = 784.41$ ,  $df = 520$ ,  $p = .000$ ; CFI = .92; RMSEA = .06; PNFI = 0.69. Next, constraining the

measurement weights to be equal between groups, the model fit with  $\chi^2 = 806.66$ ,  $df = 539$ , CFI = .92; RMSEA = .05; PNFI = 0.72. The chi-square difference test results ( $\Delta \chi^2 = 22.25$ ,  $df = 19$ ,  $p = .272$ ) indicates that full metric invariance could be established and allows valid comparisons of relationships between the effectiveness of US disaster ads and Japan disaster ads.

First, an overall structural model fit for the two groups was estimated without any constraints imposed. The one-group SEM model provided a satisfactory fit of data with  $\chi^2 = 458.76$ ,  $df = 267$ ,  $p = .000$ ; CFI = .94; RMSEA = .07; TLI = .93. Next, the procedures turned to a test of moderation using the country variable. Overall fit measures of the “totally free” model indicated that the model was consistent with the data ( $\chi^2 = 814.985$ ,  $df = 534$ ,  $p = .000$ ; CFI = .91; RMSEA = .06; TLI = .91). By constraining all structural coefficients to be equal in both groups, the model fit with  $\chi^2 = 837.74$ ,  $df = 553$ ,  $p = .000$ ; CFI = .92; RMSEA = .06; TLI = .91.

The SEM structural paths show that attitude toward helping others was positively related to ethnic identity on donation control belief (U.S.  $\beta = .25$ ,  $t = 2.15$ ; Japan  $\beta = .43$ ,  $t = 3.90$ ) and donation motivation (U.S.  $\beta = .71$ ,  $t = 6.44$ ; Japan  $\beta = .79$ ,  $t = 7.75$ ). Donation control belief is positively related to ethnic identity on donation behavior for U.S. disaster ( $\beta = .25$ ,  $t = 2.29$ ), but not significantly related to Japan disaster. Donation control belief is negatively related to donation confidence (U.S.  $\beta = -.26$ ,  $t = -2.13$ ; Japan  $\beta = -.48$ ,  $t = -3.45$ ). Donation motivation is positively related to ethnic identity on donation behavior (U.S.  $\beta = .32$ ,  $t = 2.86$ ; Japan  $\beta = .36$ ,  $t = 2.86$ ). Donation motivation is negatively related to donation confidence for Japan disaster ( $\beta = -.33$ ,  $t = -2.62$ ), but not related for US disaster. Also, ethnic identity on donation behavior is positively related to advertising effectiveness (U.S.  $\beta = .65$ ,  $t = 6.07$ ; Japan  $\beta = .55$ ,  $t = 5.13$ ). Donation confidence is positively related to advertising effectiveness (U.S.  $\beta = .22$ ,  $t = 2.16$ ; Japan  $\beta = .18$ ,  $t = 1.68$ ). An analysis of covariance (ANCOVA) was conducted to determine the effect of country and message in the relationship between EIDB/DCF and AEF. The main effects of country and message indicate that there are significant effects on AEF with country ( $F(1, 164) = 9.12$ ,  $p = .003$ ) and message ( $F(1, 164) = 4.30$ ,  $p = .040$ ). Comparison of these variables' means indicate that U.S. disaster ads have higher AEF than those of Japan disaster ads. Also, emotional messages have higher mean scores than factual messages.

The study findings show that when a natural disaster strikes in a foreign country, people's attitude towards helping others in that foreign country is affected by their ethnic identity on donation behavior. In addition, advertising effectiveness is affected by people's ethnic identity on donation behavior and their attitude towards the charity ads. Further, between emotional and factual messages, emotional messages were considered more persuasive to respondents in regards to natural disaster ads. This study has a number of important practical implications that are of relevance to all levels in society: donors, marketers, charity organizations, and advertising agencies. Knowing the antecedents of effectiveness enables advertisers and marketers to develop strategies to increase charity donation effectiveness. Charity organizations might consider emphasizing donors' motives (helping others) with emotional donation messages if the context is for a domestic charity.

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# Boosting Innovation Adoption Through Gamified Information Release

Jessica Müller-Stewens, University of St. Gallen, Switzerland

Tobias Schlager, University of St. Gallen, Switzerland

Gerald Häubl, University of Alberta, Canada and University of St. Gallen, Switzerland

Andreas Herrmann, University of St. Gallen, Switzerland

## EXTENDED ABSTRACT

While innovations are a cornerstone for most companies' success (Henard and Dacin 2010), prior research revealed significant failure rates (Min, Kalwani, and Robinson 2006). One reason is that innovations can be tedious, especially when they are not radical (Rindova and Petkova 2007), and consumers might lack the motivation to process information related to such innovations (Wood and Lynch 2002). As a result companies are not able to effectively communicate the advantages of these innovations, and consumers are often not willing to adopt them. On the quest for increasing the adoption rate of innovations, practitioners have started to use *gamification*. Yet, evidence is anecdotal so far and conclusive consumer research on the psychological processes and behavioral consequences of gamification for communicating innovations is missing.

In this article, we seek to close this gap by investigating *whether* the gamified release of information about an innovation enhances consumers' tendency to adopt a product and *what* mental process underlies this effect. The central hypothesis of this research is that gamification induces a playful state, which elicits curiosity and ultimately increases consumers' tendency to adopt innovations. We offer empirical evidence from three experiments on the effect of gamification on adopting innovations and the underlying psychological mechanisms. In line with prior research, we define gamification as the integration of game elements in non-game settings (Deterding et al. 2011) which is in the presented context the release of information about innovations. The findings of three experiments demonstrate that construing the release of information about innovations in part as games that consumers must complete successfully increases consumers' innovation adoption relative to the unrestricted release of the same information.

In Experiment 1A, 205 participants ( $M_{Age} = 37.91$ ,  $SD_{Age} = 13.37$ , 62.9 % females) were assigned either to a control or a gamification condition. In the control condition participants received information texts about five product features of an in-car multimedia system, which they were required to read. Participants assigned to the gamification condition received the same information about the innovation, but they could receive it in form of a quiz. The gamification condition indicated a higher purchase intention than the control condition. This effect is mediated by curiosity ( $\beta_{Total} = .28$ ,  $p < .05$ ;  $\beta_{Direct} = .13$ ,  $p > .10$ ;  $\beta_{Indirect} = .15$ , 95% CI [.02; .30]).

Experiment 1B extends the findings of Experiment 1A by integrating a different game: a short video racing game had to be played successfully to receive more information. Moreover, we will examine whether the effect also increases the curiosity for radical innovations. We implemented a 2 (innovation: incremental vs. radical) x 2 (gamification: control vs. video game) between-subjects design. All participants ( $N = 266$ ) received information about the same two product features of the in-car multimedia system. After reading the information, participants were assigned either to the gamification or control condition and could opt-out of more information. Participants who decided to receive more information received information about three more product features (radical vs. incremental) in the control group, or played a car racing game to receive the additional information (radical vs. incremental) in the gamification condition. Significant interaction effects revealed the type of innovation (radi-

cal vs. incremental) as moderator. A moderated mediation analysis indicated that curiosity partially mediates the effect of gamification. The conditional direct effect of gamification on purchase intention is significant for incremental innovations ( $\beta_{Direct:Incremental} = .28$ ,  $p < .05$ ) and not for radical innovations ( $\beta_{Direct:Radical} = -.12$ ,  $p > .10$ ). The conditional indirect effect for incremental innovations is significant ( $\beta_{Indirect:Incremental} = .19$ , 95% CI [.03; .53]), but not for radical innovations ( $\beta_{Indirect:Radical} = -.07$ , 95% CI [-.21; .05]). The conditional effect of gamification on purchase intention is significant for incremental innovations ( $\beta_{Total:Incremental} = .47$ ,  $p < .01$ ), but not for radical innovations ( $\beta_{Total:Radical} = -.19$ ,  $p > .10$ ).

The aim of Experiment 2 was to provide evidence that playfulness is the underlying cause of the effects. The innovation and the experimental set-up mirrored the incremental innovation condition of Experiment 1B with exception of the playfulness measure which was added in this experiment. Results of a serial mediation analysis confirmed that the relationship between gamification and purchase intention is sequentially mediated by the participants' induced playfulness and their curiosity  $\beta_{Total} = .61$ ,  $p = .06$ ;  $\beta_{Direct} = .25$ ,  $p > .10$ ;  $\beta_{Indirect:PlayCuriosity} = .24$ , 95% CI [.06; .56].

Experiment 3 corroborates and extends prior experiments in that gamification not only increases consumers' purchase intentions by eliciting curiosity, it also shows that the psychological process increases real purchases ( $\beta_{Total} = 1.32$ ,  $p < .01$ ;  $\beta_{Direct} = 1.11$ ,  $p < .05$ ;  $\beta_{Indirect} = .39$ , 95% CI [.05; 1.05]). Additionally, Experiment 3 demonstrates that the increased curiosity translates into more information acquisition, which increases the participants' recall of product advantages ( $\beta_{Total} = .19$ ,  $p > .10$ ;  $\beta_{Direct} = -.19$ ,  $p > .10$ ;  $\beta_{Indirect:Curiosity} = .24$ , 95% CI [.026; .628];  $\beta_{Indirect:CuriosityInfo} = .08$ , 95% CI [.004; .273]). Moreover, by giving the control group the same motoric task, we ruled out an alternative explanation, which is the difference in the motoric actions of the participants.

The article mainly contributes to recent work on how different types of presenting product information affect consumers' innovation adoption decision. Designing the release of information in part as games that consumers must play successfully to obtain the information boosts subsequent innovation adoption relative to an unrestricted information release. Additionally, the findings of this research advance our understanding of consumers' playfulness and curiosity in the adoption of innovations. We find that a gamified information release may elicit a sense of playfulness in consumers which induces curiosity and increases subsequent innovation adoption by activating an exploratory mindset. Moreover, we find that the radicalness of innovations can moderate these effects.

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# The Influence of Time-Interval Descriptions on Goal-Pursuit Decisions

Nira Munichor, Hebrew University of Jerusalem, Israel  
Robyn A. LeBoeuf, Washington University in St. Louis, USA

## EXTENDED ABSTRACT

Many goals are linked to a particular time frame. For example, consumers may contemplate saving money during autumn to go on vacation during the holidays. Consumers also encounter marketing communications that promise them progress toward a desired goal (e.g., weight loss) if they act in a certain way during a target time interval. We investigate the influence of the way in which the target time interval is described on the decision to initiate the pursuit of these goals. We suggest that whether the time interval associated with goal completion is described in terms of extents (e.g., “within exactly two months”) or dates (e.g., “between today and November 17”) can influence goal-pursuit decisions, with people being more likely to pursue goals with completion intervals described by extents than by dates.

We suggest that changes in focus (on the goal’s outcomes vs. the means of achieving it) underlie such effects. Extent descriptions refer to “chunks” of time (e.g., weeks, months), and may encourage people to treat the interval as a block, and therefore to neglect to consider the precise ways in which they will pursue that goal and to think more about the goal and its outcomes. In contrast, date descriptions direct attention to specific time points (LeBoeuf 2006; Malkoc, Zauberman, and Bettman 2010; Read et al. 2005), and may encourage people to envision the intervening tasks between the present and the interval’s end, and to focus on the (effortful) process of accomplishing the goal. Thus, we propose that describing a time interval that is associated with a (desired) goal in terms of extents may focus people on the outcome and direct their attention more to the goal’s long-term benefits, whereas a date description may lead people to consider instead the costs of goal pursuit. Consequently, we predict that people will be more likely to decide to pursue goals when the completion interval is described by extents rather than by dates.

Study 1a tested the effect of interval description on people’s willingness to diet. Participants indicated whether they would be willing to lose 1.5 pounds in two weeks, with time interval described either by extents or dates. Participants also reported how long the target interval seemed. More participants were willing to diet when the interval was described by extents than dates (65% vs. 44%, respectively,  $\chi^2(1)=4.06, p=.04$ ), but interval description did not affect perceived interval length. Study 1b replicated these results using a savings goal. Thus, people are more likely to pursue a goal when the allocated time interval is described by extents, rather than dates, and this effect seems not to be driven by a change in the interval’s perceived length.

Study 2 examined the focus account by manipulating effort level. Participants indicated whether they would be willing to take a class that met either once or twice a week in order to get basic mastery in Spanish in two months (described by extent or date). The effort involved in learning Spanish affected decisions only in the date-description condition: when time was described by dates, participants were more likely to take the class when it met once a week (83%) than when it met twice a week (55%;  $\chi^2(1)=6.43, p=.01$ ). When time was described by extents, however, effort did not affect participants’ decisions (65% vs. 77%, respectively;  $\chi^2(1)=1.27, p=.26$ ). This pattern provides support for our theorizing that interval descriptions affect people’s outcome- versus means-focus, such that describing a goal-completion interval in terms of dates produces greater sensitivity to the steps that people need to take to achieve that goal.

In study 3, participants indicated whether they would be willing to read three books in one month (described by extent or date) and indicated how many books they would commit to reading within that interval. Study 3 also examined the possible mechanism by collecting ratings of the goal’s difficulty. When the interval was described by extents, versus dates, participants pursued reading at a higher rate (72% vs. 47.5%, respectively,  $\chi^2(1)=7.08, p=.01$ ), were willing to read more books ( $M_{\text{extents}}=2.47$  vs.  $M_{\text{dates}}=1.87, t(116)=2.63, p=.01$ ), and found the goal less difficult ( $M_{\text{extents}}=3.68$  vs.  $M_{\text{dates}}=4.81, t(116)=-4.11, p<.0001$ ). Goal difficulty mediated the relationship between interval description and goal pursuit (Pursuit likelihood’s 95% CI: .040, 1.51; Number of book’s 95% CI: 0.30; 0.90). These results suggest that extent descriptions make goals seem less difficult to pursue than date descriptions, and thereby increase goal-pursuit rates. We suggest that this happens because extent descriptions direct people’s attention more to the outcomes of goal pursuit and less to the means of achieving that goal.

If extent descriptors lead people to focus more on the outcomes than do date descriptors, they should only increase willingness to pursue goals with *positive* long-term consequences, such as studying, and not goals with *negative* long-term consequences (but positive process), such as watching television. To test this hypothesis, participants in Study 4 considered pursuing one of two goals—watching more television or studying more—for one month. The effect of time-interval descriptor depended on the type of goal ( $\chi^2(1)=5.38, p=.02$ ). Participants were more likely to pursue the television goal when time was described by dates versus extents (45% vs. 26%, respectively,  $\chi^2(1)=4.38, p=.04$ ). For studying, however, dates yielded less goal pursuit than extents (4% vs. 14%, respectively,  $\chi^2(1)=3.17, p=.075$ ). Thus, people are more likely to pursue goals with positive outcomes when time is described by extents, but they are more likely to pursue goals with positive process when time is described by dates. These findings suggest that extents lead to a greater focus on the outcomes whereas dates lead to a greater focus on means.

In summary, even small nuances in how a goal and the time interval allocated to its pursuit are described can alter the decision to pursue that goal. An interval described by amounts of time may focus people more on the outcomes of goal pursuit than an interval described by dates. This increases people’s willingness to initiate goal pursuit during that interval, as long as goal pursuit has positive long-term consequences.

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# Implicit Attitude Formation and Change: Relative Impact of Affective Versus Cognitive Processing Modes

Anish Nagpal, University of Melbourne, Australia

Juan Jose Muzio Posadas, Villa & Moreno

Angela Paladino, University of Melbourne, Australia

## EXTENDED ABSTRACT

The co-existence of two types of attitudes, explicit versus implicit is well established (Craeynest et al., 2005; Friese et al., 2006; Karpinski and Hilton, 2001; Luchs et al., 2010; Neumann et al., 2003; Raghunathan et al., 2006). Explicit attitudes are those for which people have conscious control and awareness (Greenwald and Banaji, 1995; Wilson et al., 2000), whereas implicit attitudes are outside of conscious control and awareness (Fazio and Olson, 2003, Perugini, 2005). For instance, some people may explicitly regard a piece of chocolate cake as being unhealthy. However, they may implicitly regard the same piece of cake as being tasty. Although considerable theoretical and empirical work has examined the properties and types of implicit attitudes (e.g., Gawronski and Bodenhausen, 2006; Rydell and McConnell, 2006), a systematic understanding of how they form and change is still warranted. Empirical research on this issue has been tackled either indirectly or unsystematically (Rudman, 2004; Slovic et al., 2007), thus making it a fruitful area of study.

The dominant paradigm for understanding the formation and change of implicit attitudes is evaluative conditioning (EC; Hermans et al., 2005; Kawakami et al., 2000; Mitchell et al., 2003; Rudman et al., 2001). EC has been used in a significant number of studies as a means to form (new) or change (old) implicit attitudes (e.g., Baccus et al., 2004; Devine et al., 2002; Dijksterhuis, 2004; Hermans et al., 2005; McConnell et al., 2008; Olson and Fazio, 2006; Rydell and McConnell, 2006; Strick et al., 2009). An in-depth examination of these studies reveals that both pictures and words have been used as unconditioned stimulus (US) in EC procedures to form and change implicit attitudes. We believe that pictures and words used as US are suggestive of the existence of two different types of processing modes, affective and cognitive, both of which impact implicit attitudes. Affective processing modes refer to those emotional and intuitive responses to stimuli which do not entail reading, understanding, memory, or logic (Glaser and Glaser, 1989; Glaser, 1992). This response is an automatic phenomenon that occurs spontaneously and requires little or no cognitive involvement (Hermans et al., 1994; Kihlstrom et al., 2000; Winkielman and Berridge, 2004). In contrast, cognitive processing modes refer to those mental and analytic responses to stimuli that entail reading, understanding, memory, or logic (Izard, 1994; Lerner and Arsenio, 2000). This processing is a deliberative phenomenon that occurs voluntarily and requires cognitive involvement (De Houwer et al., 1994; Giner-Sorolla et al., 1999).

Both modes can bring about implicit attitude formation and change. However, there remain some important unresolved issues. First, what is the relative impact of affective versus cognitive processing modes in the formation of new implicit attitudes? Second, what is the relative impact of affective versus cognitive processing modes in changing old implicit attitudes? Third, does the impact of these processing modes depend upon the type of attitudes being created? In this research, we conducted four studies in an attempt to answer these questions.

In study 1, we show that affective processing modes have a greater impact in forming implicit attitudes than cognitive processing modes. The second and third studies show that the relative impact of affective and cognitive processing modes in changing implicit at-

titudes depends upon the nature of the implicit attitude. Specifically, affectively laden implicit attitudes are more likely to change by using cognitive rather than affective processing modes (Study 2). On the other hand, cognitively laden implicit attitudes are more likely to change by using affective rather than cognitive processing modes (Study 3). Thus, the findings of studies 2 and 3 uncover the existence of a mismatching effect for implicit attitudes. This mismatching effect for implicit attitudes is an important one, especially given the accumulated empirical evidence demonstrating the existence of a matching effect for explicit attitudes. Various studies have found that affectively laden explicit attitudes show more change under affective, rather than under cognitive means of persuasion; whereas cognitively laden explicit attitudes show equal change under both means of persuasion (Drolet and Aaker 2002; Edwards 1990; Edwards and Von Hippel 1995; Fabrigar and Petty 1999). Finally, the fourth study, improves upon the design of Experiment 1, and replicates the findings that affective processing modes (versus cognitive processing modes) had a greater impact in forming implicit attitudes.

The findings of the four studies have important implications for attitude research, particularly implicit attitudes. They also contribute to establishing a link between other streams of research, such as implicit memory and implicit learning. Last, this research also contributes to the literature on evaluative conditioning by investigating the impact of two types of US – those that lead to cognitive versus those that lead to affective processing – on implicit attitude formation and change.

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# Black or Green? Exploring the Drivers and Roadblocks behind Renewable Electricity Consumption

Dr Angela Paladino, The University of Melbourne, Australia

Dr Ameet Pandit, University of Newcastle, Australia

## EXTENDED ABSTRACT

Green marketing has grown from strength to strength in the past ten years (Paladino & Pandit 2012) and is largely concerned with resource conservation and the development of environmentally friendly strategies (Oyewole, 2001). Environmental concerns have escalated among consumers as issues such as environmental degradation has become increasingly salient (Paladino & Pandit 2012). Households account for a large proportion of the economy's environmental impact (Peattie 2001), as high as 30-40% (Grunert 1993) and as such, household should be inclined to take some responsibility to reduce environmental damage via recycling and/or purchase of ecologically sound products (e.g. green electricity). On the other hand, there are many benefits for an organization to be environmentally sound: increased profitability, increased goodwill for public and media relations, and an enhanced company image (Gordon, Carrigan and Hastings 2011), and more importantly, increased consumer demand for environmentally sound products (DeBeers 2008). However, these benefits do not appear to translate to the green (renewable) electricity market. Moreover, there is inadequate research that explores how green electricity providers could increase the size and sales of the marketplace (Paladino and Pandit 2012). Furthermore, there is limited research that examines consumer attitudes and perceptions towards environmentally friendly products and services (Khare, Mukerjee and Goyal 2013). Research has shown conflicting results regarding the relationship between environmental behaviors and attitudes. Some studies have shown a strong relationship (e.g. Keesling & Kaynama 2003) while others an insignificant relationship (Verhallen & van Raaij 1981). The paper argues that an understanding of attitude formation will allow us to understand the motivation to adopt or impede the purchase of green electricity. The study extends the Theory of Reasoned Action (TRA) and Planned Behavior (TPB) (Ajzen 1991) to explore the effects of knowledge on attitudes, intentions and behavior. In addition, we also draw on attribution theory (Weiner 1974) which has not been used earlier to understand the motivations behind the adoption of green electricity. Attribution theory has been used to predict and explain the cause of a current event and a consumer's future tendency to perform the same behavior (Weiner, 1974). This theory has been used to explain how individuals interpret an event and how the interpretation relates to their behavior and decision making (Weiner, 1974). Attribution theories describe how and when an individual ascribes causes to explain the behavior of others or his own behavior. This theory has been further expanded to include control and stability which ties prior inference to future action (Weiner 1985). This suggests that consumers are more likely to change if they are in a situation where the control is high and the stability is fixed (Forlani and Walker 2003). This is applicable to the green electricity market where in the non-adoption of green electricity can be assigned to organizational and environmental factors beyond the consumer's control. Thus, this study examines the impact of perceived behavioral control, subjective norms and environmental concern on attitudes. This study also examines the impact of attitudes on purchase intentions and purchase behavior. PBC deals with situations where consumers cannot exert full control over the behavior in question (e.g. intention to purchase) (Ajzen, 2002) and reflects past experiences and anticipated obstacles (Ajzen, 1991). Subjective norms have been shown to influence purchase behaviors (Ajzen

1991) and Bearden et al. (1989) suggest that influence of others is an important consideration in the determination of behavior. Quantitative data was collected using a 7 page nationwide survey across each state of Australia to assess a range of relationships. Multiple regression analysis was used to assess the nature of the relationships. The impact of environmental concern and subjective norms on attitudes was significant and positive. In addition, attitudes have a positive and significant relationship with intention to purchase green electricity. However, interestingly the impact of attitudes on purchase behavior was insignificant.

The results indicate that marketers and policy makers need to pay attention to environmental concern and subjective norms. The findings are consistent with the growing consumer concern with the environment. Consistent with past studies (Newell et al., 1998), the results suggests that a strong concern for the environment will result in consumers intending to purchase green products and helping the environment. However, it is imperative that marketers emphasize the environmentally safe status to appeal to this group of consumers. Furthermore, results also demonstrate that conforming to subjective norms and people of influence has a significant impact on decision making which is supported by Tarkiainen and Sundqvist (2005). This suggests that social pressure or influence has a strong impact on attitudes, intentions and purchase behavior. There is sharing of information between consumers and this could lead to adoption of green electricity as this could be based on what their friends are purchasing or the aspiration of that consumer. This finding is consistent with social identity theory where peer-pressure and learning by watching others is important to get consumers to conform (Paladino and Pandit 2012). This is also consistent with the driving influence of norms in the TRA/TPB and attribution theory whereby consumers reflect observed third party behaviors (e.g., Weiner 1985). This suggests that policy makers and organizations should seek to use external influences that are credible to impact green purchase behavior. Consistent with existing knowledge, attitudes has a very strong influence on the intention to purchase green electricity. Thus, marketers should focus on influencing attitudes towards helping the environment and purchasing green electricity. For example, an education campaigns and a consistent integrated marketing campaign would help influence consumer attitudes. However, the results do indicate that attitudes do not have an impact on actual purchase behavior. Although consumers may have positive attitudes and intentions towards purchase of green electricity, this may not translate into actual purchase of the good. This is consistent with the precepts of TRA and TPB as well as past findings (e.g. Bird and Brown 2005; Sharma and Iyer 2012). This finding suggests that intention to pay does not automatically constitute an ability to pay.

# Exploring the Diffusion of Negative Celebrity Information on Social Media: The Case of Korean Celebrities Involved in DUI Accidents

Saraphine Pang, Korea University, Korea  
Dahye Jeong, Korea University, Korea  
Sejung Marina Choi, Korea University, Korea

## EXTENDED ABSTRACT

The popularity of new media has changed the way through which people communicate with each other. While traditional media forms mainly advocate one-way communication, where media forms communicate with mass audiences, new media forms allow for two-way communication that allow for interaction. Specifically, the rise in popularity of social media has promoted new ways for communication. Through this, people now have access to news that occurs all over the world, sans the limitation of time and location that our ancestors faced before the development of the Internet. Traditionally, journalists were the only sources of official news. Nowadays, everyone possesses the ability to distribute news or information through the Internet. This leads to problems when managing crises, where individuals or corporations involved in the negative incident need to limit the spread of such information, which sometimes may even be inaccurate and erroneous. The volatility of information spread on social media has led to increasing difficulty in managing negative events. In order to develop strategies on how to manage the spread of such negative information, our study aims to study the patterns of how this negative information is spread through a social media network - i.e. on Twitter.

The spread of negative information online can be likened to the spreading of wild forest fires. The snowballing effect of the spread of negative information online has often led to detrimental effects (Clifford, 2009; Park et al., 2012). In addition, a study by Mizerski (1982) found that people had a higher tendency to process unfavorable information as opposed to favorable information and that unfavorable information was more likely to trigger a stronger response toward the stimulus as compared to favorable information. According to the Kroloff (1988) principle, negative news is four times as influential as compared to positive news.

The concept of word-of-mouth (WOM) diffusion is a form of interpersonal communication among consumers regarding their personal experiences with a firm or product (Richins, 1984). Several studies have been performed on WOM online and the dispersion of information on the Internet (Ayes, 1999; Bakshy et al., 2012; Brown et al., 2007; Dellarocas, 2003; Hansen et al., 2011; Jansen et al., 2009; Romero et al., 2011; Yang and Leskovec, 2010; Zhao et al., 2010).

Most research on WOM and information dispersion focused on positive effects. Little attention has been given to the dispersion of negative word-of-mouth and the potential detrimental effects of the phenomenon. Furthermore, to our best knowledge, there has been no research focusing on negative information related to a celebrity. Thus, our research attempts to fill the gap in this growing line of literature by focusing on the network aspects of the spread of negative information on online social networking services. Therefore, the following research questions were proposed:

**RQ1:** How does negative information disperse on an online social network?

**RQ2:** What are the network variables of online social networks where diffusion of negative information occurs?

**RQ3:** How do people respond toward negative information on an online social network?

## Method

Two driving-under-influence (DUI) cases involving Gil and Gu Ja Myeong were selected due to their recency at the point of data collection. Tweets were collected using specific keywords as search terms. The search terms used were “Gil” and “#Gil” for the first incident, and “Gu Ja Myeong” and “#Gu Ja Myeong” for the second incident, in Korean. All tweets, including replies and retweets, containing these keywords were collected. Tweet extraction began on the day news reports of the negative event surfaced and concluded when there were no further search outcomes from the keyword search.

## Conclusions

As the average geodesic path length was 2.258 and 1.920 for ‘Gil’ and ‘Gu Ja Myeong’ respectively, it can be concluded that the spreading of information among regular users are restricted to an average of about two steps. The outward snowballing of information on social media was thus not as evident as expected. Moreover, two-mode analysis of the relationship between regular users and news portals/official accounts revealed a high proportion of fragmentation and many individual networks centered by the latter. This shows that users tend to obtain information from one preferred source.

While analyzing online news portals and official accounts, it was noted that these types of accounts consisted of both social media representations of mass media and Internet based online portals and communities. In the case of ‘Gu Ja Myeong’, the unofficial online based portals ( $D_{\text{Nicolastein}} = 0.134$ ,  $D_{\text{wikitree}} = 0.099$ ) were significantly more influential than the official ones ( $D_{\text{kbs\_exclusive}} = 0.012$ ). This outcome is inline with Artwick’s (2012), who discovered that a significantly higher number of tweets link to alternative content as compared to mainstream news media content. Moreover, Leavitt et al. (2009) discovered that mashable was more influential than CNN on Twitter.

It was interesting to discover that the largest proportion of tweets were regular commentary tweets. Retweets were the next largest section, while retweets with comments only composed of a minute proportion. From this observation, it can be concluded that users tend to separate the sharing of news and the commenting of news, where some might only share news by retweeting, while some would only comment about the issue. As tweets are limited to only 140 characters, it is possible that users viewed posting their response toward the issue was more important than sharing the news with others. It could have been assumed that other people in their social circle would also have access to the news from other sources i.e. online news portals, thus seeing that there was no need to share the news while responding to it at the same time.

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# Culture Moderates Biases in Search Decisions

Jake A. Pattaratanakun, University of Cambridge, UK

Vincent Mak, University of Cambridge, UK

## EXTENDED ABSTRACT

Search is a very general class of consumer decision making. In essence, it involves trading off between the opportunity to acquire more information or options that can benefit decision, and the cost of such an acquisition. Theories of rational decisions have provided “optimal stopping” strategies that maximize expected payoff in models of search. Prior experimental research on these models found that people often searched insufficiently compared with optimal benchmarks. Such under-search bias is consistent with empirical findings that consumers engaged in rather limited search for a wide range of products, and anecdotal evidence that grocery consumers searched less than retail executives expected (see e.g., Moorthy et al. 1997; Urbany et al. 1996). But Zwick et al. (2003) provided a contravening exception to these results: in their experiment, participants tended to search too much relative to the optimal stopping strategy (only) when search costs were high. However, it has never been completely clarified how such conditional systematic deviations from previous findings could have occurred.

The present research explores the explanation that Zwick et al. (2003)’s experiments were conducted with Eastern (Hong Kong) participants, whereas previous studies were largely conducted with participants from Western cultures. That is, culture has a moderating effect on participants’ biases in search decisions relative to optimal stopping strategies. Relatedly, in Ackerman and Tellis (2001)’s field study, Chinese consumers were found to take more time to shop than did Americans, a result that corroborates with the view of Easterners being inclined towards an over-search bias in contrast to Westerners. It is thus possible that cross-cultural differences is a key to resolving the differences between Zwick et al. and previous findings – although any theorizing must explain why that happened only when search costs were sufficiently high.

We conjecture that Eastern subjects, with their higher sensitivity to sunk costs and thus higher susceptibility to escalation of commitment (Keil et al. 2000), would search more than optimally – in contrast to Westerners – when search costs are high and sunk costs effects have high impact by implication. However, when search costs are low, Easterners and Westerners’ search behavior does not differ significantly and generally exhibits under-search. One pilot study and two main experiments support our theorizing.

Our laboratory were conducted with 296 student participants from two major universities in Thailand and the United Kingdom; both were top-ranked universities in their countries with comparable academic aptitude levels among their students with respect to the respective country averages. Every participant was required to perform 40 identical search tasks out of which three were selected at random for payment by converting tokens earned into local currency. The conversion rates were adjusted with relevant GDP per capita to control for the perceived incentives across culture groups. In a typical task in all experiments, participants sequentially obtained price quotes in tokens (the experimental currency). If a participants decided to stop after obtaining the  $i$ -th price quote, she earned a payoff of 700 tokens minus the lowest among the  $i$  price quotes she had obtained. After obtaining the first price quote, a participant incurred a search cost every time she sought for an additional price quote. Participants were informed that the price quotes were normally distributed with a mean of 430 tokens and standard deviation of 50 tokens.

The pilot study had a 2 (Eastern vs Western) X 2 (search cost = 5 vs 15 tokens per search) between-subjects design, and compared the search behavior of participants from an Eastern (Thailand) versus a Western (the United Kingdom) culture at two levels of search costs. In Experiment 1, we culturally primed participants from a bicultural Thai population via the task interface language. The experiment had a 3(UK vs. Thai (English interface) vs. Thai (Thai interface)) between-subjects design, while the search cost increased with the number of searches: upon obtaining the  $i$ -th price quote, an additional price quote could be obtained at a cost of  $5i$  tokens. Experiment 2 provided further process evidence, in terms of the sunk cost effect, to our theorizing. The procedures were identical to those for Experiment 1 except that sunk cost information was made non-salient through removing feedback related to the total incurred search cost at all points of decision.

Our results exhibit significant influence of culture on search decisions. In the low search cost condition of the pilot study, participant decisions did not differ significantly across culture groups: both culture groups under-searched relative to the expected payoff-maximizing optimal strategy; in the high search cost condition, Eastern subjects over-searched while Western participants searched optimally. In Experiment 1, Western participants’ decisions were close to the optimal benchmark, while bicultural participants conducting the experiment in their own language over-searched significantly. By contrast, the search behavior of the bicultural participants who conducted the experiment in English was much less different from the Western participants compared with the other group of bicultural participants. In Experiment 2, the search decisions did not differ significantly across cultures.

Our study highlights an important and systematic difference in search behavior between Easterners and Westerners. We establish that in consumer price search decisions Eastern participants are more sensitive to sunk cost variations; we demonstrate how this difference drives important differences in search behavior. More generally, our results exemplify the perils of generalizing conclusions from behavioral research in marketing as well as judgment and decision-making — which have been conducted largely in the West — across cultures. Our findings highlight the need for managers to cater for consumer search behavior that could vary systematically as a function of the particular culture of the market in conjunction with the level of search costs. For policy makers, our results suggest that, in individualist cultures, consumer education on price search should emphasize the benefit of searching. However, in collectivist cultures, consumer education on price search should be directed towards reining in over-searching.

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# Ethically Deployed Defaults: Transparency And Consumer Protection Via Disclosure And Preference Articulation

Mary Steffel, University of Cincinnati, USA  
Ruth Pogacar, University of Cincinnati, USA  
Elanor F. Williams, University of California, USA  
Ana Figueras, University of Florida, USA

## EXTENDED ABSTRACT

Consumers don't always make choices in their own best interests. For instance, sixty-eight percent of people save less than they intend to save for their retirement (Thaler and Sunstein 2008). Designing decisions in a way that nudges consumers to make choices in their own best interests offers a solution (Thaler and Sunstein 2008). Defaults are a form of choice architecture that nudge consumers by automatically enrolling them unless they opt out, or by requiring them to actively opt in. Defaults can be powerfully effective, but questions of ethicality arise. How to increase transparency and protect consumers from defaults not in their best interest without jeopardizing the effectiveness of individually and socially beneficial defaults remain open questions.

Query Theory posits that defaults are effective because they serve as a reference point (Johnson, Haubl, and Keinan 2007). If default effects are rooted in reference dependence, then disclosure should not reduce their effectiveness. However, encouraging consumers to articulate their preferences may help them reframe the reference point of the decision (Tetlock 1992), thereby reducing default effects. We examine whether defaults can be disclosed for transparency without reducing effectiveness, and whether preference articulation can attenuate default effects when not in consumers' or society's best interests.

### Experiment 1

Experiment 1 explored whether defaults influence people's choices even when people are made aware of their intent and potential influence. Participants imagined they were ordering a hot chocolate that could be served either with or without whipped cream in a 2 (choice architecture: opt-in or opt-out) x 2 (disclosure: present or absent). Participants were more likely to retain the whipped cream default in opt-out conditions than to add whipped cream in the opt-in conditions (Wald  $X^2 = 23.82$ ,  $p < .001$ , Odds Ratio = 1.73). Whipped cream choice did not vary based on default disclosure (Wald  $X^2 = .75$ ,  $p = .39$ , Odds Ratio = .91) or based on the interaction between choice architecture and disclosure (Wald  $X^2 = .03$ ,  $p = .86$ , Odds Ratio = 1.02), demonstrating that people tend to retain the default regardless of whether or not the default is disclosed.

### Experiment 2

Experiment 2 explored perceptions of ethicality when the default benefitted business or society, and whether default effectiveness depended on the beneficiary. Participants were randomly assigned to one of four versions in a 2 (choice architecture: opt-in or opt-out) x 2 (beneficiary: society or business) and asked to imagine that they had moved to a new apartment complex and could choose (opt-in) or retain (opt-out) a variety of upgraded amenities that were either green or premium. In all conditions, the intention behind the choice architecture was disclosed as in experiment 1. Participants also indicated how ethical it was for the landlord to make , green [premium] amenities opt-in [opt-out].

Overall, participants retained more amenities in the opt-out conditions than they chose to add in the opt-in conditions ( $F(1, 189) = 126.42$ ,  $p < .001$ ). There was an interaction between choice architec-

ture and beneficiary on perceived ethicality ( $F(1, 189) = 3.81$ ,  $p = .052$ ), such that participants thought the opt-out format was less ethical than the opt-in format when the amenities were premium and the upgrades benefitted the business ( $t(92) = 2.55$ ,  $p = .01$ ), but not when the amenities were green ( $t(97) = -.25$ ,  $p = .80$ ). However, despite the lower perceived ethicality, there was no interaction between choice architecture and beneficiary ( $F(1, 189) = .003$ ,  $p = .96$ ). Thus disclosure does not reduce default effectiveness, even when the default is perceived to be unethical.

### Experiment 3

Experiment 3 examined whether encouraging people to articulate their preferences reduces default effects. As in experiment 2, participants imagined adding or retaining apartment amenities that benefitted society or business in a 2 (choice architecture: opt-in or opt-out) x 2 (beneficiary: society or business) x 2 (intervention: disclosure or both disclosure and preference articulation task). In the preference articulation task conditions participants were encouraged to write about whether and why they might prefer each amenity.

Overall, participants retained more amenities in the opt-out conditions than they chose in the opt-in conditions ( $F(1, 674) = 182.37$ ,  $p < .001$ ). The default was attenuated when participants articulated their preferences ( $F(1, 674) = 16.52$ ,  $p < .001$ ). Furthermore, in the opt-out condition, participants retained fewer premium amenities after articulation relative to disclosure alone ( $F(1, 173) = 51.31$ ,  $p = .04$ ), but articulation did not decrease the number of green amenities retained ( $F(1, 172) = .516$ ,  $p = .47$ ). In the opt-in condition, participants added more green amenities after articulation than after disclosure alone ( $F(1, 167) = 16.24$ ,  $p < .001$ ), but articulation did not increase the number of premium amenities added ( $F(1, 171) = 1.99$ ,  $p = .16$ ). Encouraging people to articulate their preferences can reduce default influence. Importantly, articulation reduced business-benefitting default effectiveness but not society-benefitting default effectiveness.

### General Discussion

Disclosing defaults does not reduce their effectiveness despite the fact that defaults are viewed as less ethical when benefitting business rather than society. Techniques that encourage decision-makers to consider their preferences before encountering a default may be used to help consumers counter the influence of defaults that are not in their best interests, while still allowing marketers and policy makers to effectively nudge consumers toward choices that benefit themselves and society.

This research shows that reference dependence can be the dominant mechanism behind defaults, and that such default effects can be mitigated using a task that helps participants articulate their preferences before they make decisions. This research also contributes to the framing literature by showing that preference articulation can be used as an effective method of reframing the reference point.

Our work suggests that default disclosures can be employed for transparency. However, disclosures offer insufficient protection. Therefore, more active interventions, such as the preference articulation task described in experiments 3 and 4, may be warranted when

the default runs contrary to what consumers would likely choose without the default or when the consequences are significant (e.g., expensive upgrades or automatic renewals).

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# Self-Improvement Through Diversification: The Influence of Implicit Self-Theories on Consumers' Variety-Seeking

Ruth Pogacar, University of Cincinnati, USA  
Joshua J. Clarkson, University of Cincinnati, USA  
Mary C. Murphy, Indiana University, USA

## EXTENDED ABSTRACT

Are individuals' personalities fixed or do they change over time? Your response has a profound impact on your behavior. A wide range of research demonstrates that *implicit theories* - beliefs about the malleability of people's personalities - influence everything from our relationships to our work styles (see Dweck et al., 1995). In brief, this theory proposes two typologies: incremental and entity theorists. *Incremental* theorists believe personalities are changeable and, given this constant change, are motivated to learn about themselves and their environments (e.g., failure helps me identify an area in my life for improvement). Conversely, *entity* theorists believe personalities are fixed and, given the absence of change, are motivated to maximize their current performance (e.g., failure helps me identify an area of my life that I am unable to succeed in).

These preferences have been shown to influence the product information consumers attend to and the benefits they seek. For instance, Park and John (2012) found that, for incremental theorists, ads that emphasized the self-improvement opportunities were most effective, e.g., "there's no better way for you to learn how to have a modern sense of beauty." Conversely, for entity theorists, ads emphasizing how a product would reflect positively on the consumer were more effective, e.g., "there's no better way to show others you have a modern sense of beauty."

Importantly, these mindsets are associated with distinct underlying motivations. Specifically, incremental theorists, believing that they can develop and improve themselves, are motivated by learning. Conversely, entity theorists, believing that their personalities are fixed, are motivated to perform well.

We propose that variety-seeking provides an opportunity to develop consumption knowledge. Consequently, variety-seeking might serve as an effective means of self-improvement (rather than self-presentation) and thus a highly effective means for consumers to satisfy their motivation for learning (rather than performance). Hence, incremental theorists should be more likely to variety-seek than entity theorists due to their desire to learn and develop and the opportunity for self-improvement offered through diversified consumption experiences. Entity theorists, conversely, should be motivated by the desire to make the best consumption choice and should therefore restrict consumption to options verified to be good.

To offer an initial test of this hypothesis, forty undergraduates were randomly assigned to either incremental or entity conditions. After manipulating participants' implicit theories (Dweck and Leggett 1988) we offered them a choice of four candies such that they could choose all four of one candy, one each of four different candies, or any combination. The number of different candies selected was our index of variety-seeking. Analysis revealed a significant effect of implicit theories on variety-seeking ( $t(38) = 2.21, p = .033$ ). Specifically, those in the incremental condition chose a greater number of different candybars ( $M = 3.05, SD = .887$ ) than those in the entity theory condition ( $M = 2.45, SD = .826$ ).

To offer process evidence, we conducted a second study in which participants were asked to imagine a 'buy five get one free' deal on travel-sized toothpastes. Participants were presented with six popular toothpaste brands (pretested to be familiar) and informed they could fill their baskets with any combination of toothpastes,

so long as the total summed to six. Greater variety-seeking was reflected in a greater number of different brands selected. After selecting their toothpastes, participants completed the implicit theories scale. We then assessed participants' motivation (i.e., performance or learning) on two separate scales adapted from prior research (Button, Mathieu, and Zajac 1996; Dweck 2000) to create an index of performance motivation ( $\alpha = .82$ ) and an index of learning motivation ( $\alpha = .86$ ). The order in which these scales were presented was randomized, and higher values reflected a greater motivation for either performance or learning, respectively. As predicted, consumers' implicit theories were significantly related to variety-seeking behavior ( $\beta = -.19, t(121) = -2.09, p = .038$ ); the more individuals' endorsed the belief that personalities are changeable (i.e., an incremental theory), the greater variety of different brands they selected. Mediation analysis revealed a significant mediating pathway through both performance (95% CI:  $-.19, -.04$ ) and learning (95% CI:  $-.17, -.01$ ).

However, entity and incremental theorists should only demonstrate this variety-seeking difference when brands are familiar; when unfamiliar, entity theorists should engage in variety-seeking similarly to incremental theorists because an unfamiliar consideration set would not include a preferred option to maximize performance. Therefore, in study 3, participants were exposed to the same paradigm as in study 2, except the six toothpaste brands were pretested to be either familiar or unfamiliar. Results of participants' variety-seeking behavior revealed an implicit theory  $\times$  familiarity interaction ( $\beta = -.55, t(153) = -1.99, p = .048$ ). As predicted, for entity theorists (+1 SD), variety-seeking behavior significantly increased when exposed to the unfamiliar (as opposed to familiar) brands ( $\beta = -.49, t(153) = -4.40, p < .001$ ). For incremental theorists (-1 SD), the difference was only marginal ( $\beta = -.18, t(153) = -1.66, p = .098$ ).

These studies offer evidence for the influence of implicit theories on consumers' variety-seeking behavior. In general, incremental (versus entity) theorists are more likely to variety-seek (studies 1 and 2), an effect driven by learning and performance motivations (study 2), and bounded by brand familiarity (study 3). This research has broad marketing implications for product positioning, market segmentation, and customer retention.

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# Just Me Versus We: How Feelings of Social Connection during Positive and Negative Experiences Impact Memory

Kara Bentley, University of South Carolina, USA  
Priyali Rajagopal, University of South Carolina, USA

## EXTENDED ABSTRACT

Previous research has shown that autobiographical memory is usually biased in favor of pleasant information (Walker et al. 2003), and that positive memories are more accessible than negative memories (Lishman 1974). This positivity bias has been hypothesized to occur because of the evolutionary benefits of remembering positive events, such as maintaining a positive self-image (Talarico et al., 2009; Taylor, 1991). Our research seeks to add to this literature by examining the moderating effects of social connection on consumer memory. Specifically, we show that individuals remember their shared experiences more easily and accurately compared to their individual experiences and that these shared memories are more strongly associated with positive affect. Hence, we document a “social bias” in memory recall that promotes memory accessibility for shared experiences as compared to individual experiences. Further, we examine the role of need to belong as a moderator and document that the positivity bias holds for individuals who are low on need to belong, but the social bias holds for individuals who are high on need to belong. Based on our theorizing, we predict that shared memories are more accessible than individual memories and that people associate shared (individual) memories more strongly with positive (negative) affect. Further, consumers high (low) in need-to-belong place more value on the social (valence) aspect of memories, and therefore recall memories primarily based on degree of social connection (valence).

Study 1 (N = 26 MTurk respondents). Participants were asked to recall all of the memorable events that they had experienced during their time in college. They were then shown all of the thoughts that they had listed and asked to categorize each event as shared or individual and as positive or negative. The proportion of each type of memory (shared vs. individual, shared-positive vs. shared-negative) formed our dependent measure.

The 26 participants listed a total of 142 thoughts. A chi-square analysis ( $\chi^2(1, 142) = 6.50; p = .01$ ) revealed that shared / positive memories were the overwhelming majority of listed thoughts at 56.3% (n = 80). Thus, in line with our predictions, a larger proportion of shared (62.6%) memories than individual memories (37.4%) were listed supporting H1. Further, shared and positive memories (56.3%) outweighed shared and negative memories (6.3%), partly supporting H2 and suggesting that shared memories are correlated with positive rather than negative affect.

Study 2 (N = 81 MTurk respondents) was a 2 (Valence: Positive vs. Negative) x 2 (Social Connection: Shared vs. Individual). Our key dependent variable was response time to agree or disagree with one of the following statements “Over my lifetime, I have had a lot of shared (individual) memories that are positive (negative).”

An ANCOVA revealed a significant interaction between social connection and valence ( $F(1, 68) = 3.797; p = .056$ ). Planned contrasts show a significant effect of social connection in the negative condition ( $M_{\text{individual}} = 3.388, M_{\text{shared}} = 4.203; F(1, 31) = 6.874, p = .015$ ) indicating that for negative memories, individual experiences are more accessible than shared memories. An analysis of the response time for the thought listing revealed a marginally significant interaction between social connection and valence ( $F(1, 63) = 2.731; p = .10$ ). Planned contrasts show a significant effect of valence in the shared condition ( $M_{\text{negative}} = 2.76, M_{\text{positive}} = 1.88; F(1, 61) =$

4.35,  $p = .04$ ) indicating that for shared memories, positive experiences are more accessible than negative experiences. Other contrasts do not reach significance ( $p$ 's > .10), but are in the anticipated directions.

In study 3 (N = 75 MTurk respondents) participants were instructed to recall and list all of the memorable events that they had experienced over their lifetime. We then showed them the memories that they had listed and asked them to categorize each memory as only one of the following categories: Individual, Shared, Positive, or Negative. This process allowed us to test whether the social bias or the positivity bias dominates memory retrieval. We also captured response time to list the first memory. Finally, participants filled out the need to belong scale (Leary et al. 2009).

An analysis of the response time to categorize the first memory as either shared, individual, positive, or negative revealed a significant moderating effect of the need to belong. We recoded the data to indicate whether each thought was initially categorized based on a social aspect (i.e. shared or individual) or on a valence aspect (i.e. positive or negative) and used this variable as our categorical variable. Recoding the data in this manner allowed us to get a sense for the aspect of memory that is most important in memory categorization.

A regression with response time as the dependent variable, need to belong as the continuous variable, and method of classification as the categorical variable, as well as their interaction as predictor variables, and response time for the practice questions as covariates yielded a significant interaction ( $\beta = 6.22, t(33) = 1.68, p = .03$ ). A spotlight analysis revealed that people who are low in need-to-belong were quicker at categorizing their first thought based on affect, compared to categorizing based on social connection ( $\beta = -13.14, t(33) = -2.95, p = .006$ ), but no significant differences emerged for participants that were high in need-to-belong.

Our research contributes to the literatures on memories and social identity by documenting that social memories may be as accessible as positive memories, i.e. a social memory bias in addition to the positivity bias in memory. Further, individual differences in need to belong can moderate the importance that people place on the social connection versus the valence of a memory and impact how people recall their memories. Our findings provide greater insight into how people remember consumption experiences and advertisements, and may help us to determine which aspects of an experience will be remembered and potentially used for forming attitudes towards products and services.

# Beyond Intentions: How Emphasizing Social Consequences in Health Messages Influences Temporal Proximity and Vulnerability to Negative Health Outcomes and Leads to Less Favorable Consumption Experiences

Mitchell Murdock, University of South Carolina, USA

Priyali Rajagopal, University of South Carolina, USA

## EXTENDED ABSTRACT

Our research investigates how graphic warnings about health behaviors can be rendered more effective by highlighting the social consequences of negative health outcomes. Specifically, we investigate if temporal proximity and perceived vulnerability to negative health outcomes can be enhanced by the use of social consequences. Additionally, we investigate if health messages that highlight social consequences alter perceptions of subsequent experiences.

Research shows that temporal framing (Chandran and Menon 2004), future orientation (Kees et al. 2010), and consideration of future consequences (Kees 2011) have important effects on health behavior. Additionally, highlighting social and short-term consequences can be effective among adolescents (Keller and Lehmann 2008), while other research points to the efficacy of highlighting long-term health consequences among adults (Witte and Allen 2000). Thus, perceived temporal distance, message content, and audience specificity are important when determining health behavior perceptions. Because different consequences can have varying effects, it is important to identify what consequences other than long-term health consequences could be effective in deterring adult populations from unhealthy behaviors.

Since social consequences are considered more commonplace and immediate when compared to long-term health outcomes, we posit that emphasizing the social aspects of negative health outcomes will increase the perceived temporal proximity until the outcome. Subsequently, this increased proximity will amplify perceived vulnerability to the outcome, resulting in increased message effectiveness. This increased vulnerability will lead to differences in perceptions of experience. We conducted four empirical studies to test our hypotheses.

Study 1 was a 2 (social versus health consequences) cell between subjects design with seventy one student participants. In the health condition an image of teeth with gingivitis was paired with a warning that stated, "Not flossing regularly eventually causes gingivitis, which weakens gum tissue, and can adversely affect your health". In the social condition the warning stated, "Not flossing regularly eventually causes gingivitis, which results in bad breath, and can adversely affect your social life".

Our key dependent measures were perceived vulnerability to the outcome (e.g. "How likely do you think it is that you will get gingivitis?",  $\alpha = .63$ ) and perceived temporal proximity of the specific negative health outcome highlighted in the warning (e.g. "How far away does gingivitis seem to you?",  $\alpha = .93$ ).

In line with expectations, we found a significant main effect of consequence type on temporal proximity ( $p < .05$ ) and perceived vulnerability ( $p < .05$ ) such that social consequences elicited greater perceived vulnerability with lower temporal distance than health consequences.

Study 2 tested our prediction that emphasizing social consequences can have a delayed effect on perceptions of subsequent experience. The study was a 2 cell (social versus health consequences) between subjects design and was administered in two separate parts. Forty four members of an online panel completed both parts of the survey.

In both conditions participants watched a two-minute video about texting while driving. After watching the video, participants were instructed to "think about and list all of the social (vs. health) consequences of severely injuring yourself because you were texting while driving".

After a 48 hour delay, when participants reflected on the last text they sent while driving they viewed the experience and the text itself differently between the social and health conditions. For example, there was a main effect of consequence type on perceptions of the bad/good nature of the text sent ( $p < .05$ ) with respondents in the social condition viewing the text less favorably than those in the health condition. Further, when asked about how "well thought out" the text was, participants in the social condition indicated that the text was not as well thought out as compared to participants in the health condition ( $p < .05$ ).

In Study 3 we used the same design and procedure as study 2 but we considered a different outcome – obesity. In the first section all participants watched a short video that showed how soda consumption can lead to obesity and then listed all of the social (vs. health) consequences of obesity. Approximately 24 hours after completing the first study, we asked participants to think back to the last soda they drank and to rate it on 7-point scales ranging from bad-good, not at all enjoyable-very enjoyable, not at all pleasurable-very pleasurable, awful-nice, not at all thirst quenching- very thirst quenching). In line with our expectations, there was a main effect of consequence type on perceptions of the positive/negative nature of soda last consumed ( $p < .05$ ) with social participants less favorably inclined towards their consumed soda than health participants.

Study 4 was a 2 (social versus health consequences) cell between subjects design and comprised two parts. Forty three students participated in both parts of the two-part study. Four days after completing the first part of the study, the students participated in an ostensibly unrelated study. In this part of the study, they were given a sample of sunscreen to try and their opinions about the sunscreen were solicited.

In line with our expectations there was a main effect of type on all our dependent measures in part I including temporal proximity ( $p < .05$ ), perceived vulnerability ( $p < .05$ ) and intention to protect skin ( $p < .06$ ) such that social consequences elicited greater severity, vulnerability and intention to protect but lower temporal proximity than health consequences. A mediation analysis demonstrated that temporal proximity mediates the relationship between consequence type and vulnerability.

This research provides a theoretical contribution to psychological distance literature by illustrating how psychological distance influences health-related behaviors. More specifically, this research identifies critical message attributes (social consequences, graphic warnings) that public policy makers can use in order to alter the perceived psychological distance until the negative health outcomes which will increase the susceptibility of the negative health outcome resulting in less favorable consumption experiences. Furthermore, these studies suggest that there may be alternate routes to influence behavior other than through intentions. Specifically, if warning messages can alter perceptions of experience perhaps they can be just as effective as or even more effective at changing behavior than messages that attempt to change intentions.

# Possible Futures: Consumption in light of Political, Economic, and Environmental Uncertainty

Edward Ramirez, University of Texas - El Paso, USA

Saeed Tajdini, University of Texas - El Paso, USA

## EXTENDED ABSTRACT

The recent wave of publications on environmental sustainability suggests a growing concern regarding the effects of consumption practices on the health of our planet (Ehrenfeld 2005; Meadows, Randers, and Meadows 2004). A general consensus indicates that, left unchecked, our current consumption patterns place the longevity of our ecosystems at risk (Gore 2006). Several publications offer solutions (Press and Arnould 2009), which, if implemented, could disrupt life as we know it (Kilbourne 2010). In short, sweeping institutional change is called for, as some claim that our current systems are not properly equipped to deal with the grave threat facing mankind.

The purpose of this paper is to envision the potential impact of such proposals for change on consumers and on their consumption practices, through an analysis of eight scenarios. These scenarios are crafted with political regime, economic vitality, and environmental welfare serving as the guiding uncertainties, depicting an array of possible futures (Schwartz 1996). In short, these scenarios suggest that, depending on the magnitude of change, consumption could be eliminated or it could be enhanced, allowing for transcendental consumption in developed markets, while elevating living standards in lesser developed ones.

In the sections that follow, a brief discussion of the method of inquiry on which this exploration is based is provided. Due to space constraints, only two abbreviated versions of the eight future scenarios are described. An analysis of the impact of these scenarios on the possible future of consumption is then offered.

## Method of Inquiry

In order to gain insight into the future of consumption in light of predictions of an approaching environmental cataclysm, an assortment of future scenarios was developed (Schwartz 1996). The method was created due to skepticism in regards to extrapolative models' abilities to accurately predict the future. By using a priori thought experiments, where "one performs an intentional, structured process of intellectual deliberation in order to speculate, within a specifiable problem domain, about potential consequents (or antecedents) for a designated antecedent (or consequent)" (Yeates, 2004, p. 150), scenario planning provides decision makers with a framework for understanding what could happen, given a combination of naturally occurring, overarching, and uncertain factors. As such, thought experiments help illustrate and clarify very abstract states of affairs, thereby accelerating the process of understanding. Since the purpose of this paper is to envision the potential consequences of proposals for change on consumers and on their consumption practices occurring in the future (2050), thought experimentation may prove to be a useful tool for this context.

The scenarios' guiding dimensions are based on recurrent themes found in the literature, with the author sculpting each scenario using a blend of intuition, interpretation, and informed imagination (Gould 1991). The uncertainties identified in the literature act as independent factors which both jointly and in isolation influence consumption. Three identified uncertainties—environmental welfare, political/economic regime, and economic growth—were used to craft the scenarios, which conclude in 2050. First, since many authors suggest that unbridled capitalism, which encourages consumption and many negative externalities, does not promote environmental sustainabil-

ity, they have called for significant changes to the current system (Kilbourne 2010; Patel 2010; Smith 1998). For this reason, political/economic regime was used as one of the scenarios' guiding dimensions. In addition, since economic growth has been linked with consumer receptivity to environmentally-friendly product offerings, as well as being related with social stability, economic vitality acted as a guiding dimension (Gallagher and Muehlegger 2008; Lipset 1959; PriceWaterhouseCoopers 2008). Finally, environmental welfare acted as a guiding dimension, as many authors have foretold of the effects of environmental change. Here, two diametrically opposing situations—one with a damaged environment and another with no real changes—informed the scenarios' development.

## Scenarios

And they lived happily ever after...

Democratic capitalism controlled the economically developed world in 2050. The invisible hand rewarded firms that jointly satisfy marketplace demand, while protecting the planet—thus, averting calls for wholesale political and economic change. Market forces have incorporated environmental concern into the intersection of collective supply and demand, paving the way for enlightened economic growth and more sustainable consumption.

The economy overcame the challenges faced through the middle of 2015, maintaining full employment and the longest period of peaceful prosperity in history. Consumer demand, in conjunction with technological breakthroughs in energy, pollution prevention, and Aquarian agriculture, has fueled growth in relatively unexplored sectors.

The volatility of weather patterns appears to have subsided. Whereas there certainly have been issues with pollution, entrepreneurial firms have seized the day, capitalizing on this situation by developing new products and services that redress the environmental damage inflicted by the actions of wayward firms.

Consumption thrives in this scenario, as consumer confidence soars. These effects have resulted in rising incomes and living standards for the world's inhabitants.

## Doomsday

Pro-environmentalists overthrew established regimes worldwide in late 2025. The nation-states imposed control measures and wealth redistribution. Massive dislocations resulted. Strict government control of industry halted the engines of production. By 2050, the global economy was in a situation unheard of since the Great Depression.

With global oil stocks depleted, emaciated rainforests, rising ocean levels, dustbowl conditions pervading world breadbaskets, and highly volatile weather patterns, the health of the planet had reached the tipping point. Consumption has been radically altered in this scenario. Consumers around the globe were left struggling for mere survival.

## Discussion

Two abbreviated versions of projections of future consumption were presented. These scenarios only portray possible effects given a set of scenario dimensions. Governments, industrialists, environmentalists, and consumers should carefully evaluate scenarios when

developing policies, forging marketing strategies, making purchasing decisions, and while calling for innovative new goods and services. In addition, these actors might also craft their own versions of the scenarios, as they aim to provide support for their positions.

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# Doing and Being 'Right': Exploring Consumption, Materialism, Culture, and Happiness in India

Himadri Roy Chaudhuri, IMI-Kolkata, India

Rajat Roy, Curtin University, Australia

Fazlul K. Rabbanee, Curtin University, Australia

## EXTENDED ABSTRACT

The interaction between consumption, life satisfaction and consumers' subjective well-being is a matter of significant discussion in the recent times. Consumption as a practice, in almost every culture, manifests itself in the value and traits of materialism. However, materialism and consumption, despite their universality, are often critiqued for their roles in everyday human life. Veblen's treatment (1899) is one of the classic examples in this regard. Criticisms are mostly related to individual well-being (see Burroughs & Rindfleisch 2002 for details) as well as family structure (Rindfleisch, Burroughs, & Denton 1997). Despite its suggested ill effects, there has been continuous effort on the part of an individual to legitimize the consumption process. In this backdrop, this paper explores the antecedents of materialism and examines its relationships with life satisfaction in Indian context.

Past research suggests that consumers can strategically 'manipulate' their consumption experience (Kopalle and Lehman 2001) and they continuously seek for normative approval for consumption (Ashlee 2010). This behavior is culturally situated and context dependent as such that the individual consumption goals are conveniently moderated by extant shared meanings and values (Holbrook 1998). Materialistic people believe that the continued acquisition of possessions leads to greater happiness and satisfaction in life, and the lack of possessions leads to dissatisfaction in life (Richins 1987). Specifically, Belk (1985) suggested that materialistic people are usually possessive, non-generous, and envious. These dispositional factors also indicate a tendency to experience negative emotions. However, often satisfaction with standard of living is determined by the display of monetary value of the material possessions or income, savings, and investments or any other commercially available goods or services. An individual's evaluation of these standards can be perceived as her own evaluation of satisfaction/dissatisfaction with life conditions or concerns within the material life domain. In general, materialistic people value their material possession, attach happiness, success and devote much time and energy to such acquisitions and possession (Richins, 1987, 2004). Hence their life satisfaction is significantly influenced by the material life domain that aggregates a positive experience from acquisition and possession of material goods; material satisfaction influences the overall life satisfaction of a materialist more strongly than a non-materialistic person (Sirgy, Lee, Larsen and Wright 1998).

In the Indian context, the concept of *Karma* promulgates that an individual's current state is determined by what she has done in the past (Kopalle, Lehman and Farley 2010). Past deeds and present work are conveniently correlated using the '*Karma Philosophy*' that is well ingrained in the value system of the Eastern civilization. Karma originates in the scriptures of ancient India and preaches natural causation as well as divine intervention in distribution of the consequences of being 'good' and 'bad': however, the concept of 'fruits of hard labor' is also prevalent in the Western Civilization (Chatterjee, Rai, and Chaudhuri 2013). Materialism in Indian perspective involves a context quite different from that of Western culture. There has been an unprecedented opportunity for citizens today to mingle with others from varied diverse cultural, linguistic and religious backgrounds often share workplaces set up by multinational

companies. But with its root deep into the caste system and social stratification, there has been always a search for signs and markers of status and class, and successful Indians frequently like to display their affluence through ostentatious displays of the goods they own (Singh, 1982), however such displays have taken more subtle forms (Chaudhuri, Mazumdar, and Ghoshal 2011). Hence we attempt to explain the antecedents of materialism and its relationship with life satisfaction in Indian context, as expressed by acquisition of material goods, not only by mere possession of them.

Data for this study were collected from a total of 250 Indian consumers using a structured questionnaire through convenience sampling. The average age of the respondents is about 32 years earning average monthly income of 28,000 Indian rupees; 55.5% of them are male. The respondents were requested to recall one of their recent materialistic or experiential high involvement purchases and then were asked series of questions covering the scale items of the constructs used in the study viz. social visibility, social comparison, karma, materialism, life satisfaction and happy shopping. The constructs were primarily measured using scale items from the existing literature. We conceptualize Happy Shopping to be a construct expressing the positive emotions related to material acquisition rather than only possession. The four item scale was constructed for happy shopping following the multistage method as suggested by Churchill (1979). The scale exhibited robust psychometric values.

The study found evidence that social visibility, social comparison and karma positively influence materialism which ultimately affects life satisfaction positively. Materialism is not found to affect happy shopping. Materialism is found to fully mediate the relationships of social visibility and social comparison with life satisfaction. Besides, partial mediation of materialism is also found to occur in relationship between karma and life satisfaction. Thus the paper presents a model to establish the relationship between the antecedents of materialism and its effects on life satisfaction. These findings are value driven, culturally accepted and based on belief system. Specifically we argue that motivation to undertake social comparison and gain social visibility may drive materialism in consumers. Further, the doctrine of *Karma* also provides a normative legitimacy to materialism. In a collective society, where material aspiration may create profound psychological tension (Burroughs & Rindfleisch 2002), the consumers' instinctive search for a value based justification plays a crucial role in enhancing life satisfaction and may offer a counterbalance that help offset such negative effects.

Our results support the general feasibility of the relationship among some cultural and individual factors and assessment of their reciprocal impact on consumer behaviour. Advertisers and brand managers can benefit considerably from this research by priming the consumers with relationship between 'cause and effect'. Although our research demonstrates that those who believe in karma in India are satisfied with their life and materialism; however, it could be a fertile ground for research to know how consumers handle life satisfaction if they don't believe in Karma. Future research that makes individuals primed of this 'natural law of causality' could also be of interest.

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# Inequality Aversion: The Self-Other Perspective

Ritesh Saini, University of Texas at Arlington, USA

Zhiyong Yang, University of Texas at Arlington, USA

## EXTENDED ABSTRACT

In this paper we examine how distributive justice norms vary as a function of self vs. other relevant decisions. We find that people are more inequality averse when decisions are about others versus about themselves. However this is only true when payoffs are to be randomly distributed. When payoffs are related to a meaningful skill, decision-makers become less concerned with inequality in both self- and other-relevant decisions. This “skill shift” is more pronounced for other-relevant decisions than self-relevant decisions.

The trade-off between equality and efficiency has been a critical stress point in theories of distributive justice (Okun 1975, Rawls 1971/2009, Harsanyi 1975). Previous literature has suggested that people are inequality averse. They often sacrifice efficiency in favor of parity (Fehr & Schmidt 1999; Bolton & Ockenfels 2000). This inequality aversion persists even in situations when the person is not informed, *ex ante*, if the unequal distribution will favor her or the other parties. For instance, imagine that a person has to choose between two state-of-the worlds. State A will result in equal payoff of \$100 to all participants, including the decision-maker. State B will have a higher average payoff (say \$120), but it will vary randomly amidst the participants, with a real chance of some people getting less than \$100. The decision-maker will know her payoff only after she chooses one of these states. Even in such situations, participants typically favor the equalizing option – State A (Rawls 1971/2009, Binmore 1989). However much of the cited previous work examining this equality-efficiency tradeoff has dealt with self-relevant decisions. That is, the decision maker usually has skin in the game. It is not entirely clear if inequality aversion is similarly influential for other-relevant decisions.

The purpose of our investigation are multifold: Firstly, we want to establish whether people display inequality-aversion in other-relevant decisions. The previous literature cited above suggests that the answer to this question will be in the affirmative. But what is not entirely clear is whether this inequality aversion for other-relevant decisions is equal, more, or less, intense than for self-relevant decisions. A systematic difference in the self- versus- other preference for equality can be socially inefficient. Imagine a well-intentioned leader misreading the preferences of others, and imposing a resource allocation regime on a population which is more equal, but less efficient, than what that population prefers.

We contend that the framing of a decision as a “distributional decision” for others evokes a socio-communal relationship norm, instead of a more transactional-utilitarian norm. This invocation of a socio-communal norm will in turn enhance preference for the “equality” value, at the expense of the “efficiency” value. This will result in a higher regard for inequality-aversion in other-relevant distribution decisions. In contrast, this socio-communal norm will be less impactful, and somewhat counterbalanced, by one’s self-serving preferences when making a self-relevant distribution decision. Therefore we expect a systematic self-other disparity, where distribution decisions will be more equal (and less efficient) for others than for self.

*Hypothesis 1: There will be greater efficiency- (vs. equality) preference for other- (vs. self-) relevant decisions.*

Literature on perspective-taking and self-other decisions has also consistently demonstrated a strong social projection bias. This

is a result of egocentric decision-makers falsely projecting their own preferences onto others (Ross, Green & House 1977, Dawes 1990). Therefore we expect a positive relationship between self- and other-distribution decisions.

*Hypothesis 2: Self-relevant and Other-relevant distribution decisions will be positively correlated.*

In our empirical investigation, we first begin by measuring equality vs. efficiency tradeoff choices for self-relevant and other-relevant outcomes using hypothetical scenario based experiments. We elicit both outcomes from all participants and measure the within-subject self-other gap. In subsequent studies, we also measure individual risk preferences and relate these to equality-efficiency tradeoff choices. It has been previously suggested that inequality-aversion in self-relevant settings may be a manifestation of risk preferences (Christiansen & Jansen 1978). Greater risk aversion translates into a more concave utility function which, in turn, would imply greater willingness to tradeoff expected-value in order to achieve a more egalitarian wealth distribution. We reexamine this link and investigate if this extends to other-relevant decisions as well. In our initial set of experiments, unequal rewards are to be allocated randomly. In the later studies we scrutinize contexts where allocation of rewards is not random, but skill based. In particular, we investigate if skill-based situations enhance preference for efficiency (vs. equality) in both self- and other-relevant decisions, and whether this “skill shift” is similar for both types of decisions.

While preference for equality continues to be the prevailing norm of distributive justice in a variety of socio-communal settings, a preference for differentiation based on individual contributions is normative within the economic domain (Bazerman, White, & Loewenstein, 1995). We argue that in environments where “skill heterogeneity” is prevalent, distribution decisions will acquire a less relational and more transactional motivation. This will in turn lead to greater consideration for efficiency over equity, even for other-relevant decisions.

As far as self-relevant decisions are concerned, we conjecture that this shift from a relational to a transactional norm will be relatively muted. Therefore decision-makers will continue to display even higher consideration for efficiency, but this enhanced consideration will be lower for self-relevant than for other-relevant decisions.

*Hypothesis 3: A skill-based context will lead to a higher consideration for efficiency. This enhancement in consideration will be higher for other- (vs. self-) relevant decisions. Therefore we expect an interaction effect of self-other decisions X random-skill based allocation.*

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# The Psychology of Judicial Decision-Making: Ingroup/Outgroup Biases in Juror Verdicts and Sentences

Rod Duclos, Hong Kong University of Science and Technology, Hong Kong  
Geetanjali Saluja, Hong Kong University of Science and Technology, Hong Kong

## EXTENDED ABSTRACT

Research pertaining to judicial decision-making has largely shown that despite the serious nature and need for making accurate decisions; decision-making in this domain has often been plagued by biases, particularly in the form of racial and ingroup biases. Surprisingly, most of the research until now has largely looked at biases affecting the juror-defendant relationship, but not much that looks at how a juror-plaintiff relationship could affect the sentence. Given this background, we examine how ingroup biases pertaining to a plaintiff's group status can affect judgments and how they may be mitigated. First, we demonstrate that jurors' sentence for the defendant is higher when the plaintiff is ingroup, compared to outgroup. Then we explore circumstances under which an outgroup plaintiff could elicit harsher (rather than milder) sentences from jurors. Finally we show that when the outgroup plaintiff's credibility is enhanced either through religiosity or in the form of being a benevolent member of society, the ingroup bias can be eliminated to actually favor the outgroup plaintiff.

We conducted four experiments to test our predictions. In experiment 1, 316 caucasian subjects (using m-turk) were randomly assigned to a single factor design: Plaintiff's group status: Ingroup (Caucasian) vs. Outgroup 1 (African-American) vs. Outgroup 2 (Arab). Participants were presented with details of a fictitious court trial, in which the plaintiff, a woman, was sexually attacked by the defendant. Participants were also told that the judgment was basically resting on the credibility of the plaintiff relative to that of the defendant. Perception of the plaintiff's group status was manipulated by altering the name of the plaintiff to either be ingroup (Amy) or outgroup (Lakeesha & Samirah). The dependent variable was a measure asking participants to indicate the amount of jail time they would impose on the defendant. The results showed a significant main effect of plaintiff's group status. Specifically, participants were likely to impose higher jail time when the plaintiff was Amy ( $M=3.07$ ) as compared to when she was Lakeesha ( $M=2.29$ ) or Samirah ( $M=2.23$ ) ( $F(1, 313)=2.916, p=0.056$ ). This result confirmed our expectations that jurors would grant harsher punishment to the defendant when the plaintiff was an ingroup member rather than when she was an outgroup member.

In experiment 2, we introduced a baseline condition to the above design where the plaintiff's name was not released. An ANOVA revealed a main effect of plaintiff group-status on jurors' likelihood to convict ( $F(2,282)=2.816, p=.062$ ). Whereas juror proclivities did not differ for ingroup ( $M_{Amy}=4.54, SD=1.47$ ) and baseline plaintiffs ( $M_{Baseline}=4.39, SD=1.39; F(1,282)=.561, p=.454, NS$ ), jurors appeared less likely to convict the defendant when the accuser was an outgroup member (i.e.,  $M_{Lakeesha}=4.02, SD=1.66$ ; contrast  $F(1,282)=2.244, p=.13$ ; contrast  $F(1,282)=2.644, p=.11$ ).

Experiment 3 sought to mitigate the above effect. 206 Caucasian m-turk subjects were randomly assigned to a single factor design; Plaintiff's group status: Ingroup (No veil covering hair) vs. Outgroup (with veil covering the hair). Participants were presented with the same court trial scenario from study 1 this time with pictures of the plaintiff, except that in the ingroup condition, the plaintiff's hair was uncovered, while in the outgroup condition, the same woman was photoshopped to have a veil covering her hair. For the depen-

dent variable, in addition to jail time, we also measured likelihood of conviction, imposed fine and imposed community work (.806). These were averaged to form a single dependent variable measuring punishment to the defendant. Finally, we also measured perceived honesty and trustworthiness of the plaintiff (.842). These were also averaged to form a single measure of credibility. The results showed that participants were likely to impose harsher punishment when the plaintiff was an outgroup member wearing a veil ( $M=.164$ ) as compared to when she was an ingroup member wearing no veil ( $M=.156$ ) ( $F(1, 205)=4.997, p=0.026$ ). Also, participants reported higher ratings of the plaintiff's trustworthiness and honesty, when the plaintiff was an outgroup member wearing a veil ( $M=4.60$ ) than when the plaintiff was an ingroup member not wearing a veil ( $M=4.00$ ) ( $F(1, 205)=14.641, p=0.000$ ). Bootstrapping analysis confirmed the mediating role of the plaintiff's trustworthiness and honesty, when it came to the effect of veil on judgments of punishment. We constructed a 95% confidence interval (CI) and zero fell outside this interval (95% CI: [.0696, .3011]), which indicates that the indirect effect of trustworthiness and honesty was significant.

Finally in experiment 4, 396 Caucasian m-turk subjects were randomly assigned to a 2 (Plaintiff's group-status: Ingroup (Amy) vs. Outgroup (Lakeesha)) x 2 (Plaintiff's credibility: Control vs. Boosted (volunteer)) between-subjects factorial design. Procedure was same as study 1, and names were manipulated to indicate plaintiff's group status. To boost the plaintiff's credibility, the plaintiff was simply presented to be an active volunteer for local organizations in her community. In the control condition, there was no such mention. The dependent variable measured likelihood to convict the defendant. A 2 (Plaintiff's group status) x 2 (Plaintiff's credibility) ANOVA on likelihood to punish the defendant yielded a significant interaction ( $F(1, 392)=3.581, p=0.059$ ). Contrast analysis showed that in the control condition, likelihood of punishment was higher when plaintiff was Amy ( $M_{Amy}=4.45$ ) but not with Lakeesha ( $M_{Lakeesha}=4.11$ ) ( $F(1, 392)=3.225, p=0.073$ ). In the volunteer (i.e. boosted credibility) condition however, this contrast was not significant ( $M_{Amy}=4.23$  vs.  $M_{Lakeesha}=4.40$ ) ( $F(1, 392)=.796, p=ns$ ). Thus, we successfully mitigated the ingroup bias by boosting the perceived credibility of the outgroup member.

First and sadly, the present findings imply that the burden of proof seems a lot higher for the outgroup, with jurors appearing more inclined to believe a fellow ingroup plaintiff whereas an outgroup plaintiff needs to overcome a credibility hurdle. Secondly, we also show that extraneous factors, such as the plaintiff's name, items of clothing, and hobby can signal trust thereby impacting the sentencing decision for the defendant.

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# When is More Better and When is it Worse? Causal Reasoning Drives Preference between Single and Dual Benefit Products

Kelly Saporta, The Open University, Israel  
Shai Danziger, Tel-Aviv University, Israel  
Steven A. Sloman, Brown University, USA

## EXTENDED ABSTRACT

Imagine you suffer from insomnia during stressful periods. Fearing the sleepless nights, you decide to purchase a drug you hope will prevent the insomnia. You consider drug A that claims to prevent insomnia and drug B that claims to prevent insomnia and a second symptom, nausea that you do not have. If the drugs are similarly priced, would you follow the adage “the more the merrier” and purchase the drug promising two benefits or would you follow the adage “grab more, get less” and purchase the drug promising a single benefit?

In this research, we propose that consumers base such choices on causal reasoning considerations regarding the source of the symptoms. Specifically, building on causal model theory (Sloman 2005) we propose that the causal model that ‘tells’ the consumer whether the symptoms the drug treats have the same or different causes will determine whether the benefits of treating the non-focal symptom (i.e., the probability they will need to treat nausea in the above example) outweigh the costs (for example, side effects and drug interaction). We propose that when consumers hold a same cause model they will prefer the dual benefit option more (because the benefits of treating the non-focal symptom outweigh the costs), but when they hold a different causes model they will prefer the single benefit option more (because the costs outweigh the benefits).

In three studies, we tested our predictions by facing participants with a situation in which they have a specific problem (“symptom”) they decide to treat and must choose between a product that claims to treat only the focal symptom and a product that claims to treat this symptom and a non-focal symptom, at no additional monetary cost. In each study we manipulated the causal model; we measured preference, and the utility of gain and loss associated with the second benefit (that treats S2). Because our primary interest was to examine the effect of the causal model on the decision to treat S2 (purchase the dual benefit product), we manipulated the causal model by changing S1 in same cause and different-causes conditions while keeping S2 constant. To determine the utility of gain we measured the perceived probability of S2 occurrence conditioned on S1 presence [ $P(O_2/P_1)$ ] and we measured the importance of treating S2 (if present). To assess the utility of loss, we measured the perceived probability that each product (A – the single benefit product and B – the dual benefit product) would produce side effects and the importance of avoiding them.

The results indicate that the causal model specifying whether participants believe the symptoms result from the same cause or from different causes affects preference. Under the same cause model, they preferred more the dual benefit option but under the different cause model they preferred more the single benefit option. Mediation analyses shows that this is because under the same cause model people expect the utility of gain (the probability they may need to treat the second symptom) to be larger and the utility of loss (potential addition in side effects) to be smaller than under the different causes model. Studies 2 and 3 rule out alternative accounts. In study 2 we varied both the causal model (same cause vs. different causes) and the presence and strength of covariation data between the symptoms (no data, strong vs. weak covariation). Results indicate that participants made inferences directly from the causal model, because only

the causal model, and not the covariation between the symptoms or its interaction with the causal model affected preference. In study 3, we orthogonally manipulated participants causal mode (same vs. different) and symptom similarity (similar vs. different) to demonstrate that the causal model, and not symptom similarity drives preference.

To conclude, we show that the structure of consumers’ causal beliefs about products influences their inferences and preferences. More generally, the results highlight the importance of understanding consumers’ mental representation of causal claims (see also Fernbach et al, 2013). Since people use causal models to represent causal knowledge (Waldmann, Hagmayer, and Blaisdell 2006), and this affects their causal inferences, we recommend that marketers perform analyses of the causal models that their marketing claims imply. Such an analysis could inform them about which attributes/ benefits of the product they should highlight, draw attention to, or ignore. Consumers respond to messages that are presented in a language they understand. If the language of consumers’ thinking is causal, marketers should speak that language too.

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# The Gamification of Buying

Tobias Schlager, University of St.Gallen, Switzerland  
Christian Hildebrand, University of St.Gallen, Switzerland  
Gerald Häubl, University of Alberta, Canada  
Andreas Herrmann, University of St.Gallen, Switzerland

## EXTENDED ABSTRACT

Recently marketers have started to embed challenging tasks, i.e. games, in the shopping process that consumers must overcome successfully to unlock the option to acquire products, or select product features. However academic research on the role of gamification is silent on both its consequences and the underlying psychological processes. The current research examines how this gamification of the shopping process influences the desirability of an unlocked option relative to a traditional shopping process. Specifically, the current research introduces the concept of *gamification* whereby consumers “unlock” an object (such as a product, feature, or offer) in a gamified shopping process. Drawing on literature on the positive influence of effort expended on a task (Kim and Labroo 2011; Yang, Mao, and Peracchio 2012), we suggest that embedding a game in the shopping process can increase consumer preference for the unlocked option and that this effect is driven by consumers’ experienced challenge during the process and their feelings of accomplishment after successfully completing a game.

Experiment 1 was designed to demonstrate the effect of the gamified shopping process on consumer preference. 96 students received a chocolate bar for participation and were randomly assigned to either the game or the control condition. In the game condition, participants played a beerpong game and were informed that an alternative chocolate bar is unlocked if they throw the ball into one of cups from a distance of 2.5 meters. Participants of the control condition completed a filler task. Upon completion participants were free to trade initial chocolate bar for the unlocked chocolate bar (identical except for packaging color). As predicted, participants in the game condition significantly more often chose the unlocked chocolate bar than participants in the control condition ( $M_{\text{Game}}=60\%$ ,  $M_{\text{Control}}=39\%$ ,  $F(1,94)=4.120$ ,  $p < .05$ ).

Experiment 2 mirrors the experiment 1, but examines whether a gamified shopping process motivates action (i.e., payment) beyond trading between two equally attractive options. 85 students were randomly assigned to either a game or a control condition, however, they played for obtaining the right to purchase a university coffee mug. In line with our theorizing, participants in the game condition were more likely to buy the coffee mug than participants in the control condition ( $M_{\text{Game}}=58\%$ ,  $M_{\text{Control}}=33\%$ ,  $F(1,83)=5.686$ ,  $p < .05$ ).

The purpose of experiment 3 is provide both a first demonstration of the proposed mediating role of consumers’ experienced challenge in a gamified shopping process, and to manipulate the challenge induced on consumers in a between subjects design (i.e., by two game conditions that differ in their level of challenge). 151 students were randomly assigned to either a high challenge (which resembled the game condition of the previous experiments, distance 2.5 meters), the control condition or the low challenge condition in which participants had to throw the beerpong from only 25 centimeters five times into the cups. Upon completion, participants could buy a Red Bull energy drink for 1 Swiss Frank. Participants in the high challenge game condition were significantly more likely to buy the mug than the two other conditions ( $M_{\text{HighChallengeGame}}=50.00\%$ ,  $M_{\text{LowChallengeGame}}=26.00\%$ ,  $M_{\text{Control}}=30.61\%$ ,  $F(2, 148)=3.721$ ,  $p < .05$ ), supporting that the experienced challenge increased consumer preference.

Experiment 4A examines the psychological process underlying the effect and tests a set of alternative explanations. We used differ-

ent versions of a roller ball game across the experimental conditions with the outcome that the opportunity to purchase the lottery ticket (for USD .20) was unlocked. Controlling for effort, participants in the control condition had to steer a ball to the end of a straight track. The track was manipulated such that they could not fall off. Participants in the first game condition had to complete the same game but with multiple curves. If the ball fell off the track they had to start over (or were free to leave without the option to purchase the lottery ticket). In a second game condition that was designed to disentangle the mere act of winning from playing a game participants had to play the same game, but had to roll a six using a virtual dice afterwards. In a third game condition that was designed to control consumer skills required by the game participants solely had to roll a six on the virtual dice. 191 participants were randomly assigned to one of the conditions. As suggested, participants in the game condition were more likely to purchase the lottery than participants in all other conditions ( $M_{\text{RollerGame}}=68.75\%$ ,  $M_{\text{RollerGameDice}}=35.42\%$ ,  $M_{\text{DiceOnly}}=27.66\%$ ,  $M_{\text{Control}}=45.83\%$ ,  $F(3, 187)=6.67$ ,  $p < .001$ ). A mediation analysis confirmed that the experienced challenge increased the preference for purchasing the lottery. In a follow-up experiment (Experiment 4B;  $N=107$ ) we found that feelings of accomplishment mediate the effect of experienced challenge on the purchase of the lottery. Results supported the sequential mediation. Together, experiments 4A and 4B provide evidence on the mental process underlying the preference enhancing effect of a gamified shopping process.

The objective of the final experiment is to examine the evaluative consequences of a gamified shopping process. Participants had to configure a car. In the game condition participants had to unlock specific attributes (by completing the roller game) while participants in the control condition had to complete a filler task. Again, the game increased consumer preference for the unlocked attributes, however, satisfaction with the car configuration decreased pointing out that a gamified shopping process can be detrimental for consumers.

Six experiments provide converging evidence that experiencing a feeling of challenge when unlocking an object increases consumer preference for that object. By showing that overcoming challenging tasks as games can enhance preferences, the findings mainly contribute to literature that suggests that task characteristics determine whether the effort expended is experienced positively or negatively (Buechel and Janiszewski 2014; Yang, Mao, and Peracchio 2012).

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# Desirable Brand Images in East Asia and their Determinants: Analyses from a Large-Scale Consumer Survey

Bernd Schmitt, Columbia Business School, USA

Kamel Jedidi, Columbia Business School, USA

## EXTENDED ABSTRACT

What type of images do consumers desire for brands, and what motivates them to prefer such images? Exploring this issue with Asian consumers, we investigate whether all consumers in Asia share similar brand images or whether a differentiated model (e.g., contrasting developed vs. emerging markets, or a country-based model, or a city/region-within-country model) is needed. Moreover, we trace back these similarities and differences to personal values and socio-demographic factors. The research consists of a conceptual framework, analyses of a large-scale consumer survey conducted in ten countries in Asia, and practical recommendations for brand positioning in Asia.

While some scholars argue for uniformity (due to shared cultural background or the emergence of a consumer culture), others have documented cross-national difference (Alden, Steenkamp, and Batra 1999; Hofstede and Bond 1988; Hofstede and Hofstede 2005; Steenkamp and DeJong 2010). Similarly, some practitioners argue for a global positioning approach and others for localization. To find out which view is more valid, we analyze data from the “Pan-Asian Wave Study” of the Institute on Asian Consumer Insight (ACI), collected in 2013 on 6873 consumers in four “developed countries” (Japan, The Republic of Korea, Singapore and Hong Kong) and six “emerging countries” (China, India, Indonesia, the Philippines, Malaysia, and Thailand), including Tier 1 and Tier 2 cities in most markets.

Specifically, we analyzed brands positioned as local or foreign and as functional (also referred to as “utilitarian”) and experiential (or “emotional”). We developed a conceptual model that traces back brand perceptions to consumer needs and personal values. Based on prior research (Zarantonello, Jedidi and Schmitt 2012), we hypothesized a strong and positive relationship between functional consumer values and local brands, and experiential consumer values and global brands. Overall, we also proposed a positive relation between functionality and global brands, and experience and local brands.

At the aggregate model (“all of Asia”), all four structural parameter estimates were significant ( $p < .05$ ). The strongest relation was between experiential needs and foreign brands (.61). A two-group analysis contrasting consumers from developed vs. emerging markets improved the fit statistics: In developed markets, experiential needs had positive relationships (from .33 and .75) with both foreign and local brands; the other two relationships were not significant. In emerging markets all four relationships were significant. Subsequent analyses within developed and within emerging markets resulted in a further improvement for emerging consumer markets but not developed markets.

Next we traced Asian brand perceptions back to psychological values. The study focused on two self-enhancement related and consumer-relevant values from Schwartz’s (1994) “universal values” framework: achievement and hedonism. A two group analysis, contrasting “developed markets” vs. emerging markets, again showed a significant improvement compared to an aggregate “all-of-Asia” model. The key prior findings regarding the relationships between consumer needs and brand preferences were replicated. In addition, in developed markets hedonism was not a major driver for consumer needs and brand preference. There was, however, a strong positive

relationship between achievement and experiential consumer needs. The relation between achievement and functionality was weaker and functionality did not affect brand preference. In contrast, in emerging markets, achievement was more strongly related to functionality, which in turn positively related to local brands and negatively to global brands. Achievement (as well as hedonism) were related to experiential needs and then to global brands.

In a final analysis, we identified socio-demographic determinants (related to needs and brand preferences) that either directly or indirectly affected psychological values. Both the direct and indirect routes were significant. Replicating the previous analysis, both achievement and hedonism were closely related to functional and experiential consumer needs. Moreover, in terms of significance, the key determinants on values were age, marital status and education. In sum, socio-demographic factors affected personal values, which in turn influenced the relationship between consumer needs and brand preferences.

In sum, our overall conceptual model was empirically confirmed. Methodologically, our differential results call into question cultural research that compares consumers in the “east” with consumers in the “west” by arbitrarily selecting consumers in the “east.” Practically, we recommend that marketers treat developed Asian countries as one market, and position local and global brands experientially there. In addition, they should treat China, India, Thailand, Philippines, Malaysia, and Indonesia as rather distinct markets with unique positioning. Moreover, appeals to “being successful” seem to be critical in developed market, whereas in emerging markets, for global brands, messages should be about fun and indulgence, but achievement-oriented for local brands.

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# Miscalibrated Predictions of Emotional Responses to Self-Promotion

Irene Scopelliti, City University London, UK

George Loewenstein, Carnegie Mellon University, USA

Joachim Vosgerau, Tilburg University, The Netherlands

## EXTENDED ABSTRACT

Self-promotion (e.g., highlighting one's accomplishments) is a common impression management strategy that individuals use to market themselves and generate a positive impression in others. However, there are several downsides to such self-promotional strategies, and favorable impressions may be better accomplished by modest self-presentation, or even self-denigration, than by outright bragging about one's positive qualities (Ben-Ze'ev, 1993; Feather, 1993; Powers & Zuroff, 1988; Schlenker, 1980; Schlenker & Leary, 1982; Stires & Jones, 1969; Tice, 1991; Tice & Baumeister, 1990; Tice et al., 1995; Wosinka et al., 1996). Why do so many people so often seem to get the tradeoff between self-promotion and modesty wrong? We propose that excessive self-promotion results from limitations in people's emotional perspective taking when they are trying to instill a positive image in others. Emotional perspective taking requires predicting how somebody else would emotionally respond to a situation that is different from the situation that the perspective-taker is currently experiencing (Van Boven & Loewenstein, 2005). Emotional perspective taking entails two judgments along two dimensions of psychological distance (Van Boven & Loewenstein, 2005; Van Boven et al., 2013). The first is an estimate of how one would react to an emotional situation different from one's own current situation. The second consists of adjusting one's own emotional reaction for differences between oneself and others.

We argue that self-promoters err not only in miscalibrating the extent to which their behavior elicits specific emotional responses, but even, often, in the valence of the elicited response. People may talk openly about their successes and achievements to others because they are guided by a genuine belief that others will be happy for them, or proud of them, or by the intention to appear enviable, while insufficiently adjusting for any awareness that recipients may be annoyed by their claims. We predict, that self-promoters will overestimate the extent to which their behavior elicits positive emotional reactions, and underestimate the extent to which their behavior elicits negative emotional reactions, in others. As a consequence, self-promotion may have unanticipated and unintended negative social repercussions. We test these predictions in three experiments.

Experiments 1 and 2 document the predicted miscalibration; they examine whether people overestimate positive, and underestimate negative emotions that their self-promotion elicits in others. Participants recalled an instance in which they self-promoted to someone else, or they were the recipients of someone else's self-promotion, described (Experiment 1) or rated on a series of scales (Experiment 2) their counterpart's and their own emotional reactions. In accordance with egocentric judgments and insufficient adjustment, self-promoters predicted that recipients would experience fewer positive and more negative emotions than themselves (Experiment 1), and overestimated the extent to which their counterparts felt happy for and proud of them, and underestimate the extent to which they were annoyed by them (Experiment 2). However their adjustments fell well short of reaching the actual levels of recipients' experienced emotions.

Experiment 3 examines the consequences of such miscalibration, testing the prediction that individuals who seek to elicit as favorable an image as possible in others will engage in excessive self-promotion. A group of participants ("writers") was asked to

create a personal profile, either to simply describe themselves or to maximize others' interest in meeting them, and predicted how others would rate their profile on several scales (liking, interest, successfulness, and extent to which the writer is a braggart). A separate sample of participants ("judges") evaluated the profiles on the same rating scales. When instructed to maximize the favorability of their impression on other people, profile writers engaged in more self-promotion. Although the goal they were given was to increase the likelihood that they would be liked, judged successful, and that others would be interested in meeting them, their efforts backfired. More self-promotion did not change others' perceptions of success nor their interest in meeting the self-promoter, but decreased others' liking of them and increased others' perceptions of them as braggarts. Egocentrism and social projection lead individuals to self-promote in ways that have the opposite consequences of those they intend.

In summary, three experiments show that self-promoters overestimate the extent to which their self-promotion elicits positive, and underestimate the extent to which it elicits negative emotions. As a consequence, when seeking to maximize the favorability of the opinion others have of them, people engage in excessive self-promotion that has the opposite of its intended effects, decreasing liking with no positive offsetting effect on perceived successfulness or interest.

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# Mixing Friendship with Money: Guests' Monetary Gifts and Consumption at Social Events

Yaniv Shani, Tel-Aviv University, Israel

Shai Danziger, Tel-Aviv University, Israel

Marcel Zeelenberg, Tilburg University, The Netherlands

## EXTENDED ABSTRACT

The saying "Don't do business with friends" suggests that money dealings in social relationships can cause trouble. Research on the (un)acceptability of money as a gift confirms this expectation (e.g., Webley, Lea, & Portalska, 1983; Webley & Wilson, 1989). Cases in which money is actually the expected gift, even between close friends, are therefore interesting, as in, for example, Israeli weddings. One reason money may have become the preferred gift in Israeli weddings is that it is fungible, and newlyweds may need money to start their own household. Yet despite the benefits newlyweds derive from monetary gifts, many Israelis view a wedding invitation as "punishment," partly because guests are expected to give quite large monetary gifts and they may feel the bride, groom, friends and family, are judging them for how much they give. Consistent with the notion that the decision of how much to give is difficult, several popular web sites provide monetary gift-size recommendations that factor in parameters including the social tie with the newlyweds. Sometimes people decide not to attend a wedding to save money, but this course of action may harm their relationship with the hosts. Our research, however, focuses on those that attend, and we examine whether giving a substantial amount of money as a gift induces a mindset that makes people sensitive to the relation between input and output: "If I give a lot, I should consume a lot as well." Moreover, we examine the (negative) psychological consequences of adopting such a mindset in the context of an ongoing social relationship.

The context we study is interesting because it teaches us new things about the psychological outcomes of mixing money and friendship. Previous research indicates people sometimes typify social exchange as a money market (e.g., employer-employee relationships in which parties expect inputs to match outputs) and sometimes as a social market (e.g., interactions between friends, where what one gives need not be matched by what one gets) (Belk & Coon, 1983; Fiske, 1992; Flynn & Adams, 2009; McGraw & Tetlock, 2005). Moreover, we know that the mere presence of money increases the likelihood that people adopt a money-market mindset (Heyman & Ariely, 2004) and it brings about a self-sufficient orientation in which people prefer to be free of dependency and dependents (Vohs, Mead & Goode, 2008). Heyman and Ariely (2004) showed that people are sensitive to the magnitude of compensation in money markets, with work being proportional to pay, whereas in social markets, they are not. From the perspective of our research, Heyman and Ariely examined one-off interactions between strangers, an experimenter and participant, and focused on work in return for pay (labor market). By contrast, we focus on what happens when an economic transaction occurs within an ongoing social relationship, and we examine consumption in return for pay (monetary gift at a social event). Building on the aforementioned findings that indicate a strong effect of money on subsequent behavior, we predict a positive relation between the amount guests give and their consumption. We propose that (some) guests adopt a money-market mindset whereby they try to "compensate" themselves for their monetary "investment." Importantly, we propose that guests, especially those close to the hosts, may subsequently feel bad for having adopted such a mindset. We examine these questions in this research and utilize a cognitive architecture approach to reduce such negative feelings.

In our research we find that wedding guests that give a larger monetary gift consume more, implying a money-market mindset (study 1). Recalling the last wedding they had attended, guests admit to having money-market type thoughts, with such thoughts more prevalent for guests that are not close to the newlyweds than for guests that are close (study 2A). Importantly, participants think close guests will feel particularly uncomfortable for having such thoughts (study 2B). Last, we find in a hypothetical wedding scenario (study 3) and a real bachelor and bachelorette party (study 4) that close friends give more money and feel better about their monetary gift when it is given after consumption than before consumption. Event ordering did not influence gift size and feelings of guests who were not close friends (study 3).

Our research adds to the literature in several ways. First, we find that money can have such effects even between people who have an ongoing social relationship. Specifically, in study 1, we find that wedding guests who give more money consume more, and in study 2A, we find that guests who recall the last wedding they attended admit to having money-market thoughts, with such thoughts more prevalent for guests that are not close to the newlyweds than guests that are close. Second, we are the first to examine the psychological consequences of adopting a money-market mindset in the context of an ongoing social relationship. In study 2B, we find that whereas people predict most guests would feel uncomfortable for having money-market thoughts, they predict close guests would feel the worst. In study 3, we adopt a cognitive architecture approach to address the unfortunate state of affairs for close friends. Specifically, in a hypothetical task, we reverse the order of gift giving and consumption. We find that close friends give more money and feel better about their gift when they consume before giving (we replicated this effect in a real life setting in study 4). Event ordering did not influence the gift giving or feelings of guests that were not close friends (study 3). Because participants know they will ultimately give a monetary gift, this reversal is unlikely to deter close friends from adopting a money-market mindset. Rather, by providing close friends the opportunity to give more money, it may help them compensate for consuming to recoup their investment or for having money-market thoughts.

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# Exploring the Role of Social Visibility and Goal Framing in PWYW Pricing

Rajat Roy, Curtin University, Australia  
Piyush Sharma, Curtin University, Australia  
Fazlul K. Rabbanee, Curtin University, Australia

## EXTENDED ABSTRACT

Pay what you want (PWYW) is a participative pricing mechanism that allows consumers to exercise full control over pricing by letting them pay any price (including zero) for a product or service (Chandran and Morwitz, 2005; Kim, Natter and Span, 2009). Despite growing interest in PWYW pricing, there are still many research gaps. First, Kim et al. (2009) explore only the direct effects of altruism, price consciousness and reference prices on consumers' willingness to pay (WTP) but ignore their interactions with each other. Second, there is mixed findings about the impact of social motivations on PWYW pricing decisions with Kim et al. (2009) showing that consumers pay a price higher than zero in 'face-to-face' PWYW interactions; Gneezy et al. (2012) show that 'social visibility' has a negative effect on the prices paid by the consumers, whereas Machado and Sinha (2012) did not find any significant effect of social visibility. We address both these research gaps in this paper by showing that altruism does not have a direct influence on PWYW prices and its impact is moderated by price consciousness. We also show that price consciousness moderates the effect of internal reference price on WTP. Finally, we find that social visibility moderates the influence of consumer motivation (i.e., intrinsic or extrinsic) on their willingness to pay in the PWYW context.

## Theoretical Background and Hypotheses

### Moderating Role of Price Consciousness

Consumers with high levels of price consciousness tend to have lower IRP (Mazumdar et al., 2005) and are more likely to look for and pay lower prices for their purchases (Bell and Latin, 2000). We argue that highly price conscious consumers would not be willing to pay a higher price in PWYW context, even if they have higher IRP and altruistic motivation, as paying higher prices would challenge their inherent disposition towards paying lower prices. In other words, price consciousness may not only have a direct negative effect on consumers' WTP (Kim et al. 2009) but also negatively moderate the influence of IRP and ALT on WTP, as follows:

*Hypothesis 1: Internal reference price has a stronger (weaker) effect on willingness to pay for consumers with lower (higher) levels of price consciousness.*

*Hypothesis 2: Altruism has a stronger (weaker) effect on willingness to pay for consumers with lower (higher) levels of price consciousness.*

### Interaction between Goal Framing and Social Visibility

Extrinsic goals motivate people to present the self in accordance with popular social norms; whereas intrinsic goals can be undermined when external motives are provided. For example, providing rewards to undertake an intrinsically interesting activity can lead to less enjoyment while performing the activity (Deci, 1971). We propose that goal framing combined with interpersonal relations will influence pricing decisions in the PWYW setting. Specifically, consumers may be motivated by social goals such as image (extrinsic goal) to a greater extent in the company of others (public) rather than when they are alone (private). In contrast, consumers may be driven

by personal goals such as the PWYW experience (intrinsic goal) to a greater extent when they are alone (private) rather than when they are with others (public). Hence,

*Hypothesis 3: Goal framing and social visibility jointly influence willingness to pay, such that a) the impact of extrinsic goals is higher in public (vs. private) setting and b) the impact of intrinsic goals is higher in private (vs. public) setting.*

### External Reference Price (ERP)

Consumers form their external reference prices (ERP) based on the external stimuli in the purchase environment, such as suggested retail prices or regularly offered prices (Mazumdar and Papatla, 2000). However, prior research on PWYW excludes the use of external reference pricing because the sellers in a PWYW setting generally do not display any retail or suggested prices. We argue that the interaction between goal framing and social visibility proposed under H3 may no longer hold in such a situation. First, when external price information is provided, consumers will have an objective anchor to help them make their pricing decision and no longer be driven by extrinsic factors such as image concerns or intrinsic factors such as the PWYW experience. Moreover, social visibility (private vs. public) will also not matter as consumers will have an external anchor on which they can rely in order to arrive at their pricing decision in a relatively more objective manner. Hence,

*Hypothesis 4: The two way interaction between goal framing and social visibility becomes non-significant when external pricing information is provided*

## Study 1

We used a survey in Australia with 300 participants (40% females, 70% 19-28 years age) with a structured questionnaire that described an ethnic restaurant offering food in a nice ambience without charging customers a fixed price and allowing them to pay any price (including zero). We asked the respondents how much they would be willing to pay (WTP) for their food and then measured price consciousness, internal reference price, social desirability, future intentions and altruism using well-established scales followed by demographics (age, gender, income). We tested the hypotheses using hierarchical multiple regression analysis with mean-centered scores to avoid multicollinearity. Model 3 with all the two way interactions (PCO X IRP, PCO X ALT and ALT X IRP) shows the best fit ( $R^2 = .59$ , adjusted  $R^2 = .58$  ( $F(8, 291) = 53.08$ ,  $p < .001$ ) with only IRP ( $\beta = .58$ ,  $p < .001$ ) and two interaction terms, PCO X IRP ( $\beta = -.23$ ,  $p < .001$ ) and PCO X ALT ( $\beta = -.09$ ,  $p < .05$ ) showing significant effects on WTP, supporting H1 and H2.

## Study 2

We used a 2 (goal framing: intrinsic versus extrinsic) x 2 (social visibility: friends versus alone) between-subjects experiment design at a large Australian University. 127 students (67 female, 91% in 19-30 years age-group). Goal framing was manipulated by asking participants to imagine that the reason for joining the gym was to improve their fitness (intrinsic) versus looking good (extrinsic) for an

upcoming bike trip. Social visibility was manipulated by being alone or with a group of friends when making the payment for the gym. Using ANOVA we found a significant two way interaction between goal framing and social visibility ( $F(1, 95) = 4.14, p < .05$ ) for the first dependent variable (RATIO1), hence H3 is supported. Next, we found the same two way interaction between goal framing and social visibility becomes non-significant ( $F(1, 95) = 1.50, p > .05$ ) with RATIO2, thus supporting H4.

Note: References available upon request.

# Exploring the Affect and Regulatory Focus Interaction in Self-regulatory Failure

Piyush Sharma, Curtin University, Australia

Rajat Roy, Curtin University, Australia

## EXTENDED ABSTRACT

Self-regulation involves an ongoing struggle between two opposing psychological forces, desire and will-power, with self-regulatory failure occurs when the forces of desire exceed that of the will-power (Hoch and Loewenstein 1991). Self-regulatory failure is linked with social problems such as alcoholism, smoking, drug abuse, bankruptcies, debt, crime, domestic violence, school failure, teenage pregnancies and unsafe sex (Baumeister and Heatherton 1996) as well as impulse buying, compulsive shopping and over-spending (Vohs 2006; Vohs and Faber 2007), overeating and obesity, and rash financial decisions (Howlett, Kees, and Kemp 2008) in consumer research.

Prior research (e.g., Dholakia et al. 2006; Sengupta and Zhou 2007) focuses on the role of promotion focus in self-regulatory failure without exploring how prevention focus also may or may not lead to self-regulatory failure (**Gap 1**). Current literature also neglects the way different types of affect (positive versus negative) may interact with the promotion and prevention system in the decision making process (**Gap 2**). Finally, there is hardly any research on how the interaction between affect and regulatory focus may lead to self-regulatory failure in the domain of both affective consumer behavior and cognitive choice contexts (**Gap 3**).

We address all these gaps in this paper. First, we hypothesize an interaction between affect and regulatory focus with promotion focus combined with positive affect resulting in greater self-regulatory failure than with negative affect (H1), and prevention focus with negative affect leading to greater self-regulatory failure than with positive affect (H2). Next, we posit that consumers would be willing to pay a higher price for a new product under positive (vs. negative) affect (H3a) and promotion (vs. prevention) focus (H3b), and the additional amount that the consumers would be willing to pay for a new product under positive (vs. negative) affect would be greater for consumers with promotion (vs. prevention) focus (H3c).

We then use resource depletion theory to argue that consumers would be willing to pay a higher price for a new product under high (vs. low) cognitive load (H4a), and the additional amount that the consumers with promotion focus would be willing to pay for a new product under the influence of positive (vs. negative) affect (as hypothesized in H3c) would be significantly greater, when consumers are exposed to high (vs. low) cognitive load (H4b). Finally, we posit that there would be no significant difference in the amount that the consumers with prevention focus would be willing to pay for a new product under the influence of positive (vs. negative) affect, when exposed to high (vs. low) cognitive load. We use our third study to test hypotheses H3a-H3c and H4a-H4c using purchase of a new brand of MP3 player.

## Methodology

In study 1, we used a 2 (Regulatory focus: promotion vs. prevention) X 3 (Affect: positive, negative and neutral) between-subjects experimental design with 120 first year undergraduate students. We manipulated affect (e.g., Garg, Wansink, and Inman 2007) asking the participants to describe three or four things that make them happy (or, sad) and then describe in detail the one thing that made them most happy (or, sad), depending on their assigned condition. Next, the participants read a scenario used in prior research on self-regulatory failure (e.g., Dholakia et al. 2006). We checked

manipulations and measured study realism (Feick and Higie 1992) and self-regulatory failure (adapted from Dholakia et al. 2006). We also recorded the participants' dietary habits and awareness about the nutrients in popular items to disguise the purpose of our study and use these as control variables along with demographics (Age, gender and body weight).

We used hierarchical multiple regression analysis to test our hypotheses with positive and negative affect along with promotion and prevention focus as independent variables and self-regulatory failure as the dependent variable. Our final model shows a good fit ( $R^2 = .42$ ,  $F(8,111) = 38.75$ ,  $\Delta R^2 = .18$ ,  $\Delta F = 17.12$ ,  $p < .001$ ) with no significant direct effects of the four independent variables but their interaction terms as significant. Specifically, promotion focus with positive affect ( $\beta = .33$ ,  $p < .01$ ) and prevention focus with negative affect ( $\beta = .28$ ,  $p < .01$ ) show a positive interaction; whereas prevention focus with positive affect ( $\beta = -.22$ ,  $p < .01$ ) and promotion focus with negative affect ( $\beta = -.23$ ,  $p < .01$ ) show a negative interaction. Hence, both H1 and H2 are supported. None of the control variables have any significant effect.

In study 2, we again used a 2 (Regulatory focus: promotion vs. prevention) X 3 (Affect: positive, negative and neutral) between-subjects experimental design with a fresh sample of 120 first year undergraduate students. We operationalized self-regulatory failure as actual impulsive eating behavior using real food items and primed promotion vs. prevention regulatory focus as a motivational state using a well-established procedure (e.g., Pham and Avnet 2004; Pham and Avnet 2009). We operationalized self-regulatory failure by taking the participants to another room and exposing them simultaneously to a hedonic (a slice of chocolate cake) and non-hedonic snack (a bowl of vegetable salad) (e.g., Sengupta and Zhou 2007; Shiv and Fedorikhin 1999).

We tested the hypotheses using a binary logistic regression analysis with the choice between chocolate cake and vegetable salad as the dependent variable. We found a good fit ( $-2 \text{ Log Likelihood} = 3662.42$ ; Cox and Snell  $R^2 = .29$ ; Nagelkerke  $R^2 = .42$ ) and significant interactions for promotion focus with positive affect ( $\beta = .25$ ,  $p < .01$ ) and prevention focus with negative affect ( $\beta = .28$ ,  $p < .01$ ); as well as for prevention focus with positive affect ( $\beta = -.22$ ,  $p < .01$ ) and promotion focus with negative affect ( $\beta = -.21$ ,  $p < .01$ ). These findings provide further support to the hypotheses 1 and 2. Similar results were obtained using the average scores for the measured regulatory focus (promotion and prevention) and affect (positive and negative).

Finally, in study 3 we used a 2 (Regulatory focus: promotion vs. prevention) X 2 (Affect: positive, vs. negative) X 2 (cognitive load: low vs. high) between-subjects experimental design with 240 first year undergraduate students. We manipulated regulatory focus and affect by asking the participants to write essays and operationalized self-regulatory failure as the price they were willingness to pay for a new brand of mp3 player. A three-way ANOVA shows support for all the remaining hypotheses (H3a-H3c and H4a-H4c).

## Discussion

In this paper, we provide a more complete picture of the complex socio-psychological process underlying self-regulatory failure by including both types of regulatory focus (promotion vs. prevention), three types of affect (positive, negative and neutral), two types



of products (hedonic vs. non-hedonic), two types of decision making contexts (affective versus cognitive) and a wide range of dependent variables (attractiveness, preference, choice, and evaluation).

Note: References available upon request.

# Playing Game or Searching Information? How Brand Equity and Shopping Value Affect Consumer Response

George C. Shen, National Chiayi University, Taiwan  
Chun-Hsien Wang, National Chiayi University, Taiwan

## EXTENDED ABSTRACT

As more and more people use mobile phone to perform PC functions like checking mail, chatting, and playing game, mobile-based business is no longer a concept, but a doable communication tool in which meeting consumers up there. In 2013, there are more than one million applications available in Google Play, and it is now outgrown the Apple App Store and its 900 000 applications (Ownby, 2013). Obviously, the mobile application market has become more and more competitive.

Companies are trying out applying game mechanics to non-game communication activities, but plenty of their gamified applications suffering failure because of poor design or mere understanding user's need (Wolpe, 2013). It comes down to a failure to grasp the basic concepts of game design. Unlike traditional approaches, such as frequent-flyer promotions, good gamified applications tend to motivate customers enjoying as players to achieve their own objectives, and company can gain benefit when players participate the commercial campaign voluntarily rather than passive way (Groh, 2012; Thira and Patarawan, 2013). It is in need of research to investigate what attributes of the application user perceive more benefit of using the application, in turn affects user's attitude toward the applications.

The hypothesized relationships were tested by using two experiments that explore the impacts of different types of app messaging, brand attachment, and shopping value on user's responses. In Study 1, subjects answer their existing brand attitude toward the brand before download the app. A 2 (gamification vs. informational message) design was conducted. In total, 112 students participated the experiment and were randomly assigned to either receiving one of the treatments. Participants in the gamification condition were asked to play the game in the app. Participants in the informational condition were asked to check the app without playing the game. The results show that participants displayed higher word of mouth ( $M_{\text{gamification}} = 3.41$ ,  $SE = 0.91$ ;  $M_{\text{informational}} = 3.65$ ,  $SE = 0.95$ ;  $p > .05$ ) when using informational app but not significant. In contrast, brand recall is higher when using informational app ( $M_{\text{gamification}} = 3.21$ ,  $SE = 0.90$ ;  $M_{\text{informational}} = 3.92$ ,  $SE = 0.98$ ;  $p < .05$ ). Results showed a significant moderating effect of brand attachment on the relationship between app type and WOM ( $F(1, 112) = 4.84$ ,  $p < 0.01$ ), indicating that how the brand attachment intervenes consumer's response to the apps.

In study 2, 103 participants were recruited and were randomly assigned to one of the four conditions building a 2 (gamification vs. informational)  $\times$  2 (hedonic vs. utilitarian shopping value) between-subjects design to test our research hypotheses. A t-test was used to check whether the manipulations are successful. The results revealed a significant differences between the perceived enjoyment of the app ( $M_{\text{gamification}} = 4.21$ ;  $M_{\text{informational}} = 3.04$ ;  $p < .05$ ). As expected, participates in the utilitarian condition reported that they perceived high shopping task than those in the hedonic condition ( $M_{\text{utilitarian}} = 3.89$ ;  $M_{\text{hedonic}} = 2.72$ ;  $p < .05$ ). Results show that shopping value moderates the relationship between app type and WOM ( $F(1, 102) = 8.71$ ,  $p < 0.001$ ). Participants were grouped as having shopping task reveal greater WOM for informational app ( $M = 3.93$ ), those who in hedonic shopping group had higher WOM when using gamification App ( $M = 3.72$ ).

The findings provide insights in three major ways. First, the research did not support that gamification app has higher impact on consumer's positive attitude, implies that he entertainment from an app is not cortical to determine users response. Second, the findings show that two kinds of app type that most appear on the app exchange platform, affecting consumer's WOM, this impact varies with consumer's existing brand attachment. Compared to top informational app, gamification app with more enjoyable elements is more useful to evoke WOM from consumers in low brand attachment condition. Consumers with higher attitude toward the brand will display greater WOM for informational app. Our research finding supports this point that trigger of consumer's WOM depends on app type, implies that a company can choose app type based on the targeted consumer's attitude toward the brand. Finally, this study also confirms that shopping value affects WOM intention, and its effects vary with app type. Informational app enhances user's WOM when they have a shopping task to perform. By contrast, when consumers are having spare time and using an app, then they will reveal higher WOM for gamification app.

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# The Dialectical Mind Can be Sweet toward Crisis-Associated Brands

Bing Shi, Sun Yat-sen University, China  
Haizhong Wang, Sun Yat-sen University, China  
Wumei Liu, Lanzhou University, China

## EXTENDED ABSTRACT

Researchers in the product-harm crises domain reliably demonstrate negative impact on various aspects including consumer purchases (Ahluwalia, Burnkrant, and Unnava 2000; Van Heerde, Helsen, and Dekimpe 2007). However, researchers fail to pay enough attention to one important fact—consumers inhabit within a unique socio-cultural environment. They always show a tendency of identifying with their own culture(s) (Markus and Hamedani 2007). It is noteworthy that each culture predisposes its members with a specific cognitive tool kit that is likely to shape the fundamental or philosophical thinking style of its members. Up to date, few studies have been conducted on the impact of consumers' fundamental thinking style on their purchases of a brand in a crisis setting. In this study, we address this gap by examining the role of Chinese consumers' fundamental thinking style—dialectical thinking—in their purchases of a crisis-associated brand.

Dialectical thinkers tend to expect changes, avoid extreme stands, and prefer a middle road or compromise approach toward conflict resolution (Ji, Nisbett, and Su 2001; Keller, Loewenstein, and Yan 2010; Peng and Nisbett 1999). The unique cognitive patterns related to dialectical thinkers may have significant impact on their purchases of brands in a product-harm crisis setting. Based on previous investigation (e.g., Dawar and Pillutla 2000; Siomkos and Kurzbard 1994), a product-harm crisis often involves two important aspects that lead to negative outcomes (Van Heerde et al. 2007): (1) occurrences detrimental or dangerous to consumers' health and well-being, and (2) contradiction against a key brand proposition that is valuable to brand equity and supposed to satisfy consumers' primary needs. Considering the unique cognitive patterns, in a brand crisis setting, dialectical thinkers will be more likely to expect dynamic changes from detrimental or even dangerous occurrences, and will be more likely to show a compromising/tolerant approach toward contradiction against the key brand proposition.

Furthermore, an important cultural feature—the monocultural feature of mainland Chinese—should be considered. Note that cultural frame switching is often not found among monoculturals (Luna, Ringberg, and Peracchio 2008). The country-of-origin cue for a brand should not change Chinese consumers' fundamental thinking style that is deeply rooted in their own, internalized culture. This proposition is supported by empirical research suggesting that, although collectivist societies are affected by globalization that is often accompanied by individualism, there is a tendency among people in collectivist societies to conform to social norms and behave according to the collectivist cultural values (Chu 1985; Corbu 2009). Taken together, we expect:

*Hypothesis 1: Dialectical consumers will be more likely to purchase a crisis-associated brand than will non-dialectical consumers.*

*Hypothesis 2: The higher levels of purchase intention among dialectical Chinese consumers will be found not just for a crisis-associated Chinese brand, but also for a crisis-associated Western brand.*

In Study 1, research assistants approached students in the student center or cafeteria, a total of 71 students (48% girls;  $Mage = 21.11$ ,  $SD = 1.86$ ) agreed to participate in this study. Participants were randomly assigned to dialectical and non-dialectical thinking condition (i.e., DT and non-DT conditions). These priming tasks are composed of two sections: proverb-related tasks and self-reported individual experiences. Upon completion of the priming tasks, participants were further presented with a crisis scenario as follows:

“Drink A is a product with natural ingredients. This drink advocates a healthy lifestyle for consumers. It is made of natural fruits and is rich in Vitamin C. Drinking it will strengthen consumers' immunity and make them more energetic.

However, recent reports have revealed that Drink A contains artificial additives, and some consumers feel uncomfortable after drinking it”.

Participants were asked to evaluate their purchase intention with 1 representing “very unlikely to buy this drink” and 7 representing “very likely to buy this drink”. In order to avoid participants' accurate conjecture of the research goal, we asked participants to report their perception of this research goal afterwards. An ANOVA test was conducted to compare participants' purchase intention for a crisis-associated brand across gender and two types of thinking style (i.e., DT and non-DT). Thinking style was found to have a significant main effect,  $F(1, 59) = 4.37$ ,  $p < .05$ ,  $\eta^2 = 0.07$ . Participants were significantly more likely to purchase a crisis-associated brand in the dialectical thinking primed condition than in the dialectical thinking non-primed condition.

Study 2 is a between-subject design with two independent variables: thinking style (DT vs. non-DT) and COO (Chinese vs. Western). Research assistants approached students in the student center or cafeteria, a total of 148 (51% girls;  $Mage = 21.42$ ,  $SD = 2.22$ ) participants completed the study individually. We selected two brand names in Chinese characters: 大华 (pronounced as Dahua) and 韦尔奇 (pronounced as Welch) after a preliminary study. The experimental tasks in Study 2 were similar to those adopted in Study 1 with a major difference: Study 2 used Dahua and Welch to designate the products rather than Drink A.

A three-way ANOVA was conducted to compare participants' purchase intention for a crisis-associated Chinese versus Western brand across gender and the two conditions: dialectical thinking primed and non-primed. Consumers' purchase intention for a crisis-associated brand in a dialectical thinking primed ( $M = 2.38$ ,  $SD = 1.19$ ) condition was significantly higher than that in a non-primed conditions ( $M = 1.94$ ,  $SD = 1.03$ ),  $F(1, 127) = 5.25$ ,  $p < .05$ ,  $\eta^2 = 0.04$ . The two-way interaction of thinking style x COO was not significant,  $F(1, 127) = 0.04$ ,  $p = .85$ ,  $\eta^2 = 0.00$ . The increase in dialectical consumers' purchase intention was similar for a crisis-associated Chinese brand and for a crisis-associated Western brand.

In sum, this study is among the very few to explore the impacts of consumers' philosophical thinking style and a country of origin on their purchases of crisis-associated brands/products. These findings make significant contributions to ways of dealing with crisis-associated brands for consumers and for multinational corporations in the emerging and volatile Chinese market.

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# Positively Useless: Irrelevant Negative Information Enhances Positive Impressions

Meyrav Shoham, Technion – Israel Institute of Technology, Israel

Sarit Moldovan, Technion – Israel Institute of Technology, Israel

Yael Steinhart, Tel-Aviv University, Israel

## EXTENDED ABSTRACT

The current research examines the desirability and impact of irrelevant information, in the form of unhelpful online reviews. Positive and helpful user reviews have been shown to increase evaluations and sales (Chevalier and Mayzlin 2006; Zhu and Zhang 2010). While negative reviews can increase product awareness (Berger, Sorensen and Rasmussen 2010) and negative information can be beneficial in two-sided communications and reviews (Eisend 2006; Schlosser 2011), less is known about the effect of irrelevant information in the context of word of mouth and reviews. We suggest that unhelpful reviews can have a positive effect – if they are presented as being negative.

Our premise derives from the observation that online reviews are usually written by strangers, making it difficult to assess their accuracy and relevance (Schlosser 2011). When there are several well-reviewed options or consumers are uncertain of their choice, we propose that they will turn to the small number of available negative reviews, because negative information is often perceived as more diagnostic and valuable (e.g., Rozin and Royzman 2001). If negative reviews do not provide information that consumers believe to be relevant, they are perceived as unhelpful, yet they provide reassurance that “the worst is not so bad”. This enhances the perceived usefulness of the positive information and boosts product evaluations.

Irrelevant information can have positive effects if it is valued by consumers (Carpenter, Glazer and Nakamoto 1994), but can also *reduce* product evaluations if it is not valued (Brown and Carpenter 2000) and may dilute the impact of more relevant information (e.g., Meyvis and Janiszewski 2002). We build on this research and suggest that the way irrelevant information is presented may determine its impact: when irrelevant information, such as an unhelpful review, is framed *negatively*, it should lead to higher product evaluations and purchase intentions.

We thus hypothesize that evaluations will be more positive when a review set includes an unhelpful review that is framed negatively rather than positively, and compared to sets without an unhelpful review. This hypothesis is confirmed in a series of four studies in which we also examine the process underlying the effect and rule out alternative explanations.

In study 1, participants evaluated an espresso machine and were assigned to one of three conditions: a set of four positive reviews only (control) or the same four reviews with an additional unhelpful review, framed with either a positive or a negative rating (1 or 5 stars). This review provided general information about coffee that was irrelevant to evaluating the specific espresso machine. As predicted, evaluations differed across conditions ( $F(2, 74) = 3.56, p < .05$ ). They were significantly higher when the review set included a *negatively* framed unhelpful review ( $M = 5.81$ ) compared to the positive frame ( $M = 5.04, F(2, 74) = 4.86, p < .05$ ) and control conditions ( $M = 5.0, F(2, 74) = 5.73, p < .01$ ). The latter two conditions did not differ significantly ( $F < 1$ ).

Study 2 showed that the effect is moderated by familiarity with the reviewers. The student participants read reviews of an elective course, supposedly provided by either friends or strangers. Once again, there were four identical positive reviews and one unhelpful review, framed either positively (“recommended”) or negatively (“not recommended”). The review provided information that was ir-

relevant for evaluating the course (that it fit the reviewer’s schedule). The expected 2-way interaction ( $F(1,91) = 5.80, p < .05$ ) emerged: when the reviewers were strangers, evaluations were significantly higher if the review set included a negatively framed unhelpful review ( $M = 5.68$ ) rather than a positive one ( $M = 5.0, F(1, 91) = 6.42, p < .05$ ). When the reviewers were friends, unhelpful review framing did not impact evaluations ( $F < 1$ ). We also identified the underlying process of the effect: bootstrapping analysis showed that it was mediated by a greater overall perceived usefulness of reviews.

Study 3 ruled out two-sided persuasion as an alternative explanation for the effect, by showing that it stems from a lack of negative diagnostic value rather than the mere inclusion of negative information. We therefore included a condition in which the unhelpful review was replaced by a weak but helpful negative review. As expected, we found a significant difference in evaluations of a camera ( $F(2,100) = 4.71, p < .05$ ). Evaluations were significantly higher in the negative-unhelpful condition ( $M = 5.76$ ) than the positive-unhelpful condition ( $M = 5.15, F(2, 100) = 4.94, p < .05$ ) and the weak-negative condition ( $M=4.97, F(2, 100) = 8.74, p < .01$ ), confirming that our effect is different from two-sided persuasion.

Study 4 showed that the effect occurs when a negative review is personally irrelevant but not if it is relevant (and thus, truly negative). Participants read reviews of running shoes comprising either four positive reviews only or the same reviews with an additional one-star review, which contained information relevant for women but not for men. The expected gender  $\times$  review set interaction was found ( $F(1, 80) = 10.39, p < .01$ ). Men were willing to pay more for the shoes when their review set included the additional (irrelevant) review ( $M = 86.97, SD = 27.50$ ) compared to when they saw only the four positive reviews ( $M = 71.90, SD = 17.86; F(1, 80) = 5.23, p < .05$ ). Women, however, were willing to pay less when the additional (relevant) review was included ( $M = 74.70, SD=19.76$ ) than when it was not ( $M = 89.68, SD = 19.59; F(1, 80) = 5.16, p < .05$ ).

The findings demonstrate that unhelpful reviews can have a positive effect on evaluations, and that they can boost the impact of positive reviews – if they are presented with a negative frame. Lack of negative diagnosticity, rather than the mere addition of negative information, is of key importance, with seemingly irrelevant information proving quite relevant when it comes to evaluation and purchase decisions. While consumers and sellers may find some types of reviews and information unhelpful and irrelevant, these can nonetheless have an unexpected positive effect on evaluations.

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# The Effects of Goal Progress and Goal Commitment on Self-Regulation

Anirban Som, Indian Institute of Management, Trichy, India

Chris Dubelaar, Bond University, Australia

Rafi Chowdhury, Bond University, Australia

## EXTENDED ABSTRACT

Research related to goal orientation shows that goal progress and goal commitment can influence the willingness of individuals to get distracted from their focal goal (Fishbach & Dhar 2005; Zhang, Fishbach & Dhar 2007). A goal progress prime encourages individuals to do things that are incongruent with their goal. On the contrary, a goal commitment prime encourages individuals to avoid doing things that are incongruent with their goal.

The divergent effects of goal progress and goal commitment on goal attainment have been tested across a wide range of contexts e.g. academic, health and financial. However, in spite of the presence of a significantly large amount of evidence in the literature regarding the divergent effects of goal progress and goal commitment on individuals' behaviour, attempts to identify moderators of these effects are scarce. The objective of the current study is to address this gap. It is proposed, tested and observed that regulatory focus, level of goal concreteness and temporal distance of the focal goal from present can moderate the effects of goal progress and goal commitment on individuals' actions.

Results from Dholakia et al. (2006) indicate that promotion-focused individuals are more capable of resisting distractions as compared to prevention-focused individuals. Based on articles like Wiemer, Hastings & Xu (2005), it can be construed that an abstract goal (e.g. learning) is more difficult to process than a concrete goal (e.g. preparing for an examination in a particular subject). Research on temporal framing of information (e.g. Forster, Friedman & Liberman, 2004) has shown that when events are temporally distant (vs. near), individuals tend to view the events in terms of the abstract (vs. concrete) features of the event. It was therefore construed that the divergent effects of goal progress and goal commitment prime may not be unidirectional for promotion (vs. prevention focused consumers), for individuals pursuing abstract (vs. concrete) goals and for individuals pursuing distant future (vs. near future) goals.

This research study makes significant theoretical contributions to the literature on goal orientation. It explores a wide range of constructs that can interact with progress and commitment and change the magnitude of these effects on individuals' actions. Previous research in the field of goal progress/goal commitment (e.g. Fishbach & Dhar 2005) has not attempted to identify boundaries of the effects of progress/commitment and has instead concentrated on showing the effects albeit with different primes and across different contexts. The current study identifies such a framework.

The current research also has significant contributions for the balancing and highlighting literature (e.g. Huber, Goldsmith & Mogliner 2008) which has been well researched in the marketing context (e.g. Dhar & Simonson 1999; Drolet 2002) and which identifies goal progress and commitment as one of the important contributors to its framework. Before the current research was done, the contribution of goal progress/goal commitment towards the balancing/highlighting literature looked like the following: Goal progress results in balancing and encourages individuals to engage in goal incongruent activities whereas goal commitment results in highlighting and encourages individuals to avoid engaging in goal incongruent activities.

The current research identifies three conditions (promotion - focused individuals, abstract goals, near future goals) wherein goal progress may not lead to balancing whereas it also identifies that goal

commitment would lead to highlighting irrespective of the change in regulatory focus of individuals, level of goal concreteness or the temporal distance of focal goal from present.

Thus, the current research is significant theoretically as it draws a boundary with respect to the literature on goal progress/commitment and also with respect to the literature on balancing / highlighting which is a well-researched phenomenon in the marketing context.

The marketing implications of this research can be identified as follows:

- Researchers have estimated that approximately half of the consumers in the market are promotion-focused while rest are prevention-focused (Zhao, Hoeffler & Zauberan 2007). Literature further says that consumers residing in collectivist countries (e.g. Japan) are predominantly prevention-focused whereas those residing in individualistic countries (e.g. United States) are predominantly promotion-focused. Promotion- and prevention-focused consumers exhibit different consumption patterns and different choice patterns while making purchase decisions e.g. differential degrees of emphasis on hedonic and utilitarian attributes while making purchase decisions, differential levels of self- control when faced with temptations etc. (e.g. Chitturi, Raghunathan & Mahajan 2008; Dholakia et al. 2006 etc.). The current research is the first study to actually test whether the divergent effects of goal progress and goal commitment are applicable uniformly for two sets of individuals who exhibit markedly different patterns when it comes to purchasing products in the market place.
- In one of the seminal articles on goal orientation viz. Zhang, Fishbach & Dhar (2007), it is mentioned that marketers of indulgent products (e.g. tasty yet fatty food products, holiday tour packages etc.) should frame their advertising messages in terms of goal progress in order to be able to attract individuals to purchase their products. For example, speaking about the amount of effort that one is going to invest in the future in terms of progress towards one's desired goals in life could be useful for attracting individuals to take a break from their busy schedule and purchase a vacation package (Zhang, Fishbach & Dhar 2007). In addition, talking about one's exercise plans in terms of progress towards staying fit could attract individuals to purchase tasty yet fatty food items like chocolate cakes (Zhang, Fishbach & Dhar 2007). Based on the findings of the current research it can be said that the suggestions of Zhang, Fishbach & Dhar (2007) to marketing communicators would not be enough to target consumers to purchase indulgent items. Merely highlighting marketing communications in terms of goal progress would not attract consumers to make indulgent purchases. Instead, marketing communications framed in terms of goal progress would be most effective in the following three conditions- for prevention-focused individuals, when the goals are concrete, and when the goals are in the distant future.

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# The Impact of Online Store Image Based on Ratings on New Product Quality Evaluation and Purchase Intention

Sigen Song, Anhui University of Finance and Economics China

Ping Wang, Anhui University of Finance and Economics China

Wei Xu, Anhui University of Finance and Economics China

## EXTENDED ABSTRACT

To win competition in an eCommerce environment, sellers are attempting to adopt new strategies and tactics that cater to their customers. Researchers appeared to concur that a key contributor to business performance was store image (Nevin & Houston, 1980; Samli, 1989). Common attributes include atmosphere (Lindquist, 1974, 1975), crowding degree (Harrell, Hutt, and Anderson, 1980), color in store design (Bellizzi, Crowley, and Hasty, 1983), retailer reputation (Chu & Chu, 1994), store environment (Baker et al., 1994), background music (Areni and Kim, 1993; Mattila and Wirtz, 2001; Milliman, 1982; Yalch and Spangenberg, 1990), social distance between the customers and service encounter (Goodwin, Cathy, and Frame, 1989), and even the size of shopping basket (Desai and Deabrata, 2002).

In the eCommerce context, the attributes of the online store image are proved to be different with those of traditional stores to some extent. Katerattanakul and Siau (2003) conducted an investigation of the image of the virtual store by producing a list of items according to designs and features of virtual stores from previous studies. In recent years, research has also been done to examine how traditional and online signals influence trust and perceived risk with online retailers (Aiken and Boush, 2006; Biswas and Biswas, 2004). In addition, country-of-origin is an important reputational signal for online businesses especially when the consumer is less familiar with manufacturer of the product (Reuber and Fischer, 2011). Aghekyan-Simonian et al. (2012) provided evidence that the image of online store might decrease risk perception. Other factors which might affect consumers' purchase intention include price discount (Faryabi et al., 2012) and settlement performance and usefulness of products (Chen and Teng, 2013). It is noted, however, that the ratings and online reviews by customers who purchased products and received service from virtual store can be a third category of store image, especially for new products. The question, however, is what account for the store image based on ratings and how it influences customers' quality evaluation of a new product and their willingness to buy it.

Results of informal survey suggests that the following attributes obtained an average score of six or more: transaction platform (TP), the extent to which the seller's description consistent with items (DCI), service attitude (SA), Speed of delivery (SD), shipping rate (SR), return policy (RP), positive feedback to settlers (PF), credit of the sellers (CS). With the level definition, we generated 16 online store cards based on a  $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3$  orthogonal design. We also determined the product characteristics and price for our study, with a 2 (voice recorder and search good)  $\times$  2 (599 yuan and 299 yuan) mix design, we decided on four products embedded in store image. We asked each participant to suppose that they would purchase one of the products sold in all 16 online stores, and they had to rate the product quality and purchase intention from a 10-point scale.

Data were collected from a convenience sample of 240 college students enrolled at a university in China. Before the test began, we explained the research objectives and terms in the questionnaire, and ensured that the subjects understand the meaning of the attributes of online store image and the levels of each attribute. Twelve questionnaires were not complete and deemed unusable, thus were

excluded from data analysis. This resulted in a final sample of 228 respondents. Among them, 46.9% of the respondents were female. Most of the participants were between 19 and 21 years old. All of the participants were major in Business Management. Approximately 25.44% of the participants were freshmen, 18.42% were sophomore, and 46.9% were junior.

Paired samples t test was performed to test the difference of attributes for the quality evaluation and purchase intention, the result showed that TP ( $M_{qc} = 10.94$ ,  $M_{pi} = 9.50$ ,  $p < .01$ ), SR ( $M_{qc} = 7.70$ ,  $M_{pi} = 10.68$ ,  $p < .001$ ), and RP ( $M_{qc} = 7.35$ ,  $M_{pi} = 8.15$ ,  $p < .05$ ) varied significantly for the different purposes. Data analysis has yielded some the findings: (1) The TP was considered to be a more important attribute for the purchase of experience goods than for search goods ( $F(1,225) = 3.86$ ,  $P < .1$ ). (2) The SA may promote sales of search products ( $F(1,225) = 3.01$ ,  $P < .1$ ). (3) Both quality evaluation ( $F(1,225) = 3.02$ ,  $p < .001$ ) and purchase intention ( $F(1,225) = 12.79$ ,  $p < .001$ ) of low-priced products demanded a higher CS. The mixes of the attributes of online store image have different market shares. We found that the five highest market share for the new product quality were 33%, 20.6%, 12.1%, 12.1%, and 8.3%. However, when they were asked to score their purchase intention, the five market share for the new product quality became 21.1%, 19.0%, 15.3%, 15.0%, and 10.6%. When faced with a variety of attributes with different levels, consumers tend to make compromises.

First of all, DCI, SA, CS were the most important attributes of online store image for Chinese young adult consumers. The three attributes jointly contributed more than 50% to the new product quality evaluation and purchase intention. Secondly, we found that the importance of the attributes of the online store image was closely related to product characteristics. The market share of the attributes mixes of online store image had high concentration rate on the quality evaluation while it had less dispersion on purchase intention.

There have been some limitations in the current study. Online store image can have three categories, the role of the first and the second category remained unclear. Consumers may have a different perception toward SA between the actual interaction process and the application of static rating outcome from other buyers. In the present study, we hide the product attribute information, and put respondents in a situation of purchase a new product with little information such as picture, brand, and price, this may weaken the results of our study. Future research could conduct joint analysis of both online store image and product attributes.

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# Managing the Complexity of Nostalgia: A Study of Affective and Cognitive Consequences of Nostalgic Advertising Among Consumers

Ekta Srivastava, Indian Institute of Management Lucknow, India

Satish Maheswarappa, Indian Institute of Management Lucknow, India

## EXTENDED ABSTRACT

Marketers are trying hard to expand equity and enhance relevance of their brands for the consumers of today by leveraging the emotion of nostalgia. The basis lies in a study by NBC Universal Integrated Media (2013) which showed that brands that connected to the past acquired top positions in Brand Power Index. Nostalgic advertising which gained popularity in recent years is based on cues/themes that flash back to the past. The Google reunion ad introduced in November 2013, targeting its Indian user base, is a perfect example of how effectively brands can tap into consumers' nostalgia.

The extant literature on nostalgia can be categorized into: research focusing on 1) advancing conceptual understanding of nostalgia (Stern 1992), 2) identifying antecedents (Loveland, Smeesters and Mandel 2010), 2) scale development and measurement of various dimensions of nostalgia (Holbrook 1993), 3) exploring relationships with other concepts such as possessions (Belk 1990), heritage visiting (Goulding 2001) and materialism (Rindfleisch, Freeman and Burroughs 2000), 4) determining consequences such as ad and brand attitudes, purchase intention (Muehling and Pascal 2011; 2012), (5) examining role of moderators such as gender, nostalgia proneness and attitude towards past, and (Schindler and Holbrook 2003), (6) content analysis to examine types and frequency of nostalgic ads (Madrigal and Boerstler 2007).

This research attempts to advance understanding of the emotional content of nostalgia. For this, we first examine the complex ambivalent nature of nostalgia which means that nostalgia evokes both positive and negative affect simultaneously. We develop and test some executional cues to make it more and more positive and less and less negative. We try to extend the literature by examining cognitive consequences such as processing styles. We also attempt to investigate final outcome variables such as Self-Brand Connection (SBC) and Willingness to Pay a Premium (WTP) for advertised brands. We also try to add to literature on content analysis by investigating elements used to evoke nostalgia and type of products/services using nostalgic advertisements in Indian context.

We have taken support from following theories to develop our conceptual framework around nostalgia: Affect-As-Information approach (AAI) (Schwarz and Clore 1996), Cognitive Tuning hypothesis (Bless et al. 1990), Cognitive Regulation mechanism (Bless and Fiedler 2006), Cognitive-Experiential Self-Theory (CEST) (Epstein 1994) and Self-congruity theory (Sirgy 1986). These theories have not been applied previously to the studies of nostalgic consumer behaviour.

As we are investigating the influence of positive and negative feelings evoked through nostalgia on cognitive processing, we take support from AAI, cognitive tuning hypothesis and cognitive regulation mechanism (Schwarz and Clore 1996). AAI approach, cognitive tuning hypothesis and cognitive regulation mechanism can be applied to specific emotions such as nostalgia. Further, we take support from Cognitive-Experiential Self-Theory (CEST) to define two types of cognitive processing styles, and self-congruity theory to investigate SBC as an outcome of nostalgia. According to Muehling and Pascal (2011), CEST is a relevant theory for an investigation of the effects of nostalgia.

*Hypothesis 1: Nostalgia would result in a complex ambivalent affective response*

*Hypothesis 2a: Stimulus's ability to recapture past results in stronger positive affective response to nostalgia*

*Hypothesis 2b: Stimulus's ability to recapture past results in weaker positive affective response to nostalgia*

*Hypothesis 3a: Stimulus's 'Good past, Good present' perception results in stronger positive affective response to nostalgia*

*Hypothesis 3b: Stimulus's 'Good past, Good present' perception results in weaker negative affective response to nostalgia*

*Hypothesis 4: Positive affective response to nostalgia among individuals lead to the use of top-down processing style for evaluating a nostalgic stimulus*

*Hypothesis 5: Negative affective response to nostalgia among individuals lead to the use of bottom-up processing style for evaluating a nostalgic stimulus*

*Hypothesis 6: Top-down processing style adopted for a nostalgic stimulus results in a stronger SBC as compared to bottom-up processing style*

*Hypothesis 7: Top-down processing style adopted for a nostalgic stimulus results in a stronger WTP as compared to bottom-up processing style*

We begin by identifying emotional appeals, specifically nostalgic appeals, in Indian television ads through content analysis. The intention was to gauge the presence of nostalgic appeals in Indian advertising and select ads to be used as nostalgic stimuli for our further studies.

In Study 1, we content analyzed 700 Indian TV ads aired between January 2013 and December 2013. Our inter-coder reliability range from 0.81 to 0.98 which meet the criteria suggested by Kasrajian (1977).

Study 2A was conducted to empirically verify that nostalgia is a complex ambivalent emotion. We exposed 164 respondents to three nostalgic ads selected through pre-testing on a sample of 47 students using a 6-items 7-point scale on Nostalgia, as used in past research (Muehling and Pascal 2011; 2012). We measured the ambivalence through 53-items 5-point feelings inventory adapted from Burke and Edell (1989).

In study 2B, we examine executional variables in nostalgic ads which may enhance the positive valence and reduce the negative

valence in nostalgia. We exposed 45 subjects to a Google reunion ad in order to evoke nostalgia [Mean = 5.39 on 6-item seven-point scale of nostalgia] (Muehling and Pascal, 2011; 2012). Then, these subjects were exposed to vignettes which were developed to manipulate valence in nostalgia- 'Ability to recapture past' vs 'No ability to recapture past' and 'Good past, Good present' perception and 'Good past, bad present' perception.

In study 3, we examined the influence of nostalgia on cognitive processing style. We exposed 60 subjects to a nostalgic Google reunion ad followed by vignettes ('ability to recapture past' vs 'no ability to recapture past') to manipulate positive and negative affective response to nostalgia. Then, they were shown an informative Google print ad which was created for the purpose of this study. We adopted the method used by Keller and Block (1996) to measure the extent of top-down and bottom-up processing.

In study 4, we examine the influence of cognitive processing styles on SBC and WTP. For this, we induced positive mood and negative mood among 57 subjects by adopting the method used by Chang and Pham (2013). Then, manipulation check for top-down and bottom-up processing style was done using the procedures given by Keller and Block (1996). SBC was measured by adopting scale used by Escalas (2004) while WTP was measured by adopting scale used by Netemeyer et al. (2004)

The results of study 1 revealed that nostalgic appeals are not very rare in India and comprise 12% of all emotional appeals used.

In study 2A, three factors resulted from 37 items - upbeat, negative and warm factor - which was consistent with Burke and Edell (1989). This was further tested via CFA [Chi Sq. (606, 164) = 823.48,  $p=0.00$ , RMSEA= 0.047, CFI = 0.98]. The factor structure, thus obtained, gave support to hypothesis 1.

In study 2B, we found that negative valence of nostalgia was lesser for those who were exposed to the condition- 'ability to recapture past' (Mean = 1.37, SD = .50;  $t = 3.29$ ,  $df=19$ ,  $p < .01$ ) and 'Good past, good present' (Mean = 1.55, SD = .49;  $t = 2.46$ ,  $df=22$   $p < .05$ ) than those who were exposed to the condition- 'no ability to recapture past' (Mean = 2.31, SD = .81) and 'Good past, bad present' (Mean = 2.13, SD = .65). On the other hand, there was no significant difference in the positive valence among conditions- 'ability to recapture past' and 'no ability to recapture past' and 'Good past, good present' perception and 'Good past, bad present' perception. Thus, we found support for hypothesis 2b and 3b while hypothesis 2a and 3a were not supported.

In study 3, we found that recall score was higher in case of negative affect condition of nostalgia (Mean = 5.13, SD = 2.86;  $t = -2.64$ ,  $df=58$ ,  $p < .05$ ) than that in case of positive affect condition of nostalgia (Mean = 3.34, SD = 2.33). Higher recall score implied that bottom-up processing was used in case of negative affect condition of nostalgia (Keller and Block 1996), thus supporting hypothesis 4. Moreover, imagery was higher in case of positive affect condition of nostalgia (Mean = 5.24, SD = 1.15;  $t = 3.37$ ,  $df=58$ ,  $p < .01$ ) than that in case of negative affect condition of nostalgia (Mean = 4.23, SD = 1.18). Higher imagery implied that top-down processing was used in case of positive affect condition of nostalgia (Keller and Block 1996), thus supporting hypothesis 5.

In study 4, we found that SBC was higher when top-down processing style was used (Mean = 3.94, SD = 1.12;  $t = 2.17$ ,  $df = 55$ ,  $p < .05$ ) than that in case of bottom-up processing style (Mean = 3.25, SD = 1.27). We also found that WTP was higher when top-down processing style was used (Mean = 4.76, SD = 1.35;  $t = 2.38$ ,  $df = 55$ ,  $p < .05$ ) than that in case of bottom-up processing style (Mean = 3.98, SD = 1.14). Thus, we found support for hypothesis 6 and 7.

First, we extend the literature by empirically showing that nostalgia is an ambivalent emotion through a different methodology. In addition, we identify executional cues in nostalgic ads to minimize the negative valence of nostalgia and they can be used by advertisers to predict the outcome of nostalgia. We prescribe the cognitive processing style which would be adopted when either the positive or negative valence is dominant in nostalgia. Thus, the current research can be used by marketers to prescribe the level of information to be disclosed in case of positive or negative affective response so that persuasive impact of nostalgic ads is maximized. Moreover, we determine the influence of positive and negative affect of nostalgia on SBC and WTP. Marketers may use nostalgia to increase consumers' connection to brands and charge premium from such brands by carefully manipulating affective response to nostalgia.

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# Social Media Usage Results In Purchasing Online

Philipp Hendrik Steiner, University of St. Gallen, Switzerland

Tobias Schlager, University of St. Gallen, Switzerland

Peter Maas, University of St. Gallen, Switzerland

## EXTENDED ABSTRACT

The influence of social media (SM) on any consumer's behavior has been broadly discussed in the past decade. From the consumer's perspective, SM have multiple purposes, such as enhancing social relationships and exchanging information with other consumers. Initial research in the domain of marketing has grasped the influence on the purchase process. Consumers exchange information and support each other in online communities, they discuss their recent experiences with a product in online forums or write recommendations on product review websites about how they perceive a specific product or a brand in general (Henning-Thurau et al. 2010). By means of these interactions, consumers have truly become more powerful as they nowadays can directly influence other consumers' decisions throughout the purchase process (Bernoff and Li 2008). The bad news for companies is that their influence has been steadily decreasing as a result of this shift toward consumer-to-consumer interactions. Several attempts to manage SM (e.g., Kietzmann et al. 2010) were made, nonetheless, SM cannot be *directly* influenced by companies (Hoffman and Fodor 2010). If, at all, the companies' influence is reduced to *indirectly* engineering consumers' interactions in SM by, for instance, providing links to their SM identities (Naylor, Lamberton, and West 2012).

One dominant concern in channel literature is the efficient guidance of consumers toward interaction channels that are beneficial for companies. For instance, companies may provide more accurate information via online channels and consumer may determine the specific aspect that they wish to collect more information about. However, there is a lack on knowledge about how SM may fulfill such a task.

Bringing both research areas together – research on SM and on traditional online and offline channels – provides a fruitful area of research since we still lack is *whether* and *how* the presence of SM influences the purchase process, and in particular, how SM influence the consumers' selection of the purchase channel. In particular, we observe the behavioral consequences of using SM throughout the purchase process (the consumers' selection of the purchase channel) as well as the underlying mental process (how perceptions shape these). Drawing on social identity theory, we identify customer-brand identification (CBI) with the SM channel as crucial construct in this process.

The optimal search strategy for the consumer is a weighing up between cost of search and perceived benefit (Moorthy, Ratchford, and Talukdar 1997). Searching in SM channels helps consumers to build up and confirm their own opinions. SM is perceived by consumers as a more trustworthy source of information than other channels (Foux 2006). Whilst this decision process SM users are influenced by other users (Wilcox and Stephen 2013). SM brand supporters can influence a consumer's brand evaluations and purchase intentions (Naylor, Lamberton, and West 2012; Kim and Ko 2012). But to understand human decisions it is necessary to analyze cognitive and affective aspects. In combination with the evaluation of a SM brand the customer-brand identification (CBI) will help to identify the customer's decision process of using the SM channel and the effects on the purchase channel because it contains of a cognitive and an affective part (Bagozzi and Dholakia 2006). This relationship is also influenced by other factors. Consumers also evaluate the

simplicity of online purchase, their benefit of buying online and their felt risk to buy their product online. In terms of the purchase channel, we differentiate between the most prominent possibilities – online and offline channels.

In summary, we make two hypotheses to grasp the influence of the consumers' identification with the social media brand on the selection of the purchase channel:

*Hypothesis 1: The higher the (a) cognitive and (b) affective customer-brand identification (CBI) with the SM channel, the higher the probability of making a purchase online.*

*Hypothesis 2: This relationship is mediated by the relative (a) perceived usefulness, (b) perceived ease of use and the (c) perceived risk of making a purchase online.*

We collected 2,260 valid responses by an online questionnaire. Moreover, participants had to have used at least one social media channel to research the product or service to be admitted to the survey. In our sample, 50.4% of the participants are male whereas the female proportion was 49.6%. The respondents have an average age of 39.6.

To investigate our research question, we asked consumers for the cognitive and affective identification with the SM brand that were used for acquiring information. For both, we used constructs yet used by literature (Zinkhan and Martin 1983; Lam et al. 2010). Similarly, the channel perceptions, which serve as mediators, directly stem from previous literature (Cox and Cox 2002; Verhoef et al. 2007). Same is valid for the covariate internet usage (Mathwick and Rigdon 2004). The confirmatory factor analysis indicated no problems with regards to convergent and discriminant validity.

For our focal research question, we used mediation analyses. The confidence intervals and p-values were bootstrapped (Nboot = 10,000).

For both constructs (affective and cognitive CBI), the direct effect was insignificant. The indirect effects via the three suggested mediators were all significant, indicating a full mediation of the perceptions of the purchase channel (mediation path via the relative perceived usefulness:  $p < .001$ ; mediation path via the relative perceived ease of use:  $p < .001$ ; mediation path via the relative perceived risk:  $p < .05$ ).

Our results indicate that SM usage actually influences consumer selection of the purchase channel (beyond what online behavior explains), which in turn alters behavior. A high level of identification with a SM brand increases the probability of making a purchase online. Shedding further light on the mental processes that underlie this effect, we find that this relationship is mediated by the consumers' perceptions of the channels. Therefore, we enhance current research, which has predominantly focused on SM as a marketing tool (Mangold and Faulds 2009) or its influence on consumers' purchase intention (Kim and Ko 2012). Second, drawing on social identity theory, we suggest that the cognitive and affective facet of SM determine whether consumers perceive to be "in-group" or not. Conceptually, this supports the theory that we suggested: social identity theory.

The results of our studies also have large implications for managers. First, SM might save money in terms of guiding consumers to (cheaper) online channels. Second, having a high identification with a SM brand, the likelihood of making an online purchase is increased. Thus, marketing managers may find additional value in communicating their brand via social media since consumers then chose the more cost-effective online channels.

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# Saying No to the Glow: Why Consumers Resist Arrogant Brands

Nira Munichor, Hebrew University of Jerusalem, Israel  
Yael Steinhart, Tel-Aviv University, Israel

## EXTENDED ABSTRACT

Consumers love brands, and marketers in turn invest a great deal of effort in making their brands appealing and powerful. One approach that marketers use to enhance brand image is the *communication of arrogance*—i.e., a display of superiority, accomplished by disparaging others (Brown 2012; Johnson et al. 2010). One example is the slogan of Arrogant Bastard Ale: “Hated by many. Loved by few. You’re not worthy.”

Presumably, marketers adopt an arrogant image for a brand because arrogance has positive connotations, such as heightened quality and status (e.g., Shariff and Tracy 2009), which appeal to consumers. However, arrogance also has negative connotations, such as hubris and narcissism (Cheng, Tracy, and Henrich 2010; Tracy and Robins 2007). In light of these negative connotations, we propose that in some cases brand arrogance may backfire, leading consumers to avoid arrogant brands even when they perceive those brands as high in quality and status. Specifically, we suggest that brand arrogance might pose a threat to consumers’ self-perceptions, causing them to feel inferior. We predict that the psychological threat inherent in brand arrogance will cause consumers with a priori unfavorable self-perceptions—that is, consumers who feel weak, powerless, or low in self-worth—to avoid arrogant brands. These consumers will be less able than consumers with more positive self-perceptions to tolerate the psychological threat inherent in brand arrogance, and will therefore be more motivated to protect themselves from that threat and to avoid the arrogant brand. We further suggest that arrogant-brand avoidance may reflect not only a passive, protective decision, but also an active means of restoring self-worth, via an expression of self-determination and free will (e.g., Ryan et al. 1991). Accordingly, we posit that arrogant brand avoidance may function as a means of rebuilding consumers’ self-perceptions.

Study 1 manipulated participants’ self-perceptions (positive vs. negative), and then asked them to evaluate an arrogant brand and choose between that brand and a competing neutral-image brand. Study 1a (n=60), which involved a self-expressive product, confirmed that negative (vs. positive) self-perceptions decreased the arrogant brand choice rate (37% vs. 64%,  $\chi^2(1)=4.20$ ,  $p<.05$ ). Study 1b (n=49) replicated these results using a utilitarian product and actual purchases: Participants with more negative (vs. positive) self-perceptions were less likely to choose (50% vs. 83%,  $\chi^2(1)=5.73$ ,  $p<.05$ ) and bought fewer units of the arrogant brand (1.12 vs. 2.87,  $t(47)$ ,  $p<.05$ ).

Study 2 confirmed that study 1’s results can be attributed to brand arrogance rather than to other brand features. After manipulating participants’ self-perceptions (n=96), we asked them to choose between a fictitious smartphone brand, which we manipulated to be either arrogant or non-arrogant, and an alternative neutral-image brand. We found an interaction effect ( $\chi^2(1)=2.85$ ,  $p=.09$ ): Participants with more negative self-perceptions were less likely to choose the focal brand when it was arrogant (37.5%) than when it was not arrogant (84.4%,  $\chi^2(1)=9.58$ ,  $p<.01$ ). Conversely, arrogance level did not affect choices of participants with more positive self-perceptions ( $p>.4$ ).

If consumers resist arrogant brands in order to repair their self-worth, then those who restored their self-image by other means should be less likely to resist arrogant brands. To test this hypothesis,

study 3 first manipulated participants’ self-perceptions (n=221), and then manipulated the degree to which they boosted their self-perceptions through changing their relative height perceptions (Duguid and Goncalo 2012). Participants then chose between a fictitious arrogant watch brand and a competing neutral-image brand. We found a significant interaction ( $\chi^2(1)=4.73$ ,  $p<.05$ ): Participants with more negative self-perceptions, tallness perceptions (i.e., boosted self-image) suppressed participants’ resistance to the arrogant brand; participants who felt relatively tall chose the arrogant option at a higher rate than participants who felt relatively short (78% vs. 44%,  $z(1)=-1.98$ ,  $p<.05$ ). However, perceived relative height had no effect on participants with more positive self-perceptions (51% vs. 50%,  $z(1)=-.18$ ,  $p>.1$ ).

Study 4 investigated whether arrogant-brand resistance assists consumers in reestablishing their self-image. We randomly assigned participants (n=151) to one of two conditions. These conditions determined the order in which each participant completed the following two tasks: reporting one’s self-esteem (Heatherton and Polivy’s (1991), and making a selection between a fictitious arrogant sunglasses brand and a competing neutral-image brand. As expected, among participants who resisted the arrogant brand, self-esteem reported after making the choice was significantly higher than self-esteem reported before making the choice (5.90 vs. 5.08,  $t(54)=3.01$ ,  $p<.01$ ). Conversely, among participants who chose the arrogant brand, there was not a significant difference ( $p>.9$ ).

Finally, study 5 focused on a real brand, and investigated whether reactions that express self-determination and free will but that do not relate to actual brand selection, can repair self-perceptions. We randomly assigned participants (n=105) to one of two conditions: in one condition participants had the option to express their opinions about an arrogant brand; and in the other condition participants did not have that option. We also measured brand ownership. Participants watched a video that described the positioning of a known arrogant brand. Then, half of the participants were asked to mark whether they “like” or “dislike” the brand, and the other half were not. Finally, to measure self-perceptions, we asked participants to mark the rung on a ladder that best matched their self-perception at that moment (1 to 7). As expected, brand ownership and the ability to express an opinion had an interactive effect on self-perceptions ( $F(1,101)=4.38$ ,  $p<.05$ ): Participants who did not own the brand (and were therefore more vulnerable to the threat inherent in brand arrogance), those who could express their opinion positioned themselves higher on the ladder than did those who could not express their opinion (5.59 vs. 4.49,  $t(104)=-2.72$ ,  $p<.05$ ); whereas among brand owners the ability to express an opinion (vs. not) did not significantly affect self-perceptions (5.09 vs. 5.40,  $t(104)=.78$ ,  $p>.1$ ).

Taken together, our results illustrate the key role that self-threat plays in consumers’ reactions to arrogant brands. Our findings may have important implications for consumers, by making them more aware of the influences that a brand’s image may exert on their behavior and wellbeing; and for marketers, by making them more cautious when adopting an arrogant image.



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## Decoding the Opening Process

Yixia Sun, The Chinese University of Hong Kong, China

Yuansi Hou, The Chinese University of Hong Kong, China

Robert S. Wyer, Jr., The Chinese University of Hong Kong, China

### EXTENDED ABSTRACT

When we do not know what is in a package, the discovery of its contents can often be a pleasant surprise. In many instances, however, people already know what is in the package we receive and opening it does not reveal anything new. In this case, does the mere process of opening it, or only *seeing* it being opened, influence reactions to its contents? On Yahoo Answers, a lady described her experience of being proposed like this “*The day I finally got my ring [which I had helped to choose] ...my husband brought it home in its box and popped the box open... Even though I had already seen the ring, it made me gasp. There’s something special about that moment when the box opens and reveals a ring. It can’t be explained.*” (Karin, 2011). Our research attempts to provide this explanation.

The affect that people experience when they open a box could come from two sources. First, when people do not know what is contained in the box, revealing its contents can be surprising. Whether the surprise is pleasant or unpleasant depends on the valence of the object that is revealed (Derbaix & Vanhamme, 2003). (For example, finding a cute puppy in the box could elicit pleasant surprise whereas finding a cockroach is likely to be unpleasant.) Surprise usually occurs when the object in the box is unexpected, however (Vanhamme, 2000). Consequently, the lady’s reactions in the preceding example may result from a second source of affect, namely, the opening process itself.

Exploratory behavior is intrinsically rewarding and can elicit positive feelings (Brown, 1953; Butler, 1957). Opening a package may exemplify this behavior. Even if the revealed outcome is negative such as the cockroach, the opening process per se could be still positive thus independent of the revealed outcome. To this extent, it could elicit positive feelings of enjoyment even when its contents are already familiar.

Although the positive effect of the opening process should be pronounced if individuals opened the box themselves, it should be also evident when the opening process being observed. (For evidence that individuals vicariously experience emotions similar to those of the persons they observe or imagine, see Waytz & Mitchell, 2011). In the studies we conducted, participants only observed a box being opened and did not open it themselves. By eliminating the possible effects of other factors associated with opening a package (e.g., effort, or the impact of merely touching a product on its evaluation; see Peck & Shu, 2009), this procedure permitted more effective control over the factors we assumed to underlie evaluations. We hypothesized that observing a box being opened elicits positive affect and that this affect, once experienced, influences evaluations of both the package and its contents. This could result from people’s misattribution of the affect elicited by the opening process to their feelings about the product, and the consequent use of these feelings as a basis for evaluating it (Schwarz & Clore, 1983, 1988).

The present research focused on the opening process per se, independently of its outcome. Experiment 1 provided preliminary evidence that observing a box being opened (vs. observing the box already opened) increased participants’ evaluations of a commemorative coin when they were already familiar with the coin by seeing a picture of it.

Experiment 2 more effectively distinguished between the effect of surprise and the effect of the enjoyment that participants experience

when seeing a box being opened. To do this, we presented a negatively valenced stimulus (i.e., a spider stamp) rather than a positive one. If unexpectedly encountering the picture of a spider in a box is an unpleasant surprise, it is likely to increase the intensity of people’s negative reactions to the stimulus and to decrease their evaluations of it. If, on the other hand, people are already aware of the box’s contents at the time they see it being opened, surprise may be minimal. In this case, if seeing a box being opened elicits enjoyment and these feelings transfer to the box’s contents, it should increase the favorableness of reactions to the box’s contents. Results confirmed this assumption. In *familiar* conditions in which they had seen a picture of the stamp, they evaluated it more favorably if they saw the stamp in a box being opened than if they saw it in a box that was open already (2.47 vs. 1.70, respectively;  $F(1, 180) = 8.40, p < .01$ ). In *unfamiliar* conditions in which they had no idea what was in the box, they evaluated it *less* favorably in the former case than in the latter (1.68 vs. 2.56, respectively;  $F(1, 180) = 8.19, p < .01$ ). A sequential mediation “opening conditions → surprise → enjoyment → product evaluations” was confirmed in the unfamiliar condition. (CI: from .06 to .70), implying that the surprise elicited by seeing a box opened polarized the evaluation of the product in these conditions. When the stamp was familiar, only enjoyment had an indirect effect on product evaluations (CI: from -.83 to -.03) but surprise did not (CI: from -.06 to .02).

In Experiment 3, we not only familiarized participants with the product before they saw it in the box, but also presented it in a box with a transparent cover so opening the box did not reveal its contents to any appreciable extent. Again, participants liked the product more when they were exposed to the box being opened ( $M = 4.11$ ) than when the box was already open ( $M = 3.11$ ;  $F(1, 36) = 4.99, p < .05$ ), indicating that the positive effect of observing a box being opened could be independent of the revealed outcome. Enjoyment was demonstrated mediating this effect (CI: 0.02 to 1.06).

Experiment 4 further tested this effect by using an empty box with a transparent cover. Because there was no product in the box, no expectation or surprise would be elicited. Still, participants in the opening process condition liked the box more than those in the open already condition.

Finally, Experiment 5 provided evidence that the positive effect of opening a box was independent of the box quality.

The products tested in our studies are more hedonic rather than utilitarian and thus were particularly likely to be influenced by affective reactions. Whether the opening process has an impact on utilitarian products deserves further investigation. Nevertheless, our study suggests a strategy for marketers to use in presenting their products. Followed the quote from the film *Forest Gump*, our study suggests that “If you have known the flavors of those chocolates, put them back in a box and reopen it. You will love them again.”

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# Disfluency as a Desirable Cue of Novelty

Billy Sung, University of Queensland, Australia  
Nicole Hartley, University of Queensland, Australia  
Eric J. Vanman, University of Queensland, Australia

## EXTENDED ABSTRACT

The positive effect of fluency—the subjective experience of ease in possessing information—on consumer attitude has been widely supported. Fluency may increase the perceived believability, accuracy, familiarity, value, liking, and even preference of an advertisement (see Alter & Oppenheimer, 2009 for a review). Contrary to this, recent consumer research has shown that *disfluency* can also be considered desirable. In fact, disfluency may enhance the perceived instrumentality of goal fulfilling objects (Labroo & Kim, 2009), the competence of professional services (Thompson & Ince, 2013), and the uniqueness of special-occasion products (Pocheptsova, Labroo, & Dhar, 2010). To our knowledge, no study has provided an adequate account of the desirable effect of disfluency and the competing effects of fluency and disfluency.

A review of the psychology literature suggests that fluency is highly associated with the feeling of familiarity. People perceive easy-to-read words as more familiar than words that are hard-to-read (Whittlesea & Williams, 1998). Moreover, non-famous or unfamiliar celebrity names seem more familiar and famous if ease of processing is enhanced (Jacoby, Woloshyn, & Kelley, 1989). Disfluency—the opposite of fluency—should therefore signal novelty. Although the association between fluency and familiarity is not novel in the extant literature, no research has examined whether disfluency is associated with novelty. Accordingly, we hypothesized

*Hypothesis 1: Disfluency is associated with the perception of novelty.*

Decades of research in psychology and marketing have shown that consumers associate familiarity with positivity (see Bornstein, 1989 for a review). Given this, why is disfluency desirable to consumers if it is associated with novelty. Novelty is an antecedent of interest—an evolutionarily adaptive emotion that motivates people to approach new information and experiences (Silvia, 2006). Interest is not necessarily positive in affective valence; for instance, people are more interested in novel and disturbing pictures than pleasant pictures (Turner & Silvia, 2006). Interest is therefore distinctive from enjoyment and liking. Following this, fluency may lead to enjoyment and liking whereas disfluency may result in interest. Thus, consumers may perceive both fluency and disfluency as desirable. The current research is the first to investigate and differentiate the effect of discrete emotion to explain the competing effect of fluency and disfluency. We therefore hypothesize that:

*Hypothesis 2: Disfluency may serve as a novelty cue that evokes the emotion of interest.*

*Hypothesis 3: Disfluency has an indirect effect on behavioral intention through novelty and interest.*

*Hypothesis 4: Disfluency has an indirect effect on product innovativeness through novelty and interest.*

*Hypothesis 5: The indirect effect of disfluency hypothesized in hypothesis 5 increases behavioral intention toward the advertised product.*

We conducted two experiments and a follow-up study to examine the above hypotheses. In Study 1, 118 participants (68 males) from an online consumer panel were introduced to a new product - the Leap Motion Controller. Participants read a vignette that described the functionality, the usage, and the specifications of the product. The vignette was randomly displayed either in a difficult-to-read (disfluent) font (i.e., 10-point Times New Roman in grey; Sample) or an easy-to-read (fluent) font (i.e., 14-point Times New Roman in black; Sample). Subsequently, participants completed Alexander, Lynch, and Wang's four-item product innovativeness scale (2008).

Drawing from previous conceptualization of novelty, we developed a four-item scale to measure the novelty appraisal. The participant rated the extent to which they perceive the controller as novel, unfamiliar, complex, and unique on a scale of 1 (strongly disagree) to 7 (strongly agree). The validity of the scale was confirmed by an exploratory factorial analysis with varimax rotation. At the end of the study, a memory test of the product information on the vignette was administered. Participants also completed a manipulation check for the fluency manipulation by rating whether the information on the vignette was easy-to-read on a scale of 1 (strongly disagree) to 7 (strongly agree).

The disfluency manipulation was successful ( $p < .001$ ). The fluent condition and the disfluent condition, however, performed equally well on the memory test for the product information ( $p = .456$ ). Using the bootstrapping approach, we conducted a mediation analysis based on 10,000 bootstrapping samples. In support of hypothesis one and four, disfluency had a significant indirect effect on product innovativeness through novelty (.062, 95% CI [.010, .157]).

In Study 2, 107 (22 males) undergraduate students viewed and evaluated products in four different advertisements. The printed text in the advertisements was manipulated to either be a difficult-to-read or easy-to-read font. Participants rated each product's novelty on the novelty scaled used in Study 1 and completed Olshavsky & Spreng's two-item product innovativeness scale (1996). Participants then rated whether they felt confused, interested, fear, happy, sad, surprised, and bored after viewing the advertisement on a scale of 1 (strongly disagree) to 7 (strongly agree). After viewing all the advertisements, participants completed a manipulation check where they reported whether the information on the advertisements were difficult to read. A memory test of the advertisement content was also administered.

Using the bootstrapping approach, we conducted a mediation analysis based on 10,000 bootstrapping samples. The full mediation regression model significantly accounted for 37% of the variance in behavioral intention,  $F = 14.75$ ,  $p < .001$ . Supporting hypothesis one to five, disfluency had a significant indirect effect on behavioral intention through novelty, interest, and perceived innovation,  $b = .002$ , 95% CI [.0001, .011]. In fact, disfluency had significant indirect effects on intention through: (1) novelty, (2) novelty and interest, and (3) novelty and innovativeness,  $b = .040$ , 95% CI [.006, .112],  $b = .020$ , 95% CI [.003, .065], and  $b = .021$ , 95% CI [.005, .056], respectively. These results were replicated in a follow-up study that involved a consumer panel sample and the same procedures. Sup-



porting our hypotheses, disfluency had a significant indirect effect on behavioral intention through novelty, interest, and product innovativeness,  $b = .031$ , 95% CI [.001, .148]. These findings show that disfluency can be desirable for consumers as it may serve as a novelty cue that evokes interest and in turn, enhance the perceived innovativeness and behavioral intention of a product.

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# Do Asians Keep Up with the Joneses? A Process Perspective on How Susceptibility to Interpersonal Influence and Materialistic Orientation Predict Compulsive Buying

Jiat Chow Tan, Nanyang Technological University, Singapore  
S.H. Annabel Chen, Nanyang Technological University, Singapore  
Yin-Leng Theng, Nanyang Technological University, Singapore

## EXTENDED ABSTRACT

While compulsive buying has long been of interest to consumer researchers, extant empirical studies on compulsive buying, or the chronic tendency to engage in shopping and buying behavior in excess of an individual's needs and resources, has been largely focused on Western societies. Thus, in an attempt to answer the title question of whether Asians keep up with the Joneses, the current study proposed a conceptual framework in which we modeled susceptibility to interpersonal influence and materialistic orientation as the antecedent and mediating variables, respectively, to explain a possible connection with compulsive buying, and empirically tested this framework in a sample of college students in Asia.

The focus here is on two etiological factors that have been shown to consistently predict compulsive buying, namely materialistic orientation which primarily concerned with people's desire for material goods (Richins and Dawson, 1992), and susceptibility to interpersonal influence which consists of two primary forms: susceptibility to normative influence, which refers to the consumers' tendency to conform to the expectations of others and the desire to use products that enhance their image that conforms to the expectations, and susceptibility to informational influence which relates to the predisposition to seek information about products or services from others (Bearden, Netemeyer, and Teel, 1989; Roberts, Manolis, and Tanner, 2008).

Lending credence to the interrelationships between the factors, correlational studies consistently report a positive association between susceptibility to interpersonal influence and materialistic orientation in the United States and in Asia (e.g. Chan and Prendergast, 2008; Chaplin and John, 2010). However, there exists the opportunity to further clarify the pattern of linkages between each of the factors and compulsive buying from the process perspective. As an initial step towards this, we first tested a single antecedent model which specifies that susceptibility to interpersonal influence predicts compulsive buying through two pathways: one which maps a direct relationship between the two variables and a second indirect pathway with materialistic orientation as the mediating variable. In doing so, the hypothesis is that being susceptible to interpersonal influence predisposes one to develop compulsive buying, with the indirect pathway hypothesizing that being susceptible to interpersonal influence is associated with greater materialistic orientation, which in turn, predisposes one to develop compulsive buying. We then expanded on this initial framework into a multi-antecedent model, separately modeling the effects of two types of interpersonal influence on materialistic orientation and compulsive buying with the aim to bring clarity as to which aspect of interpersonal influence may be responsible for compulsive buying.

## Method

To accomplish our research objectives, a web-based survey of 315 college students (62% females) enrolled in a full-time degree programme at a public university was conducted. The mean age was 22.0 years (SD=2.28). All questions were administered to the college students in an organized lab setting. To assess the constructs of interest in this study, the Consumer Susceptibility to Interpersonal Influence scale, the Material Values scale (Richins, 2004) and the

Compulsive Buying scale (Faber & O'Guinn, 1992) were used, with Cronbach alphas of .89, .85 and .70, respectively. Ordinary least squares (OLS) mediation analysis was employed to estimate the coefficients of the direct pathway linking susceptibility to interpersonal influence as the antecedent variable and compulsive buying as the consequent variable, and their indirect pathway via the mediating variable, materialistic orientation. Besides the participants' age and gender, their social economic status and a short measure of the possibility of social desirability bias (Reynolds, 1982) were also assessed and included as control variables in our analyses. Also, to obviate the issue of non-normally distributed mediation effects, the current study employed bootstrap mediation (bootstrap sample size of 10,000) using the PROCESS SPSS macro developed by Hayes (2012). Moreover, to ensure that common method bias did not affect our results, we ran a Harman's single-factor test prior to our main analyses.

## Results

With the single antecedent model, the results indicate that our model accounted for 20% of the adjusted variance in compulsive buying scores ( $F(5,309)=15.55, p<.001$ ). This was contributed, in part by, a significant direct effect of susceptibility to interpersonal influence on compulsive buying ( $\beta=.06, p<.01$ ). Examining the indirect pathway, we found that the constituent path linking susceptibility to interpersonal influence and materialistic orientation ( $\beta=.16, p<.001$ ), as well as the path linking materialistic orientation and compulsive buying ( $\beta=.18, p<.001$ ) were significant. Importantly, results for the indirect effect indicated that the pathway linking susceptibility to interpersonal influence on compulsive buying via materialistic orientation was significant (95% CI=.02,.08). With the expanded multi-antecedent model, the results indicate that the model accounted for 22% of the adjusted variance in compulsive buying scores ( $F(6,308)=14.24, p<.001$ ). A key result from this multi-antecedent model is that although the direct ( $\beta=-.07, p=n.s.$ ) and indirect (95% CI=-.04,.02) effects for the informational influence were not significant, normative influence yielded significant direct ( $\beta=.10, p<.01$ ) and indirect ( $\beta=.03, 95\% \text{ CI}=.02,.06$ ) effects.

## Discussion

On the whole, the findings reported above provide support for our theoretical framework. Not only did we corroborate the relationships found in prior research showing that susceptibility to interpersonal influence and materialistic orientation are potent etiological factors in predicting compulsive buying among Asian college students, we also found that one's susceptibility to normative influence plays a greater role than informational influence in predicting materialistic orientation and whether one eventually becomes compulsive in their consumption. Moreover, in tying together the findings across prior studies on compulsive buying and providing a parsimonious explanation for why certain young consumers may be more vulnerable to developing compulsive buying behaviors, our study may have important implications for our current understanding on the etiological factors of compulsive buying, as well as prevention efforts that can be aimed at reducing the occurrence of compulsive buying among Asian young consumers.

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# The Effects of Social Setting and Portion Size on Food Consumption Amount

Marcus Chee Tiong Tan, Bond University, Australia

Chris Dubelaar, Bond University, Australia

Natalina Zlatevska, Bond University, Australia

## EXTENDED ABSTRACT

How much a person eats has always been explained by an individual's hunger and satiety level (Vartanian et al., 2008). In the 1960s, scholars first discovered non-physiological factors would better predict the amount of food a person will consume (Schachter et al., 1968; Stunkard & Koch, 1964). Existing literature shows that consumers' food consumption behaviours are influenced by a number of distinctive contextual cues. These can be divided into personal contextual cues, consumption contextual cues, and food contextual cues. Individuals often seek norms of appropriateness from these contextual cues in eating events (Herman & Polivy, 2005). This research manipulates social settings and portion size, which are identified as important consumption contextual cues and food contextual cues respectively. Other contextual cues are kept constant by using an experimental method.

Consumer preferences and marketing efforts are largely characterised by the advantages of larger portion size offerings (Dubois et al., 2012). Portion size is widely recognised as having a profound impact on the amount consumed (Zlatevska et al., 2014). In contrast, it is less clear as to what effect eating with others has on the amount consumed. Studies have reported people consumed both more and less as a result of eating in a group (Herman et al., 2003). Most food is offered in different portion sizes and consumed in a social setting. Whether or not the effect of portion size will be influenced by social setting remain unanswered.

This research aims to better understand how portion size and social effects jointly affect the amount an individual is likely to consume. The research questions include: Will there be an interaction between portion size effect and social effect? Will personal characteristics moderate the effect of portion size and social influence? What is the effect of social influence when known context effects are controlled? These research gaps in the existing literature are important as both portion size and social effects are recognised as some of the most important contextual cues in the literature. These contextual cues were reported to have profound impact on an individual's consumption amount. The understanding of the combined effect, its moderator, and directionality of these contextual cues is an important advancement in the current knowledge. Social effect was reported to be stronger for people with low self-esteem (McFerran et al., 2010). Hermans and colleagues (2009; 2012) show mixed results regarding correlations between restrained eating and amount consumed. Therefore, personal contextual cues are measured to examine moderation effect.

In the face of the possible bi-directionality of social influence on the amount consumed by an individual, an experimental study design was used to keep various other contextual cues constant. A cover story was used in this research; participants signed up for a study that explores consumers' choices of holiday destination. Participants were seated at a round table in a classroom, and were given some group activities related to the cover story to induce rapport. Eating was incidental to participating in this study. Participants signed up for the experiment on a voluntary basis and were awarded course credit. An experimental design with two (portion size: small, large) by two (social setting: alone eating, social eating) between subject design was used.

This research consisted of two studies using different types of food. The food used in Study 1 was *Arnott's Nice* cookies and the food used in Study 2 was *MARS M&M's* chocolates. The cookies and chocolates in both studies were served in sealed, clear plastic containers that were opened for the participants by the experimenter. Each container was weighed before and after the experiment. In Study 1 (cookies), results show that individuals' consumption is affected by the social setting (alone eating vs social eating), but not portion size. In addition, social effect is moderated by portion size effect. Restrained eating (but not self-esteem) moderated the effects of social setting on the amount consumed by an individual. In Study 2 (chocolates), results show that individuals' consumption is affected by both the social setting (alone eating vs social eating) and portion size. Self-esteem and restrained eating both moderated the effect of portion size and social setting on consumption.

In Study 1 (cookies), portion size effect was moderated by social effect. Given that portion size has been shown to have a profound and robust impact on the amount consumed (Zlatevska et al., 2014), portion size effect was moderated by the effect of social setting, which also has a great impact on consumption amount. This finding is consistent with fixed-unit effect reported in Davis et al.'s (2014) findings. They found that individuals consumed fixed units of food regardless of the unit's size when individuals are eating in a group. However, in Study 2 (chocolates), both portion size and social setting had an impact on the amount consumed by an individual. The effects of portion size and social setting were independent and additive. The relationship between portion size and social setting differs in Study 1 and Study 2. This is explained by the difference in social visibility for different food type used in each study. The cookies that were used in Study 1 have higher social visibility compared to the small sugar coated chocolates used in Study 2. Therefore, the amount of cookies consumed by an individual is dependent on the social setting but not portion size. On the other hand, the impact of social effect and portion size effect in Study 2 are independent of each other.

The finding of the difference in the relationship between portion size and social effects for Study 1 and Study 2 will help social marketers promote healthy eating lifestyles. This can be achieved by encouraging people to have their meals in a social setting; highlight the importance of portion size effect when eating small unit sized junk food in a social setting. We now know that social setting and portion sizes interact only when the consumption behaviour of participants is visible to others. When it is not visible, the two contextual cues reduce to their main effects only.

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# Consumer Understanding of Price Promotion Communication

Pei Jie Tan, University of South Australia, Australia

Svetlana Bogomolova, University of South Australia, Australia

## EXTENDED ABSTRACT

Consumer literacy and numeracy skills applied to the shopping task, determines consumers' success in making financially sound purchase decisions. Failure to understand price promotion signage might lead to sub-optimal decisions (Mitchell and Papavassiliou 1999). The most common types of price promotions communication are: price off deals, e.g. % off, \$ off (Krishna et al. 2002); multi-buy deals, e.g. buy 2 for \$5 (Nies et al. 2011); Freebies, e.g. \$50 monthly payment with first month free (Koster 2010); Package, e.g. flight and hotel packages (Naylor and Frank 2001); Rebates, e.g. \$400 with \$20 rebate (Kim 2006).

This study focuses on the consumers' *ability* to comprehend and effectively use the price promotion information, by addressing the following research questions:

**RQ1:** What proportion of the population is unable to correctly perform price promotion literacy tasks?

**RQ2:** What proportion of the population is unable to correctly perform price promotion numeracy tasks?

**RQ3:** What is the relationship between consumers' price promotion literacy and numeracy?

**RQ4:** Which demographic characteristics are associated with the lowest price promotion literacy and numeracy?

Study 1 consisted of 1016 respondents from Illinois, US collected in March 2013. Study 2 consisted of 607 respondents across Australia collected in September 2013. There were five literacy, 10 numeracy, and one combined measure asking participants to indicate how much they need to pay (literacy), or to compare deals or discounts (numeracy). Examples of stimuli were taken from the real-world price promotions in respective countries. To enable generalizability, the questions covered: groceries (bread, rice); durables (jeans, washing machine) and services (TV subscription, flight and hotel packages). There was no time limit in either study, but the timing was recorded and used as a covariate.

On average, 25% of the consumers could not comprehend the price promotion signage; while 23% of the consumers could not carry out arithmetic tasks using the price promotion information.

There was a significant positive association between the consumers' price promotion literacy level and their numeracy level  $\chi^2(16) = 156.94, p < .001$ . Multiple regression models were carried out with the consumers' levels of literacy and numeracy respectively, set as dependent variables (N of correct responses), and the demographic characteristics set as predictors. The timing was added as an additional block within the Study 2 model.

The US consumers who performed worse in literacy tasks were: young adults, have low education level, low income, and were the non-main shopper for the household. In Study 2, only the income level reached significance in association with price promotion literacy. Hence, this suggests that income level is the main driving factor for price promotion literacy.

The US consumers who performed worse in calculation tasks were: young adults, have low education level, and low income. After adding the timing factor, Australian consumers who performed worse at numeracy tasks were: young adults with low income. Hence, this suggests that age and income level are the main driving factors for price promotion numeracy.

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# The Upside of Choice-Set Un-categorization

Tao Tao, The Chinese University of Hong Kong, China  
Leilei Gao, The Chinese University of Hong Kong, China

## EXTENDED ABSTRACT

Previous research has mainly documented the positive effect of product categorization on choice satisfaction (Mogilner et al 2008), consumption quantities (Kahn and Wansink 2004), and purchase likelihood (Castro et al 2013). This research mainly investigated the cognitive influences of categorization, such as perceived variety (Mogilner et al 2008; Kahn and Wansink 2004). Less attention has been given to the affective influences. By separating shopping motivation as experience-oriented and task-oriented, the current research investigates the affective influences of choice-set un-categorization on shopping evaluations.

We define an un-categorized set as a group of products that are neatly but randomly displayed without being sorted by type. Compared to a categorized choice set, an un-categorized choice set looks complex. An environmental cue of complexity and randomization could increase perceived arousal (Mehrabian and Russell 1974). Therefore, an un-categorized choice set is inferred to have a high arousal potential to increase consumers' arousal level. However, this potential would only take effect when consumers take their affective reactions into account. Consumers shopping motivation determines whether people are more likely to focus on their feelings during the shopping process. Experience-oriented shoppers make evaluations base on affective feelings (Babin et al 1994), whereas task-oriented shoppers make evaluations base on cognitive appraisals (Pham 1998). Therefore, we proposed that under experiential shopping orientation, compared to a categorized set, a disorganized set is likely to result in greater feelings of arousal. Further, because leisure shoppers shop mainly for fun and enjoyment (Holbrook and Hirschman 1982), they are more likely to attribute arousal to a more excited shopping experience, and subsequently derive more pleasure from their shopping experience (Kaltcheva and Weitz 2006). We therefore propose that when consumers adopt an experiential-oriented shopping motivation, an un-categorized set will lead to greater consumer satisfaction than a categorized set (H1). Moreover, this positive influence of un-categorization is sequentially mediated by the higher arousal level and greater pleasure generated from the shopping experience (H2).

Contrary to experience-oriented shoppers, task-oriented shoppers rely more on their cognitive appraisals to make evaluations (Hoffman and Novak 1996). Because a categorized set is perceived as providing greater product variety than an un-categorized set (Mogilner et al 2008), this positive cognitive appraisal of a categorized set will lead to greater consumer satisfaction. Therefore, we propose that shopping motivation moderates the influence of product categorization on consumer satisfaction (H3). Finally, the positive un-categorization effect only existed when the products were presented visually rather than verbally (H4). Three experiments tested these propositions.

In experiment 1, 71 undergraduate students were required to imagine being in an experience-orientated shopping situation. After browsing either categorized or un-categorized 64 products on a simulated online store, 8 items of pleasure and arousal (Mehrabian and Russell 1974) were rated on 9-point scales. Then participants made choices. After that, choice evaluation and shopping experience were rated on 10-point slider scales. As predicted, product evaluation was higher when the choice set was un-categorized ( $M = 6.81$ ) than categorized ( $M = 5.70$ ;  $t(69) = 2.61, p < .05$ ). Similar results were shown on shopping experience ( $M_{uncat} = 6.53$  vs.  $M_{cat} = 5.66$ ;

$t(69) = -2.09, p < .05$ ). H1 was supported. Compared with categorized choice set, un-categorized choice set increased pleasure ( $M_{uncat} = 5.50$  vs.  $M_{cat} = 4.86$ ;  $t(69) = 2.60, p < .05$ ) and arousal ( $M_{uncat} = 6.61$  vs.  $M_{cat} = 5.86$ ;  $t(69) = 2.06, p < .05$ ). Multi-step mediation analyses indicated a significant indirect effect on the casual chain from un-categorization, arousal, pleasure, and finally to choice evaluation (5000 resamples,  $\beta = 0.25$ , 95% CI = [0.04, 0.64]), or to shopping experience ( $\beta = 0.27$ , 95% CI = [0.04, 0.65]), supporting H2.

Experiment 2 employed a 2 (categorization: categorized vs. un-categorized) x 2 (shopping motivation: task-oriented vs. experience-oriented) between-subjects design. 137 undergraduate students were introduced to shop in the same online store as experiment 1. Shopping motivation was firstly manipulated by suggesting the corresponding shopping strategies (Dawson et al 1990). After making choices, participants rated choice evaluation, perceived variety and perceived arousal on sliding scales. A 2 x 2 ANOVA on choice evaluation showed a significant interaction effect ( $F(1, 133) = 9.82, p < .01$ ) such that relative to categorized choice set, un-categorized choice set increased choice evaluation under experiential orientation ( $M_{uncat} = 6.99$  vs.  $M_{cat} = 5.97$ ;  $F(1, 133) = 5.18, p < .05$ ), whereas decreased choice evaluation under task orientation ( $M_{uncat} = 6.22$  vs.  $M_{cat} = 7.14$ ;  $F(1, 133) = 4.64, p < .05$ ). H3 was supported. A moderated mediation analysis yielded that under experience orientation, the indirect effect of categorization on choice evaluation was significant through perceived arousal ( $\beta = -0.42$ , 95% CI = [-0.93, -0.09]), but was not significant through perceived variety ( $\beta = 0.05$ , 95% CI = [-0.15, 0.35]). Contrary, under task orientation, the indirect effect was significant through perceived variety ( $\beta = 0.26$ , 95% CI = [0.04, 0.66]), but was not significant through arousal ( $\beta = 0.07$ , 95% CI = [-0.24, 0.46]).

Experiment 3 tested H4 by using a 2 (categorization: categorized vs. un-categorized) x 2 (stimuli format: verbal vs. visual) between-subjects design. 190 workers in M-Turk were asked to imagine being in an experience-oriented shopping scenario. They would choose from 48 magazines which were either categorized or un-categorized, and either displayed in pictures or in texts. As expected, a two-way ANOVA on choice evaluation revealed an interaction effect of stimuli format and categorization,  $F(1, 186) = 4.33, p < .05$ . When the magazines were displayed visually, compared with the categorized set, the un-categorized set increased choice evaluation ( $M_{uncat} = 7.73$  vs.  $M_{cat} = 6.88$ ;  $F(1, 186) = 5.39, p < .05$ ). However, when the magazines were displayed verbally, choice evaluation did not differ ( $M_{uncat} = 7.26$  vs.  $M_{cat} = 7.50$ ;  $F < 1$ ). A moderated mediation analysis with the arousal and pleasure index as mediators, and presentation format as the moderator, revealed that the moderated mediation index on the two mediators were both significant (arousal:  $\beta = -0.33$ , 95% CI = [-0.66, -0.09]; pleasure:  $\beta = -0.52$ , 95% CI = [-1.15, -0.02]). Therefore, H4 was supported.

In summary, this research demonstrated that when leisure consumers go shopping, an un-categorized set would enhance their arousal level, thereby increasing perceived pleasure of the shopping experience, and therefore increase consumer evaluation. Further, this positive un-categorization effect only occurs when the products are presented in visual format rather than in verbal format. Besides demonstrating the benefits of un-categorization, this research added new evidence for the emotional impact of environmental cues on shop-

ping evaluations and provided useful marketing implications for product categorization and display.

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# Are All Teasers Created Equal?

## The Effectiveness of Sampling Experiences on Desire for the Target Product

Yanping Tu, University of Chicago, USA  
Christopher K. Hsee, University of Chicago, USA

### EXTENDED ABSTRACT

Providing sampling experiences (i.e., “teasers”) is a common marketing practice. For example, Amazon.com invites consumers to “click to look inside” for sample pages; Godiva offers registered chocolate aficionados free chocolate samples. In this research, we study the factors that influence the effectiveness of sampling experiences on inducing consumers’ desire for the target product.

Existing literature has documented the reasons why sampling experiences can increase (Cabanac 1979) or decrease (Steinberg and Yalch 1978; Lammers 1991) desire for the target product. We propose a novel factor that influences the effectiveness of sampling experience, independent of the previous findings. We refer this factor as the *perceived overlap* between the sampling experience (i.e., the experience of consuming the product samples) and the product experience (i.e., the experience of consuming the target product). We reason that, because the sampling experience and the product experience share commonality, consumers could perceive the sampling experience as a part of the product experience (i.e., perceiving overlap). We hypothesize that consumers will desire the target product less when the perceived overlap is higher, because a higher perceived overlap signals to consumers that their desire for the target product has been fulfilled to a greater extent by the sampling experience, and that they do not need to consume the product “again”. Our reasoning is in line with research showing that people disengage from focal activities after engaging in a few related actions and feeling that they have (partially) completed the focal activities (Dhar and Simonson, 1999; Fishbach, Dhar, and Zhang 2006; Laran and Janiszewski 2009).

Then, what influences the perceived overlap? We propose two factors in this research. The first factor is on the environment: the *location of the sample relative to the target product*. We propose that, because object relations in the mental world is a direct reflection of those in the physical world (Shepard and Metzler 1971), consumers would perceive higher overlap when the samples are displayed inside (i.e., physically overlap with) the target product than outside.

The second factor is on the consumer: *consumption expectation*. Because accessible goals lead people to perceive environmental cues as relevant to the goals (Balci et al. 2006; Wilcox et al. 2009), we argue that people with a consumption expectation (i.e., consumption goal) would be more likely to interpret sampling experience as relevant to the product experience, and thus perceive higher overlap, than those without a consumption expectation.

Taken together, we propose the following hypotheses:

*Hypothesis 1: Product samples displayed inside (vs. outside) the target product would lead to a higher perceived overlap between the sampling experience and the product experience, which further leads to a lower desire for the target product.*

*Hypothesis 2: Consumers with an expectation (vs. without expectation) to consume the target product would perceive a higher perceived overlap between the sampling experience and the product experience, which further leads to a lower desire for the target product.*

Studies 1-3 tested H1. Study 1 adopted a 2 (sampling experience: with vs. without)  $\times$  2 (location: inside vs. outside) between-participants design, using a painting album as the target product and two sample paintings to provide a direct sampling experience. In the with-sampling-experience (vs. without-sampling-experience) condition, participants viewed two sample paintings (vs. non-painting pages). In the inside (vs. outside) condition, the pages were shown in an opened album (vs. shown as separate pages next to a closed album). We measured desire to view the whole album and found that, in the with-sampling-experience condition, those in the inside (vs. outside) condition exhibited lower desire; whereas in the without-sampling-experience condition, desire did not differ between the inside and outside conditions. Results in the two with-sampling-experiences conditions supported H1, and results in the two without-sampling-experience conditions (control conditions) ruled out the possibility that the proposed effect may be driven by the inherent positivity of the outside condition.

Study 2 used a causal chain design to test the mechanism in H1. Study 2a used a 2 (location: inside vs. outside) between-participants design to test the first link, from Sample Location to Perceived Overlap. Participants viewed sample paintings (displayed inside vs. outside the target album) and indicated the perceived overlap on a Venn-diagram measure, which used one large circle to represent “Viewing the whole album” and a small circle to represent “Viewing the samples,” and varied the degree of overlap between these two circles from small (denoted as 1) to large (denoted as 7). As predicted, participants in the inside (vs. outside) condition indicated higher perceived overlap. Study 2b used a 2 (perceived overlap: high vs. low) between-participants design to test the second link, from Perceived Overlap to Desire for the Target Product. We imposed high (vs. low) perceived overlap via both verbal and pictorial information on participants, before they viewed sampling paintings. We then measured their desire to view the whole album and found that participants in the high-perceived-overlap (vs. low-perceived-overlap) condition exhibited lower desire.

Study 3 replicated study 1 using a different product (M&M’s chocolate) and videos on eating M&M’s to provide an indirect sampling experience.

Studies 4 to 6 tested H2. Study 4 adopted a 2 (sampling experience: with vs. without)  $\times$  2 (consumer expectation: with vs. without) between-participants design. In the with-expectation (vs. without-expectation) condition participants learned (vs. did not learn) that they would view an album in its entirety. In the with-sampling-experience (vs. without-sampling-experience) condition, participants then viewed (vs. did not view) sample paintings. We measured desire to view the whole album and found that, in the with-sampling-experience condition, with-expectation (vs. without-expectation) participants exhibited lower desire; whereas the reverse was true in the without-sampling-experience condition. Results in the two with-sampling-experience conditions confirmed H2, and results from the two without-sampling-experience conditions ruled out the possibility that the proposed effect may be driven by the inherent positivity of the without-expectation condition. Study 5 found supportive evidence for the causal chain in H2, using similar methods as study 2. Study 6 replicated study 4 using a different product (Ghirardelli

chocolate) and videos on eating Ghirardelli to provide indirect sampling experience.

In sum, these empirical studies supported our proposed framework. Theoretical and practical implications will be discussed.

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# Bubble Living: Social Class and Contextual Influences on Immigrant Consumer Acculturation in a Non-western Cultural Context

Wakiuru Wamwara, Wright State University, USA

## EXTENDED ABSTRACT

This research examines immigrant adaptation processes in a non-western developing country by investigating consumer acculturation of immigrants from five different regions of the world. Prior research has examined immigrant acculturation (cf. Mehta and Belk 1991; Penaloza 1994) by primarily investigating immigrants from less industrialized countries as they adapt into highly industrialized countries such as the United States, Denmark etc. While this research generated valuable information, acculturation research has been criticized for a “one size fits all” approach (Rudmin 2003). Recent work by Schwartz et al. (2010) reexamined the concept of acculturation and called for studies that investigate the role that “context of reception” plays in the acculturation process. Luedicke (2011) reviewed acculturation research and noted the lack of systemic and macro-level dimensions in acculturation studies and he offered an alternative consumer acculturation framework, which presented acculturation as a complex system of recursive socio-cultural adaptive relationships (Askegaard and Ozcaglar-Toulouse 1999). A perusal of immigrant adaptation as well as varying national environments demonstrates not only vast national differences, but also regional as well as in country differences. Evidently, immigrants face favorable or unfavorable contexts of reception. In discussing the role of context, Schwartz (2010:240) suggested: “to understand acculturation, one must understand the interactional context in which it occurs. This context includes the characteristics of the migrants themselves, the groups or countries from which they originate, their socioeconomic status and resources, the country and local community in which they settle and their fluency in the language of the country of settlement.” Unfavorable contexts have been shown to result in major sources of stress in the lives of immigrants (Segal and Mayadas 2005). Perceived discrimination is among the most debilitating stressors that immigrant and minority individuals face (Berry et. al 2006). The perceived discrimination may also be heightened by the type of migrant. Steiner (2009) highlighted the need to be cognizant of the type of immigrant under consideration and the types of acculturation options available to the immigrant particularly given the circumstances surrounding their migration.

As noted, context of reception is extremely important when examining immigrant acculturation. Therefore, we investigate the role that “bubble living” has on immigrant acculturation. “Bubble living” is defined as the self-segregation that occurs either through choice or through the inherent systems present in the context of reception. We highlight the role that socioeconomic status and cheap labor play in facilitating this “bubble living”. We examine how “bubble living” influences the immigrants’ choices in the following life domain activities: a) choice of neighborhood; b) grocery shopping; c) language acquisition; d) children’s school; e) transportation and f) Financial/M-Pesa transactions

## Method

The data for this study is drawn from a larger study of thirty-three immigrants. We present the findings from sixteen of the non-black immigrants. Research informants were recruited using the snowball method and they represent different regions of the world. Before commencing the research, a research permit was obtained from the government. All interviews were conducted in English, in Nairobi, Kenya and informants were assured of confidentiality

and anonymity. The interviews were audio-taped, transcribed and analyzed by means of coding patterns and the constant comparative method (Glazer and Strauss 1967).

## Findings

Our findings suggest that consumer acculturation is mitigated by “life lived in a bubble”, cheap labor and social class. We demonstrate that in certain cases, immigrants to a developing country can self-segregate without suffering negative repercussions as has been found in other contexts such as the United States. Moreover, in this context, acculturative stressors usually associated with immigration are mitigated by the hiring of domestic workers to navigate the consumption environment for the immigrants. This is evident with regards to grocery shopping, especially the buying of fresh fruits and vegetables. Also, many immigrants do not drive themselves since they can afford a personal driver. Further, the immigrants did not learn the local languages, yet they were able to function in the society. Furthermore, self-segregation was evident in the following areas: a) they live in expatriate enclaves; b) they shop at expatriate shops such as KPS or Yaya; c) their children attend international schools; d) they buy cosmetics, clothing, shoes etc only when they are back in their country of origin and d) they maintain the bulk of their financial resources in banks outside of the host country and they do not participate in local money transfer services.

Clearly, in this context, immigrant adaptation is mitigated by cheap labor, social economic status, “bubble living” and multilingualism suggesting the need for future research into the role of these mitigators. A limitation of this study is that we only examine the experiences of non-black immigrants to Kenya hence, future research should no doubt examine the differences in acculturation of blacks and non-blacks in this cultural context. The contribution of this research lies in its ability to incorporate contextual factors in examining the acculturation of immigrants from highly industrialized countries and their adaptation in a less industrialized country. Most acculturation research examines the acculturation of immigrants from less developed countries and their adaptation in highly industrialized countries. Needless to say, as noted by the international migration office, there is tremendous movement around the world with immigrants from industrialized countries traveling and living in less industrialized countries. Consequently new theoretical models should reflect these new realities and theories developed in these regions might further inform acculturation work.

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# Capturing Rainbow Men's Hearts: A Mediated Moderation Model of Brand Gay Image, Brand Attachment and Gay Identity

Hao Wang, National Taiwan University, Taiwan  
Heng-Chiang Huang, National Taiwan University, Taiwan  
Ming-Huei Hsieh, National Taiwan University, Taiwan

## EXTENDED ABSTRACT

An increasing number of multinational corporations are adopting homoerotic branding strategies to pursue the homosexual market. Abercrombie & Fitch, for example, does not declaim a gay men brand image directly, but it is still considered a gay-friendly brand and is particularly favored by gay consumers. A&F has long adopted a globally renowned marketing strategy for using homoerotic image that includes front line employees and ad models featuring young shirtless, muscular and athletic men.

For decades, researchers have investigated the role of brand image (eg., Pettijohn et al., 1992, Reilly and Rudd, 2007). "Brand gay-likeness," broadly defined as "the association of a brand with gay culture," can be considered a unique brand image that gives LGBT consumers a compelling reason to purchase (Aaker and Shansby, 1982, Keller et al., 2011). Previous qualitative research has demonstrated that gay men's consumption practices vary due to changes in their level of gay identity (Hsieh and Wu, 2011). Gay consumers have a need to express their self-image through purchasing and displaying brand-name items. Hence, examining the interaction between brand gay-likeness and consumer gay identity is becoming an important issue in our field.

According to the image congruence model (Onkvisit and Shaw, 1987), consumers evaluate a brand's image with its symbolic meanings. Symbolic meanings are used to create, maintain and enhance a consumer's self-image. Thus, congruence between the self-image and brand image usually leads to a favorable brand attitude and increased purchase behavior within that brand (eg., Hong and Zinkhan, 1995). Attachment is considered to be a cognitive and affectional bond between a person and other objects (Bowlby, 2012). Gay consumers transverse through different gay identity stages, each of which leads to a different psychological process in their brand evaluation and self-image expressions (Halpin and Allen, 2004). We proposed that gay consumers tend to have stronger brand attachments and higher buying intentions for a brand whose perceived brand gay image is congruent with the consumers' identities.

*Hypothesis 1: The extent of brand gay-likeness has a positive impact on gay men's brand purchase intentions.*

*Hypothesis 2: The degree of gay identity positively moderates the impact of brand gay-likeness on gay men's brand purchase intentions.*

*Hypothesis 3a: The degree of gay identity positively moderates the impact of brand gay-likeness on brand attachment.*

*Hypothesis 3b: Brand attachment fully mediates the relationship between brand gay-likeness and gay man's brand purchase intention.*

We formed a focus group composed of three marketing scholars to decide the candidate brands for this study. The pretest asked

61 gay men to rate the gay-likeness of the 18 brands. To recruit respondents for a formal survey, we made announcements in online student-related communities for major universities in Taiwan and Hong Kong. A total of 102 self-proclaimed gay men responded and completed the online survey. The sample sizes for level-1 and level-2 data were 612 and 102, respectively.

The results conform to the required conditions of MedMo as described by Muller et al. (2005), thereby supporting our hypotheses. First, as reported in Model 1, the interaction between brand gay-likeness and gay identity is positively significant ( $\gamma = .11$ ,  $p < .001$ ) when brand purchase intention is the DV, supporting Condition 1. Second, Model 2 reveals that the interaction between brand gay-likeness and gay identity is positively significant ( $\gamma = .08$ ,  $p < .01$ ) when the DV is brand attachment, also supporting Condition 2. The two conditions described above establish the moderation effect. Third, we found a positive and significant relationship ( $\gamma = .773$ ,  $p < .001$ ) between brand attachment and brand purchase intention. In addition, the significant interaction effect between brand gay-likeness and gay identity in Condition 1 becomes insignificant in Condition 3 ( $\gamma = .043$ ,  $p = .278$ ). So brand attachment indeed acts as a mediator between brand gay-likeness and brand purchase intention. In sum, the results support all our hypotheses of the MedMo model in which gay identity moderates the effect of brand gay-likeness on brand attachment, and the effect of brand gay-likeness on brand purchase intention is fully mediated by brand attachment.

In line with our expectations, the MedMo model and all our hypotheses were supported. Specifically, brand gay-likeness was found to be a strong predictor of brand purchase intentions. In an attempt to understand the gay consumer's evaluation of a brand, we showed that some brands are perceived to have gay images. Based on the self-congruence perspective, we introduced gay identity as an important factor that moderates the effect of brand gay-likeness. Gay consumers prefer brands with extent of gay-likeness similar to their perceived stage of gay identity. With respect to hypothesis 3, we found brand attachment to fully mediate the effect of brand gay-likeness on brand purchase intention. We also found the degree of gay identity to positively moderate the impact of brand gay-likeness on brand attachment. Without brand attachment, the influence of brand gay-likeness on brand purchase intention will not occur.

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# A Study on Price Presentation Order Effect: The Role of Color

Tien Wang, National Cheng Kung University, Taiwan  
Lucia Rodriguez, National Cheng Kung University, Taiwan  
Ralph Yeh, National Chung Cheng University, Taiwan

## EXTENDED ABSTRACT

Price entails firm revenues directly and has long been a critical focus of marketing strategy. Consumers are constantly facing situations in which they have to make the choice over a product in a category where different options in price are presented (Lambert, 1972). The extant literature suggests that the way a price is structured and presented to consumer affects their perceived magnitude of the price (Dhar & Simonson, 1992; Diehl & Zaubermaier, 2005) and subsequently the choice on price. While the advances in information technology have greatly influenced consumption behavior, research is needed to examine the influence of price factors on consumer online shopping behavior. This study investigated the direct impact of price order on purchase decision in an online setting. Furthermore, the role of color was also examined to reveal the influence of contextual factor on this relationship.

Drawing on the prospect theory (Kahneman and Tversky 1979), this study hypothesized that in a descending price presentation order format consumer price choice will be higher than that of an ascending price presentation order format. When people browse product prices in ascending order online, they see price increasing because eyeballs move from top to the bottom of the screen (Atterer, Wnuk, and Schmidt 2006, Feusner and Lukoff, 2008, Buscher, Cutrell, and Morris 2009). The first price, which is lowest in ascending format, will be regarded as a reference point. Since people tend to associate price with quality, a price increase may be interpreted as a gain in quality. On the contrary, the highest price becomes the reference point for people in a descending format and price drops are interpreted as losses in quality. Based on prospect theory, people interpret gains versus losses differently. The worth of losses at the same magnitude is perceived greater than gains and people tend to avoid losses.

Color was selected as the contextual factor being proposed to moderate the influence of price order on consumer decision for two main reasons. Literature on color suggested that it influences consumers' information processing and shopping decision (Elliot and Maier 2014, Bagchi and Cheema 2013, Babin, Hardesty, and Suter 2003, Bellizzi and Hite 1992). It is less clear whether such effect pertains in an online environment where many product and website features may come into play in an online channel. In light of the theory of color, this study proposes that red color inhibits consumers' cognitive and emotional responses and hence weakens the price order effect on final price choice. On the contrary, blue color promotes such effect and strengthens the influence on consumers' price choice.

A two (price order: ascending vs. descending) by three (color: red vs. black vs. blue) between-subject experimental design was conducted to examine the hypotheses. The research findings offer convergent evidence lending support to our hypotheses. The price presentation order has main effect on consumers' online price and the magnitude of the effect depends on the color.

More research could be conducted to further advance our understanding in price order effect. For instance, the price order presented in this study is in a top-down format. Will different type of presentation exert different effect? Moreover, this study focuses only on the font colors. Future research may examine other color design such as the background color to provide more supporting evidences to the color effect.

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# Mortality Salience and Materialistic Consumption: Role of Self versus Loved Ones

Yanan Wang, Bishop's University, Canada

## EXTENDED ABSTRACT

Marketing communications can prompt consumers to contemplate their own death, as well as the death of loved ones. For example, a TV ad of the Heart & Stroke Foundation may remind a viewer of his own mortality if he has a heart condition or of his father's mortality if the father has a heart disease. Past research has largely focused on thoughts about one's own death, which has been termed mortality salience (Greenberg, Solomon, and Pyszczynski 1997). In this research, we extend past research by arguing that there are two distinct types of mortality salience, namely mortality salience of self (MSS) and mortality salience of a loved one (MSLO), and further test their effects on materialistic consumption.

Past terror management studies have mostly focused on MSS, with only a few studies having explored the effect of MSLO (Greenberg et al. 1994; Davis & McKearney, 2003; Bonsu and Belk 2003). In these latter studies, it was assumed that MSLO would serve as a reminder of an individual's own mortality, thus MSLO individuals' response might follow predictably from the perspective of Terror Management Theory (Greenberg, et al. 1997). Past research has shown that MSS can lead one to lean on materialism as a means of coping with existential anxiety so MSS promotes pro-materialistic behaviour (e.g., Mandel & Heine, 1999; Arndt et al., 2004; Sheldon & Kasser, 2008). Thus, it could be that MSS and MSLO have convergent effect on materialistic consumption.

However, bereavement research implied that MSS and MSLO may have divergent effects. Bereavement studies have revealed that after losing a loved one, the bereaved are more inclined to pursue intrinsic goals, including a greater appreciation of life, better relationships with others and a more conscious development of personal strengths (Niederland & Sholevar 1981; Tedeschi & Calhoun 1996). It is possible that MSLO individuals may also focus more on pursuing intrinsic goals. Past research has revealed that intrinsic and extrinsic goal content forms a bi-polar dimension (Ryan & Deci 2000; Grouzet et al. 2005), so the lack of compatibility between intrinsic and extrinsic goals suggests that MSLO individuals may become less overt in materialistic consumption.

We conducted four empirical studies to test the convergent assumptions derived from terror management studies and divergent assumptions from bereavement studies. Study 1 partially replicated Mandel & Heine's (1999) study on the effect of MSS on the preference of high-status products. 122 participants were randomly assigned to one of the three conditions (control, MSS or MSLO) by answering manipulated questions on a dentist visit, their own death, or the death of a beloved parent (Greenberg et al. 1994). After answering filler tasks, participants rated their purchase intention towards high-status Rolex watches and BMWs and low-status KIA automobiles and Pringles chips. The MANOVA test on high-status products revealed significant treatment effects (Hotelling's Trace=.08,  $F(1, 121)=2.32$ ,  $p=.05$ ). ANOVA shows that the death-thought manipulation has a significant effect on consumer preferences for BMWs ( $F(2, 120)=4.06$ ,  $p<.05$ ) and a marginal effect on Rolex watches ( $F(2, 120)=2.84$ ,  $p<.10$ ). Pair-wise comparisons showed that MSLO participants ( $M_{rolex}=2.5$ ,  $S.D.=1.1$ ;  $M_{bmw}=3.8$ ,  $S.D.=1.2$ ) had significantly lower degrees of preference for luxury products than MSS participants ( $M_{rolex}=3.6$ ,  $S.D.=1.2$ ,  $p<.05$ ;  $M_{bmw}=5.2$ ,  $S.D.=1.3$ ,  $p<.05$ ). The MANOVA test on low-status KIAs and Pringles revealed no significant treatment effects (Hotelling's Trace=.03,  $F(1, 121)=.92$ ,  $p=.45$ ).

Study 2 was designed to test the effect through a budget allowance task adopted and revised from Van Boven (2005)'s study. 157 participants were randomly assigned to one of the three conditions as in study 1. After filler tasks, they were asked to give answers with respect to spending \$500 on A) a materialistic product and B) an experience. Then participants were asked to make a decision between A and B. In the end, participants reported their general level of self-esteem which acted as a control variable. A chi-square test revealed that 8% of MSLO participants chose the materialistic product over the experience, while 37% of MSS participants and 39% of control participants signalled their preference for the materialistic choice (Pearson chi-square = 15.01,  $d.f.=2$ ,  $p=.001$ ).

Study 3 was designed to test the effect through participant's desire for money which is a manifestation of one's materialism value (Kasser 2002). After answering manipulation questions as in study 1, 350 participants firstly identified, out of five Canadian coins the actual coin size among a set of seven coin sizes (ranging from 92.5% to 107.5% of the actual size), then indicated how many pleasant things (e.g., sunshine, chocolate etc.) they would forego permanently in exchange for two million dollars (Zhou and Gao 2008). ANOVA tests revealed a significant treatment effect on the sum of estimated coin sizes ( $F(2, 347)=3.12$ ,  $p<.05$ ) and the number of things to forego ( $F(2, 347)=3.72$ ,  $p<.05$ ). The two measures on the desire of money were significantly inter-correlated ( $r=.33$ ), which is consistent with the experiment design assumption that they all measure the same variable. Pair-wise comparisons showed the significant difference between MSLO ( $M_{coin}=4.61$ ,  $S.D.=.133$ ;  $M_{forgo}=1.46$ ,  $S.D.=1.46$ ) and MSS participants ( $M_{coin}=4.66$ ,  $S.D.=.134$ ,  $p<.05$ ;  $M_{forgo}=1.97$ ,  $S.D.=1.51$ ,  $p<.01$ ).

Study 4 was designed to test the effect through participant's choice between two magazines that highlight materialistic and non-materialistic value respectively. After answering manipulation questions, 201 participants indicated their choice between two magazines, *Money* and *Canadian Family*. A chi-square test on participants' choice between the two magazines revealed that 40% of MSLO participants chose *Money* over *Canadian Family*, while 62% of MSS participants and 52% of control participants signalled their preference for *Money* (Pearson chi-square =6.61,  $d.f.=2$ ,  $p=.03$ ). The results showed significant difference between MSLO and MSS participants regarding the choice of magazine (Pearson chi-square=6.60,  $d.f.=1$ ,  $p=.01$ ).

In summary, our four empirical studies revealed the divergent effects of MSS and MSLO on materialistic consumption. Specifically, we found that MSS promotes materialistic consumption whereas MSLO prevents it. The explanations of the divergence may arise from two mechanisms, namely negative emotions and goal orientation, which provides research opportunities for future studies.

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# I Know It's Not Your Fault!

## Effect of Social Exclusion on Attribution of Brand Crisis

Ziwei Wang, Peking University, China

Ping Tu, Peking University, China

### EXTENDED ABSTRACT

The negative experience of social exclusion can exert great impact on people's cognition, emotion, and behavior, including consumer behavior. The current research focuses on a different marketing domain. We explore if social exclusion could influence people's attribution of brand crisis. We propose that the experience of social exclusion would motivate people to take others' perspectives and thus follow others' attribution patterns.

People make attributions spontaneously, and their attributions are vulnerable to the "actor-observer asymmetry" bias. People would make external attribution for failures of the self and internal attribution for failures of others (Malle, 2006). The bias also applies to the brand crisis context. Consumers believe that crises are generally firm related and blame the firm for the crisis (Lei, Dawar, & Gürhan-Canli, 2012). But the firm may consider itself as more innocent and find other external factors to blame. It has been found that buyers and sellers would blame each other for the same crisis event (Folkes & Kotsos, 1986). The existing research suggests that the perspective in the crisis would determine the pattern of crisis attribution. So if consumers are motivated to take the crisis brand's perspective, they may blame the brand less.

We propose that social exclusion can motivate consumers to take other's perspective because perspective taking can be both reflective and functional for the excluded group. It can help the excluded understand the reason why they are excluded and help them regain social acceptance. Past researches have given support for the link between social exclusion and perspective taking. Excluded participants were more likely to consider others' preferences when making decisions for groups (Mead et al., 2011) and take others' spatial perspectives in relevant tasks (Knowles, 2014).

When facing a brand crisis and being asked to make attributions for the brand in crisis, excluded participants may automatically consider the perspective of the brand and make less internal attributions for the brand. Less internal attribution can further predict higher purchase intention of the brand. Social exclusion can provide the motivation for people to step into others' shoes, but the predicted effect should require both the motivation and the ability to take others' perspectives. So we render trait perspective taking ability as a moderator in the proposed effect and propose that the above effect would be stronger for people with higher trait PT ability. Number of attribution targets can be a boundary condition because when multiple targets were provided for attribution, it would be hard for people to consider everyone's perspective. So it is likely that they would adopt the perspective of the target they feel closest to due to the easiness and fluency attached with understanding close targets.

Four experiments were conducted to test all the hypotheses. We used recall tasks to manipulate social exclusion and provided participants with fictitious reading materials for crisis attribution. Study 1 revealed that excluded participants made attributions favoring the brand in both brand crisis and success scenarios. Study 2 found that the above effect worked for people with high trait perspective taking ability only. Study 3 demonstrated that the internal attribution made to the brand in crisis could predict future purchase intention. Study 4 asked participants to make attributions for multiple targets involved in the crisis event and found that excluded participants made favor-

able attributions for the consumers (the close target) rather than the crisis brand.

Through four experiments, we found that when being asked to judge the responsibility of the crisis brand, excluded participants would blame the brand less. And the effect was stronger for people with higher trait perspective taking ability. Number of attribution targets served as a boundary condition.

Theoretically, the research provides a complete picture for understanding the role of social exclusion in brand crisis attribution. By rendering a new mechanism of perspective taking and identifying a social antecedent of crisis attribution, the findings should contribute to the brand crisis literature. Also by exploring the effect of social exclusion in the brand crisis attribution domain, the paper facilitates understanding of the influence of social exclusion in marketing. Practically, the findings can bring insights to real world crisis management. Future studies can work on adopting different methods of exclusion manipulation, exploring the effect in other crisis contexts, and exploring more downstream effects of crisis attribution.

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# Sampling Traps: How the Opportunity to Sample Experiential Products Reduces Hedonic Value

Sarah Wei, University of Alberta, Canada  
Gerald Häubl, University of Alberta, Canada

## EXTENDED ABSTRACT

Consumers typically appreciate opportunities to *sample experiential products* – such as by viewing trailers or portions of movies, listening to parts of songs from music albums, reading book excerpts, or hiking portions of mountain trails. This type of sampling is thought to facilitate assessing the attractiveness of available options, thus enabling consumers to make better consumption choices. Counter to this intuition, this present research demonstrates that the opportunity to sample experiential products can backfire and reduce consumers' enjoyment of consumption experiences.

Sampling experiential products – i.e., consuming them in partial – is more engaging than merely obtaining descriptive information about them (Hoch, 2002). We hypothesize that the opportunity to sample tends to trap consumers into excessive exploration of available options. This activates an exploration mindset (Hills, Todd, & Goldstone, 2008) "container-title": "Psychological Science", "page": "802-808", "volume": "19", "issue": "8", "source": "pss.sagepub.com", "abstract": "There is compelling molecular and behavioral evidence that goal-directed cognition is an evolutionary descendant of spatial-foraging behavior. Across animal species, similar dopaminergic processes modulate between exploratory and exploitative foraging behaviors and control attention. Consequently, we hypothesized that spatialforaging activity could prime attentional cognitive activity. We examined how searching in physical space influences subsequent search in abstract cognitive space by presenting participants with a spatial-foraging task followed by a repeated Scrabble task involving search for words that could be made from letter sets. Participants who searched through clumpier distributions in space behaved as if words were more densely clumped in the Scrabble task. This was not a function of arousal, but was consistent with predictions of optimal-foraging theory. Furthermore, individual differences in exploratory search were conserved across the two types of tasks. Along with the biological evidence, our results support the idea that there are generalized cognitive search processes." "DOI": "10.1111/j.1467-9280.2008.02160.x", "ISSN": "0956-7976, 1467-9280", "note": "PMID: 18816288", "journalAbbreviation": "Psychological Science", "language": "en", "author": [{"family": "Hills", "given": "Thomas T."}, {"family": "Todd", "given": "Peter M."}, {"family": "Goldstone", "given": "Robert L."}], "issued": {"date-parts": [{"2008", 8, 1}], "accessed": {"date-parts": [{"2014", 11, 30}], "PMID": "18816288"}}, "schema": "https://github.com/citation-style-language/schema/raw/master/csl-citation.json", which is characterized by a greater importance of the goal of exploring additional options relative to the goal of exploiting the preferred option – by focusing on consuming and enjoying the most attractive alternative.

We hypothesize that an exploration mindset reduces the motivation to consume any of the available experiential products in its entirety. More importantly, many experiential products have the property that a substantial portion of the pleasure they provide is due specifically to *completing* their consumption (e.g., seeing the end of the movie). Thus, we hypothesize that, by demotivating the complete consumption, the exploration mindset induced by the opportunity to sample reduces the hedonic value of the consumption experience.

A critical aspect of this theoretical account is the disproportionate hedonic value that arises specifically from completion – i.e., from

the consumption of an experiential product in its entirety and/or up to its natural end. This property, which we refer to as "*indivisibility*" that is inherent to many experiential products (Ariely & Zauberman, 2000), suggests a critical boundary condition for the proposed negative effect of sampling. We hypothesize that the negative effect of the opportunity to sample on the hedonic value of a consumption experience is attenuated when the experiential products are high in divisibility – i.e., if they consist of small independent parts, each of which is enjoyable in its own right.

Study 1 was designed to provide a first demonstration of the basic effect. 91 undergraduate students were randomly assigned to one of two conditions (opportunity to sample: yes vs. no). Participants were asked to select the video they would enjoy most from a list of 10 animation videos of low divisibility. In both conditions, participants read descriptions (including the title, director, and the basic storyline) of each option, one at a time. For participants who had the opportunity to sample, the video player right above the verbal descriptions automatically started playing; they could decide whether to watch the video to completion or to switch to a different option. Participants with no opportunity to sample saw a screenshot of the video right above the verbal description, and they cannot switch once they selected one. Participants in both conditions could stop watching the video whenever they liked. The results show that, relative to no opportunity to sample, the opportunity to sample significantly reduced the completion rate of watching the selected video ( $\chi^2 = 13.34$  (1, 89),  $p < .001$ ) and the hedonic value of the consumption experience ( $M_{\text{Sampling}} = 6.76$  vs.  $M_{\text{NoSampling}} = 7.74$ ;  $t(1, 89) = 2.15$ ,  $P = .034$ ).

Study 2 examined the proposed moderating role of the divisibility of experiential products. 187 participants from a panel in North America were randomly assigned to conditions using a 2 (opportunity to sample: yes vs. no) by 2 (divisibility: high vs. low) between subjects design. The high divisible videos all had hilarious and enjoyable moments throughout, whereas low divisible animation videos had strong, cohesive storylines. As the result, the opportunity to sample significantly reduced the completion rate of watching the selected video ( $\chi^2 = 9.82$ ,  $p = .002$ ). The interaction between sampling and divisibility significantly influenced the hedonic value of the consumption experience ( $F(1, 183) = 5.06$ ,  $p = .026$ ): the opportunity to sample significantly reduced the hedonic value of the consumption experience when the sampled videos were of low divisibility ( $M_{\text{Sampling}} = 8.19$  vs.  $M_{\text{NoSampling}} = 8.89$ ,  $t(87) = 2.02$ ,  $p = .044$ ); and the hedonic value of the consumption experience was not influenced when the sampled videos were of high divisibility ( $M_{\text{Sampling}} = 8.79$  vs.  $M_{\text{NoSampling}} = 8.36$ ,  $t(80) = -1.18$ ,  $p = .24$ ).

Study 3 was designed to provide deeper insight into the psychological mechanism that underlies sampling traps. We directly manipulated the exploitation mindset by enforced completion of the selected experiential product. 162 M-Turk workers were randomly assigned to conditions of a 2 (opportunity to sample: yes vs. no) by 2 (enforced completion vs. spontaneous completion) between subjects design. In the enforced completion condition, the button ending the video-watching section would not appear on screen unless participants completed the selected video. As the result, the opportunity to sample significantly reduced the completion rate of the selected video ( $\chi^2 = 5.16$  (1, 102),  $p = .023$ ) in the spontaneous completion condition. Further, the interaction of the manipulations significantly

impacted the hedonic value of the consumption experience ( $F(1, 159) = 4.34, p = .046$ ): the opportunity to sample significantly reduced the hedonic value of the consumption experience when the completion of selected video was spontaneous ( $M_{\text{Sampling}} = 7.85$  vs.  $M_{\text{NoSampling}} = 8.64, t(158) = 2.11, p = .038$ ); and sampling did not influence the hedonic value of the consumption experience ( $M_{\text{Sampling}} = 8.69$  vs.  $M_{\text{NoSampling}} = 8.14, t(158) = -1.03, p = .31$ ) when completion was enforced.

This paper sheds light on how the opportunity to sample experiential products influences consumers' enjoyment of consumption experiences. Evidences from three studies show that the sampling of experiential products can trap consumers into excessive exploration of available options and ultimately reduce the hedonic value of their consumption experience. In addition, the findings have important practical implications for both companies (e.g., when and how to allow consumers to sample their products) and consumers (e.g., how to avoid sampling traps).

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# Mental Traveling Along Social and Temporal Distance: The Influence of Cultural Orientation on Construal Level

Vincent Chi Wong, The Chinese University of Hong Kong, Hong Kong  
Robert S. Wyer Jr., The Chinese University of Hong Kong, Hong Kong

## EXTENDED ABSTRACT

Construal level theory (CLT) concerns the effects of psychological (e.g., temporal and social) distance on the construal of objects and events. That is, psychologically distant events are conceptualized in terms of high-level, abstract concepts whereas proximal events are construed in concrete, context-specific terms (Trope & Liberman, 2003). 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., Bond & Cheung, 1983), whereas others suggest the opposite (e.g., Spassova & 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 (e.g., social and temporal) on construal level.

## The Role of Flexibility Perspective Shifting

People are mental travelers along dimensions of social and temporal distance, and can imagine themselves at different points along these dimensions (e.g., Grossmann & Kross, 2010). 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).

## Cultural differences in Flexibility Perspective Shifting

Previous research has examined how cultural orientation shapes individuals' tendency to shift perspective along social and temporal dimensions (Lastovicka et al. 1999; Oyserman, Kimmelmeier and Coon 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 (Oyserman et al. 2002). 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; Hofstede and Bond 1988).

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.

In summary, these studies documented that internal values (i.e., cultural orientation) and situational factors (i.e., psychological distance) combine to influence construal level. 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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# The Effect of Jargon on Sensitivity to Omissions in Judgment based on Limited Evidence

Ruomeng Wu, University of Cincinnati, USA

Esta Shah, University of Cincinnati, USA

Frank R. Kardes, University of Cincinnati, USA

## EXTENDED ABSTRACT

Customers often have to make purchase decisions based on incomplete or limited evidence. People tend to neglect the missing information and focus on whatever information that is given to them (Silvera et al. 2005). Research has shown that in some situations, however, consumers become sensitive to omissions. For example, information is perceived as more sufficient when a bigger amount of information is shown (Anderson 1981; Hernandez et al 2014; Sanbonmatsu et al 1997). In this paper, we investigated a potentially new approach to reduce the omission neglect: the effectiveness of jargon, namely technical words or expressions, on reducing omission neglect.

Research has shown that when ease of processing decreases, the target is evaluated less favorably (Reber et al. 2004). As technical jargon is hard to understand or process, it should have led to unfavorable evaluation. Past research, however, suggests that jargon was associated with more favorable judgments (Kazdin and Cole 1981). Labroo et al showed that ease of processing makes people attribute the good feeling to the target itself, leading to ignorance of the necessary information to form rational judgments (Labroo et al. 2007).

We predicted that understandable jargon is perceived as more credible and is more positively evaluated, though it also increases difficulty to process and increases people's sensitivity to possible omissions. Nevertheless, when information described in jargon becomes too difficult to process, it may lead to negative evaluation while increasing peoples' sensitivity to potential missing information. Besides, jargon's positive effect on sensitivity to omissions may also be influenced by jargon information amount.

We conducted two experiments to assess the role of information description (jargon vs. ordinary language) in product evaluation and perceived information sufficiency based on limited information.

In Experiment 1, we examined the role of understandable jargon in consumer judgment and perceived information sufficiency. In two conditions, participants were invited to evaluate a camera based on three attributes. Half of the participants were shown the attributes in jargon (e.g. "Image Resolution: 12 Mp"), while the other half were shown the attributes in daily used language (e.g. "Average quality image"), updated from the jargon attributes, based on a pretest. Results has shown that people found the jargon information more credible, though more difficult to process. They rated information described in jargon and ordinary language as equally favorable. Results also showed that only when the given information is in ordinary language description do people memorize the present information better than the absent information. When the given information is in jargon, however, people are high in response accuracy for both present and missing information. This pattern indicated that people may become more sensitive to omissions when presented with jargon, confirmed by Experiment 2.

In Experiment 2, we further explored the effects of jargon on omission neglect using more technical jargon and manipulating set size and measurement order. Participants received a description about a drug described either in extremely difficult to understand jargon or in ordinary language. The description was followed by either nothing or detailed information on ingredients described in jargon. Afterwards, participants were randomly asked to report either the ease of processing and information sufficiency first, or the perceived science

and overall evaluation first. Results showed that jargon description led to less perceived information sufficiency than ordinary description, mediated by both ease of processing and perceived credibility. Jargon strongly increases people's sensitivity to potential missing information. Inconsistent with past research, our results suggest that even when more information is provided, as long as the information is in jargon, people's sensitivity to omissions does not decrease but increases. Besides, extremely difficult to understand jargon leads to unfavorable evaluations, mediated by difficulty of information processing and perceived information insufficiency, though the perceived technicality increases, positively mediating evaluations.

Two experiments using two different products (digital camera and drug) provide consistent evidence that consumers tend to be sensitive to missing information when available information is described in technical jargon. We also showed that though jargon can increase the perceived credibility by making the information seem more scientific or reliable, resulting in favorable evaluations, it can also increase the difficulty to understand the information, resulting in unfavorable evaluations.

The paper extends the omission neglect literature and the technical expressions studies by studying the effect of jargon and by investigating consumers' responses to different levels of jargons. Moreover, the current research extends the priming literature by combining the effect of jargon and measurement orders. Past research has shown that measurement order may influence consumers' judgments and decisions (Kardes 1988). We found that making customers to focus on how scientific the information is rather than how difficult to understand the information can improve the overall evaluation towards the target product.

Furthermore, a large amount of technical information, such as jargon ingredients for drugs or food does not necessarily make a products seem more professional and reliable, it can also confuse and irritate customers if people find it too hard to understand.

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# The Effect of Anxiety on Risky Decisions

Zhiyong Yang, University of Texas at Arlington, USA

Ritesh Saini, University of Texas at Arlington, USA

Traci Freling, University of Texas at Arlington, USA

## EXTENDED ABSTRACT

Suppose you have decided to undergo elective knee surgery after years of discomfort. In researching your options of where to have this surgery, you come across a *US News & World Report* hospital ranking which ranks Hospital A as the best in your city. This ranking is based on a statistical analysis of death rates for patients and patient safety (based on hard data), as well as reputation (based on physician surveys). However, you remember a compelling advertisement for Hospital B—which is ranked lower on the *US News & World Report* list. This ad features an actual patient who had knee surgery performed at Hospital B, and gushes about its “compassionate and capable” doctors and staff. Further, she goes on to thank Hospital B for “helping me walk pain-free for the first time in twenty years!” Which information do you weigh more heavily: the fact that the Hospital A is ranked more favorably, or the compelling narrative provided by one satisfied customer?

Decisions like this—which involve uncertainty and risk—often require evaluating and prioritizing different pieces of information before making a final choice. Such information can be broadly classified as statistical or anecdotal. Anecdotal evidence consists of a specific historical instance, while statistical evidence is a numerical summary of a series of instances. Not always—but often—statistical information is superior to anecdotal evidence. In such situations, a judicious decision maker would ignore the latter evidence in favor of the former. But there is something in us which often hinders our discrimination between these two types of information. A striking demonstration of this was the case of “Baby Jessica,” whose accidental fall into a well near her home in Texas, and the ensuing highly publicized rescue, elicited over \$700,000 in donations from sympathetic donors. Interestingly, the same potential donors largely ignored the disturbing statistics about a famine in northeast Africa a few years later that affected millions of children. While other factors may also have been at play, researchers have largely attributed this sympathy-gap to the visceral and vivid mental imagery evoked by Baby Jessica in contrast to the bland abstractness of the famine statistics (Small, Loewenstein, and Slovic 2007).

Such neglect of statistical information is called the *anecdotal bias*. Often the anecdotal bias persists even when statistical information objectively dominates the available anecdotal information (Bar-Hillel 1980). Heuristics and biases like availability and representativeness, including base-rate neglect, are also manifestations of insensitivity to numerical information and the overuse of more visceral and vivid cues (Locksley, Hepburn, and Ortiz 1982). Similarly, research with professionals in medicine, the law, management, and other fields documents a preference for clinical reports over more accurate actuarial judgments.

Other researchers concur that anecdotes and exemplars are more effective and persuasive because they are more vivid and easy to process (Hamill, Wilson, and Nisbett 1980). In contrast, statistical information is usually more pallid and entails more cognitively taxing processing. These differences imply dual routes for the processing of anecdotal versus statistical information, where a more emotionally aroused mindset is likely to reflexively favor the use of anecdotal evidence, while greater cognitive functioning will more heavily weigh statistical evidence. Such duality is reflective of the dual-process theories of persuasion and decision making, which posit that—while the

more engaged, deliberative processing style emphasizes information quality—the more emotional, intuitive approach is less discriminating, and is influenced by trivial information in addition to relevant, central cues (Petty and Cacioppo 1986). This body of work suggests that relatively uninformative anecdotal evidence is likely to influence the decision outcome when the latter processing style dominates, often at the expense of more diagnostic statistical evidence. This is particularly likely when the more visceral and vivid anecdotal information evokes greater engagement. Such advantages of vividness have been shown for narratives and anecdotes, and also for graphical representations of information (Schirillo and Stone 2005).

While significant evidence of the superiority of anecdotal or narrative evidence exists, this advantage is neither absolute nor universal. In several studies, statistical evidence has been found to be more persuasive (Allen and Preiss 1997). This calls for an investigation of potential contextual moderators which may influence the magnitude of the anecdotal bias across different situations.

In this paper we examine the impact of anxiety on a decision maker’s tendency to over-utilize anecdotal information, even when more reliable statistical information is available. We focus on the role of anxiety, a negative high-arousal emotion, in our exploration of the anecdotal bias because risky choices are often made in contexts riddled with high decision anxiety.

We expect that activating decision makers’ anxiety about negative outcomes will increase the impact of anecdotal information on decision making. Anxiety is a common emotion that signals the presence of a potential threat or negative outcome, promotes pessimistic appraisals of future events, and impairs affect regulation (Hartley and Phelps 2012). Additionally, worry and anxiety are believed to evoke high levels of autonomic arousal, which impairs working memory capacity and executive functioning (Hartley and Phelps 2012). Thus, anxious individuals are more likely to (a) process persuasive arguments less thoroughly, (b) scan alternatives in a more haphazard fashion, (c) exhibit lower recall and organization of information in memory, (d) succumb to framing effects, and (e) select an option without considering all alternatives. Hartley and Phelps (2012) assert that such deficiencies occur because anxiety damages affect regulation processes, reducing one’s ability to modulate these processing tendencies. This interruption of affect regulation is likely to make an anxious individual less discriminating about information quality, more influenced by the visceral and vivid nature of the evidence, and thus more susceptible to the anecdotal bias.

In the sections that follow, we gather evidence for this proposed effect of anxiety on the anecdotal bias in four consecutive experiments. Study 1A was a natural experiment, in that we did not directly manipulate anxiety but rather had respondents complete a simple choice task on one of two occasions across which anxiety was expected to vary substantially and predictably. Specifically, we randomly assigned 100 undergraduate students (46.0% females;  $M_{age} = 24.9$ ,  $SD = 4.49$ ) taking a Marketing course to one of two conditions which involved them participating in an experiment either (1) prior to an ordinary class meeting when anxiety was expected to be low, or (2) prior to a scheduled exam in the class when anxiety should have been higher.

In both conditions, participants were asked to “Imagine that you are traveling for work to a foreign country. This is a 30-day assign-

ment that will require you to drive to and from work while you are there.” Immediately following this imagination, they were exposed to a decision scenario, where they were asked to choose between two different automobile insurance policies for extended travel in a foreign country: one option was statistically superior, while the other was anecdotally superior. Statistical information took the form of customer satisfaction ratings, while a traveler’s personal experience provided contrary anecdotal information: “Company A has the highest customer satisfaction ratings (90%) of all companies offering international automobile insurance coverage. Company B has a relatively lower overall customer satisfaction rating (65%). Despite such a difference in customer satisfaction ratings, the travel magazine cites another traveler’s personal experience with these two insurance companies. He has traveled to the city several times and has used both insurance companies. A recent experience he had with Company A was very negative. When he had a collision in a foreign country, it took months to get reimbursed for his medical expenses and—contrary to his expectations—many of his expenses were not covered. But he has not had any negative experiences with Company B.” The purpose of using an unknown traveler to deliver the anecdotal information was to minimize potential confounds caused by the source of information.

After making a choice, participants responded to a state-anxiety scale adopted from Spielberger et al. (1970) comprised of the following three items: (1) *How emotionally engaged were you while making this decision?*; (2) *How worried were you while making this decision?*; and, (3) *How anxious were you while making this decision?* (1 = not at all; 7 = a lot). We averaged these three items to create an index for situationally activated anxiety ( $\alpha = .86$ ). In addition, participants responded to the following two items: (1) *How involved were you in making this decision?*; and (2) *How much thought did you put into making this decision?* (1 = not at all; 7 = a lot). We averaged these two items to create an index for task involvement ( $\alpha = .83$ ). Our objective was to show that participants would not differ in task involvement, but would exhibit different levels of state-anxiety, due to the field experimental conditions.

An ANOVA on task involvement ( $F(1, 99) = .70, p > .50$ ) showed no significant difference in task involvement of respondents participating in the experiment on an exam day ( $M = 3.65$ ) versus on a regular class day ( $M = 3.89$ ). However, their state-anxiety on a regular class day ( $M = 3.06$ ) was significantly lower than that on an exam day ( $M = 4.62; F(1, 99) = 26.73, p < .001$ ), suggesting that participants’ anxiety varied in the expected manner.

Separate ANOVAs on respondents’ choices revealed significant differences across anxiety conditions. Consistent with our expectations, 63% of the respondents in the high anxiety condition (i.e., on an exam day) chose the anecdotally superior option, whereas only 35% did so on a regular class day when anxiety was lower ( $F(1, 99) = 7.45, p = .01$ ). This supports our assertion that incidental anxiety can augment the anecdotal bias even when situational involvement remains unchanged. Notably, such an effect exists when anxiety is situationally activated by events or factors unrelated to the focal decision.

To assess the generalizability of results from study 1A, we re-administered this experiment using a different choice task with a second sample of undergraduate students ( $N = 96$ ; 52.1% females;  $M_{\text{age}} = 23.57, SD = 3.39$ ). The research design, procedures, and measures in this study were identical to those in Study 1A, except for two differences. First, instead of the international travel scenario employed in Study 1A, we designed a decision scenario in which participants were asked to choose between two different medications for a stomach virus that sometimes affects tourists in a particular

foreign country. Specifically, they were asked to “Imagine that you are traveling for work to a foreign country where your company recently set up new operations. A few days before you are to leave, your company sends a memo which informs you that the country you are heading to is experiencing a stomach flu infection which causes mild symptoms including a few days of diarrhea.” The choice task was between a statistically superior option (i.e., *Drug X was effective for 85% of those who tried it vs. Drug Y was effective for 70%*) and an anecdotally superior option (i.e., *Drug X did not work for a co-worker who was afflicted with the virus when he was abroad, but Drug Y did the trick and cured him*). The other important difference is that, to control for information source across statistical and anecdotal conditions, we framed both types of evidence as being from the respondents’ company website, indicating that a summary report on the website provided effectiveness ratings for each drug (statistical information), along with a personal account from a coworker who had tried both drugs (anecdotal information).

An ANOVA on task involvement ( $F(1, 95) = .03, p > .50$ ) showed no significant difference in task involvement of respondents participating in the experiment on the exam day ( $M = 3.08$ ) versus on a regular class day ( $M = 3.34$ ). As expected, participants’ state-anxiety on a regular class day ( $M = 3.41$ ) was significantly lower than that of participants on an exam day ( $M = 5.02; F(1, 95) = 29.91, p < .001$ ). These findings replicate results obtained in Study 1A.

Planned contrasts on participants’ choices revealed significant differences across the anxiety conditions. As expected, 63% of participants in the high anxiety condition (i.e., on an exam day) chose the anecdotally superior option while only 37% did so on a regular class day when anxiety was lower ( $F(1, 95) = 8.13, p < .01$ ).

In the next experiment we investigate the influence of anxiety on the anecdotal bias and attempt to rule out the possibility that negative emotions in general lead to this propensity. This study also diverges from Studies 1A and 1B in other important aspects. While those studies examined the relative choice share of anecdotal (versus statistical) options when both were presented together, this study examines the role of anxiety in a decision maker’s susceptibility to the anecdotal bias when anecdotal and statistical information are presented separately. This is a critical methodological distinction because several researchers have demonstrated a preference reversal for the same options when they are presented separately versus jointly. Another important difference characterizing Study 2 is that—while prior studies in this article examine the issue of choice—this study examines the persuasive impact of a message. Also, although we controlled for the source of anecdotal and statistical information in Study 1B, there was another distinction between these two types of information: While anecdotal information came from an individualized source, statistical information originated from an aggregated source, which could have potentially led to differential trust and credibility across sources. Our next study controls for this difference as well by ensuring both anecdotal and statistical information come from the same source.

Study 2 used a 3 (Affect Type: anxiety vs. sadness vs. control)  $\times$  2 (Message Type: anecdotal vs. statistical) between-subjects design. Besides the focal emotion of *anxiety*, we chose to study *sadness* in this experiment. Our sample was comprised of two hundred and twenty six non-student participants (50.4% females;  $M_{\text{age}} = 39.78, SD = 14.52$ ) on a nationwide online panel in the U.S. that is commercially available from Amazon M-Turk.

Affect Type was manipulated by asking participants to recall a previous event in their life. In the anxiety and sadness conditions we asked participants to recall an anxiety-provoking or a sadness-provoking event, while those in the control condition were asked to

recall a typical evening in their life. In all Affect Type conditions, participants were asked to write down the description so that any reader could understand their emotional state. The average length of participants' descriptions across all Affect Type conditions was 441.6 characters ( $SD = 253.8$ ;  $median = 399$ ). Description length did not vary significantly across conditions ( $p > .50$ ).

Following this task, participants in all conditions rated four statements (1 = *Strongly Disagree*; 6 = *Strongly Agree*) relating to their current emotional state: (1) *The experience evokes no particular emotion in me*; (2) *The experience is very vivid and easy to recall*; (3) *The experience makes me feel anxious*; and, (4) *The experience makes me feel sad*. These items were designed to serve as manipulation checks for the Affect Type manipulation.

Next, participants were exposed to the Message Type manipulation. In each condition, participants read a letter written by a cattle farmer to a newspaper editor in response to an article recently published in that newspaper which discussed the issue of additional regulation in the cattle farming industry, following the leak of an undercover video showing inhumane practices while handling cattle. The letter in the statistical Message Type condition employed multiple types of numerical information to make a favorable case for cattle farmers (and against additional government regulation). The letter in the anecdotal Message Type condition made a similar case but used only narratives and anecdotes and featured no numerical information.

In the final stage of the experiment, participants expressed their degree of agreement with nine statements designed to measure the degree of influence the letter had (e.g., "*The message is written by someone who knows the topic*"). As a manipulation check for Message Type we also included two questions assessing participants' perception of the nature of the information presented in the letter: (1) *The letter mostly consists of "anecdotes" and narratives*"; and, (2) *The letter mostly consist of "statistics" and "facts."* All the items listed above were anchored at 1 = *Strongly Disagree* and 6 = *Strongly Agree*.

As expected, participants perceived the emotionality of the experience to be lower in the control condition ( $M_{anxiety} = 5.15$ ;  $M_{sadness} = 5.26$ ;  $M_{control} = 3.62$ ;  $p < .001$ ) and equal across the anxiety and sadness conditions of Affect Type ( $p = .66$ ; two-condition means test). Recall and perceived vividness of the experience did not vary significantly across Affect Type conditions ( $M_{anxiety} = 5.19$ ;  $M_{sadness} = 5.22$ ;  $M_{control} = 4.98$ ;  $p = .30$ ). Experience-induced sadness was the highest in the sadness condition and the lowest in the control condition ( $M_{anxiety} = 3.18$ ;  $M_{sadness} = 5.10$ ;  $M_{control} = 1.81$ ;  $p < .001$ ). Similarly, experience-induced anxiety was the highest in the anxiety condition and the lowest in the control condition ( $M_{anxiety} = 4.46$ ;  $M_{sadness} = 3.47$ ;  $M_{control} = 1.79$ ;  $p < .001$ ). Also as anticipated, participants perceived the anecdotal-condition letter as consisting mostly of "anecdotes" and "narratives" ( $M_{anecdotal} = 4.43$ ;  $M_{statistical} = 3.00$ ;  $p < .001$ ), and the statistical-condition letter as comprised mostly of "statistics" and "facts" ( $M_{anecdotal} = 2.64$ ;  $M_{statistical} = 4.04$ ;  $p < .001$ ). These results suggest that our manipulations were successful.

To test the core thesis of the paper, all nine statements measuring the letter's influence on the participant formed a highly reliable ( $\alpha = .94$ ), unidimensional Influence Index, which served as our key dependent variable. A 3 (Affect Type)  $\times$  2 (Message Type) ANOVA revealed no significant main effects of Affect Type ( $p = 1.00$ ) or Message Type ( $p = .20$ ) on the Influence Index, but did yield a significant interaction effect ( $F(2, 226) = 4.25$ ,  $p = .015$ ). Planned contrasts revealed a significant difference in the Influence Index only across the anxiety condition ( $M_{anecdotal} = 4.71$ ;  $M_{statistical} = 4.07$ ;  $p = .015$ ), but not across the sadness condition ( $M_{anecdotal} = 4.44$ ;  $M_{statistical} =$

$4.37$ ;  $p = .71$ ) or the control condition ( $M_{anecdotal} = 4.28$ ;  $M_{statistical} = 4.51$ ;  $p = .23$ ). These results confirm our principle hypothesis that it is indeed negative emotional arousal, specifically anxiety—and not just any negative emotion—that causes the enhanced preference for anecdotal information.

While our previous studies dealt with *incidental anxiety*, Study 3 examines the role of *integral anxiety* in enhancing the anecdotal bias. In particular, this research investigates the role of anxiety caused by probabilistic risk (i.e., the likelihood that a person will encounter an unwanted event) in influencing individuals' suboptimal decisions. When the cost of making a poor decision is high—as in the domain of high stakes medical-decision making or high-risk foreign travel—and the decision maker perceives high risk and/or fear, the decision process is often accompanied by higher arousal and negative affect, specifically in the form of anxiety and worry.

The research design, procedures, and measures in this study were identical to those in Study 1, with one exception: Instead of using the exam day to naturally heighten anxiety, this study experimentally manipulated the probabilistic risk of being infected by a contagious disease. Following Freling, Saini, and Yang (2012), participants were told that the risk of infection was low (high), and were then asked to make a choice between two medication options: one medication was anecdotally superior, while the other was statistically superior.

Consistent with our expectations, the anecdotal bias increased with higher risk (from 30.0% to 57.7%,  $\Delta M = +27.7\%$ ;  $Z = 2.82$ ,  $p_{one-tailed} < .001$ ). The indirect effect was tested using bootstrapping procedures. The procedures generated a 95% confidence interval around the indirect effect with zero falling outside of the confidence interval (95% CI = .13 to .78), indicating that the mediating pathway was significant. These results confirmed that, consistent with our expectations, the observed effect of infection risk on preference for the anecdotally superior medication was driven by participants' levels of state-anxiety.

Our research points to an interesting possibility of how high-stakes risky decisions may be influenced by anxiety. It has been widely assumed that higher stakes and incentives benefit decision accuracy. The Elaboration Likelihood Model literature postulates a perpetually positive role of high situational involvement in enhancing decision accuracy (Petty and Cacioppo 1986). Our findings build upon the nascent literature stream presenting a counterintuitive view of the rationalizing role of high stakes and incentives in enhancing human performance.

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# Customer Engagement Behavior: Scale Development and Validation

Hongyan Yu, Sun Yat-Sen University, China  
Ann Veeck, Western Michigan University, USA

## EXTENDED ABSTRACT

Customer non-purchase behavior also plays an important role in the marketing of products. This behavior includes, but is not limited to, recommending brands to others, blogging and posting on the Internet about consumption experiences and participating in company activities. Scholars are increasingly aware of the importance of non-purchase behavior. Van Doorn et al. (2010) defined this behavior as “customer engagement behavior (CEB)” with the term referring to a customer’s behavioral manifestations toward a brand or a firm beyond purchase that results from motivational drivers (Van Doorn and Lemon et al., 2010). Numerous studies have examined CEB customer engagement behavior. However, there is lack of research delineating the boundaries of CEB and the means for measuring those boundaries. The purpose of this study is to define the boundaries of and measure CEB, through a set of multi-item scales.

Study 1 is Item Generation. In the first phase of the research, 21 consumers with opinion leader intentions were asked to describe in open-ended interviews the behaviors that they exhibit in a relationship with a brand which they are engaged. We established guidelines for the interviews based on the operationalized definition and drivers of CEB in related literature. This stage generated 58 initial items. Three marketing professors and 12 graduate students were asked to evaluate these items. They suggested improvements and eliminated items that were ambiguous, redundant or otherwise faulty. As a result, we obtained 37 items with good content validity to test via EFA.

Study 2 is item purification. It involved pilot testing the items with a convenience sample of undergraduate students in a class setting from a university. 87 respondents completed the questionnaire without any response errors. We evaluated the items using exploratory factor analysis. An iterative process eliminated items that had factor loadings below 0.5, high cross loadings above 0.4 and low commonalities below 0.3 (Churchill Jr, 1979; Hinkin, 1998). The final factor analysis resulted in three factors with eigenvalues exceeding 1, composed of 14 items, explaining 72% of the total variance. The KMO(0.766) and Bartlett’s test of sphericity ( $p$ -value<0.001) indicated that factor analysis was appropriate for the data.

Factor 1 relates to behavior in which customers directly promote brand sales beyond purchase behavior. We call factor 1 *promotion* because the customer behavior promotes the performance of a company or a brand. Factor 2 encompasses behavior in which customers join an Internet community and discuss a brand or company with other customers in that forum. We term factor 2 *communication* because it describes the flow of brand or company information and communication among customers. Factor 3 represents the interaction between the company and the customer. We name factor 3 *collaboration* because this construct relates to behavior in which customers cooperate with the company and in which the customer and company improve business performance together.

Study 3 is scale structure and item revision. The scale from study 2 was not ideal because some important elements of CEB did not appear in the three dimensions. Based on the literature and in-depth interviews, we added self-concept connection behavior to express the relationship between customers and brands in CEB. We named this dimension *self-expression* and added relevant items to the results of study 2. We conducted another EFA with a new set of items. To enhance the generalizability of the results, we conducted a survey ( $n=157$ ). The process of EFA was identical to that in study

2. The KMO value was 0.849 and Bartlett’s test of sphericity was  $p$ -value<0.001. Subsequently, a factor analysis was conducted on the remaining 16 items using the maximum likelihood estimation method with oblique rotation. Using eigenvalues of greater than 1.0 and a scree test as guidelines for factor extraction, a final four-factor model emerged with 16 items. All of the factor loadings of the items exceeded 0.5, all factors’ Cronbach’s  $\alpha$  were above 0.7 (0.741-0.828), all item-total correlation coefficients were above 0.4 (0.483-0.709), and each factor had a high internal consistency. In summary, the CEB scale we established had four dimensions and 16 items.

Next, we tested the validity of the CEB scale, including the internal consistency, composite reliability, convergent validity, discriminant validity, common method variance, and nomological validity. To test the nomological validity, we built four hypotheses to determine the relationships among brand loyalty, self-enhancement, brand attachment and customer relationship equity.

To test these hypotheses, we conducted a survey both in the field and online. The sample size was 432, with an effective sample size of 421 after eliminating no-response questionnaires. The design of the questionnaire in study 4 was identical to that in study 3 except we added items of self-enhancement, brand loyalty, customer relationship equity and brand attachment. CEB consists of four dimensions with 16 items.

We evaluated measurement properties by running CFA. The model fit was good ( $\chi^2=6.00$ ;  $d.f.=2$ ; CFI=0.99; GFI=0.99; NFI=0.99; NNFI=0.98; RMSEA=0.069; SRMR=0.022). All of the path coefficients were above 0.5(0.52-0.88) and significant at the  $\alpha=0.05$  level. The composite reliabilities for all the five latent constructs were between 0.771 to 0.860. Additionally, the coefficient alpha values were well above the threshold value of 0.7 (0.764-0.858). The  $t$  value for all loadings are greater than 2.57 (Netemeyer et al., 2003) providing evidence of convergent validity. The results show that the AVE of each construct is above 0.5 (0.520-0.671), which means that all the constructs have a good convergent validity. We computed the average variance of the five factors and compared it with the highest variance that each factor shared with the other factors in the model. The AVE for each factor was of greater than the highest shared variance. Finally, we tested our hypotheses. Four hypotheses are supported, therefore, the CEB scale we developed has good nomological validity.

Following Van Doorn et al.’s (2010) definition, we developed a CEB scale with acceptable reliability and validity and tested the relationships among CEB, brand loyalty, brand enhancement, brand attachment and customer relationship equity. The results provide a tool for empirical research of customer engagement behavior and enrich the theory in service dominant logic, co-creating value, and customer relationship management.

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# Conceptualizing Customer Perceived Green Value as a Second-order Construct

Ruizhi Yuan, Nottingham University Business School, China

Martin J. Liu, Nottingham University Business School, China

Jun M. Luo, Nottingham University Business School, China

Alain Yee Loong Chong, Nottingham University Business School, China

## EXTENDED ABSTRACT

Extant research has examined the role of perceived green value (PGV) in various purchasing decisions, such as green purchase attitude, buying intentions and green behaviors (e.g. Chen and Chang, 2012). However, the concept of PGV is not consistently defined and developed. Therefore, the primary objective of this research is to develop a method to understand the construct. This research represents the first attempt to propose it as a multidimensional higher-order construct which consists of ecological, functional, symbolic, experiential and epistemic values.

The first step of this research is to specify the construct domain by providing a conceptual definition of the construct of perceived green value (PGV). In this research, we define PGV as “customers’ perceptions of obtaining additional benefits from purchasing, consuming and disposing green products compared with non-green products in a manner that is sensitive or responsive to ecological concerns”.

Existing literature operationalizes the PGV construct as a unidimensional construct. They perceive it as the “give-versus-get” trade-off, “value for money” “meeting quality and environmental requirements” (e.g. Lin et al., 2005; Haws et al., 2014). However, it neglects the complex nature of PGV. The root of PGV is the various additional values that green products can deliver compared with these non-green ones. Moreover, from a structural model perspective, it conceptually violates the fundamental definition of PGV. Thus, PGV should be regarded as a multidimensional model, discerning the complex nature of the construct. Perceptions of value are not limited to the environmental aspects but may include social, emotional and even epistemic value components (Sheth et al., 1991). Based on the Consumption Value Theory (Sheth et al., 1991) and branding benefits theory (Orth and De Marchi, 2007), we propose that PGV is a second-order construct that consists of *ecological, functional, symbolic, experiential, and epistemic* values.

The process follows Lages and Fenando’s (2005) approach for evaluating a second-order construct. In the first phase of the research we explored the ideas and opinions that consumers held about green product and green product value. Ten in-depth interviews were conducted among university students in China. Respondents, balanced between male and female, had purchased green products in recent 6 months. The interview results are consistent with the dimensions identified in the extant literature. The definition and dimensions of PGV is confirmed. The next step of the operationalization process requires quantitative survey data. The target population was customers who have purchased green products recently. The research is a cross-sectional consumer survey and the sample consisted of 400 Chinese respondents. The Confirmatory Factor Analysis (CFA) results confirm that PGV is a multidimensional construct which includes ecological, functional, symbolic, experiential and epistemic values.

This research extends the existing green consumption research by firstly testing a practical five-dimensional scale of perceived green value. The reliabilities, factor analysis and validity tests indicate that the five dimensions of PGV demonstrate that consumers assess green products, not just in functional terms of expected performance (functional value), but also in terms of individuals’ concern to the

environment (ecological value), self-expressive benefits of what the green product communicates to others (symbolic value), the enjoyment derived from the green product (experiential value), and interest in green products (epistemic value). From a managerial perspective, this research identifies factors with practical implications for companies seeking to gain a greater share of the green market. From perceived green value perspective, if it is true consumers are “value-driven”, and then managers need to understand what consumer’s perceived green value is and where they should focus their attention to achieve this market advantage. A mix of informational and emotional appeals is necessary for firms to create awareness of these values in consumers’ minds.

This research represents first attempt to identify the construct of perceived green value in a multidimensional way. It is the first empirical approach for structuring dimensions of PGV. Although customer value and green product perceptions represent central marketing objectives, research still fails to offer concepts that might explain customers’ perceptions of green products. The proposed approach therefore contributes to a systematic conceptualization of PGV and in this sense, extends the extant literature. However, this research includes several limitations. This empirical study is primarily an exploratory in nature, focusing on green products in general. Future studies should address the potential role of product category in affecting consumers’ perceived green value and their subsequent responses. For example, buyers may perceive green energy brand with more functional values, while perceive hybrid vehicles with more symbolic values.

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# The Influence of Descriptive Norm on Conservation Behavior: The Moderating Role of Construal Level

Yuhosua Ryoo, Korea University, South Korea  
Young Shin Sung, Korea University, South Korea  
Yongjun Sung, Korea University, South Korea  
Na Kyong Hyun, Korea University, South Korea

## EXTENDED ABSTRACT

With the establishment of active coffee consumption culture globally, rapid increase in disposable paper cup usage and following environmental destruction are becoming of a great concern. As a part of environmental protection campaigns, recently, the number of coffee franchises such as *Starbucks* and *The Coffee Bean & Tea Leaf* are making efforts to convince consumers to use coffee mugs and tumblers instead of disposable cups. However, the effectiveness is in doubt. In order to raise awareness on such environmental issues and induce consumers to actively participate in such campaign, a type of descriptive norm – provincial norm – is regarded as one of the strongest determinants that influence consumers' conservation behavior. However, little studies have been conducted to search its' mechanism and boundary effect. The purpose of current research is to propose a spatial distance, a dimension of psychological distance, as a novel underlying mechanism of the provincial norm effect and moderating role of Construal Level Theory (CLT).

Recently, a number of research revealed that consumer's conformity to descriptive norms can vary as a function of the type of reference group tied to that norm – general norms and provincial norms (Goldstein et al., 2008; Spink, Crozier, & Robinson, 2013). Provincial norms refer to the behavioral descriptions of reference group close to one's local setting and circumstances. General norms refer to the behavioral descriptions of reference group distal to one's local setting and circumstances. Consumers are more likely to be influenced by the norms of their immediate surroundings than those of their less immediate surroundings, although there is no evidence that provincial norm is rationally more diagnostic of effective or appropriate than the general norm.

One of distinctions between the two reference group conditions is the 'physical' and 'spatial' closeness the individual perceived with the reference group. From this perspective, it is logically predictable that the distinctive effect between general norm and provincial norm is due to the differences of perceived spatial distance, a dimension of psychological distance, between the consumer and the reference group.

Construal-level theory (CLT; Trope, & Liberman, 2010) is a theory that describes the relation between psychological distance and the extent to which people's thinking. The general idea is that the more distant an object is from the individual, the more abstract it will be thought of, while the opposite relation between closeness and concreteness. In consideration to the researcher's proposition that spatial distance is higher in provincial norms than in general norms, current research suggests that the provincial norm message will be more efficacious when presented with low-level construal message versus high-level construal message, whereas the general norm message will be more effective when presented with high-level construal message versus low-level construal message.

An experiment was conducted based on a 2 (descriptive norm: general vs. provincial)  $\times$  2 (construal level: high vs. low) between-subjects design. Participants (N = 120, 56 females, Age  $M = 23.39$ ) were assumed that they were visiting an imaginary coffee shop, *Coffee Story*, and were provided an advertisement called 'The Mug Cup & Tumbler Usage Campaign', then evaluated both willingness-to-

participate (WTP) and ordinary consumers' willingness-to-participate (OWTP) with each in 3 items. All items were asked in a 7-point Likert scale (1: strongly disagree, 7: strongly agree).

As descriptive norms, the provincial (general) norm message was manipulated as the following: "JOIN YOUR FELLOW CUSTOMERS VISITING THIS STORE (*COFFEE STORY STORES IN KOREA*) IN 'THE MUG CUP & TUMBLER USAGE CAMPAIGN'. In a study conducted in Fall 2014, 75% of the customer who visited this store (all *Coffee Story* stores in Korea) used mug cups or tumblers, instead of disposable cups". Based on the previous research (McCrea & Myers, 2012), levels of construal were manipulated as 'why a mug cup or tumbler should be used' or 'how a mug cup or tumbler should be used'.

A two-way ANOVA was conducted. The analysis revealed a main effect for descriptive norm on WTP (participant's willingness to participate;  $F = 18.688, p < .01$ ) and OWTP (average Korean consumer's willingness to participate;  $F = 5.399, p < .05$ ), participants reported a higher WTP when presented with the provincial norm (WTP  $M = 4.29$  / OWTP  $M = 4.16$ ) than when presented with the general norm (WTP  $M = 3.52$  / OWTP  $M = 3.63$ ). However, the main effect for construal level did not reach significance ( $p > .1$ ).

There was a significant interaction between the descriptive norms and construal level (WTP:  $F = 88.215, p < .01$  / OWTP:  $F = 59.259, p < .01$ ). Consistent with the predictions, additional planned comparisons showed that when presented with the provincial norm message, participants reported more WTP and OWTP in response to the 'how' message (low-level construal; WTP  $M = 5.11$  / OWTP  $M = 4.8$ ) than the 'why' message (high-level construal; WTP  $M = 3.38, t(58) = 7.438, p < .01$  / OWTP  $M = 3.45, t(58) = 3.986, p < .01$ ). On the other hand, when presented with general norm message, participants reported more WTP and OWTP in response to the 'why' message (high-level construal; WTP  $M = 4.26$  / OWTP  $M = 4.57$ ) than the 'how' message (low-level construal; WTP  $M = 2.84, t(58) = -5.92, p < .01$  / OWTP  $M = 2.74, t(58) = -7.815, p < .01$ ). These results support the hypothesis.

Our findings suggest that the consumers are more likely to be influenced by provincial norms than general norms, which is consistent with previous research, and the effect of provincial norms can be enhanced or limited according to the levels of construal paired. When presented with the provincial norm (general norm) paired with low (high) construal level, consumers will show higher willingness-to-participate in conservation campaigns, and even consumers thought that other consumers will show same reactions to the campaign.

The interaction effect between descriptive norms and construal level logically supports that the psychological distance, especially spatial dimension, appropriately explains why provincial norms are more persuasive than general norms as a novel underlying mechanism. In addition, these findings provide practical solutions to influencing in various consumer conservation domains. Matching descriptive norms and construal level would be effective to encourage other positive consumer behaviors, such as a charity donation, purchasing fair-trade product, and so on.

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# Enhancing Customer Participation in Social Media: A Value Co-Creation Perspective

Hongxia Zhang, Peking University, China

Mary Tate, Victoria University of Wellington, New Zealand

Hongzhi Gao, Victoria University of Wellington, New Zealand

Jia Chen, Peking University, China

## EXTENDED ABSTRACT

A new term we coin to capture the essence of social media branding is value in sharing. This concept is derived from a concept of value in use (Vargo and Lusch 2004). Value in sharing is the key outcome of the process by which social media participants socially construct the meanings of a social consumption experience and share the meanings of this experience to others in their social groups in social media. The active social media conversations transform value propositions of a brand into a state in which they can create economic, symbolic, functional or emotional value for customers. Specifically, we define a brand's value cocreation strategy/value propositions in social media as follows:

- Economic value co-creation intentions (EVC) - offering opportunities for a social group to acquire economic benefits from sharing information and customer experiences in social media;
- Symbolic value co-creation intentions (SVC) - incorporating symbols (social objects) in social media that facilitate the creation and dissemination of shared meanings among a social group. Two forms of symbolic value that are directly relevant in social media are: prestige/status and personality expressions (Bhat and Reddy 1998)
- Functional value co-creation intentions (FVC) - offering opportunities and making space in social media to encourage users to debate on, construct and share the functional value of a product or service;
- Emotional value co-creation intentions (EMVC) - offering stimuli that are based on shared social experiences of the key stakeholders of the brand for the purpose of creation of emotional arousal of social media users and their emotional attachment to the shared experiences involving the brand.
- Global value creation intentions (GLVC) - integrating global consumption values into local consumption practice, and encouraging the sharing of the integration experiences in social media.

We employ an exploratory mixed method approach using interviews and social media content analysis, to explain the success and challenges of social media branding strategies in China. We employ an exploratory mixed method approach using interviews and social media content analysis, to explain the success and challenges of social media branding strategies in China. Our analysis of consumer interviews suggests that it is critical for a brand's identity aligns with the individual and group identities of social media users in order for the brand to achieve active participation from young Chinese consumers in social media space. Multiple regressions results also showed some promising results in this pilot study.

In order to get social media users participated in a brand's social media site, the brand needs to offer economic incentives (a free coffee, prize of different kinds). This economic perspective of value co-creation has been largely overlooked in the past value cocreation studies which tend to focus on the social, functional and hedonic benefits of value co-creation (Desai 2009; Nambisan and Baron 2009). Although potentially emotional and hedonic arousals gained from the reading and sticking around in social media, fundamentally so-

cial media is a space for social benefits. In this regard, personality expressions of individuals and emotional expressions or resonance in social media may not be as strong stimuli or psychological drivers as status-based values which will enhance an individual's and a group's social status. While social media may potentially cover any aspect of a person's or a group's social experiences, it is critical for us to know social status benefits outweigh other individual benefits with regard to social media participation. This insight into social media may have a root in Chinese culture which values collective and social-hierarchical values (Chan 1963; Hofstede 2001) as opposed to individualist cultures in some Western countries.

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# The Role of Self-Regulatory Focus in the Effectiveness of Actor's vs. Observer's Visual Perspective

Jing Zhang, San Jose State University, USA

Xiaojing Yang, University of Wisconsin-Milwaukee, USA

## EXTENDED ABSTRACT

The persuasive power of visual image and its stylistic properties has been evidenced in consumer research (Peracchio & Meyers-Levy, 2005; Yang et al., 2010). This project focuses on one common stylistic property - visual perspective and examines its persuasiveness. Marketers may use either an actor's vs. observer's visual perspective to depict a product in an ad to appeal to consumers. An *actor's visual perspective* is also referred to as the first-person perspective, in which individuals see the event through their own eyes. An *observer's perspective* is also labeled as the third-person perspective, in which individuals see themselves and the event from the perspective of an external observer (Sutin & Robins, 2008). In this paper, we examine how different visual perspectives affect consumers' evaluations of the product promoted in the ad. Specifically, we predict that regulatory fit between visual perspective (actor's vs. observer's) and self-regulatory focus (promotion vs. prevention) will lead to greater persuasion outcomes. Moreover, internal vs. external evaluation thoughts will explain the persuasion effect observed under the actor's vs. observer's perspective conditions, respectively. We test these predictions in two experiments. Findings of this project contribute to research on the role of regulatory fit in visual persuasion, visual perspective taking, and stylistic properties in visual communication. Practical implications are also discussed.

Research in social and consumer psychology has shown that different visual perspectives make consumers attend to distinct information, rendering different aspects of the social target or event salient, which in turn affects their emotions (Hung & Mukhopadhyay, 2012), interpretation of actions (Libby & Eibach, 2002), and judgment and decision making (Jones & Nisbett, 1972). This stream of research in general contends that an actor's perspective encourages consumers to rely more on their internally driven states (Pronin & Ross, 2006), whereas an observer's perspective encourages consumers to rely more on externally driven, other-oriented data (e.g., what do other people think of me?). We argue that the persuasiveness of such visual perspectives hinges on consumers' self-regulatory focus.

Regulatory focus theory suggests that consumer judgments, decisions, and behaviors can be motivated by two regulatory orientations: promotion- vs. prevention- focused (Higgins, 1997). Research has established that accentuating people's ideals (e.g., hopes and wishes) engenders a promotion-focused self-regulation, whereas highlighting people's oughts (e.g., obligations and duties) activates a prevention-focused self-regulation (Higgins, 1988). Of particular importance to this project, due to a higher propensity to take risks and deploy eagerness regulatory strategies, promotion-focused consumers are more likely to resort to their internal feelings or knowledge structure. In contrast, due to a higher propensity to be risk averse and to apply vigilance regulatory strategies, prevention-focused consumers focus more on external information when making judgments and decisions (Avnet & Higgins, 2006; Pham & Avnet, 2004).

The concept regulatory fit helps us bring together the two lines of research. We hypothesize that a favorable fit between consumers' regulatory focus and the visual perspective of the advertised product, referred to as a regulatory visual perspective fit, will result in more persuasion. Specifically, employing a promotion-oriented visual perspective (actor's perspective) to depict a product enhances product values and evaluations among promotion-focused consumers,

whereas using a prevention-oriented visual perspective (observer's perspective) increases product values and evaluations among prevention-focused consumers. In addition, internal vs. external evaluation thoughts are expected to explain the persuasion effects.

Two studies with a 2 (Self-Regulatory Focus: Promotion vs. Prevention)  $\times$  2 (Visual Perspective: Actor's vs. Observer's) between-subjects design are used to test the hypotheses. The actor's vs. observer's perspective is manipulated in videos (study 1: online game) and print ads (study 2: online class) by varying camera angles (Peracchio & Meyer-Levy, 1996). The promotion- vs. prevention- focused regulation is manipulated through a priming technique (Pham and Avnet, 2004). We measure participants' product evaluations as the primary dependent variable across two studies, and assess participants' listed thoughts (study 2) to reveal the underlying processes.

The evaluation index was submitted to a 2  $\times$  2 ANOVA to test hypotheses in each study. As expected, a significant two-way interaction effect emerged. Contrast analysis showed that when participants were exposed to an actor's perspective, those primed with a promotion focus reported more positive evaluations than those primed with a prevention focus. Conversely, when participants were exposed to an observer's perspective, those primed with a prevention focus reported more positive evaluations than those primed with a promotion focus. Mediation analysis was conducted to confirm the mediating roles of internal vs. external thoughts. Results showed that under the actor's perspective condition, internal thoughts mediated the effect of regulatory focus on evaluations, whereas under the observer's perspective condition, external thoughts partially mediated the effect of regulatory focus on product evaluations.

Across two experiments, using different product categories, we find converging evidence for the regulatory visual perspective fit in terms of persuasion effects and processes. Our findings contribute to the literature on self-regulatory focus and role of regulatory fit in visual persuasion. Prior research has focused primarily on how regulatory fit can be influenced by message framing, such as abstract vs. concrete framing (Lee et al. 2010) and gain vs. loss (Aaker & Lee, 2004). We demonstrate that visual perspective of stylistic properties, a non-message factor also contributes to regulatory fit. Second, we also add to research on visual perspective taking by suggesting that consumers' regulatory focus that is salient at the time of viewing the ad may affect them to take either an actor's or observer's perspective. Lastly, our project also contributes to research on stylistic properties of visual images by offering additional evidence for the important role of the visual (vs. verbal) element of communications in persuasion. For marketing practitioners, our findings that favorable fit between visual perspective and self-regulatory focus leads to greater persuasion outcome imply that if an actor's (observer's) perspective is used in the ad, a promotion-focused (prevention-focused) message should be used to maximize the persuasive effects.

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# Conspicuous Consumption and Subjective Well-Being: A Bi-Motive Explanation

Mohua Zhang, Kedge Business School and University of Pierre Mendes-France, France  
Dwight Merunka, Aix-Marseille Graduate School of Management-IAE and Kedge Business School, France

## EXTENDED ABSTRACT

The impact of conspicuous consumption (CC) on Subjective well-being (SWB) generates controversy. In contrast to the negative relationship found by Linssens, van Kempen, and Kraaykamp (2011), DeLeire and Kalil (2010) demonstrate a positive impact of CC on SWB.

Shrum et al. (2013) propose that the outcomes of symbolic consumption depend on consumers' motive to use the product as a self- (i.e. show to one's self) or as an other-signal (i.e. show to others). This might be an explanation to the above contradictory results. However, their proposition has never been empirically tested. Our research objective is thus to empirically investigate the impact of CC on SWB depending on the dominance of self or other-signaling motives.

Composed of life satisfaction (LS), positive affect (PA), and negative affect (NA), each component of SWB relates differently to consumption behavior (Hudders and Pandelaere 2012; Diener 1994). We propose that CC has a positive impact on LS and PA and a negative impact on NA if consumers' motive is to signal to themselves (self-signaling CC), and has a negative impact on LS and PA and a positive impact on NA if consumers' motive is to signal to others (other-signaling CC). Besides, as materialism negatively influences SWB (Richins 1994) and high materialists have a tendency to use status goods or unique products to communicate information about themselves to others, such as status or identity (Hudders and Pandelaere 2012; Lynn and Harris 1997), we propose that materialism enhances the negative impact of other-signaling CC on LS and PA, as well as its positive impact on NA.

We use an experimental method to test the hypotheses. Three studies were conducted in China. In study 1 (n=198, *student* sample), we treated consumption motive as a *state* to test the *temporary* impact of self- vs. other-signaling CC on consumers' SWB. We exposed one group (n=112) to a self-signaling (i.e. participants were asked to imagine a situation where they buy conspicuous objects for themselves) and another group (n=86) to an other-signaling condition (i.e. participants are asked to imagine a situation where they consume conspicuous objects to show to others). Participants then completed measures of manipulation checks, LS, PA, NA, and brief demographics. LS is measured with the scale of Diener et al. (1985) ( $\alpha=.79$ ), and PA ( $\alpha=.71$ ) and NA ( $\alpha=.74$ ) with Watson, Clark, and Tellegen (1988). Manipulation check was successful. However, results do not show any significant differences of SWB between the two groups.

In study 2 (n=181, non-student sample) we adopted an "*outsiders*" approach to test whether observers anticipate that self-signaling conspicuous consumers have a higher level of SWB than other-signaling ones. We exposed one group of participants (n=88) to a story of a consumer performing self-signaling CC and another group (n=93) to the same consumer but performing other-signaling CC. Participants then evaluated this consumer's SWB. Measures are the same as in study 1 with satisfactory reliabilities ( $\alpha_{LS}=.73$ ;  $\alpha_{PA}=.77$ ;  $\alpha_{NA}=.85$ ). Manipulation check gave satisfactory results. Results show participants consider other-signaling consumers have less LS ( $LS_{self-signaling}=3.13$ ,  $LS_{other-signaling}=2.79$ ,  $p<.01$ ) and PA ( $PA_{self-signaling}=3.38$ ,  $PA_{other-signaling}=2.99$ ,  $p<.01$ ), and more NA ( $NA_{self-signaling}=3.03$ ,  $NA_{other-signaling}=3.41$ ,  $p<.01$ ). PLS analysis (self-signaling=0, other-signaling=1) shows that self-signaling CC has a positive differential im-

impact on LS (path coefficient Self/Other=.30,  $p<.01$ ) and on PA (path coefficient Self/Other=.34,  $p<.01$ ), and a negative differential impact on NA (path coefficient Self/Other=-.28,  $p<.01$ ).

In study 3, we use a *non-student* sample (n=240) and treat consumption motives as a *trait-like* disposition to test the *chronic* impact of self- vs. other-signaling CC on consumers' SWB, as well as the moderating effect of materialism. Participants received an online questionnaire and were asked to complete measures on self- and other-signaling motive, LS, PA, NA, materialism, and brief demographics. The self-signaling CC is measured with the scale of Bhattacharjee and Mogilner (2014) ( $\alpha=.85$ ), and other-signaling CC with Wang and Griskevicius's (2014) ( $\alpha=.87$ ). LS ( $\alpha=.85$ ), PA ( $\alpha=.79$ ), and NA ( $\alpha=.80$ ) were the same. Materialism was measured with Richins' (2004) scale ( $\alpha=.71$ ). Difference tests indicate that self-signaling consumers have a higher level of LS ( $LS_{self-signaling}=3.38$ ,  $LS_{other-signaling}=3.12$ ,  $p=.01$ ) and less NA ( $NA_{self-signaling}=2.39$ ,  $NA_{other-signaling}=2.72$ ,  $p<.01$ ) than other-signaling consumers. PLS analysis demonstrates that self-signaling CC has no impact on LS and NA, but a positive impact on PA (path coefficient=.22,  $p=.01$ ). Other-signaling CC has a negative impact on LS (path coefficient=-.17,  $p<.05$ ), and a positive impact on NA (path coefficient=.29,  $p<.01$ ). The impact on PA is non-significant. Concerning the moderating effect of materialism, it enhances the positive impact of other-signaling CC on NA (path coefficient $_{materialism \times other-signaling}=.31$ ,  $p=.01$ ), and its negative impact of on LS (path coefficient $_{materialism \times other-signaling}=-.53$ ,  $p=.01$ ).

Our study provides some evidence that the direction of the impact of CC on consumers' SWB (i.e. LS, PA and NA) depends on consumption motives, both from the sender's and the receiver's perspectives. We also demonstrate that materialism increases the impact of other-signaling CC on LS and NA. We therefore contribute to be the first empirical study investigating the impact of CC on consumers' SWB from a bi-motive perspective. Results generally confirm Shrum et al. (2013) theoretical prediction. We also incorporate materialism to further clarify the boundary conditions of the relationship between other-signaling CC and the different components of SWB.

However, study 1 fails to demonstrate any differences across the two motive conditions. It might be that both the use of student participants and having them refer to an imagined CC scenario fails to create the conditions for differences across the consumption motives. Future studies should adopt a non-student sample and consider manipulating self/other signaling to further verify the impact of temporary CC on SWB. In addition, our study only considers a direct impact of CC on SWB. There are mediators between consumption activities and SWB such as consumption goals (e.g. self-image enhancement) or satisfaction with life domains. Future research should include some potential mediators of the relationship between CC and SWB to further clarify the influencing process.

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# Do Consumers Need a Signal to Move on? The Effect of Punishing a Scapegoat in Cluster Product-Harm Crisis

Xuan Zhang, China University of Petroleum, Beijing, China

Hongxia Zhang, Peking University, China

Jing Lei, University of Melbourne, Australia

## EXTENDED ABSTRACT

In the year of 2008, a huge cluster product-harm crisis was sweeping over the dairy industry in China. Six babies died and 296,000 were ill, due to the consumption of the milk being added with melamine (to make it appear higher in protein) (BBC News, 2009a). This event involved many brands of dairy products, and made people feel panic about their daily-consumed products. After this crisis broke, we did a preliminary investigation with results not surprisingly showing that the crisis brought negative influence on the performance of both dairy producers and the dairy industry in China. However, contrary to our expectation, such negative effect seemed to last for only about a quarter, because the pattern of the statistics went back to a normal status three months later.

Based on this interesting phenomenon, we are interested in finding out the factor that drove consumers back to the market so quickly. But through reviewing the previous literature regarding product-harm crisis, we have little inspiring findings. Although previous literature has discussed deeply about individual brand's response during a product-harm crisis to recover from the crisis, almost no research deals with the issue of whether there's a factor that could improve consumers' attitudes towards a whole brand category after a cluster product-harm crisis happens.

However, the timeline of the crisis (BBC News, 2009b) has shown exciting news, since we found some critical events that happened in December 2008 and January 2009, three months after the crisis was firstly exposed. On December 24th, 2008, Sanlu, a dairy producer in China, the first accused brand in this crisis, was declared bankrupt, and on January 22th, 2009, sentences were handed out to Sanlu executives following their trial. Therefore we propose that the factor may be the punishment on Sanlu, mentioned as the "scapegoat" of this crisis by Gao, Knight, and Zhang (2012). In this research, we try to show that the punishment on a scapegoat brand could objectively help with the recovery of a brand category in which cluster product-harm crisis happens, and to further discuss the mechanism of the scapegoating effect.

Under the circumstances of cluster product-harm crisis, we propose that there would be scapegoating effect. With the existence of a scapegoat brand "punished", it would be easier for consumers to get over such a crisis, because punishments on the scapegoat brand could work as a signal to show an ending of the event in consumers' perceptions. However, we believe that the scapegoating effect would be greater when the crisis is severer, that is, when substantive crisis happens. In this research, we classify product-harm crisis into two types based on its definition by Dawar and Pillutla (2000). When products are dangerous to consumers, "substantive crisis" happens; in contrary, when products are defective, but not dangerous to consumers, non-substantive crisis happens. Moreover, different consumers would have different reactions to the existence of a scapegoat brand (those with high need for closure vs. those with low need for closure).

When a cluster product-harm crisis happens, consumer brand trust decreases, leading to a disparity between their previous and current beliefs and attitudes. Then when they have to buy or think about purchasing a product in the crisis category, they would suffer cognitive dissonance, and be motivated to process information that

could help them deal with it. The appearance of a scapegoat brand is such information showing consumers a signal that the crisis is over, leading to a reduction of cognitive dissonance, thus changing consumers' attitudes.

In order to test our hypotheses, we have conducted three experimental studies. And in all studies, 6-point Likert scales are used for all questions (Lee, Jones, & Mineyama, 2002; Stening & Everett, 1984). Study 1 and Study 2 are to test the existence of the scapegoating effect in cluster crisis. We apply the same 2 (scapegoat brand: yes vs. no)  $\times$  2 (crisis type: substantive vs. non-substantive) between-subject design, and in Study 1 we also added a control group (no crisis). Results of ANOVA (Table 1) show that, when a cluster crisis happens in a brand category, consumers' brand trust on this category would decrease, and when there is a scapegoat brand in the crisis category compared with when there is no scapegoat brand, consumers' brand trust on that category would be higher, showing the existence of the scapegoating effect. Moreover, when the crisis is substantive, the scapegoating effect is significant, whereas when the crisis is non-substantive, the scapegoating effect is not significant. In Study 3 we used a 2 (scapegoat brand: yes VS. no)  $\times$  2 (need for closure: high VS. low) mixed design is used, with the previous factor manipulated between subjects and the latter factor measured as an individual trait, to test the moderating effect of consumer need for closure and the mediating role of dissonance affect in this process, which is supported by the results.

Theoretically, we investigate the influence of cluster crisis on the crisis brand category. In the past, scholars mainly discuss about situations when brand A is in crisis, what the influence would be on brands B, C, and D. In this research, we extend from individual brands to brand category, discussing when brands A, B, C in one brand category are all involved in a crisis, what the influence would be on this category. Moreover, we explore the scapegoating effect in cluster crisis and its mechanism in the field of marketing, for the first time to our best knowledge. Practically, our results suggest to individual brands better not to be the scapegoat. However, it's quite hard for individual brands to control which brand to be the scapegoat. Therefore what they could do is to do things right. When a cluster product-harm crisis happens, especially when it's severe, we suggest industrial regulators to take actions quickly. The sooner they punish brands that have made mistakes, the sooner consumers would get back into the market. Although time could heal, a signal such as punishing a scapegoat brand could make the process much faster.

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# Consumers' Local-Global Identity and Price Sensitivity: The Role of Sacrifice Mindset

Huachao Gao, University of Texas at San Antonio, USA

Yinlong Zhang, University of Texas at San Antonio, USA

Vikas Mittal, Rice University, USA

## EXTENDED ABSTRACT

Consumer price sensitivity has important implications for consumers' welfare and company's profitability (Lynch and Ariely 2000). According to a recent Shopper Behavior Study by Parago (2014), price sensitivity accounts for 65% of the variance in consumer in-store decision, while store image, product quality, and brand name account for only 13%, 12% and 7% respectively. Given its importance, scholars have extensively examined the antecedents of price sensitivity, such as product assortments (Diehl, Kirnisch, and Lynch 2003), competitive environment (Gordon, Goldfarb, and Li 2013), online products comparison (Lynch and Ariely 2000), and so on. Yet, it is unclear whether consumers' identity might affect their price sensitivity. This is surprising given consumer identity has been found to affect a wide range of consumer behaviors, including consumers' spending and financial decisions (Bolton and Reed 2004; He, Inman, and Mittal 2008; Reed et al. 2012).

To fill this knowledge gap, this research focuses explicitly on one of the most important identities of consumers in the era of globalization, namely local-global identity (Arnett 2002), and examines how such an identity might affect consumer's price sensitivity. According to Arnett (2002), a local identity refers to consumers' mental associations of their faith in and respect for one's local traditions and culture and identifying with people in one's local community. In contrast, a global identity refers to mental representations in which consumers are interested in global cultures and identifying with people around the world (Zhang and Khare 2009). We argue that when consumers' local (vs. global) identity is accessible and hence more important, they tend to identify more strongly with their local communities (vs. the whole world), which forms their identifiable in-group.

Recent social identity research shows that consumers are more willing to sacrifice for relatively smaller in-group than for the relatively larger in-group. For instance, Swann et al. (2014) found that individuals tend to show higher willingness to sacrifice for small in-group such as immediate family, local friends, or local community, whereas individuals show lower willingness to sacrifice for large in-group such as country, state, or the world. Thus, when consumers' local identity is salient, they tend to be more willing to sacrifice for this relatively small in-group, activating a sacrifice mindset among these consumers. In contrast, when global identity is salient, the in-group is the whole world, a larger and relatively more nebulous, heterogeneous group with which it is more difficult to identify. As a result, these group of consumers will be less likely to activate a sacrifice mindset.

Accordingly, we argue, when local (vs. global) identity is activated, either chronically or temporarily, consumers will have higher willingness to sacrifice and thus be in a sacrifice mindset. Furthermore, this sacrifice mindset, in turn, affects price sensitivity. Previous research shows support for the effect of sacrifice mindset on price sensitivity. First of all, research from consumer perception widely found that consumers tend to see quality as a gain, whereas price as a sacrifice or effort (Suri and Monroe 2003). As a result, consumers with an active sacrifice mindset would be more willing to sacrifice on price, i.e., show lower price sensitivity. Second, research from decision strategy suggests consumers with the concept of sacrifice accessible tend to rely on the compensatory decision strategy

such as explicit trade-off between attributes, which in turn makes consumers see the necessity of paying higher price to get high quality as necessary, indicating lower price sensitivity (Frisch and Clemen 1994). Third, Clausen (2005) found that sacrifice is an important factor in consumer decision. When consumers are more willing to sacrifice, they tend to see monetary sacrifice as necessary and view price as less important. In other words, sacrifice reduces price sensitivity. Combine the findings from the above three streams of research as well as our previous arguments about the effect of local-global identity on sacrifice mindset, we hypothesize that consumers with local (vs. global) identity more accessible tend to be in a sacrifice mindset, which in turn cause them to be less price sensitive.

To test the above theorizing, we conducted six studies using divergent operationalizations of local-global identity and price sensitivity. More specifically, study 1A was an online survey, in which we measured both price sensitivity (Lichtenstein, Ridgway, and Netemeyer 1993) and local-global identity (Tu, Khare, and Zhang 2012). The regression results indicated local-identity and price sensitivity is negatively related. In study 1B, we directly manipulated local-global identity (Zhang and Khare 2009) and measured price sensitivity with the willingness to pay (WTP) measure adapted from Kalra and Goodstein (1998). The results indicated that consumers primed with local (vs. global) identity showed higher WTP, indicating less price sensitivity. Study 1C further replicated the local-global identity effect on price sensitivity with samples from a developing country.

Study 2 was designed to test the mediation of sacrifice mindset via willingness to sacrifice. We first manipulated local-global identity, then measured price sensitivity, and also measured willingness to sacrifice (Swann et al. 2014). The results not only supported that local-identity consumers are less price sensitive, but also supported willingness to sacrifice as the mediator. Study 3 and 4 further tested the mediation effect following the moderation-of-process procedure (Spencer et al. 2005). Study 3 was a 2 (identity: local vs. global) x 2 (sacrifice mindset: primed vs. control) between-subjects design. As expected, we replicated the identity effect under the control condition, whereas under the sacrifice mindset primed condition, this effect was attenuated. Study 4 was 2 (identity: local vs. global) x 2 (self-focus: manipulated vs. control) between-subjects design. Again we replicated the identity effect under the control condition, whereas under the self-focus condition, in which consumers tend to be more selfish, this effect was attenuated.

Through this research, we make significant contributions to the literature. First, this research extends our understanding of price sensitivity, one of the most significant factors in consumer decision making, by identifying local-global identity as an antecedent and sacrifice mindset as the mediator. Second, we contribute to the local-global identity literature by establishing a novel and surprising link between local-global identity and price sensitivity, which are two seemingly unrelated constructs. Third, we also contribute to the social identity literature by demonstrating that consumer identity can affect those decisions not directly related to the activated identity, which challenges the widely held belief that consumer identity can only affect identity-related consumption decisions.

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# By Brand or By Category?

## The Effect of Display Context in Evaluating Incongruent Brand Extensions

Xiaoying Zheng, Peking University, China

Ernest Baskin, Yale University, USA

Ravi Dhar, Yale University, USA

Siqing Peng, Peking University, China

### EXTENDED ABSTRACT

To grow the business organically is one of the most important objectives of CMO. According to a Spencer Stuart survey of 200 U.S.-based marketing executives, CMOs are expected to play a more prominent role in driving product innovations. One of the most common ways of introducing new products in the marketplace is to extend to new product categories by leveraging existing brands in the portfolio. Typically, 80 to 90 percent of new products introduced in any one year are brand extensions (Keller, Parameswaran, and Jacob 2008). A most robust finding in the literature is that extensions that have high fit with the parent brand are more favorable than those have low fit (Aaker and Keller 1990; Park et al. 1991). However, many of the new growth opportunities may not be in the categories that are regarded as high fit with the typical categories. A question naturally arises how companies can introduce new products that have low fit with the parent brand.

Recent research finds that the relative emphasis on fit in brand extension evaluation is malleable and can be moderated by various factors. For example, Kim and John (2008) suggest that consumers who construe their environment at a low level place less importance on fit in evaluating brand extensions, as opposed to those who construe at a high level. Monga and John (2010) show that fit is important for analytic thinkers, but not for holistic thinkers. Meyvis, Goldsmith and Dhar (2011) demonstrate that adding a visual image or allowing brand comparison could shift consumer's focus from fit to parent brand quality.

We build on this research stream, and propose that brand extension evaluations are susceptible to the display context of the extension product. Two common display contexts are examined: by-brand display, where extensions are placed next to typical products of the brand, (e.g., a new razor extension of a camera brand is displayed with cameras of the brand) and by-category display, where extensions are placed next to competing brands of the same product category, (e.g., the new razor extension is displayed with razors of other brands). To illustrate, take Nike perfume, a real and relatively low fit product with the athletic footwear category of Nike, for example. When Nike perfume is introduced to the market, brand managers could either place it by brand with Nike shoes and sports related products (e.g., in a Nike store), or put it next to other perfume brands like Calvin Klein (e.g., in a fragrance specialty). The purpose of our research is to explore the effect of such assortment decision would have on consumers' evaluation towards the extension.

We find across six studies that extension is evaluated more favorably when displayed by category relative to by brand. A premise of our conclusion is that brand extension evaluation is primarily driven by two kinds of associations: brand benefit association (e.g., brand reputation, quality, favorability, positioning) and category fit association (e.g., incongruence between extension product category and brand's typical product category) (Meyvis and Janiszewski 2004; Ng and Houston 2006). Display context as an environmental cue, could influence the relative accessibility of these two associations. In a by-brand display context, all products are of the same parent brand, while the extension product is in a dissimilar category as opposed to other typical products of the brand. Therefore, "brand" serves as

shared information, whereas the "product category incongruence" is a distinctive characteristic. In a by-category display context, all products are in the same product category but of different brands. Thus, "product category" becomes a common feature, whereas "brand" information is distinctive (Tversky 1977). Distinctive information is perceptually salient and easy to be noticed, thus is more likely to be used for judgment (Zajonc 1980; Simonson, Bettman, Kramer, and Payne 2013). Therefore, brand benefit association is highlighted and accessible, and category fit is less salient and de-emphasized in by-category display context, relative to by-brand display context. This leads to the prediction that brand extension is evaluated more favorable when it is displayed by category relative to by-brand.

We tested this prediction in six studies. In study 1a, we presented Canon electric razor either together with Canon cameras or with razors of other brands. The results showed that Canon razor was more favorably evaluated when displayed with competing razor brands than with Canon cameras. Study 1b replicated the result of study 1a using Nike razor and Toyota microwave oven. Study 2 demonstrated that the display context effect only influenced evaluation for low fit brand extensions, but not for high fit extension. Study 3 created an online shopping scenario of Canon razor and tested the underlying mechanism. It was indicated that consumers thought more about product category fit when Canon razor was displayed with Canon cameras, whereas they mentioned more about the benefits that Canon could bring about (e.g., quality, trustworthy, reputation) when Canon razor was next to other razor brands. Furthermore, we showed that this beneficial effect of by-category display over by-brand display held only when Canon was highly regarded. Study 4 explored the moderating role of consumer characteristics: need for cognition. We presented Evian microwave popcorn either next to Evian spring water or next to popcorns in different brands. Then we measured consumer's need for cognition. Results suggested that display context effect only occurred among consumers low in need for cognition, because these people are more likely to rely on contextual cues to make judgment. Study 5 further replicated the display context effect in the lab and showed that the display context not only influenced predicted consumption experience, but also exerted impact on actual consumption experience. In other words, even consumers have actual experience of the extension product, their evaluation was distorted by the display contexts.

In conclusion, the current research sheds light on how display context influence consumers preference for incongruent brand extensions. Results from five studies support our prediction that by-category display context highlights the brand benefit association, and de-emphasizes the category incongruence perception, which in turn increase brand extension evaluation. On the contrary, by-brand display context facilitates the negative influence of category incongruence information, which leads to lower preference for incongruent brand extensions. Furthermore, we demonstrate that the effect is more prominent for consumers low in need for cognition. Finally, we demonstrate that display context not only influence predicted preference, but also shape actual consumption experience.



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# Conspicuous Consumption as a Way to Cope with Threatening Social Comparison

Xiaoying Zheng, Peking University, China

Siqing Peng, Peking University, China

## EXTENDED ABSTRACT

Imagine the following scenario. Mike has got little education in his life. He returns to a high school reunion and finds himself surrounded by a group of highly educated bachelors, masters or even PhDs. The perceived inferiority in education leads to envy, shame, self doubt or scorn. Mike may react to the situation in the following divergent ways (Johnson, 2012; Sherman and Cohen, 2006): (1) to keep up with his fellow classmates by striving for an academic degree; (2) to show off his success in wealth by purchasing conspicuous items; (3) to derogate his classmates by devaluing education and degrees. This present research is to explore the possibility of the second coping mechanism: cope with threatening social comparisons by purchasing conspicuous products, and tests its underlying mechanism.

Social comparison is the process of assessing oneself relative to others (Festinger 1954). Comparison is pervasive in daily life and greatly influences people's judgments, experiences, and behavior greatly (for a review, see Corcoran, Crusius and Mussweiler, 2011). People intentionally or unintentionally engage in social comparison whenever, wherever and whatever they can in daily life. The information about what others can do and can not do, or what others have achieved and have not achieved, or what characteristics others own and do not own, could be drawn to compare with oneself (Festinger, 1954; Dunning and Hayes, 1996). While much is known about why people make social comparisons, to whom do they compare to, and with what effect does comparisons on the self, considerably less is known about the behavioral consequences of social comparison. In this research, we examine how incidental social comparison information would influence people's subsequent consumption behavior, namely conspicuous consumption, which is unrelated to the comparison.

Based on the literature of consumption as self-concept management (e.g., Lee and Shrum 2012; Gao, Wheeler and Shiv 2009; Rucker and Galinsky 2009; Sivanathan and Pettit 2010), we propose that people are motivated to engage in conspicuous consumption after making upward comparison---comparing oneself to better off others, than those who make downward comparison---comparing oneself to worse off others, or those who do not make any social comparison. Upward comparison shakes and threatens self concept in the comparison dimension (Gilbert, Giesler and Morris, 1995; Morse and Gergen, 1970; Mussweiler, Rüter, & Epstude, 2004). To cope with the perceived inferiority in the comparison dimension, consumers are likely to emphasize and build up positive image in other dimensions. Conspicuous consumption, although costly, is a good and direct way to show off a socially recognized dimension: social status signaled by wealth and resources (Griskevicius et al., 2007). Therefore, to compensate for the inferiority arising from social comparison, consumers who compare themselves with superior others are more willing to spend on lavish and conspicuous items.

*Hypothesis 1: Consumers who make upward comparison emphasize more on the importance of materialistic goods than those who make downward comparison and those who do not make social comparisons.*

*Hypothesis 2: Consumers are more likely to engage in conspicuous consumption after making upward comparison compared to downward comparison or no comparison.*

Although it is established that self threat motivates individuals toward status infused goods, it is unclear when the effect would occur. We propose self concept clarity (Campbell 1990; Campbell et al. 1996) as a boundary condition for the proposed compensation effect. Self concept clarity refers to "the extent to which the contents of an individual's self concept are clearly and confidently defined, internally consistent, and temporally stable" (Campbell et al. 1996, p.141). Self concept clarity reflects a structural aspect of the self concept which includes both literal consistency and temporal stability. Individuals with low self concept clarity are more dependent on, or influenced by external information and social context (Campbell and Fehr 1990; Epstein 1973). Morse and Gergen (1970) suggest that people whose conception of self is highly consistent are less susceptible to the presence of a comparison target in the surroundings because they experience greater difficulty in incorporating potentially inconsistent information about themselves into their well-articulated self concept system. Pelham and Wachsmuth (1995) demonstrate that people who are uncertain of their self concept are motivated to engage in explicit, thoughtful social comparisons, which tend to lead contrast effect in self evaluation. Smith, Wethington and Zhan (1996) showed that individuals with low self concept clarity are more likely to adopt passive coping styles such as avoidance, withdrawal or denial of the problem when confronting with the negative events or situations. Based on the above analysis, we propose that individuals low in self concept clarity should be more influenced by social comparison information and be more likely to adopt conspicuous consumption as a way to passively compensate for the threatened self concept. On the contrary, individuals whose self concept is consistent and stable are less susceptible to social comparison information and are more likely to engage in adaptive coping styles that focus on the problem at hand, rather than avoid or deny the problem by emphasizing on alternative dimensions.

*Hypothesis 3: Self concept clarity moderates the effect of social comparison on conspicuous consumption. For consumers with low self concept clarity, upward comparison motivates them to engage in conspicuous consumption; For consumers with high self concept clarity, upward comparison has no effect on conspicuous consumption.*

Four studies were conducted to test our hypotheses. Study 1 preliminarily suggests that consumers put more emphasis on the importance of materialistic goods after comparing the self to academically superior classmates. Study 2 provides initial support for our basic hypothesis that comparing to superior counterparts leads to more conspicuous consumption. To manipulate upward vs. downward comparison, we asked participants to compare their GPA with the person whose GPA ranked the first place or the last place in their class. After making comparison, participants were presented with a hypothetical scenario in which they won a lottery in a shopping mall and had to decide how much they would like to spend on conspicuous and inconspicuous commodities. The results confirmed the hy-

pothesis that people are more likely to spend money on conspicuous items after making upward comparison. Study 3 replicated the result using false intelligence task feedback in the lab and measure conspicuous consumption by preference for conspicuous logos. Study 4 examined the moderating role of self concept clarity. Similar to study 1&2, we used GPA context to manipulate social comparison and measure consumer's preference for conspicuous brand logos. Results showed that the impact of upward social comparison on conspicuous consumption occurs only among individuals with low self concept clarity, but not for those high in self concept clarity.

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# Is Failing to Plan Always Planning to Fail? When Planning Facilitates Failure

Natalina Zlatevska, Bond University, Australia

## EXTENDED ABSTRACT

*“If you fail to plan, you are planning to fail!”*

– Benjamin Franklin

It is generally believed that success at achieving a particular task starts with formulating a plan and then imagining the steps required for completion of the task. For example, a consumer who wants to achieve the goal of weight loss may join a gym and adopt a healthy eating regime. This consumer may also envision or mentally simulate scenarios in which their resolve to lose weight could be challenged (e.g. the offering of cake during office morning tea). In response, the consumer may predetermine various ways in which they could control their behavior so as to stay on track to achieve their goal of weight loss (e.g. bringing a healthy morning tea alternative from home).

Mental simulation is considered a beneficial activity for consumer behavior (Escalas and Luce 2004; Gregory, Cialdini, and Carpenter 1982; Keller and Block 1997; Petrova and Cialdini 2008). It has been found to make consumers more discerning in their use of information contained in advertisements (Escalas and Luce 2003), and has been found to reduce the gap within consumer preferences (Hamilton and Thompson 2007; Zhao et al 2007). More specifically, process-oriented simulation has been found to facilitate the successful self-regulation required for goal achievement (Taylor et al 1998). Pham and Taylor (1999) show that when students were asked to simulate the process (steps required) in order to do well on an upcoming midterm exam, they performed better than students who had simulated the desired outcome (achieving a good grade).

In the present research we question whether mental simulation is always beneficial for successful self-regulation and subsequently examine situations in which mental simulation might prove to be disadvantageous for regulatory performance. Some theories regarding the cause of the effect are also discussed

### Mental Simulation

Mental simulation is the imitative mental representation of events (Taylor and Schneider 1989). Simulating the steps necessary for completing a difficult task, referred to as process simulation, has been reported to aid the motivation needed to complete a task, thereby resulting in better performance. The effect is thought to occur because imagining the steps required to complete an action during process simulation allows an individual to anticipate, and preemptively regulate the emotions encountered during the performance of the task. However, not all types of mental simulation serve to aid self-regulatory behavior.

Outcome-oriented simulation is reported to be less beneficial for a positive behavior result because it encourages the individual to fantasize about the achievement of an outcome without considering the actual steps required to accomplish the desired outcome. Under certain conditions, it is thought that such fantasies may have a negative impact on an individual's motivation and may actually serve to discourage the individual from successfully completing a particular task.

Despite the long-standing belief that mental simulation, and more specifically process-oriented simulation, is beneficial for regulatory behavior, recent research has demonstrated that it does not

always result in favorable behavioral outcomes. Simulating regulatory restraint has been shown to result in subsequent lapses of self-control (Ackerman et al 2009; Macrae et al 2014); while simulating the process of choosing among alternative options has been found to lead to decision difficulty and performance impediment (Thompson, Hamilton and Petrova 2009).

In this research, we investigate why mental simulation, and in particular process simulation, could be detrimental to self-regulation. We predict that under certain conditions, process simulation may be more detrimental for regulatory behavior than outcome simulation because planning the steps required to regulate behavior and successfully achieve a goal encourages the individual to disengage from active regulatory pursuit.

The expectation is grounded in research which demonstrates that asking participants to commit to plans that specify how and when a goal should be achieved, serves to satisfy the cognitive processes required for continued goal pursuit, and subsequently reduces the continued search for ways to achieve a goal (Masicampo and Baumeister 2011). We speculate that disengagement occurs because planning has been shown to draw attention to the difficulty of achieving a goal (Dalton and Spiller 2012).

We also expect that the type of task being simulated has an effect. The positive behavioral effects of process simulation have been found for tasks directly related to the simulation, e.g. simulating the steps needed to improve grades results in better performance on exams (Pham and Taylor 1997; 1999). However, the temporal distance between the two tasks (the simulation and the task being performed) in these studies has been quite pronounced. We expect the opposite (impaired performance) when the temporal distance is close. Our expectation is in line with previous research which has shown that regulatory impairment, following regulatory simulation, is more pronounced when the target of the simulation is an event that is in the near (rather than the distant) future (Macrae et al 2014).

In summary, we expect that process (outcome) oriented simulation impairs (aids) regular behavior when the behavior being engaged-in is directly related to the scenario being simulated. And, that outcome (process) oriented simulation will (not) impair regulatory behavior when the behavior being engaged-in is unrelated to the scenario being simulated.

Study 1 (n = 116) tested the assumption that mentally simulating self-regulation impairs subsequent self-regulatory performance. The results provide preliminary evidence that mentally simulating self-regulation impairs subsequent regulatory performance. Study 2 (n = 134) expanded on the preliminary findings of Study 1 and examined the effect of type of simulation (process, outcome) and task type (simulated task is similar to the engaged-in task, simulated task is different to the engaged-in task) on self-regulatory performance. Findings show that, under certain conditions, mental simulation results in decreased self-regulatory performance. Specifically, individuals disengage from the pursuit of goal attainment following process simulation, but not following outcome simulation. The effect occurs when the simulated and the subsequent engaged-in regulatory task are the same. The opposite is true when the tasks differ.

### 1. Process vs. Outcome Simulation

Mental simulation is the imitative mental representation of events (Taylor and Schneider 1989). Simulating the steps necessary



for completing a difficult task, referred to as process simulation, has been reported to aid the motivation needed to complete a task, thereby resulting in better performance. The effect is thought to occur because imagining the steps required to complete an action during process simulation allows an individual to anticipate, and preemptively regulate the emotions encountered during the performance of the task. However, not all types of mental simulation serve to aid self-regulatory behavior.

Outcome-oriented simulation is reported to be less beneficial for a positive behavior result because it encourages the individual to fantasize about the achievement of an outcome without considering the actual steps required to accomplish the desired outcome. Under certain conditions, it is thought that such fantasies may have a negative impact on an individual's motivation and may actually serve to discourage the individual from successfully completing a particular task.

Despite the long-standing belief that mental simulation, and more specifically process-oriented simulation, is beneficial for regulatory behavior, recent research has demonstrated that it does not always result in favorable behavioral outcomes. Simulating regulatory restraint has been shown to result in subsequent lapses of self control (Ackerman et al 2009; Macrae et al 2014); while simulating the process of choosing among alternative options has been found to lead to decision difficulty and performance impediment (Thompson, Hamilton and Petrova 2009).

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We also expect that the type of task being simulated has an effect. The positive behavioral effects of process simulation have been found for tasks directly related to the simulation, e.g. simulating the steps needed to improve grades results in better performance on exams (Pham and Taylor 1997; 1999). However, the temporal distance between the two tasks (the simulation and the task being performed) in these studies has been quite pronounced. We expect the opposite (impaired performance) when the temporal distance is close. Our expectation is in line with previous research which has shown that regulatory impairment, following regulatory simulation, is more pronounced when the target of the simulation is an event that is in the near (rather than the distant) future (Macrae et al 2014).

In summary, we expect that process (outcome) oriented simulation impairs (aids) regular behavior when the behavior being engaged-in is directly related to the scenario being simulated. And, that outcome (process) oriented simulation will (not) impair regulatory behavior when the behavior being engaged-in is unrelated to the scenario being simulated.

Study 1 tested the assumption that mentally simulating self-regulation impairs subsequent self-regulatory performance. Study 2 demonstrated an interaction between the type of simulation (process or outcome) and the nature of the regulatory task.

## 2. STUDY 1

### 2.1 Method

One hundred and sixteen undergraduate students participated in study 1 in return for course credit. Participants were randomly assigned to one of the following four conditions;

1. Regulate
2. Regulate and Glucose
3. Simulate Regulation, and
4. Simulate Other (no regulation).

*Regulate Condition:* Participants in the Regulate Condition were provided with an unsolvable puzzle tasks to work on for 5 minutes.

*Regulate and Glucose Condition:* Participants in the regulate and glucose condition were provided with five Glucojel candies (glucose jellybeans) to consume while working on the same unsolvable puzzle. The ingestion of glucose during self-regulation has been shown to improve regulatory performance (Gailliot and Baumeister 2007). Participants were stopped after five minutes of working on the task.

*Simulate Regulation Condition:* Participants in the simulate regulation condition were provided with a copy of the same unsolvable puzzle and were told to "Take a moment to visualize yourself completing the puzzle task on the following page. Imagine yourself working through all of the steps required to complete the task. Although you may want to give up, imagine regulating and really pushing yourself to complete this difficult puzzle. It is very important that you actually see yourself working on the puzzle and have that picture in your mind. Do not actually complete the puzzle BUT do imagine yourself working on the puzzle." All participants were required to engage in the simulation exercises for five minutes and to write down any thoughts that they had.

*Simulate Other Condition (no regulation):* Participants in the simulate other condition (no regulation) were not shown the unsolvable puzzle, rather they were asked to "Take a moment to visualize yourself somewhere other than in the current room. Think about where would you be. How you would describe the location to another person. What would you be doing? Who you would be with? Imagine how you would be feeling." All participants were required to engage in the simulation exercises for five minutes and to write down any thoughts that they had.

Following the first exercise, the participants of all four conditions were then asked to complete a self-regulatory task, adapted from Baumeister, Bratslavsky, Muraven and Tice (1998). Here, participants were given a page of text and were then required to make note of any word that contained the letter "e", except in cases where a vowel appeared immediately after or two letters prior to, the letter "e". The number of words that were correctly identified, were used to measure their regulatory performance; the greater the number of words correctly identified, the better their regulatory performance was determined to be.

### 2.2 Results

A one-way analysis of variance (ANOVA) revealed a significant difference in regulatory performance between the conditions  $F(3, 112) = 5.73, p = .001$  (See Figure 1). LSD post-hoc comparisons revealed that participants who simulated themselves regulating their behavior performed worse ( $M = 23.47, SD = 11.67, CI [19.26, 27.66]$ ) than participants who simulated themselves engaging in another activity ( $M = 30.25, SD = 11.17, CI [25.02, 35.48]$ ),  $p = .03$ , and those participants who ingested glucose during the regulation

task ( $M = 29.34$ ,  $SD = 9.43$ ,  $CI [26.10, 32.58]$ ,  $p = .03$ ). However, participants who simulated themselves regulating their behaviour did not perform worse than participants who engaged in the regulating activity ( $M = 20.07$ ,  $SD = 10.56$ ,  $CI [16.05, 24.09]$ ,  $p = .22$ ).

### 2.3 Discussion

The results provide preliminary evidence that mentally simulating self-regulation impairs subsequent regulatory performance. These findings are in agreement with previous research, which demonstrates impaired regulatory performance following mental simulation (Macrae et al 2014). Surprisingly, we find that the simulation of a regulatory task is as detrimental to subsequent regulatory performance as engaging in two successive regulatory tasks (regulation condition). Engaging in a period of self-regulation has been shown to impair subsequent regulatory performance (Baumeister et al 1998).

Study 2 expands on the preliminary findings of Study 1 and examines the effect of type of simulation (process, outcome) and task type (simulated task is similar to the engaged-in task, simulated task is different to the engaged-in task) on self-regulatory performance.

## 3. STUDY 2

### 3.1 Method

One hundred and thirty-four participants (46% male, 54% female) were recruited from Amazon's Mechanical Turk (Buhrmester, Kwang, & Gosling, 2011) and were paid \$0.50 for their time. All participants were residing in the United States at the time of their participation.

Participants were randomly assigned to one of four conditions of a 2 (task type: similar, different) x 2 (simulation: process, outcome) between subjects design.

*Manipulation of task type:* Participants were provided with one of two tasks; those in the same condition were shown a picture of the same complex puzzle task used in Study 1 and were asked to imagine a scenario where they had to complete (completed) the task. Participants in the different condition were asked to imagine a scenario where their doctor had advised them that they had to lose weight to improve their health and that they were engaging (had engaged) in a diet to achieve this task.

*Manipulation of simulation:* Participants in the process simulation condition were asked to imagine themselves regulating their behavior. They were asked to "imagine yourself working through all of the steps required to complete the task (either the puzzle or achieving weight loss). Although you may want to give up, imagine regulating and really pushing yourself to try and work towards achieving your goal. It is very important that you actually see yourself working on the task and have that picture in your mind." Participants in the outcome simulation condition were asked to imagine themselves having regulated their behavior and completed the task (either the puzzle or achieving weight loss). They were told to "imagine yourself having worked really hard, pushing yourself and regulating your behavior to successfully achieve your goal. It is important that you actually visualize yourself having already successfully achieved your goal". All participants were required to engage in the simulation exercises for five minutes and to write down any thoughts that they had.

All participants were then asked to solve a complex puzzle task consisting of three shapes. The task was not the same as the puzzle task used in study 1, however it was similar. For this task participants were asked to identify which sequence of shapes (out of four possible scenarios) completed a puzzle matrix. The amount of time (in seconds) spent working on the task was used as a measure of self-regulatory performance. The greater the amount of time spent working on the task, the better the performance.

To summarize, participants in the same condition simulated themselves completing (having completed) the puzzle task and then engaged in a (similar) puzzle task. Participants in the other condition simulated themselves engaging (having engaged) in a diet to achieve a weight loss goal and then engaged in a puzzle exercise.

### 3.2 Results

An ANOVA revealed a significant interaction of simulation and task type  $F(1,133) = 5.68$ ,  $p = .02$ ,  $\eta_p^2 = .04$  (see Figure 2). Participants who simulated themselves completing a complex puzzle task (process simulation) performed worse when solving another complex puzzle task (similar condition) ( $M = 105.93$ ,  $SD = 50.93$ ) than participants who had focused on having already completed the puzzle (outcome simulation, similar condition) ( $M = 152.76$ ,  $SD = 110.12$ )  $t(1, 64) = 2.28$ ,  $p = .03$ ,  $CI [5.63, 88.24]$ . However, there was no difference in performance on the complex puzzle between participants who simulated themselves dieting (process simulation, other condition) ( $M = 150.36$ ,  $SD = 136.51$ ) and those who had simulated themselves having already completed the diet (outcome simulation, other condition) ( $M = 115.59$ ,  $SD = 66.21$ )  $t(1,66) = -1.35$ ,  $p = .19$ ,  $CI [-86.59, 17.04]$ .

Participants in the process simulation condition performed marginally worse when they engaged in an activity that was similar to the task that they simulated ( $M = 105.83$ ,  $SD = 50.93$ ) than when the task was different ( $M = 150.36$ ,  $SD = 136.51$ ),  $t(1, 63) = 1.79$ ,  $p = .08$ ,  $CI[-5.58, 94.66]$ . And, participants in the outcome simulation condition performed marginally worse when they engaged in an activity that was different from the task that they simulated ( $M = 115.59$ ,  $SD = 66.21$ ) than when the task was similar ( $M = 152.76$ ,  $SD = 110.12$ ),  $t(1, 63) = -1.72$ ,  $p = .09$ ,  $CI[80.55, -6.21]$ .

### 3.3 Discussion

The results confirm the expectation that process oriented simulation is more detrimental to subsequent self-regulation than outcome simulation when the task being simulated is similar to the task being engaged in. When the two tasks are different, the effect reverses.

## 4. General Discussion

It is believed that mental simulation is beneficial for self-regulation, and that process simulation is more beneficial for regulation than outcome simulation. However, recent research suggests that this might not be the case. We contribute to the growing interest in this area of mental simulation by demonstrating that process simulation can be detrimental for regulatory behavior. We show that the effect depends on the nature of the task being simulated.

While we suspect that this effect occurs because process oriented simulation causes the individual to imagine the difficulty associated with regulating behavior, and in doing so may discourage the individual from striving towards achieving their regulatory goal, we did not specifically address this in our two studies. Future work will be needed to determine if in fact disengagement is the cause (and the only cause) of the identified effect.

Furthermore, in the present study we encouraged participants to consider the more cumbersome steps required to achieve the regulatory goal. What would happen if we asked participants to consider an easier route to goal achievement? Would we still see active disengagement following use of process simulation? In the present research the temporal distance between the simulated task and the engaged in task is close. Would the same effect persist in the event of greater temporal distance between the two tasks?

Finally, although we propose disengagement as an explanation for the identified effect, it is possible that an alternate explanation may exist. Decrements in regulatory performance have been found

to occur because of changes in regulatory resources. Self regulation is believed to rely on the availability of a pool of regulatory resources (Muraven et al 1998). Each act of regulation depletes some of these resources, resulting in impaired self regulation. Some accounts of process simulation state that it involves the regulation of negative affect. The regulation of negative affect is thought to rely on the availability of regulatory resources (Baumeister et al 1998). Therefore, it is possible that mental simulation depletes regulatory resources, leading to the decreased regulatory performance identified in this research. Although it is likely that resource depletion may be an explanation, there is emerging research data, which states that depletion effects only occur because of changes in motivation, and not because of changes in the availability of resources (e.g. Inzlicht and Schmeichel 2012; Inzlicht, Schmeichel and Macrae 2014).

The research findings presented in this paper question whether failing to plan is always an indicator of planning to fail and shows that in some circumstances planning may actually facilitate failure. As captured by Jane Jacobs in *The Death and Life of Great American Cities*. "The pseudoscience of planning seems almost neurotic in its determination to imitate empiric failure and ignore empiric success."

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# Roundtable Summaries

## Conducting Field Experiments in Consumer Research

### Chair

Leonard Lee, National University of Singapore, Singapore

### Participants

Darren Dahl, University of British Columbia, Canada

Yael Steinhart, Tel Aviv University, Israel

Claire Tsai, University of Toronto, Canada

Echo Wen Wan, University of Hong Kong, China

Haiyang Yang, Johns Hopkins University, USA

Catherine Yeung, National University of Singapore, Singapore

Meng Zhang, Chinese University of Hong Kong, China

In recent years, field experiments have become a popular part of the researcher's methodological toolkit. Many journal editors and reviewers are also increasingly requesting researchers to test their theories and provide empirical evidence using field experiments. In fact, there seems to be a general belief that the "formula" for getting one's research published today is to provide empirical evidence from both the lab and the field, and whether this belief is indeed fact or fiction remains unclear. Given the growing popularity of and emphasis on field experiments, this roundtable session aims to take a step back to reassess the roles of field experiments in consumer research. While many have advocated the importance of field experiments in addressing situational variations of theoretical effects and providing external validity (Levitt and List 2007a, 2007b), others either question the ability of field experiments to provide a panacea in ascertaining the external validity of laboratory findings (Dipboye and Flanagan 1979; Lynch 1999), or defend outright the importance of external *invalidity* lest a preoccupation with external validity leads researchers to "dismiss good research for which generalization to real life is not intended or meaningful" (Mook 1983).

This roundtable session brings together a team of ten consumer research scholars who will share their diverse viewpoints on the roles of field experiments in consumer research as well as offer practical advice and suggestions to fellow researchers who are keen to undertake field experimental research. Despite belonging to different home institutions throughout the world and having varying degrees of research experience, the ten participating roundtable panelists share a strong common interest in field experimentation and have each conducted field experiments on a variety of substantive topics with businesses (be it for-profit or non-profit) in different parts of the world. Among these panelists are also current journal editors and members of journal editorial review boards; therefore, the panelists will be sharing their opinions and experiences not only from the perspective of a researcher but also from that of a journal editor and/or reviewer.

In particular, some of the questions that the panelists in the roundtable session will discuss may include the following:

- What makes an experiment a true field experiment? How do field experiments differ from natural experiments and observational studies?
- How important are field experiments (really) for consumer research, and to what extent could their use be "abused"?
- How should one evaluate whether a field experiment is truly necessary or useful to one's research?
- Are there any specific types of research questions or problems that are especially amenable to experimentation in the field?
- What are the essential ingredients of an effective field experiment?
- What are some potential challenges in conducting field experiments?
- Why do some field experiments fail?
- For a researcher who wishes to conduct a field experiment, what are the important steps that he or she should take?
- How is the advent of new data collection techniques (e.g., mobile, eye tracking devices, in-store sensors, social media) changing the nature of field experiments? What are some opportunities that these technologies may offer to enhance the power and effectiveness of field experiments?
- Are there any particular opportunities or challenges for conducting field experiments in the Asia-Pacific region compared to other parts of the world?

The session will begin with comments from the individual panelists, followed by a substantial period of Q&A from the audience (facilitated by the primary session organizer) in order to promote open discussion and audience participation. Given the broad applicability of and considerable interest in field experiments in consumer research, as well as the diverse expertise of the panelists, we expect this session to draw a sizable crowd and stimulate very lively discussions.

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# Roundtable Summaries

## How Consumers of All Ages Interact with Social Media to Make Social Connections

### Chairs

Alice Wang, University of Iowa, USA  
Catherine Cole, University of Iowa, USA

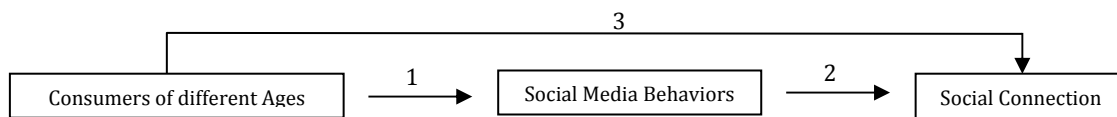
### Participants

Ying Ding, Renmin University of China, China  
Jayson Jia, University of Hong Kong, China  
Yuwei Jiang, The Hong Kong Polytechnic University, Hong Kong, China  
Jing Xu, Peking University, China  
Yinlong Zhang, The University of Texas at San Antonio, USA  
Echo Wen Wan, University of Hong Kong, Hong Kong, China  
Meng Zhang, Chinese University of Hong Kong, China  
Leilei Gao, Chinese University of Hong Kong, China  
Feifei Huang, Chinese University of Hong Kong, China

The overall objective of the session is to better understand how consumers of all ages engage in and interact with social media in order to establish and / or maintain social connections. Knowledge on the different patterns of behaviors, if any, has significant contributions to both theory and practice. Theoretically, it sheds light on the conceptual relationship between aging and social connections. Empirically, it helps marketers design better products and develop more effective positioning and communication strategies for the different age groups.

Whereas the need for healthy social relationships is one of the most fundamental needs of all human beings (Baumeister and Leary 1995), young or old, the advent and popularity of social media is only a recent event. The convention wisdom may have associated social media with a younger generation, partly because many social media sites started to gain popularity among younger generations and only later became more popular among older generations (e.g., Facebook). However, with 65% of people between the age of 50 and 64 and 49% of those 65+ actively engaged in various social media (PewResearch 2014), it is becoming more imperative for marketing researchers and practitioners to understand whether matured adults engage in and interact with social media in the same way as younger adults; and if not, what the differences are and why they occur.

In this session, we will have fun talking with researchers at all stages of their careers about aging, social media behaviors, and the ultimate goal of social connection (or avoidance of social isolation). By the end of the session, we will have generated an exciting discussion on the causal chains charted below, which are new to marketing and can serve as a research agenda going forward. Specifically, we will have answered: (1) How do consumers of different ages engage in and interact with social media? Are there systematic differences between the younger and older segments? If so, what are the differences? (2) How does the engagement in and interaction with social media establish and maintain social connections or avoid social isolation? and (3) Is there a direct link between aging and social connection or isolation? Do social media behaviors mediate the effect of aging on social connection or the reduction of social isolation?



We have planned a variety of pre-conference discussion activities. The session co-chairs will create an email list and online document sharing platforms (e.g., Google Docs, Apple iCloud, Dropbox, etc.). Each participant will first introduce themselves and their work briefly via email and then upload relevant papers, manuscripts, data, etc. to the sharing platforms. Via email discussions, participants will brainstorm topics that are of interest to marketing researchers and practitioners, and everyone will contribute to creating a comprehensive literature structure, developing new hypothesis, and discussing potential methodological opportunities and obstacles. We will also ask around our colleagues who conduct research in relevant areas to inquire their thoughts, questions, and recommendations. Depending on each participant's specific schedules, we will also try to get together in person before the conference starts to touch base on the issues to be discussed.





# Working Papers

## 1. Unpacking the Individual Mechanisms of Customers' New Product Ideation Success

Oguz Ali Acar, King's College London

Crowdsourcing with customers offers unprecedented opportunities for companies to improve the success of their new product development efforts. This study investigates the individual processes which make the ideas generated by customers better. In doing so, it aims to enable managers to harness innovative potential of customers more effectively.

## 2. I Believe You Are Not Innocent : Consumer's Attitude Toward Brand In Crisis Depending On BJW Level

Jung Yong Ahn, Korea University  
Sungmo Kang, Korea University  
Jinwon Kang, Korea University  
Yuhosua Ryoo, Korea University

The objective of the current research is to test how 'belief in a just world (BJW)' affects to consumer attitude toward brand in a brand crisis. In our research, we find that participants who show high level of BJW rationalize and disassociate them with victim of unfortunate event (brand crisis).

## 3. Wargames: Exploring Responses to Consumer Creation Requests in a Collectible Toy Figurine Community

Navdeep Athwal, Warwick Business School, University of Warwick, UK  
David Fleming, Eastern Illinois University, USA

The paper extends our knowledge of consumer creation requests. This preliminary netnographic data analysis of a collectible toy figurine community; WarriorFlex reveals that consumer creativity and discontent leads to unauthorized gaming adaption, official organizations responses to consumer requests and co-creation activities between the manufacturing organization and community members.

## 4. Online Property Marketing: The Effect of Presentation Style on Intention to Inspect

Jacqueline Baker, Monash University, Australia  
Professor Harmen Oppewal, Monash University, Australia

This research examines online property marketing and the effect of visual (floor plans) and verbal (text descriptions) apartment representations on consumer intention to inspect property.

## 5. Social and Physical Environmental Efficacy: Concept Introduction and Scale Creation

Debra Z. Basil, University of Lethbridge, Canada

Efficacy has been shown to impact individual behavior. This research identifies two sub-dimensions of efficacy (social and physical environment). Scales are created and tested in three focus groups and five empirical studies. Results show social environment and physical environment efficacy scales help us better understand individuals' responses to persuasive communications.

## 6. Healthy Versus Tasty: A Canadian test

Michael Basil, University of Lethbridge  
Olivier Trendle, Grenoble Ecole de Management  
Carolina Werle, Grenoble Ecole de Management

Foods promoted as “healthy” are often assumed to be less tasty. However, this association appears to vary across cultures. This research examines the association among Canadian students. Using both explicit and implicit measures, we found participants more likely to consider healthy foods to be tasty.

## 7. Impact of Power on the Persuasion of Fear Appeals in Green Advertising

Shankha Basu, Nanyang Technological University, Singapore  
Sharon Ng, Nanyang Technological University, Singapore

Power influences the persuasiveness of fear appeals in green advertising. Three studies show that high power leads to lower persuasiveness of fear appeals in green advertising. This is especially so when the consumer’s attention is focused more on the personal threat than on the environmental threat implied in the ad.

## 8. Feeling Hot, Hot, Hot: Activation of Hot and Cool Mental States through Embodied Sensory Experiences

Rishtee Batra, Indian School of Business, Hyderabad, India  
Tanuka Ghoshal, Indian School of Business, Hyderabad, India

Our research examines the metaphorical link between the physical experience of hot (spicy) tastes and mental representations of hot-headedness. We find that people rate others as more hot-headed when experiencing hot (spicy) tastes and that such hot tastes also impact self-judgments and people’s own responses toward ambiguously aggressive actions.

## 9. Memorable Experience Desires: Getting Into the Mind of the Luxury Hotel Consumer to the Year 2020

Jorn H. Buhring, The Hong Kong Polytechnic University, School of Design  
Barry O’Mahony, Swinburne University of Technology, Australia  
John Dalrymple, Swinburne University of Technology, Australia

Profound changes have been observed in how tourists engage with destinations, attractions and hotels, while increasingly seeking memorable experiences. Making use of Pine and Gilmore’s experience framework, this forward-looking study engaged luxury hotel guests in depth interviews to identify primary memorable experience generator categories of the future luxury hotel room.

## 10. Skepticism Towards Advertising and Consumers’ Response to Slogans

Gaëlle Bustin, Universitat Pompeu Fabra, Spain  
Maria Galli, Universitat Pompeu Fabra, Spain

Past research found slogans to generate “reactive” behavior, leading consumers to behave contrary to the advertiser’s intentions. We examine the moderating role of individual differences in skepticism towards advertising. We find that slogans have negative effects for consumers highly skeptical towards advertising, but positive effects for non-skeptical consumers.

## 11. Boomerang Effects of Low Price Discounts

Fengyan Cai, Shanghai Jiao Tong University, China  
Rajesh Bagchi, Virginia Tech, USA  
Dinesh Gauri, Syracuse University

The authors show that providing a low price discount (vs. none) can lower purchase intentions and incidences under certain conditions—when discounts are low and purchase volume is small. This effect disappears when purchase volumes are large, consumers weight all attributes equally.

## **12. Scents and Sounds: a Multisensorial Approach to the Study of Brands**

Marina Carnevale, Fordham University, USA  
Rhonda Hadi, Oxford University, UK  
David Luna, Baruch College, USA

Product scents may enhance product evaluations and memory. Similarly, the inherent meanings conveyed by brand names are shown to impact consumers' preferences. In the current research, we propose a multisensorial approach to the understanding of brands by exploring how brand names and scents interactively affect consumer choice and memory.

## **13. When Sense Making is Unequal to Sense Giving: A Case Of Skepticism Against McDonald's CSR Initiatives by Organic Food Eating Parents in Singapore**

Suwichit Chaidaroon, University of Westminster, UK

To examine consumers' skepticism against corporate social responsibility (CSR) messages, a case study was conducted with Singaporean organic food-eating parents with regards to McDonald's CSR efforts. Results showed that successful CSR initiatives aligned the process of sense giving by the organizations with the process of sense making by the consumers.

## **14. The Cultural Differences in Perceptual Value on Money-Like Items in New Zealand and Hong Kong**

Kin Yan Chan, University of Canterbury, New Zealand  
Simon Kemp, University of Canterbury, New Zealand  
Joerg Finsterwalder, University of Canterbury, New Zealand

A study compared typicality ratings and reaction times in classification task in different money-related objects. Results shows a social/cultural differences: House, Shares of company, Gold and Supermarket Vouchers were regarded as a more typical form of money in Hong Kong compared to in New Zealand

## **15. Brand Diversity in Extension Feedback Effects**

Joseph W. Chang, Vancouver Island University, Canada

The results reveal that, for brands with similar brand extensions, the impact of negative extension information on high- (vs. low-) diversity brands is more pronounced. However, for brands with dissimilar brand extensions, the impacts of negative extension information on high- and low-diversity brands are identical.

## **16. Brand Constructs and Extension Feedback Effects: Perspectives of Categorical Similarity, Functional Cohesiveness, and Quality Diversity**

Joseph W. Chang, Vancouver Island University, Canada

This research advances extension feedback effect research to the perspective of brand construct, specifically in categorical similarity, functional cohesiveness, and quality diversity. The results of three experimental studies reveal that negative extension information instigates more negative influence on brands with categorically similar, functionally cohesive, and qualitatively diversify brand extensions.

## **17. It is my Brand: Development and Validation of a Brand Ownership Measure**

Hua Chang, Philadelphia University  
Hyokjin Kwak, Drexel University  
Lingling Zhang, Towson University

Brand research has developed many constructs to depict different forms of relationships between consumers and brands. However, a scale for measuring consumers' feelings of ownership towards brands has not yet been developed. Through four studies, we develop a scale of brand ownership and show that brand ownership affects consumer behaviors.

## **18. Clear Today But Foggy Tomorrow: The Impact of PM2.5 on Construal Level**

Fengchao Chen, School of Business, Renmin University of China, China  
Ying Ding, School of Business, Renmin University of China, China  
Wei Chen, School of Business, Renmin University of China, China

Given the pervasiveness of PM2.5 air pollutants, the present paper investigates the role of PM2.5 in the individuals' information processing style. Across two experiments, the findings suggest that increases in PM2.5 levels would make people be more likely to engage in abstract mindset.

## **19. The Reversed Endowment Effect in Living Goods Transaction**

Rui Chen, School of Economics and Management, Tsinghua University  
Leonard Lee, Business School, National University of Singapore  
Yuhuang Zheng, School of Economics and Management, Tsinghua University

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.

## **20. Does Hunger Matter? How Focal Image Style, Food Type and Physical Status Impact CRM Effectiveness**

Pei-Chi Chen, National Sun Yat-sen University, Taiwan  
Chun-Tuan Chang, National Sun Yat-sen University, Taiwan

This research examines how the impact of an ad's focal image style (product-focused/cause-focused) on the effectiveness of cause-related marketing (CRM) is influenced by the food type (vice/virtue) being advertised and the viewer's physical status (hungry/satiated). We found two significant two-way interactions affecting purchase intention and attitude towards the sponsoring firm.

## **21. Global Brands and Consumer Psychological Adaptation to New Cultural Environments**

Sunmyoung Cho, Yonsei University, Seoul, Korea

This research shows that global brands situated around the world facilitate consumers' psychological adaptation to new cross-cultural environments. Asian participants felt comfortable and familiar with the European locale and acquired positive sense of self when they experienced some global brands in the European cities.

## **22. When Celebrities Become Brands**

HeaKeung Choi, Korea University, Korea  
Saraphine Pang, Korea University, Korea  
Sejung Marina Choi, Korea University, Korea

Different types of celebrity endorsements lead to different levels of accountability and thus different perceptions from the public. Therefore, in this study, consumer evaluations toward three different types of celebrity endorsements in the absence and presence of celebrity negative information – celebrity-brand, spokesperson, and representer – were studied.

## **23. The Discrete Emotions Theory Controversy in Psychology and Relevance to Consumer Behavior**

Louis Daily, Center For Global Business Research, University of Phoenix, USA  
Fiona Sussan, Center For Global Business Research, University of Phoenix, USA  
Norris Krueger, Center For Global Business Research, University of Phoenix, USA

Universality of emotions is relevant to Consumer Behavior. Consumer scholars like de Mooij sided with culture school, but universal dominated Psychology. Matsumoto used Ekman's universal theory in consumer research. The debate has opened with new research. This paper reviews history of debate and new studies, draws conclusions for future.



## **24. When Do Opinion Leaders Spread Word-of-Mouth? The Moderating Role of Brand Strength and Performance**

M. Deniz Dalman, Graduate School of Management, Saint Petersburg State University, Russia  
Junhong Min, Michigan Technological University, USA

While Word-of-Mouth (WOM) has been studied extensively in the marketing literature, brand effects on WOM are scarcely researched. In this research our objective is to fill this gap in literature by investigating how and when opinion leaders (vs. other consumers) choose to spread WOM for brands varying in strength.

## **25. Reflecting on Young Women's Carnavalesque Ritual Alcohol Consumption**

Emma Dresler, Massey Business School, Massey University  
Leigh Parker, School of Design and Photography, Universal College of Learning  
Margaret Anderson, Massey Business School, Massey University

Alcohol, as a product, is generally consumed in the pursuit of pleasure. The study adopted the theoretical framework of melding Bakhtin's theory of carnival with ritual consumption to explore how young women navigate the temporal and spatial boundaries, to legitimise their experience of collective hedonistic alcohol consumption.

## **26. How Community Interactions Demotivate Customer Involvement and Impair Creativity in Service Innovation: From the Perspective of Social Exclusion Theory**

Xiucheng Fan, Fudan University, China  
Jing Wang, Fudan University, China

Our studies explore the effects of social interactions on creative behavior. Compared with socially accepted condition, we distinguish two types of social exclusion instances, being rejected and being ignored. With several experimental studies, we find that ignored experiences lead to lower task intrinsic motivation and creativity (flexibility and originality dimension).

## **27. It's not Necessarily What You Say, but Who You are That Matters! Effect of Identity Awareness and Review Quality**

Cheng-Hsi Fang, Chien Hsin University of Science and Technology, Taiwan

An experiment was carried out to test whether identity awareness (virtual identities vs. real-life identity) and review quality changed the purchase and sharing intentions of consumers. Results show that when interacting in a community such as Facebook, in which users typically reveal their real-life identity, low-quality product reviews can have a profound effect on the purchase intentions of consumers.

## **28. Just Give Me a Story: An Explorative Study of Microfilm**

Pei-wen Fu, National Sun Yat-sen university, Taiwan  
Chi-cheng Wu, National Sun Yat-sen university, Taiwan  
Ching-Ya Weng, National Sun Yat-sen university, Taiwan

This study aims to explore the new advertising tool-microfilm. By both qualitative and quantitative studies, we identify consumers' schema toward microfilm. We further compare microfilm with emotional appeal advertising. Results indicated that an effective microfilm should contain a well-design plot but without intentional product insertion.

## **29. Economic Knowledge And Intelligence Predict Long-Term Saving in Children at The Age From 7 to 9**

Agata Gąsiorowska, University of Social Sciences And Humanities, Poland  
Tomasz Zaleskiewicz, University of Social Sciences And Humanities, Poland

Research on saving and financial policy often overlook young children as agents capable to save in long-term. We conducted two long-term studies examining children's behavior in saving game. We showed that the propensity to save is related to the level of economic knowledge, children's intelligence and the source of money.

### **30. Effects of Performance Goals on Food Preferences and Consumption**

Pierrick Gomez, NEOMA Business School, France  
Dimitri Vasiljevic, NEOMA Business School, France

This research examines how performance goals influence food behavior beyond task achievement. In three experiments, we demonstrate that information (i.e., words, slogans) associated with performance increase consumption and preferences for unhealthy food and preferences for it. Further, this effect is due to a need for food energy.

### **31. Ad-Magazine Congruency in the Context of the Associative Structure of the Mind: Effects for Affect, Memory and the Coherence of Print Advertisements**

Alicja Grochowska, University of Social Sciences and Humanities, Poland  
Andrzej Falkowski, University of Social Sciences and Humanities, Poland

The goal of the research was to examine the effects of congruency between an advertisement and its context (magazine) on the coherence within the advertisement, and their consequences for the memory and affective reactions to the advertisement.

### **32. A Feelings-As-Information Approach to the Relationship Between Customer-to-Customer Interaction and Service Satisfaction**

Marloes Heijink, Hong Kong Polytechnic University  
Yuwei Jiang, Hong Kong Polytechnic University

Other customers can lighten up or destroy your service experience. An online survey and a lab experiment reveal that affective responses mediate the relationship between customer-to-customer interaction (CCI) and service satisfaction, but only for relevant CCI. This study provides evidence that the feelings-as-information framework also applies to services.

### **33. Using Shapes in the Advertising of Brand Extensions**

Hosei Hemat, University of Sydney, Australia  
Ulku Yuksel, University of Sydney, Australia

Despite the common belief that sensory stimuli matter, little research has explored how such specific shapes can affect consumers' evaluations of brand extension fit. Using experiments, this research shows that specific geometric shapes can affect consumer perceptions for dissimilar brand extensions.

### **34. When Cross-Cultural Consumer Risk Preferences Reverse**

Hosei Hemat, University of Sydney, Australia  
Ulku Yuksel, University of Sydney, Australia

Using experiments, we investigate cultural differences in consumer risk-taking to identify previously unknown cultural paradoxes and boundary conditions. We adopt a context dependent view of the effect of culture on risk-taking exploring different risk types and decision-maker perspectives as moderators

### **35. The Impact of Brand Concept and Task Design in Co-creation: The Role of Processing Fluency**

Sara Hsieh, National Chengchi University, Taiwan  
Aihwa Chang, National Chengchi University, Taiwan

Drawing from construal level theory and processing fluency theory, our findings contribute to reveal interaction effect between brand concept and co-creation task characteristics works through processing fluency to affect consumer experience. Results show that for value brand co-creation, analytical task as opposed to creative task fosters higher level of processing fluency, which leads to stronger co-creation process satisfaction and brand loyalty intention.

### **36. Choice of Lucky Products: The Effects of Buying Purpose, Task Risk and Product Type**

Li-Shia Huang, Fu Jen Catholic University

This study used an experiment to demonstrate that lucky products are suitable for gift-giving. Risky task may increase the likelihood of choosing lucky products for gift-giving and self-buyers. Besides, lucky appeals are more suitable for hedonic products than for utilitarian ones.

### **37. Effects of Processing Style on Variety Seeking**

Zhongqiang (Tak) Huang, The Chinese University of Hong Kong  
Robert Wyer, The Chinese University of Hong Kong

In this research, we investigated the effects of processing style on variety seeking. It showed that global processing would lead to more variety seeking whereas local processing would result in less choice of variety.

### **38. Abstract Thinking Explaining the Effect of Mixed Emotions on Creativity**

Eunjin Hwang, Hongik University, Republic of Korea  
Nara Youn, Hongik University, Republic of Korea

Through three studies, we showed that mixed emotions promoted abstract thinking, which in turn led to enhanced creativity. Individual differences in the extent to which people prefer structure moderated the effect of mixed emotions on abstract thinking.

### **39. The Effects of Investment and Brand Transgression on Brand Commitment**

Yunjoo Jeong, Korea University, South Korea  
Jung Ju Rue, Korea University, South Korea  
Yongjun Sung, Korea University, South Korea

Commitment in consumer-brand relationship has been interesting areas to explore for the researchers. Although numerous researches has been done on the commitment, research on the perspectives of the interpersonal relationship are very limited especially on consumer investment. The study results illustrate that highly invested consumers show resistance to symbolic transgression.

### **40. Slow Fashion Consumers: Profiling Consumers According to Values, Apparel Consumption Behaviors and Demographics**

Sojin Jung, Institute of Textiles & Clothing, The Hong Kong Polytechnic University, Hong Kong  
Byoungho Jin, Consumer, Apparel and Retail Studies, University of North Carolina at Greensboro, USA

In an attempt to understand slow fashion consumers better, this study is aimed at (1) classifying consumer segments based on the five dimensions of consumer orientations to slow fashion (Jung & Jin, 2014), and (2) profiling each segment according to personal values, apparel consumption behaviors and demographic information.

### **41. Seeing Differently: A Cross-Cultural Difference in Consumer Attention**

Jinwon Kang, Korea University  
Eunice Kim, University of Florida, USA  
Young Shin Sung, Korea University  
Jung Yong Ahn, Korea University

The objective of the research is to test the impact of the cross-cultural difference in cognitive process on consumer's attention which affects memory for brands they saw. Eastern participants (holistic thinking) look longer, thereby recalling and recognizing brands in the background better than do those from Western cultures (analytic thinking).

## **42. Mental Simulation as an Imbalance Resolution Between Types of Misfortune and Public Donations**

Jungyun Kang, Sungkyunkwan University, Korea  
Hakkyun Kim, Sungkyunkwan University, Korea  
Kiwan Park, Seoul National University, Korea

People are unwilling to donate to controllable misfortunes. How then can we help such individuals? We suggest that mental simulation can moderate the effects of misfortune type on charitable behaviors. Empirical Studies show that outcome-focused mental simulation leads to charitable giving for controllable misfortunes.

## **43. I'm Not a Banal Brand But a Real Friend: The Role of Brand Anthropomorphism in Consumer-Brand Relationships**

Taeyeon Kim, Korea University, South Korea  
Jang Ho Moon, Sookmyung Women's University, South Korea  
Yongjun Sung, Korea University, South Korea

The purpose of this study is to examine the effects of brand anthropomorphism on consumer-brand relationships in social media, by employing a longitudinal experiment. The results show that brand anthropomorphism increase the level of social presence, resulting in more favorable brand evaluations, even after a brand transgression.

## **44. Conviction Bias: Intertemporal Differences in Nonconforming Choices**

Nicole Y. Kim, Yonsei University, South Korea  
Se-Bum Park, Yonsei University, South Korea  
Subin Im, Yonsei University, South Korea  
Sunnah Baek, Yonsei University, South Korea

We show that people conjecture less preference uncertainty and greater choice conviction in the distant future than in the near future – a phenomenon we term conviction bias. We find that this bias systematically affects intertemporal choices in nonconformity, such that nonconforming choices are preferred in the distant future.

## **45. Seeing Goals in Products: Effects of Goal Visualization on Product Valuation**

Hae Joo Kim, School of Business and Economics, Wilfrid Laurier University

We show that a product (e.g., curvy bottle) which merely helps consumers visualize an end-state (e.g., toned physique) creates an illusory perception that the goal is easier to attain, which subsequently, increases the perceived value of the product. The effect is attenuated when actual goal progress is made.

## **46. Guilt Makes You Refund More**

Hyoju Kim, Korea University, Republic of Korea  
Hayeon Park, Korea University, Republic of Korea  
Bohye Park, Korea University, Republic of Korea  
Yongjun Sung, Korea University, Republic of Korea

The objective of this research is to explore the influence of guilt, unrelated to the shopping context, on consumption. When consumers encounter better deal, those who experienced guilt were more regretful about their purchase than others. Our finding suggests that guilt triggers corrective action and influences the post-purchase evaluation.



## **47. Factors Impacting Post Purchase Behavior for Social Commerce Users**

Moon-Yong Kim, Hankuk University of Foreign Studies, South Korea

The present research examines the factors influencing post purchase behavior for social commerce users in China. This research incorporates the characteristics of website and food service participating in social commerce to investigate the key factors of consumers' satisfaction in social commerce and to examine the relationships between satisfaction and repurchase intentions.

## **48. The Interplay of Consumer Animosity and Regulatory Focus in Influencing Consumer Responses to Cause-Related Marketing**

Moon-Yong Kim, Hankuk University of Foreign Studies, South Korea

The current research proposes that high (vs. low) level of consumer animosity will lead to more unfavorable responses to a foreign brand in the ad with a CRM message when consumers are promotion-focused. In contrast, the effect of consumer animosity will be attenuated when consumers are prevention-focused.

## **49. I Can't Change Much but We Make a Difference – the Influence of Societal Nostalgic Consumption on Optimism about Future**

Canice M. C. Kwan, Chinese University of Hong Kong, China  
Shirley Y. Y. Cheng, Hong Kong Baptist University  
Alex S. L. Tsang, Hong Kong Baptist University

Four studies differentiate two sources of nostalgic content (collective vs. personal) and show how collective nostalgia colors consumers' perceptions about their future and thus promotes risk-taking decisions in public policy endorsement. We also examine a novel explanation which extends nostalgic from social connectedness to identification with a collective entity.

## **50. Why Do People Share Knowledge Through Online Social Network**

Kyung-Joon Kwon, University of Westminster, UK  
Norman Peng, University of Westminster, UK  
Donna Mai, University of Westminster, UK

The purpose of this study is to examine attitudes toward sharing information online and satisfaction toward social commerce websites' influences on 181 young Korean consumers' intentions to share their consumption experiences online. The results show both factors can affect young consumers' behavioral intentions. The implications of this study are discussed.

## **51. Thinking Creatively through Hands**

Jeong Eun Lee, Hongik University, Republic of Korea  
Nara Youn, Hongik University, Republic of Korea

Through three studies, this research empirically demonstrates that physical hand movement enhances creativity. The relationship between using hands and creativity is mediated by eliciting embodied metaphor of hands and experience of flow.

## **52. Imagine All The People: The Consequences of Imagining Luxury Ownership**

Jeffrey Lee, Massachusetts Institute of Technology, USA

This paper finds a negative impact of imagining status-goods ownership on product interest, even when ease-of-imagination and mental elaboration are considered. Further, this effect is attenuated when imagining experiences with (as opposed to signaling with) the status good, suggesting that imagined ownership reduces purchase interest by making social costs salient.

### **53. The Effect of Narcissism on Consumer-Brand Relationships**

Eunji Lee, Korea University, South Korea  
Taeyeon Kim, Korea University, South Korea  
Yongjun Sung, Korea University, South Korea  
Sunwoong Park, Korea University, South Korea

This study provides an empirical evidence of the link between narcissism and consumer-brand relationships. Overall finding suggest that narcissists, comparing to nonnarcissists, are less committed to brands and more influenced by alternatives, regardless of the investment level.

### **54. The Effect of Choice Mode by Having Different Choice Set Size**

Hyun-Kyung Lee, Korea University, South Korea  
Miyoon Eo, Korea University, South Korea  
Jung Wan Ryu, Korea University, South Korea

People change their preference or act of choosing can be differ from their choice mode (instrumental vs. experiential) and choice set size. Participants in instrumental condition more like small choice set than large one. On the other hand, participants in experiential condition more like large choice set than small one.

### **55. How Does Perceptual Disfluency Amplify the Effect of Consumer Reviews?**

Changxin Li, Nanjing University, China  
Yunhui Huang, Nanjing University, China  
Jiang Wu, Nanjing University, China

We conducted three studies to explore the effect of perceptual fluency on the persuasiveness of the consumer reviews. consumers tend to evaluate a positively(negative) reviewed product more positively when perceived disfluency. This effect is reversed when consumers are high in cognitive load, but notable when people are high in need-for-cognition.

### **56. The Denomination-Spending Matching Effect: When the Magnitude Matches, It Feels Less Painful to Pay**

Yi Li, HEC Paris, France

This study extends the finding that consumers are reluctant to use large denominations for small purchases and proposes that consumers are also reluctant to use small denominations for large purchases. Two experiments show that when the magnitude of the denomination matches that of the purchase, the pain of paying reduces.

### **57. Towards a Comprehensive Understanding of Attention Bias in Choice Process**

Yi Li, HEC Paris, France  
Selin Atalay, Frankfurt School of Finance & Management

Attention bias refers to more attention being assigned to the chosen option during the choice. Eye-tracking research attributes it to liking's positive influence on attention. Pre-decisional bias research attributes it to selective information processing. This study fits both explanations into a three-stage-choice-process and demonstrates two explanations jointly explain attention bias.

### **58. Paying More to Save Less: The Effect of Conditional Promotion on Willingness to Pay**

Yi Li, HEC Paris, France  
Tatiana Sokolova, HEC Paris, France

This study compares two conditional price promotions and show that “buy two items, get a discount on the cheaper item” induces higher willingness to pay for the second item than “buy two items, get a discount on both items”. The effect holds even when the latter promotion offers greater savings.

## **59. Emoticon Usage in Social Media: Influences of Social Presence and Motivation Orientation**

Shuling Liao, College of Management, Yuan Ze University  
Cindy Yunhsin Chou, College of Management, Yuan Ze University  
Meng-chen Lin, College of Management, Yuan Ze University

We examined the relationship among social presence perceptions, motivation orientation and emoticon usage, and investigated the moderating effect of self-monitoring on emoticon usage in social media. Motives including expressive and benefit orientations were found determine emoticon usage towards social presence. Self-monitoring influences emoticon usage for utilitarian benefits in social media.

## **60. Are Product Review Sites Forums or Battlefields? A Qualitative Study of Consumer Attribution and Dialectical Thinking in eWOM Communication**

Shuling Liao, College of Management, Yuan-Ze University, Taiwan  
Brandon DuBreuil, College of Management, Yuan-Ze University, Taiwan

This study intended to observe how consumers communicate amongst one another in an online review setting by adopting the attribution and the dialectical thinking theories to explain some interpersonal communications in eWOM interaction.

## **61. The Match-up Influences of ad Appeal, Product Category, and Brand Strength on Inducing Affective Forecasting Biases**

Shuling Liao, College of Management, Yuan-Ze University, Taiwan  
Ting-i Wang, College of Management, Yuan-Ze University, Taiwan  
Meng-chen Lin, College of Management, Yuan-Ze University, Taiwan  
Tzu-han Lin, College of Management, Yuan-Ze University, Taiwan

Biases due to underestimation or overestimation of consumption satisfaction often occur between predicted and actual emotions. This research explores how ad execution, product category, and brand strength in the advertisement will trigger consumers to generate forecasts of future consumption emotion, and how these forecasts might lead to affective forecasting bias.

## **62. Postmodern Self and Self-Presentation in Online Social Networks**

Heejin Lim, Faculty of Retail and Consumer Sciences, The University of Tennessee, USA  
Melanie Doss, Ph.Candidate in Retail and Consumer Sciences, The University of Tennessee, USA

This study explores consumers' self-presentation in online social networks. Using a dramaturgical approach, this study examines virtual strategies of self-presentation, and the impact of the audience in self-disclosure on Facebook. In-depth interviews reveal eight distinct types of Facebook users in terms of the degree of self-disclosure and behavioral orientation.

## **63. Accept the Product You Are Anxious About: How Much of a Role Does Hope Play And When?**

Yu-Ting Lin, Imperial College London, United Kingdom  
Andreas Eisingerich, Imperial College London, United Kingdom

Since new products are also associated with high levels of uncertainty and risk, consumers believe innovative offerings could provide possibilities in their lives due to product-related hope but may also be anxious about the product's performance. Thus, driving forces of hope versus anxiety, and self-esteem on adoption are worthy of further investigation.

## **64. How Pinteresting! Exploring Global Brands' Visual Brand Identity Strategies**

Jhih-Syuan Lin, University of Georgia, USA  
Kuan-Ju Chen, University of Georgia, USA  
Yongjun Sung, Korea University

This research explores how top global brands translate their brand marketing strategies into persuasive visuals on Pinterest. A comprehensive conceptual framework of visual brand identity is developed. Top 100 global brands' Pinterest data were collected and will be analyzed. Directions for future research endeavors and marketing communication development are discussed.

## **65. The Lonely Philanthropist: How Social Cues Moderate the Effect of Loneliness on Charitable Giving**

Zoe Y. Lu, University of Wisconsin - Madison, USA  
Robin J. Tanner, University of Wisconsin - Madison, USA

In the current research, we hope to reconcile the contradicting findings on the effect of loneliness on prosocial behavior by proposing a moderator: the presence of social cues. We propose that the effect of loneliness on prosocial behavior is moderated by the presence of social cues. Specifically, we propose that 1) the need to belong will mediate the positive effect of loneliness on prosocial behavior when social cues are present, 2) empathy will mediate the negative effect of loneliness on prosocial behavior when social cues are absent.

## **66. Universal Consumer Motivation Scale (CMS) – Construction, Validation and Application**

Dominika Maison, Psychology Department, University of Warsaw, Poland  
Magdalena Poraj-Weder, Psychology Department, University of Warsaw, Poland

Based on four survey studies (each based on national-wide representative sample, n=1000) we constructed 26-items Consumer Motives Scale (CMS) and Consumer Motivation Model. The scale fits to all psychometric standards (validity, reliability). The CMS consists of 5 major consumers' motivations: power/recognition; control, belonging, reward, quality.

## **67. Psychological Differences in Reactions Toward Information About Corporate Social Responsibility (CSR)**

Dominika Maison, Psychology Department, University of Warsaw, Poland  
Magdalena Poraj-Weder, Psychology Department, University of Warsaw, Poland

Socially responsible behavior of companies is a very new issue in emerging markets. However not always reactions toward such engagement of the companies are perceived positively by consumers. Based on national wide survey (n=1055) and cluster analysis we found big individual differences in reaction toward CSR.

## **68. Customer Satisfaction Regulation in Group Service Consumption: Cross-Cultural Moderators**

Koji Matsushita, Chuo University, Japan  
Haruko Tsuchihashi, Aoyama Gakuin University, Japan  
Kaichi Saito, Meiji Gakuin University, Japan

This study on group service consumption suggests that a focal customer regulates his CS moderated by his self-construal. We clarify that the degree of the other customer's experience drives the regulation and play a part in Separable or Inseparable Integration. We propose how to manage group customers based on self-construal.



## **69. Status Products; When the Informed Consumers Turn More Generous**

Reza Movarrei, Grenoble Ecole de Management, France  
Olivier Trendel, Grenoble Ecole de Management

We show that product information (those not implying additional features) affect WTP for status-products only when they manipulate perceived recognition of others. So recognition-facilitating information leads to higher WTP for status products and perceived recognition of others by self mediates it. We both measure and manipulate (by memorizing) the mediator.

## **70. Culture and Indecisiveness**

Andy Ng, York University, Canada  
Michaela Hynie, York University, Canada

Using an experimental approach and a chronic individual difference approach, results of three studies show that East Asian (vs. European) Canadians experience more choice and decision difficulty, with dialectical thinking giving rise to general indecisiveness. Moreover, this general indecisiveness leads to reduced life satisfaction among East Asian Canadians.

## **71. Technology vs. Fashion Branded Wearable Devices**

Saraphine Pang, Korea University, Korea  
Sukyung Kang, Korea University, Korea  
Kyunhoon Boo, Korea University, Korea  
Sejung Marina Choi, Korea University, Korea

As wearable devices possess both technology and fashion characteristics, an experiment was conducted to test whether the product fared better as a technology branded or fashion branded product. In addition, the effectiveness of type of advertising message (rational vs. emotional) was also tested.

## **72. Cultural Differences in Celebrity Endorsement Evaluation: Holistic vs. Analytic Thinkers**

Hayeon Park, Korea University, Korea  
Jung-Ah Lee, Korea University, Korea  
Young Shin Sung, Korea University, Korea  
Yongjun Sung, Korea University, Korea

The objective of the current research is to test the impact of the congruency between brand and celebrity on consumers' celebrity endorsement evaluation. Our findings show that Easterners (i.e. holistic thinkers) are more tolerant of low celebrity-brand fit endorsements than are those from Western cultures (i.e. analytic thinkers).

## **73. The Effect of Spatial-Temporal Congruency on the Evaluation of a Retro Product**

Jaewoo Park, Chiba University of Commerce, JAPAN  
Charles Spence, University of Oxford, UK

The present study investigated whether the horizontal position of a product, the hand used to hold that product, and their interaction would influence people's evaluation of a retro product. A significant interaction term was obtained. This result supports the view that spatial-temporal congruency can enhance product evaluation.

## **74. Underdog Positioning Can Backfire**

Kiwan Park, Seoul National University, Korea  
Yae Ri, Sophia Kim, Seoul National University, Korea

The underdog brand positioning may not always work positively for the corporate. The present research proposes and finds that the negative consequence of the underdog effect is more pronounced when ethical transgressions take place than the ethical or functional transgressions are committed.

## **75. Materialism in Adolescence: The Effect of Violent Media**

Yupin Patara, Sasin Graduate Institute of Business Administration, Chulalongkorn University  
Issariya Woraphiphat, Sasin Graduate Institute of Business Administration, Chulalongkorn University

This research examines the effect of violent media exposure on materialistic value in adolescents. We found that anxiety triggered by violent media exposure leads to a higher materialistic value in adolescents with interdependent self-construal than independent self-construal. We collect data from Thailand (the interdependent-self) and the United States (the independent-self).

## **76. Selling New Hotel Membership Programs: The effects of knowledge-based control and climate for psychological safety**

Norman Peng, University of Westminster  
Annie Chen, University of Westminster

This research examines how knowledge-based control influences hotels' new membership schemes sales performance. In addition, the moderating effect of climate for psychology safety will also be investigated. 86 key informants filled out the survey. Findings' implications to hotel management literature and practices are discussed.

## **77. Consistent or Not? The Role of Product Visibility in Sequential Decisions**

Dikla Perez, Tel -Aviv University, and Technion  
Yael Steinhart, Tel-Aviv University  
Amir Grinstein, Ben-Gurion University and the VU Amsterdam

This research proposes that the extent to which a consumer's sequential purchase decisions are consistent, is influenced by the consumption visibility of the product associated with his or her first decision.

## **78. The Effect of Subjective Abundance on Prosocial Behavior**

Ruth Pogacar, University of Cincinnati, USA  
Karen Machleit, University of Cincinnati, USA  
James Kellaris, University of Cincinnati, USA

Subjective Abundance influences consumers independent of objective resources. Thinking about loved-ones induces subjective abundance, which interacts with Financial Abundance, independent of mood, so people are more prosocial when high in subjective abundance but low in financial abundance, possibly explaining differences in prosociality between higher and lower socioeconomic status individuals.

## **79. Who Regrets More After a Choice? The Role of Dialectical Thinking**

Rongrong Qiu, Fudan University, China  
Xiucheng Fan, Fudan University, China

Dialectical thinking means considering two opposites spontaneously and regarding things as changeable and connected. The current article finds that people who have high degree of dialectical thinking experience more post-decision regret than people of low degree of dialectical thinking. The conclusion complements the theory of regret.

## **80. The Price of Abundance: How a Wealth of Experiences Impoverishes Savoring**

Jordi Quoidbach, University Pompeu Fabra  
Elizabeth Dunn, University of British Columbia, Canada

In a series of correlational and field studies, we found that being a world traveller—or just feeling like one—undermined the proclivity to savor visits to enjoyable, but unextraordinary destinations by endowing individuals with a sense of abundance.

## **81. Perception and Reality, Their Intertwined Relationship: Is Consumers' Use of the Internet Affected by Their Attitude Towards It?**

Jong-Youn Rha, Professor, Seoul National University, Korea  
A-young Choi, Research fellow, Sungkyunkwan University, Korea  
Bohan Lee, Master Student, Seoul National University, Korea  
Sangman Han, Professor, Sungkyunkwan University, Korea

In this study, we used a single source data that consists of both web-log and a survey data to explore consumers' attitude towards Internet on their actual behavior. We classified consumers into different groups according to their positive and negative attitude towards the Internet and investigated its actual online behavior.

## **82. Questioning the 'One Size Fits All' Approach to Cultural Advertising: Investigating Between and Within Cultural Variations in Information Processing Styles**

Ann Kristin Rhode, ESCP Europe Business School Paris  
Benjamin G. Voyer, ESCP Europe Business School Paris

The question of whether and how advertising should be standardized across cultures remains unanswered. We challenge the assumption of a uniform pan-Asian holistic attentional bias and suggest that advertising strategies for geographic regions rather than countries might be problematic given the effect of language structure on information processing styles.

## **83. The Interplay of Product Image and Regulatory Focus on Green Consumption**

Jung Ju Rue, Korea University, South Korea  
Yuhosua Ryoo, Korea University, South Korea  
Na Kyong Hyun, Korea University, South Korea  
Pei Yu Tsai, Korea University, South Korea  
Yongjun Sung, Korea University, South Korea  
Sunyoung Kim, Korea University, South Korea

This research proposed product image and regulatory focus as key factors that impact consumers' evaluations of green product. The findings reveal that consumers showed more positive responses when gentle products were paired with promotion messages than with prevention messages, while did not show any significant differences in strong products.

## **84. Framing the Consumer Subject: The Case of High Fashion Magazine Covers**

Emma Samsioe, Lund University, Sweden

This paper explores if and how the examination of high fashion magazine covers can extend theory on the constitution of an active consumer subject, in the formation of a consumer culture. It departs from work on gender portrayals in advertising research, regarding the role of women in society as consumers.

## **85. Mindfulness, Meditation, and Consumption**

Nicha Tanskul, Sasin Graduate Institute of Business Administration, Chulalongkorn University  
Yupin Patara, Sasin Graduate Institute of Business Administration, Chulalongkorn University

Through ethnographic participant observation, this study is to explore meditation practice and reveals how it affects consumer values, well-being, and stage of happiness. Findings suggest that meditation practice can make people become more aware of the present and recognize their priorities, accept the current self and induce an internal happiness.

## **86. Marketing Exclusion: When Loyalty Programs make Customers Feel Like “Outsiders”**

Danna Tevet, Tel Aviv University, Israel  
Shai Danziger, Tel Aviv University, Israel  
Irit Nitzan, Tel-Aviv University, Israel

We examine how preferential treatment given to privileged customers in loyalty programs affects unprivileged customers. We demonstrate that exposure to preferential treatment of others causes unprivileged customers to experience un-belonging (we term this “marketing exclusion”). We show that preferential treatment affects unprivileged customers’ loyalty, purchase preferences and behavior towards others.

## **87. Effect of Irrelevant Haptic Inputs on Consumers’ Judgment: The Moderating Role of Construal Level**

Taku Togawa, Chiba University of Commerce, Japan  
Hiroaki Ishii, Seikei University, Japan  
Jaewoo Park, Chiba University of Commerce, Japan

Previous literature has shown that perceived hardness affects consumers’ judgments of unrelated objects. However, the literature has not considered other factors involved in this effect. Drawing on construal level theory, we demonstrate that the effect of perceived hardness on consumers’ judgment differs depending on their construal level.

## **88. The Contagion Effects of Other-Customer Misbehavior in the Servicescape: The Perspective of Social Learning**

Timmy H. Tseng, Department of Business Administration, National Chengchi University, Taiwan

This study examines the effects of rules and other-customer misbehavior on futuristic customer misbehavior from the perspective of social learning. An experimental design was used to validate hypotheses. The results indicated that current other-customer misbehavior influences futuristic customer misbehavior. Service firms can set rules to prohibit such misbehaviors.

## **89. Coping Strategies for Other-Customer Misbehavior: The Perspective of Relationship Norms**

Timmy H. Tseng, Department of Business Administration, National Chengchi University, Taiwan

Drawing on the perspective of relationship norms, this study examines the effect of coping way on customer satisfaction toward the service firm and the moderating role of relationship type. A strategy is presented based on the findings of this study to help service firms cope with other-customer misbehavior.

## **90. How Fluency Fitting Purposes Influences Payment to Travel**

Jiang Wu, Nanjing University, China  
Wenjie Shi, Nanjing University, China  
Yunhui Huang, Nanjing University, China

We examined how well perception of fluency matches the purpose of travel influences the degree of willingness to pay for travel. When people perceive disfluency, they will pay more for an adventurous trip but pay less for a leisure trip, no matter whether the destinations are familiar, unfamiliar or fictional.

## **91. Reciprocation Anxiety: Scale Development and Its Impact on Reciprocal Behavior**

Wenwen Xie, Sun Yat-sen University, China; Radboud University Nijmegen, The Netherlands  
Li Gu, Sun Yat-sen University  
Xinyue Zhou, Sun Yat-sen University

This study proposed the construct of reciprocation anxiety and operationalized it along three dimensions: reciprocation sensitivity, reciprocation avoidance, and distress. We described the development of Reciprocation Anxiety Scale and provided experimental evidence that people scored higher on reciprocation anxiety scale tend to return more money in the trust game.



## **92. Will You Warm Me Up: Consumer Prefer Anthropomorphized Products When the Temperature is Low**

Chun-Ming Yang, Ming Chuan University, Taiwan  
Wen-Hsien Huang, National Chung Hsing University, Taiwan.

Two studies find that low temperature cause people to prefer anthropomorphized products, especially when the possession-self link is high. Moreover, we also find that need for affiliation mediate this relationship. This research contributes to the literature by bridging anthropomorphism and embodied cognition literature, and provides new practical and theoretical insights.

## **93. Presenting Underdog Employee Stories in Services Advertising: The Moderating Role of Brand Familiarity and Implicit Theories**

Chun-Ming Yang, Ming Chuan University, Taiwan  
Yu-Shan Chen, National Chengchi University, Taiwan  
Shu-Ni Hsu, National Taiwan University of Science and Technology, Taiwan

With two studies, this research demonstrates that, just like brand biography, underdog employee's story could affect consumer's responses through the mediation of identification with the employee. Our results also suggest that presenting underdog employees in advertisements is particularly suitable for unfamiliar brands. However, this effect is stronger for incremental-focused consumers.

## **94. Construal Level Theory Explains the Occurrence of Choice Overload Effects**

Ulku Yuksel, The University of Sydney Business School, Australia  
Nguyen Thai, The University of Sydney Business School, Australia

This research demonstrates how desirability versus feasibility mindsets explain choice overload effects. Consumers who are exposed to large (small) choice-sets construe impending tasks concretely (abstractly), and weigh desirability attributes less (more) than feasibility attributes. Subsequently, the triggered feasibility mindset decreases the willingness to consume products selected from large choice-sets.

## **95. Confirmation Bias in The Consumer Perception of Financial Expertise**

Tomasz Zaleskiewicz, University of Social Sciences And Humanities, Poland  
Agata Gasiorowska, University of Social Sciences And Humanities, Poland  
Yoram Bar-Tal, Tel-Aviv University, Israel  
Katarzyna Stasiuk, Maria Curie Sklodowska University, Poland  
Renata Maksymiuk, Maria Curie Sklodowska University, Poland

Our goal was to study how consumers perceive epistemic authority (EA) in finances. In three experiments we investigated the impact of advisors' recommendation and clients' opinion about loans, investments, and life insurance on advisors' EA. Consumers ascribed higher EA to advisors holding opinions similar to their own (confirmation bias).

## **96. The Effects of Consumers' Online Motivations on Ad Clicks on Social Media**

Jing Zhang, San Jose State University, USA  
En Mao, Nicholls State University, USA

A model is developed to delineate the process by which online motivations affect ad clicks on social media. Path analysis showed that consumption motivations affect perceived informativeness and entertainment values of ads, which in turn influence ad clicks. The effect of connection motivations is mediated by perceived ad-media congruity.



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