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Sustainability and Society

May 20–22, 2010 Westin Tabor Center Denver, CO



Volume 20

Editors Kenneth C. Manning • Kathleen J. Kelly • David E. Sprott



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“Sustainability and Society”

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Denver, CO**

**Editors:
Kenneth C. Manning
Kathleen J. Kelly
David E. Sprott**



Volume 20

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PREFACE

Researchers attending the Marketing & Public Policy Conference (MPPC) typically investigate topics that intersect business, policy, consumers, and society; as such, this research community is well positioned to address many significant challenges facing our world. Accordingly, for this year's conference, we encouraged submissions that centered on the theme of "Sustainability and Society." Despite potential obstacles, such as the overwhelming scope of most environmental problems and the lack of clear paths toward investigating sustainability, we were impressed by the quantity and quality of the sustainability-related submissions. Our colleagues addressed a variety of topics, including the development of sustainable markets, the misuse of shared resources, consumer preferences for sustainable products, constrained consumption, processing of environmental messages, and sustainable disaster recovery.

In addition to its focus on sustainability, this year's conference highlighted research representing more traditional domains of marketing and public policy, such as privacy, corporate ethics, food labeling, marketing to vulnerable populations, tobacco marketing, and deceptive advertising. Although these topic areas are not new to the conference, we were struck by the timeliness of research examining food advergaming, adolescents and sexting, privacy and social media, front-of package nutrition claims, and the regulation of nanofoods. Authors at this year's MPPC should also be applauded for not shying away from investigating persistent problems associated with obesity, alcohol abuse, counterfeit brands, tobacco packaging, aggressive driving, and consumers' financial decisions.

Never hesitant to innovate, we tried a few new things at this year's conference. To further stimulate interaction regarding ongoing research initiatives, we introduced research roundtable sessions. Four such roundtable sessions provided attendees the opportunity to discuss sustainability and public policy research, the Food and Drug Administration's research needs as they relate to tobacco control, information provision and financial decisions, and the role of marketing and public policy in addressing natural disasters. In addition, we worked to create more conducive contexts for discussing ongoing research projects by integrating a midday poster session along with lunch.

This, the twenty-first annual MPPC, would not have been possible without the contributions of many organizations and individuals. The Program Committee provided us with valued support and ideas. We thank the American Marketing Association (AMA) for its support in organizing and implementing the logistics of the conference. Special thanks are offered to Jessica Thurmond Pohlonski for her commitment to the MPPC and for serving as an important conduit to the AMA. We are also grateful to Tom Brown, Pam Ellen, and Kathleen Seiders for their support of the MPPC and, specifically, for helping us in successfully transitioning the 2010 MPPC to the online conference management system. (Future conference cochairs will also benefit from the significant efficiencies this system offers in managing the submission, review, and program development processes.) In addition, we are appreciative of Charles Hofacker's support in developing conference-related communications and in integrating the conference Web sites. The sponsorship of the opening reception by Villanova University's Center for Marketing and Public Policy Research is also gratefully acknowledged.

This year's conference was preceded by the Marketing and Public Policy Research Workshop, which was held on the campus of Colorado State University. We thank our cochairs, Ingrid Martin and Marlys Mason, for their help in orchestrating the workshop. We also appreciate the commitment of numerous faculty members who developed workshop sessions and acted as mentors for workshop participants. The workshop would not have been possible without the generous support of the Colorado State University College of Business, the AMA, the Association for Consumer Research, the Marketing Science Institute, and the AMA Marketing and Society Special Interest Group.

Finally, we thank the administration, Department of Marketing faculty, various staff members, and graduate students at Colorado State University's College of Business for providing us with assistance in myriad ways and ultimately making it possible for us to host the workshop and conference.

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DO FOOD ADVERGAMES PROMOTE HEALTHY DIETARY CHOICES AND LIFESTYLES? AN ANALYSIS OF NATIONAL MARKETERS' SELF-REGULATION OF FOOD ADVERGAMES FOR CHILDREN

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SUMMARY

Food marketing to children has been studied and criticized for decades, but renewed interest has accompanied a reported surge in childhood obesity, affecting one in five children in the U.S. (The Obesity Society 2009). Despite vocal public concern, calls for enhanced regulation, and voluntary industry self-regulation, food marketing messages in a variety of media continue to target children. One marketing tactic involves integrating food brand identifiers into free online games known as advergames (Lee et al. 2009; Moore and Rideout 2007; Weber et al. 2006). These games promote food products that often fail to meet nutritionists' recommendations (Lee et al. 2009), and, by their nature, blur the line between advertising and entertainment. This latter fact might challenge, more greatly than other forms of advertising, the ability of children to notice or resist their persuasive intent (Cole and Quilliam 2008; Moore and Rideout 2007), while also evading the scrutiny of parents, regulators, and policy makers.

Industry Self-Regulation

In a move to address the possible contribution of advertising to childhood obesity, 16 major food companies have joined the Children's Food and Beverage Advertising Initiative (CFBAI), pledging to "help promote healthy dietary choices and healthy lifestyles among American children" through modifying their products and promotions. This arrangement reflects the industry's preference for voluntarily adopted self-regulation over government-imposed regulation (Seckman 2006).

Since food advergames influence children's food preferences and choices (Mallinckrodt and Mizerski 2007; Pempek and Calvert 2009), it is important to explore whether food marketers follow their promise of self-regulation. This study, then, identifies the pervasiveness of food advergames for children, the tactics used in or

around these games, and evaluates the nutritional content of the advertised products in these games. In addition, we provide a comparison of the advergame tactics used by the CFBAI pledge takers with the advergames offered by those food marketers who did not subscribe to the CFBAI self-regulation pledge.

Methods

We conducted a content analysis of food advergames, analyzing the websites operated by major food marketers. We collected data regarding the presence of food advergames that children might locate and play, the tactics used in those games, the presence of disclaimers indicating that games are advertisements, and the presence of healthy lifestyle information. In addition, we analyzed the nutritional content of products included in the advergames.

To identify the food companies and brands to include in this study, we first visited websites of top-selling food companies and then identified games appearing on those websites that promoted products consumed by or targeted to children. Of the 446 identified games, 179 were randomly selected and included in the final analysis, with two coders independently coding all games. We also collected data from the nutrition facts labels for all products incorporated in the games.

Results

The results reveal that there is still a chasm between the industry's expressed intention and its behavior. Employing the Nutrition Standards for Foods in Schools (Harris et al. 2009), we found that advergames targeting children still promote products high in calories, sugar, fat, and sodium. Further, although it may seem contradictory, the CFBAI companies appear to be less responsive to public concerns about the types of products promoted in advergames that might be seen and played by children than are

the companies that have not signed on to the CFBAI voluntary guidelines. CFBAI company-sponsored advergames were more likely to include greater proportions of unhealthy versus healthy foods than advergames offered by other companies. Non-participating companies incorporated healthy foods in their advergames at three times the rate of the CFBAI participants.

Additionally, the CFBAI pledge requires companies offering interactive games that incorporate food products to include either “better for you” products or healthy lifestyle messages. Only about half of the advergames offered by CFBAI participating companies included “better for you” products and/or healthy lifestyle messages. CFBAI

companies were more likely than non-CFBAI companies to include advertising disclaimers.

Our findings provide support to those calling for further monitoring of food industry practices, and, as the FTC has suggested, standardized definitions of media directed to children, standardized criteria for “better for you” products, and a requirement that all children’s food advertising promote healthy dietary choices (Federal Trade Commission 2008). At least in the domain of food advergames, self-regulation may not be achieving the goals expressed by its principal advocates. References are available upon request.

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INVESTIGATING ADOLESCENTS' PERCEIVED BRAND STRESS: SCALE DEVELOPMENT, ANTECEDENTS, AND CONSEQUENCES

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SUMMARY

Brands play an important role in everyday life of consumers and there are a number of positive effects resulting from purchasing and consuming brands (e.g., minimizing purchase risks) (Muniz and O'Guinn 2001). Although brand consumption involves many positive effects, negative influences should not be denied. However, only few scholars (e.g., Aaker, Fournier, and Brasel 2004) have engaged in research on such "dark" sides of brands.

One negative effect can be seen in brand stress in the form that individuals feel pressured to purchase and consume branded products and services in order to be accepted by the peer group. Prior research found that adolescence is a period of heightened vulnerability to the influence through marketing and the media (Pechmann, Levine, Loughlin, and Leslie 2005). Branded products and services are part of this influence. We thus concentrate on adolescents' perceived brand stress. Up to now, there has been no solid understanding of this concept.

The main objective of this study is to conceptualize and operationalize the construct of adolescents' perceived brand stress (APBS). Furthermore, we identify and empirically test possible antecedents and consequences of APBS.

In adolescence, the influence through peers, the media, and marketing is most likely to be experienced for pub-

licly consumed goods such as branded clothing and fashion items (e.g., Childers and Rao 1992). Thus, we use clothing as a sample product category for our empirical study.

Five major antecedents (susceptibility to brand choice influences exerted by the peer group, the media, and the parents, inconsistencies, and product category involvement) and two major dependent variables (brand sensitivity and purchase intention) are identified as relevant in terms of their relationship to APBS. Moreover, we propose that susceptibility to brand choice influences and product category involvement have an influence on brand sensitivity that in turn also affects purchase intention.

By examining the model parameters using data of 1,049 ten to 19-year-old adolescents allows us to confirm all but two of the proposed hypotheses. The susceptibility to brand choice influences exerted by the parents does not influence APBS. Additionally, there is no significant relationship between APBS and purchase intention. By taking into consideration brand sensitivity as a mediator of this relationship, however, there is a total effect of APBS on purchase intention. This shows that adolescents' perceived brand stress does have a significant influence on the intention to purchase branded clothing. Important implications for public policy and ethical marketing management can be derived. References are available upon request.

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I'LL SHOW YOU MINE, IF YOU SHOW ME YOURS: PUBLIC POLICY IMPLICATIONS OF ADOLESCENT SEXTING

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SUMMARY

Sexting, or sending sexually-charged pictures and messages via mobile phones, is on the rise among adolescents (Lenhart et al. 2008; Nielsen Mobile 2008), resulting in serious consequences (e.g., charges of child pornography, Irvine 2009; suicide, Celizic 2009). One in five teens have sent nude or semi-nude pictures/videos, while 40 percent have sent sexually-suggestive text messages (TRU Survey 2008). In the marketing and public policy literature, adolescent sexual risk-taking behaviors have been of interest (e.g., Moore et al. 2002; Pechmann et al. 2005); however, researchers have yet to examine sexual behaviors in the context of texting, and policy makers have only recently begun addressing the sexting phenomenon (e.g., SAFE Internet ACT). The purpose of this study is threefold: (1) to gain a better understanding of sexting itself, (2) to discuss the motives and implications of adolescent consumers' use of sexting, and (3) to discuss public policy implications associated with this phenomenon.

Although some marginalize the phenomenon of sexting (Cumming 2009), computer mediated communication (CMC) is typical among modern American teenagers, who have grown up with readily-available technology (e.g., mobile phones, the Internet, digital cameras; Palfrey and Gasser 2008). Walther's (1996) theory of "hyperpersonal communication" suggests that in CMC, receivers perceive senders more positively, senders edit self-presentation, time pressures are non-existent, and intimacy is heightened through a synergistic feedback loop. Text messaging is different from traditional communication in three additional ways: (1) privacy of the consumption experience (i.e., content can be exchanged discretely, even in communal consumption environments; Davie, Panting, and Charlton 2004), (2) ubiquity of the technology (i.e., adolescents can stay connected to one another anytime, anywhere; Katz and Aakhus 2002), and (3) permanence of the shared content (i.e., content can be documented and saved indefinitely).

For this exploratory study, the authors utilize a case study approach (Yin 1994), examining the "phenomenon in its natural setting" (Benbasat, Goldstein, and Mead 1987,

p. 370), gathering data related to one family's experience with sexting (e.g., depth interviews; artifacts) over a period of 18 months (Burawoy 1998). Participants include three members of one family: the father (Ryan), mother (Carol), and their 14-year-old daughter (Lauren),¹ who had been sexting with her boyfriend (Eugene) for several months before the beginning of data collection. Findings from the data reveal insights about the characteristics, motivations, and consequences of sexting. Due to space limitations, these findings are only briefly discussed in this abstract.

First, the authors examine characteristics of sexting: what it is (i.e., nature of the sexted content) and how it is facilitated (i.e., nature of the hardware). Sexted content includes both text and picture messages. For instance, although Carol's first indication of Lauren's sexting was a call from Eugene's mother to tell Carol about a topless photo sent by Lauren from her cell phone to Eugene's, Carol also found multiple instances of real-time "conversations" conducted between the teens on their cell phones, discussing sexual activities. Characteristics of cell phone hardware include dynamic communication capabilities (e.g., snap, store, and transmit digital photos to other cell phones, email accounts, and social networking sites). Further, cell phones are viewed as necessities (e.g., to communicate in case of emergency, to facilitate social acceptance among peers); thus, teens often have cell phones accessible and parents are reluctant to limit this access.

Second, the data reveal four basic motives for sexting: peer influence, proof of affection, fun and flirtation, and self-identity formation. Interviews with Lauren reveal that she equates sexting to flirting and feels that sharing intimate photos is a tangible display of her trust in and affection for Eugene. In line with the consumer socialization literature, teens receive phones around the same time that their primary socialization agent is shifting from parents to peers (John 1999; Nielsen Mobile 2008; Ward 1974), a transitory stage marked by increased attention on peer influence and identity construction. Sexting offers a tool by which teens can edit their social self-identities.

Third, the data reveal four areas in which sexting could create short-term or long-term consequences: bullying and gossip, punishment, physical intimacy, and emotional development. After her sexting incident, Lauren was bullied by peers (e.g., other boys began asking for photos, teens picked on her at school) and her adult neighbors began gossiping (e.g., questioning Carol and Ryan's parenting). Lauren was embarrassed by being caught, but punishments can come in other forms, including legal ones (e.g., charges of child pornography). Further, in a 2008 TRU survey, teens reported that sending suggestive messages impacts future behavior (e.g., hooking up). In this study, the correlation between sexting and actual physical intimacy is uncertain; however, Lauren did experience emotional consequences (e.g., withdrawal from family/friends).

Based on findings from the case study, the authors identify the following three areas of public policy that are associated with the sexting phenomenon: privacy, education, and legislation/regulation. Private images or messages from cell phones can easily transition into the public sphere, being viewed by friends or strangers (e.g., sexual predators) on the Internet. Education is important, since adolescents are unaware of sexting's ramifications. Parents require education as well, as they did not grow up with ubiquitous digital technology. Since mobile technology is relatively new, child pornography legislation is being applied to punish sexters. This presents a paradox-

ical challenge, since teenagers who are caught and charged with distribution of the material may also be victims (e.g., pressured by boy/girlfriends; humiliated by peers). Legislation concerning cyberbullying/stalking may provide a basis for sexting laws. Most states have legislation requiring schools to include punishment for electronic harassment in safety policies (e.g., suspension/expulsion; National Conference of State Legislatures (NCSL) 2009a) as well as electronic stalking/harassment laws, with punishments including fines and imprisonment (NCSL 2009b). The SAFE Internet Act of 2009 is the first bill to address the need for initiatives concerning minor-to-minor sexual solicitation and harassment.

As technology advances, policymakers and consumers need to adapt as well, particularly for vulnerable consumer groups such as adolescents. While this case study provides a foundation for understanding the characteristics, motivations, and consequences of sexting, further research is required to provide a deeper understanding of the phenomenon (e.g., gender differences, long term ramifications). References are available upon request.

ENDNOTE

1 Pseudonyms are used to protect the identity of the participants. A more thorough description of the participants is available upon request.

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THE SYMBOLIC CONSUMPTION OF CIGARETTES: CONSTRUCTING CIGARETTE BRAND PERSONALITIES FOR THE PROTOTYPICAL GLOBAL AND LOCAL BRANDS IN TURKEY

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SUMMARY

Brand use is rife with symbolism and the role of consumption in self-identity construction is one of the cornerstones of consumer research (Levy 1959; Sirgy 1982; Wicklund and Gollwitzer 1982). This is the idea that products, even services, can be an extension of ourselves or complete us as they come to embody desired personality traits. Brands can take on an image as a consequence of factors such as promotions, packaging, pricing, even other users typically associated with the brand (Wicklund and Gollwitzer 1982). In this research we develop a brand personality construct tailored to Turkish consumers and take the perspective that in addition to the utilitarian aspects of cigarette smoking and brand choice (e.g., taste, price), motives for cigarette use are also self-expressive in nature (e.g., based on the need to appear cool, feminine and contemporary, masculine and rugged; Aaker 1997). Cigarette manufacturers have long invested in the creation of brand persona rich in symbolic meanings that offer clear competitive differentiation (Hafez and Ling 2005). We therefore investigate the brand personalities attributed to two brands of cigarettes (i.e., the foreign Marlboro and local Samsun brands), and their impact on purchase likelihood.

Analyses of national survey data collected for a variety of product categories suggest that Turkish consumers attribute four main personality dimensions to brands – specifically, *competence* (denoted by attributes such as high quality, confidence, prestige, success), *excitement* (denoted by traits such as passionate, active, fun loving), *traditionalism/conservatism* (denoted via traits such as economical, frugal, family-oriented, traditional), and *androgyny* (denoted by masculine, rebellious, glamorous, and feminine trait associations). Of these, competence and excitement were similar to dimensions found in the U.S. by Aaker (1997), and traditionalism and androgyny were specific to Turkish culture. The androgyny factor, that possessed connotations of gender roles and

contemporary overtones, was further broken down within the cigarette category into *masculinity* and *contemporary-femininity* (consisting of rebelliousness, glamorous, and feminine traits). This additional bifurcation makes sense for the brands in this category. The Marlboro brand has historically been portrayed in masculine terms and has been embodied within the “Marlboro Man” imagery and sponsorship of male-oriented sporting events – both adopted extensively by Phillip Morris in Turkey.

Results indicated that Marlboro was associated with perceived competence, excitement, and contemporary-femininity to a greater extent than Samsun. Samsun, on the other hand, was rated higher on perceived masculinity, and (to a marginal extent) traditionalism. Marlboro was mostly viewed as competent in nature, and to a lesser extent as exciting. Despite its masculine portrayal, no significant differences were found in the extents of masculine and contemporary-feminine perceptions for Marlboro. The local Samsun brand was perceived predominantly as masculine and to a lower degree as traditional. Rising competence perceptions significantly raised purchase likelihood for both Marlboro and Samsun. Surprisingly, rising masculinity perceptions mitigated purchase likelihood for Marlboro cigarettes, thus implying that the brand’s masculine and macho positioning in Turkey actually hurts rather than helps behavioral intentions associated with it.

Important academic and practical implications of this research are foreseen. From a theoretical standpoint, research on brand personality and cross-cultural variations is used to understand self-expressive brand use within the important middle-eastern market of Turkey. This culture-specific measure also adds to anti-smoking literature by proving insights into the symbolism inherent in cigarette brand use. From a practical perspective, our results provide guidelines for tobacco de-marketing initiatives brand by brand within Turkey. The World Health Organization’s suggestion (Onder 2002) that control efforts be tailored to

specific regions gains purchase given not just commonalities but also unique brand personality attributions found for this particular market. We take a step further and suggest that tobacco control practitioners take into account not just cultural but also brand specific variations while designing customized cigarette de-marketing programs. Anti-smoking measures that lump all cigarette use in a common category are expected to have limited merit given the perceptual differences by culture and brand found here. Understanding how different brands are personified in Turkey helps smoking cessation efforts by identifying brand personality dimensions that: (a) enhance favorable behavioral intentions and are therefore most in need of countering (e.g., perceived competence for Marlboro and Samsun); or (b) hinder favorable behavioral intent and are perhaps not as critical

to counter (e.g., perceived masculinity for Marlboro). In other words, it is especially important for tobacco de-marketing programs (via advertising and other means) to reposition perceptions about Marlboro and Samsun cigarettes so that they no longer denote traits subsumed under the competence dimension (specifically: professional, successful, reliable, trustworthy, prestigious, self confident, high quality, assertive, well known, durable, global, original, good, and stable). This is similar to the repositioning of perceptions from: smokers are “cool” to smokers are “fools” within North America (adbusters.com). Such examinations should help not just in Turkish smoking cessation efforts, but also in planning similar exercises across other brands and cultures. References are available upon request.

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COGNITIVE, AFFECTIVE, AND NORMATIVE MEDIATORS OF THE TAK NAK ANTISMOKING ADVERTISING CAMPAIGN: CULTURAL IMPLICATIONS FOR SOCIAL MARKETING

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SUMMARY

Tobacco use is a major public health problem, representing the single most important preventable cause of death in the world (World Health Organization [WHO] 2008). Tobacco control efforts have attempted to educate “at risk” consumers about the harms of smoking and to dissuade them from smoking by using broad population-based interventions. Among these are mass media campaigns, which have been a useful tool for community-based tobacco control efforts in Western countries (Logan and Longo 1999; National Cancer Institute 2008). Numerous studies have explored how exposure to antismoking media campaigns can result in a change in smoking attitudes and behavior (e.g., Andrews et al. 2004; Tangari et al. 2007). These studies, however, have been limited to Western countries. Given that smoking rates are increasing in many low- and middle-income countries, it is critical for the tobacco control community and social marketers to understand how messaging strategies in Asian antismoking mass media campaigns can be shaped to achieve the greatest likelihood for an increase in tobacco cessation in this region.

Tobacco Control in Malaysia

Malaysia is widely regarded by the tobacco industry as a “profitable cigarette market” (Lambat 2006). Smoking prevalence is high among males in Malaysia, whereas it has historically been low among females. In 1996, the overall smoking prevalence was 24.8 percent, with 49.2 percent of adult males smoking and 3.5 percent of adult females smoking. By 2005, smoking prevalence had declined only slightly among males (i.e., 48%), whereas smoking rates have notably climbed among females (i.e., 21%). The Ministry of Health Malaysia launched a nationwide antismoking media campaign known as TAK NAK – meaning “Say No” – in February 2004. The campaign is meant to serve the dual purpose of preventing the initiation of smoking (particularly among youth and

women) and persuading existing smokers to consider quitting.

Cognition, Affect, and SOCIAL Norms in Health Behavior

There is recognition that both cognitive and affective aspects in health behavior are important. Leventhal’s parallel response model identifies distinctive cognitive and emotional processes in the processing of fear appeals. The model suggests that a health threat triggers people to deal with (1) the threat itself (cognitive process), and (2) the fear induced by the threat (emotional process) (Leventhal, Brisette, and Leventhal 2003).

Understanding social norms is crucial to understanding smokers from a variety of social backgrounds. Smokers in a culture emphasizing a person’s identity as a member of a group (i.e., a collectivistic culture), rather than emphasizing the person’s individual identity (i.e., an individualistic culture), might be more influenced by social norms. In Malaysia, a collectivistic country, social norms can play a very important role in mass-media communication.

The primary goals of this study were to evaluate the TAK NAK media campaign on quit intentions and to explore potential mechanisms that may help explain why the TAK NAK campaigns might be effective.

Methodology

The current study is part of a larger project, the International Tobacco Control (ITC) Policy Evaluation Project, which consists of parallel cohort surveys of representative samples of adult smokers in 20 countries. A total of 2,006 adult smokers were recruited and completed the face-to-face survey from an area sample of households. The outcome variable was quit intentions of adult smokers, and we assessed the extent to which quit intentions may have been strengthened by the antismoking campaign.

We also tested whether the impact of the campaign on quit intentions was related to cognitive mechanisms (increasing thoughts about the harm of smoking), affective mechanisms (increasing fear and other emotional reactions), and perceived social norms (increasing perceived social disapproval about smoking).

Results

Mediational regression analyses revealed that thoughts about the harm of smoking, fear-arousal, and social norms against smoking mediated the relation between TAK NAK impact and quit intentions. Smokers who reported higher TAK NAK impact, which was a combination of reported exposure to the TAK NAK campaign and the self-reported use and personal relevance of the TAK NAK campaign, were more likely to intend to quit smoking. This was, at least in part, due to the fact that smokers who considered the campaign effective (higher in the impact score) were more likely to (1) feel fear from the TAK NAK campaign; (2) think about the harm that smoking

might cause; and (3) perceive Malaysian society as disapproving of smoking.

Discussion and Conclusions

Our study suggests that an effective campaign should make smokers engage in both cognitive and affective processes. Also, an effective campaign should make people consider whether society disapproves of smoking. Our findings echo the WHO Framework Convention on Tobacco Control's (the world's first public health treaty) ultimate goal of raising public awareness and achieving social change by altering social norms against tobacco use. As the tobacco epidemic continues to grow in low- and middle-income countries, there is an urgent need to conduct rigorous evaluation of population-level efforts to reduce tobacco use. Such work will be an important component in the overall efforts of nations attempting to reduce the enormous projected toll of smoking in the 21st century. References are available upon request.

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ESTIMATING THE EFFECTS OF DISSUASIVE TOBACCO PACKAGING ON YOUNG ADULTS

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SUMMARY

As smoking is the leading cause of preventable death and disease, several countries have attempted to reduce smoking prevalence by restricting tobacco marketing. However, while these efforts have reduced mass media advertising, marketing continues through other media, such as packaging (Pollay 2000a). Industry documents reveal tobacco manufacturers research pack designs carefully and employ imagery that is both aspirational and reinforcing. Graphic health warnings (GHWs) disrupt brand connotations, and larger warnings and generic (or plain) packaging would further reduce the persuasive appeal packaging exerts. However, although it is now well established that GHWs are more effective than text warnings, little is known about the optimal warning size or the relationship between warning size and branding. Because tobacco companies' challenge proposals that constrain their marketing activities, research is required to address these questions and provide a basis for proportionate policy measures.

Branding has particular importance for tobacco companies because the symbolic meanings co-created by marketers and consumers enable brands to communicate attributes, images, and personalities (Aaker 1996; Kapferer 1997). These concepts are especially significant in relatively homogenous markets such as cigarettes, where product content and price points are similar. Imagery thus differentiates brands and enables tobacco manufacturers to sell status, social acceptance, glamour, and adventure, rather than simply nicotine delivery (Pollay 2000b; Carter 2003; Eadie et al. 1999; Dewhirst and Davis 2005). Dissuasive packaging disrupts these associations by introducing negative emotions, particularly fear and anxiety (Hammond et al. 2004); these affective responses stimulate higher levels of cognitive processing and more quit attempts than text only warnings (Hammond et al. 2006, 2007b).

However, while GHWs are established as more effective than text-only warnings, researchers have not identified the optimal GHW size, or whether reducing competing brand imagery would result in a greater likelihood of cessation related behaviors. As young adults (18–30) are disproportionately at risk of taking up smoking and appear resistant to cessation interventions, this group merits particular attention. We thus tested the following hypotheses:

- H1: That young adult smokers will select packs with reduced imagery less frequently than packs with higher levels of branding.
- H2: That young adult smokers will select packs featuring larger GHWs less frequently than packs with smaller GHWs.
- H3: That young adult smokers will be more likely to engage in cessation related behaviors when exposed to packs with fewer brand elements and larger GHWs.

The research involved a face-to-face survey of 299 young adult smokers aged between 18 and 30 that achieved a response rate of 79 percent. We used a "best-worst" (BWS) experiment that followed Finn and Louviere's (1992) methodology; respondents viewed choice sets and selected both the best (highest utility) and the worst (lowest utility) option from each set. As BWS measures choice behavior in a specific scenario, it is a closer approximation of actual behavior than measures of attitude or intention that explicitly draw attention to the test stimuli. A 4*3 (branding element level by GHW size) experimental design was used and a completely plain pack was added to this to create 13 test stimuli. Respondents viewed 13 show cards, each containing four-cigarette pack images that varied in the number of brand elements shown and in the warning label size and format. They were told that each pack contained the same type of

cigarettes and cost the same price; two versions of the show cards were used to average any order effects. The Juster Scale (an eleven-point probability scale designed to estimate conditional behaviors) was used to estimate respondents' likelihood of engaging in cessation-related behaviors following exposure to one of two pack options: a fully branded pack with a 30 percent GHW, which served as a control, and a plain package with a 75 percent GHW.

A multi-nomial logit regression model was fitted to the best-worst data to analyze the choice patterns and test hypotheses 1 and 2. The findings supported both hypotheses and showed that preferences consistently declined as packs featured fewer branding elements and larger GHWs. The 75 percent GHW was the most dissuasive stimulus tested and had the largest (negative) co-efficient. The completely plain pack, which featured neither a warning nor branding elements, was more popular than packs with larger GHWs, even when the latter contained some brand imagery. This finding highlights the trade-off respondents made to avoid more salient GHWs. To test the final hypothesis, respondents used the Juster Scale to estimate their likelihood of engaging in cessation related behaviors after exposure to one of two stimuli that differed in branding level and GHW size. The results supported

hypothesis three as respondents exposed to an unbranded pack with a large GHW had a significantly higher likelihood of reducing the number of cigarettes they smoked, seeking quit support, or making a quit attempt.

The findings extend earlier studies that examined smokers' perceptions of GHWs and plain packaging (Wakefield et al. 2008). We estimated how manipulating GHW size and branding level would affect smokers' choice patterns or cessation-linked behaviors. Where GHWs covered at least 50 percent of the pack, or where minimal branding elements were present, respondents chose plain packs in preference to other options. This finding illustrates the point at which branding's ability to reassure smokers and maintain choice patterns declines, and suggests GHWs that cover at least 50 percent of a pack front will be more effective than smaller warnings. The results provide important policy guidance, since regulators need to consider not only how people feel about possible measures, but how they are likely to respond to these. Although replication studies are required, the findings quantify the importance of tobacco branding, support the introduction of larger graphic health warnings, and suggest generic packaging has an important role to play in a new suite of best practice tobacco control measures. References are available upon request.

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SPECIAL SESSION

EMOTIONS, MAGICAL BELIEFS, AND MALADAPTIVE HEALTH BEHAVIORS

Session Chair:

Sayantani Mukherjee, California State University, Long Beach
Ingrid M. Martin, California State University, Long Beach

Discussant:

Paul N. Bloom, Duke University

SESSION OVERVIEW

Despite an emphasis on healthy lifestyle (Bolton et al. 2008), there is an increasing trend toward “unhealthy” or maladaptive behaviors including overdosing on health remedies (Balluz et al. 2000), eating junk food (Sharpe, Staelin, and Huber 2008), smoking (Pechmann and Knight 2000) and lack of physical activity (Adler and Matthews 1994). Various factors have been proposed to explain maladaptive behaviors such as self-regulatory mechanisms (Chandon and Wansink 2007), stereotypic beliefs (Pechmann and Knight 2000), problem status (Bolton, Cohen, and Bloom 2006), self-positivity bias (Chandran and Menon 2004) and impulsive behavior (Mukhopadhyay, Sengupta, and Ramanathan 2008) to name a few. Still many questions remain. Especially lacking are insights into how emotions, superstitious and magical beliefs, and other irrational beliefs might influence consumers’ maladaptive health decisions.

In this session, three studies strive to deepen our understanding of the role of emotions and magical beliefs in maladaptive health behaviors. The Peter et al. and the El Hazzouri et al. studies identify the role of emotions in various types of unhealthy lifestyle practices. Specifically, the Peter et al. paper examines the role of emotional intelligence as consumers attempt to make decisions on whether to adopt a healthy weight. They argue that although people are knowledgeable about healthy choices, they may not be able to apply their knowledge without the ability to manage their emotions. This can lead to maladaptive health choices. The El Hazzouri et al. study further examines how social emotions such as pride and embarrassment result in unhealthy consumer practices related to the use of ability-enhancing products. They suggest that consumers who do not need such products

experience more pride and less embarrassment when using such products in public. As those consumers do not have any ability deficiency, their emotions reflect their enhanced performance and not their consumption experience. Conversely, consumers who need such products, experience less pride and more embarrassment. Apparently, the fact that the consumption of such products is public seems to further expose their low ability making them focus more on the embarrassment of having to use such products than on their enhanced performance. Thus, maladaptive behaviors such as abuse and misuse are commonplace.

Interestingly, they also find that social emotions did not play a role when consumers are told that ability-enhancing products have magical powers. Mukherjee and Martin further expand on the theme of magical powers in their study by looking at how dietary supplement use fits into the everyday lifestyle of consumers. In their study, they identify the influence of magical beliefs in several different ways. First, they use in-depth interviews to uncover the role of this type of beliefs that consumers hold during supplement use. Then they verify the presence of these magical beliefs in an experiment by comparing supplements to over-the-counter drugs. In a second on-going experiment they examine the effects of magical beliefs on perceived effectiveness and behavioral intents to use dietary supplements.

Collectively these three papers demonstrate that maladaptive practices such as overdosing on supplements, making poor choices that lead to overweight and obesity, and the use of ability-enhancing products can lead to ignoring warnings, disclaimers, and scientific studies that are there to protect consumers. Our discussant Paul Bloom will synthesize the three papers. His expertise in Health Mar-

Special Session: Emotions, Magical Beliefs, and Maladaptive Health Behaviors

keting is expected to generate an interactive discussion. We expect this symposium to have significant theoretical, pragmatic and public policy implications, and appeal to a

wide audience in the areas of public policy, health marketing, affect and emotion, consumer decision-making and consumer behavior in general.



EMOTIONAL INTELLIGENCE: A MODERATOR OF HEALTH PERFORMANCE

Paula C. Peter, San Diego State University
Anjala S. Krishen, University of Nevada, Las Vegas
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SUMMARY

Performance is defined as the successful adoption of a quality behavior. Decision quality refers to choosing the “good” option that is normally characterized as being the least appealing in the short run (e.g., have a piece of fruit instead of a candy bar) but the best one in the long term (e.g., maintenance of a healthy diet). Social marketing campaigns are often challenged by scenarios in which “bad behavior” is characterized by immediate positive emotions (e.g., junk food) for which negative consequences are not immediately experienced (e.g., weight gain). In these contexts, consumers need to learn to overcome their immediate emotional state and instead focus on long-term consequences. This requires perceptual ability and understanding the use and regulation of emotions, otherwise defined as “Emotional Intelligence” (Mayer and Salovey 1997).

Emotional intelligence has just recently been introduced into the field of consumer research (Kidwell, Hardesty, and Childers 2008) and represents a construct that may help consumers help themselves. Emotional intelligence (EI) is the ability to perceive, facilitate, understand, and manage emotions in self and others (Mayer and Salovey 1997). Brackett and Mayer (2003) demonstrated that people with lower Emotional Quotients (EQ, Bar-On 1997) seem to be more predisposed to unhealthy/risky behaviors such as drug abuse. Trinidad and Johnson (2002, in Mayer, Roberts, and Barsade 2008) suggest that higher levels of EI are negatively correlated with tobacco and alcohol use among adolescents. However, these results have only been partially replicated (Mayer, Roberts, and Barsade 2008).

Kidwell, Hardesty, and Childers (2008) provide evidence that emotional intelligence influences health-related decision making quality, although these authors focus on the direct effect of emotional intelligence on decision quality. Additional recent research (e.g., Douglas, Frink, and Ferris 2004) suggests that emotional intelligence will

moderate the relationship between conscientiousness and performance. We will extend this work by examining whether EI will moderate the relationship between knowledge and performance in the health domain.

With relation to the adoption of a healthy diet, social marketing campaigns have extensively focused their attention on the presentation of nutritional knowledge. However, these campaigns have clearly not been successful since consumers seem to not use their knowledge in the appropriate manner. Obesity is reaching epidemic proportions (25% of the population of thirty U.S. States are identified as obese, CDC 2007) and is affecting consumers at increasingly younger ages.

A model that incorporates knowledge as a variable which impacts adoption of health behaviors is offered by Fishbein et al. (2001). Fishbein et al. (2001) propose a “unified theory” that identifies a finite set of variables which need to be taken into account when considering any volitional behavior (e.g., maintenance of a healthy weight). The variables identified in their model are: intention, barriers (environmental constraints), knowledge (skills), attitude (anticipated outcomes), social norms, self-standards, emotion, and self-efficacy.

The aim of this study is to provide empirical evidence which supports the role of emotional intelligence as a moderator of the relationship between knowledge and performance in the health context. Consumers with higher EI levels are expected to be better able to use their knowledge to guide their adoption of healthy weight ($18.5 \leq \text{BMI} < 25$) than subjects with lower levels of EI.

A total of 120 students participated in the study, 64 percent reported a healthy weight and 36 percent were overweight or obese ($\text{BMI} > 25$). In order to collect the information for the population-specific variables (Fishbein et al. 2001) an open-ended elicitation with a sample from the population of interest (10 undergraduates) was conducted. Responses that were given by at least 20

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percent of the sample were used in the questionnaire. We also conducted a pretest to identify a set of knowledge questions (source: USDA 2006) that provide adequate differentiation among high and low knowledge respondents. We first tested for possible differences in terms of knowledge between healthy weight subjects and obese/overweight ones. No significant differences were found between healthy weight subjects and overweight/obese subjects. Next, we regressed all appropriate/variables related to reducing food consumption together with EI and the product terms (EI by knowledge) on BMI. The variables were all mean-centered. The overall model was significant ($R = .552$, $R\text{-square} = .304$, $F(13, 85) = 2.85$; $p < .003$). Social norms and the product term (actual knowledge by EI) were the only significant behavioral determinants related to performance (BMI, $p < .05$). The results suggest that EI does not directly predict performance (BMI); however, it significantly moderates the relationship between knowledge and BMI. For people with high levels of EI, an increase in knowledge corresponds to a significant decrease in BMI. Therefore, consumers with high levels of EI are better able to “use”

knowledge in the “appropriate way,” so as to help them maintain a healthy weight (lower levels of BMI). This finding suggests that high levels of EI promote a person’s ability to apply their knowledge toward making “good” decisions. Our results suggest that even if people have the knowledge necessary to make the right decisions, without the appropriate levels of EI, they might not be able to apply their knowledge in the right direction. In many consumption situations, people are knowledgeable about the positive/healthy choice, but are not able to recognize and manage their feelings to help them make that choice.

The goal of this study was to contribute to a research agenda which aims to support and enhance consumer welfare by focusing on emotional intelligence as a possible mechanism to improve the use of knowledge. The findings suggest that EI is an activator of mechanisms that will direct cognitive processes in a “good” direction. As Mayer and Salovey (1997) contend, EI should be considered a type of “intelligence” which enhances the processing of certain types of information and helps people make better decisions.

PROMOTING PRIDE OR EMBARRASSMENT? POTENTIAL EMOTIONAL OUTCOMES OF THE CONSUMPTION OF ABILITY ENHANCING PRODUCTS

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SUMMARY

Over the last few decades, the industry of ability enhancing products, including sexual and cognitive enhancements, steroids, and plastic surgeries, has proliferated. The unnecessary use of such products puts people at risk in alarming proportions (Dupont et al. 2008; Babcock and Byrne 2000), and therefore a meaningful roadmap for how to prevent such misuse is increasingly predicated on a theoretical and actionable understanding of why and under which conditions people engage in the consumptions of such products. Previous research has examined a variety of factors that might influence people's decisions to engage in the consumption of ability enhancing products. Riis, Simmons, and Goodwin (2008), for instance, have found that healthy young people are less willing to consume ability enhancing products that have the potential to alter their self-identity (e.g., social ability) than the ones that do not have that potential (e.g., memory ability). Little research to date, however, has investigated the role that social emotions play in the consumption of ability enhancing products. The current research investigates whether people's perception of one's initial cognitive ability (high vs. low) interacts with the fact that the consumption of ability enhancing products is known (public) or not known (private) by others in predicting which consumers will experience pride and embarrassment related to the consumption of such products. In addition, this research also investigates whether the perception that the ability enhancing product requires low or high effort from the user to give the expected results moderates these effects.

The role that social emotions play in the consumption of ability enhancing products was assessed using two laboratory experiments within the context of the consumption of cognitive enhancing products – a context found to be relevant to the sample population. The two experiments employed a third person scenario in which a college

student is said to use a cognitive enhancing product to improve academic performance. Undergraduate business students at a major midwestern university participated in the studies for course credit.

In Study 1, we examined the interactive effects of user's initial cognitive ability (low vs. high) and consumption setting (public vs. private) on anticipated feelings of pride and embarrassment. Results indicate that when the consumption of the cognitive enhancing product is public, consumers with initially low ability experience significantly weaker feelings of pride and stronger feelings of embarrassment than consumers with initially high ability. There were no significant effects of user's cognitive ability on any of the measured emotions for participants in the private condition. In addition, within users with initially low ability condition, participants feel less proud and more embarrassed when the consumption of the enhancing product is public than when it is private. On the other hand, within users with initially high ability, participants do not differ in the way how they experience feelings of pride and embarrassment in either consumption setting conditions (public or private). It is important to notice that in Study 1, the users' level of effort required to make the enhancing product to deliver the expected results was kept constant across conditions. Interestingly, theories on attribution suggest that people value effort and that the social "heroes" are the ones with low ability who engage in high effort to improve their performance (Weiner 1995; Weiner and Kukla 1970). Thus, we can expect the effects found in Study 1 to be dependent on the extent that the enhancing product requires effort from its users in order for it to deliver the expected results.

In Study 2, participants were given the same scenario as that used in Study 1, with one exception: half the participants were told that the enhancing product works like magic and that the student does not have to spend a lot of time studying or preparing for exams (low effort), and

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the other half were told that the product does not work like magic and that the student still needs to spend a lot of time studying and preparing for exams (high effort). Results showed a significant three-way interaction between user's initial cognitive ability (low vs. high), consumption setting (public vs. private), and effort (low vs. high) on feelings of pride and embarrassment. Simple effect tests revealed that when the consumption of the product is public and consumers are told that the product still requires high effort from the user, consumers with initially low ability experience weaker feelings of pride and stronger feelings of embarrassment than consumers with initially high ability. This effect reverses when the consumption of the product is private. That is, within the high effort condition, consumers with initially low ability experience stronger feelings of pride and weaker feelings of embarrassment than consumers with initially high ability. In addition, within the high effort condition, if consumers of the enhancing product have initially low ability, they feel less proud and more embarrassed when the consumption of the enhancing product is public than when it is private. On the other hand, consumers with initially high ability feel more proud and less embarrassed when the consumption of the enhancing product is public than when it is private. There were no significant effects of user's initial ability or

consumption setting on any of the measured emotions for participants in the low effort condition. In conclusion, effects on social emotions occur only when the ability enhancing product still requires users to engage in high effort in order for the product to deliver the desired results.

In an era where ability enhancing products has become increasingly more accessible and more popular, understanding the social emotions that accompany the use of such products is of fundamental importance. For instance, embarrassment with the consumption of such products could make consumers less likely to use them whereas pride with the consumption could encourage abuse. The fact that when the consumption of such products is public, users with initially low ability (those who might need such products), experience less pride and more embarrassment when high effort is still required, suggests that attention needs to be given on how to reduce that embarrassment. On the other hand, the fact that users with initially high ability (those who do not need such products and might misuse them), experience more pride and less embarrassment when the consumption of such products is public, suggests that attention needs to be given on how to reduce that pride.

THE MAGICAL POWERS OF DIETARY SUPPLEMENTS

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SUMMARY

Dietary supplements are a ubiquitous part of consumers' everyday healthy lifestyle practices. Despite their popularity, there is mixed evidence that supplements improve health with concerns over the safety of certain supplements (Cohen 2009; Neuhouser et al. 2009). A better understanding of the underlying dynamics of supplement consumption is imperative in order to design corrective interventions which can counter unsafe consumer practices. Indeed, interest in the effects of remedy marketing (drugs and supplements) on consumer lifestyle is growing. For example, recent consumer research (Bolton et al. 2008) suggests that OTC and prescription drugs (versus supplements) undermine consumers' intentions to pursue a healthy lifestyle (e.g., eating healthy, exercising).

In this paper, we explore whether supplements "always" lead to a healthy lifestyle? In an effort to better understand how consumers use dietary supplements as a means to pursue a healthy lifestyle, we conducted a set of 16 depth interviews in a pilot study. A key theme emerged from these interviews. Consumers' dialogs suggested that they associate supplements with mystical powers. In particular, we found that magical beliefs guide consumers' decision making for supplements. For example, participants would acknowledge that they had strong positive beliefs in the use of supplements as part of their lifestyle; they would also acknowledge the veracity of scientific studies debunking the value of dietary supplements. Again, this was after participants recognized that supplements probably did not help but, it couldn't hurt to take them. They would consistently refer to this as a "placebo" as if to try and find some justification for this predictably irrational behavior. This is reflected in Bruno's account: "I believe that it [flax seed supplement] might be a little bit in my head. I mean I am sure if someone told me to take sugar pills and say that it will make your joints feel better it would probably feel a little bit better." Or Allison who states that, "I'm sure that all those supplements don't work but supplements like cranberry pills must be good for you because they are natural . . . [Do you see the benefits of

taking these . . .] I think that I do, otherwise I wouldn't take it if I didn't feel anything."

There is emerging evidence in the literature that magical beliefs and superstitious thinking often guide consumers' decisions (Kramer and Block 2008). Relatedly, research in the use of complementary and alternative medicines and food has observed magical thinking (Stevens 2001) as well as highly irrational superstitions (Lindeman, Keskivaara, and Roschier 2000). People often associate magical powers with tangible objects (Zusne and Jones 1982) and even the self (Pronin, Wegner, and McCarthy 2006). Perceptions of magical powers can be traced to cognitive errors that often involve illusory correlations or perceived causality when none exists. Magical thinking often originates from mental processes that operate beyond the level of consciousness. Thus, magical processes often guide actions and behaviors although people will cognitively deny their existence. In addition, there are motivational processes that underlie magical thinking. Research indicates that magical thinking is a way to gain control over a desired situation that may otherwise be uncontrollable.

Based on the literature and our qualitative results we conducted an experiment to test the hypothesis that consumers associate magical powers with supplements. Using over-the-counter medications (OTCs) as a control group, we hypothesized that there would be a greater likelihood of associating magical powers with dietary supplements (vs. OTCs). Following Bolton, Cohen, and Bloom (2006), we used indirect questioning technique. Eighty-nine college students were exposed to a hypothetical scenario involving a specific college student user of dietary supplement (OTC). Participants were then asked to indicate the extent to which the target is likely to associate magical powers with dietary supplements (vs. OTCs). Results indicate that the target was perceived to be more likely to associate magical powers with supplements versus OTCs ($t(88) = 2.14, p < 0.05$). Because magical beliefs operate below the level of consciousness, study 2 primes magical beliefs to examine their effects on consumers' perceptions of effectiveness and behavioral

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intentions. We expect that participants will perceive dietary supplements as more effective in the magic prime (vs. neutral prime) condition. In addition, we expect that the intention to use dietary supplements will be higher under the magic prime (vs. neutral prime). We do not expect any difference in these variables between the magic prime (vs. neutral prime) for the OTC category. We are currently collecting the data for this experiment. In Study 3 we will examine whether magical beliefs influence participants' actual choice of supplements (vs. OTCs).

Our research contributes to the growing research in consumer behavior on remedy marketing by examining the magical processes underlying supplement consumption. Specifically, we find that there is a sub-segment of dietary supplement users that do not use supplements as a means to ensure a healthy lifestyle but instead use them as a means to protect their own magical beliefs. This is critical from a policy perspective because magical beliefs can explain some of the unsafe consumer practices with regards to dietary supplement usage. References are available upon request.

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INFLUENCING THE NEGATIVE EFFECTS OF PLANNED OBSOLESCENCE AND PRODUCT NEGLECT: THE INFLUENCE OF INSTRUMENTAL AND TERMINAL MATERIALISM

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SUMMARY

It has been suggested that America is a disposable or throwaway society; one in which things are easily discarded. One way to produce a more sustainable society and decrease the affects of a throwaway society would be to increase the length of time that a consumer keeps and uses a product before acquiring another one. This alternative has been described as "slow consumption" and suggests a need to slow the rate at which raw materials are transformed into products and eventually discarded (Cooper 2005). Two possible hindrances of slow consumption are planned obsolescence and neglecting possessions by not engaging in proper care and maintenance. Planned obsolescence describes a phenomenon in which products become obsolete because of new advances in product style or function. By changing the product periodically, the length of time consumers kept their possessions decreases. The effects of neglecting possessions have the same effect: shorten product lifespan. If products are not cared for properly, they will cease to function, creating a need to purchase a new product. Through the decrease in product lifespan, both planned obsolescence and product neglect impede slow consumption.

Because of the negative effects of planned obsolescence and product neglect, research into influencers of these types of behaviors would be beneficial. The current research investigates one such possible cause: materialism. Materialism has been defined as the importance of possessions to a person (Belk 1985; Richins and Dawson 1992) and two different types of materialism have been suggested to exist: instrumental and terminal (Csikszentmihalyi and Rochberg-Halton 1978). The difference between the two is the reason *why* someone finds importance in their possessions. Those high in instrumental materialism find importance in their possessions as resources to accomplish tasks while those high in terminal materialism find importance in their possessions in gaining status classification among others

(Scott 2009). Recognizing the different reasons in importance of possessions may result in different relationships to outcome constructs, including possible beneficial outcomes such as increased product care. The current research investigates this premise using two outcome measures of instrumental and terminal materialism: planned obsolescence and degree of product care. Thus, this research investigates whether the differences in the reasons why we find importance in our products will influence our consumption behavior in terms of planned obsolescence and caring for our products.

It was hypothesized that instrumental materialism would be positively related to product care and technological obsolescence while negatively related to psychological obsolescence. For terminal materialism, it was hypothesized to be negatively related to product care, positively related to product love, and technological and psychological obsolescence. A survey was utilized to test the proposed hypotheses. The sample was drawn from an online panel managed by Zoomerang. Within five days, 413 respondents had completed the survey resulting in a response rate of 8.9 percent. The theoretical model used to explore the influence of terminal and instrumental materialism on planned obsolescence and product love/care was the 3M Model of personality and motivation (Mowen 2000). In the model, elemental, compound, situational, and surface traits are arranged in a hierarchy and serve as a frame of reference for evaluating outcomes. Two hierarchical models were developed with one containing the outcome measures of product care and love and the other containing the outcome measures of planned obsolescence. Structural equation modeling (SEM) using LISREL 8.8 was used to analyze the two hypothesized models.

The first analysis investigated the relationship between instrumental and terminal materialism and product care and love. Results showed that those high in terminal materialism were more likely to both care for and love their possessions while those high in instrumental materialism were more likely to just take care of their posses-

sions. Thus, both types of materialism would engage in the beneficial behavior of taking care of their possessions, although those high in instrumental materialism were more likely to engage in this behavior. Taking care of possessions can decrease the effects of a throw-away society by decreasing the chances that a product will be discarded because of needed repair. The second analysis examined the relationship between instrumental and terminal materialism and planned obsolescence. Two different types of obsolescence were used: psychological and technological. As hypothesized, those high in terminal materialism were more likely to get tired of the products quickly and also want the newest models of products. Instrumental materialism was positively related to tech-

nological obsolescence. Thus, it appears that those who find possessions important to help complete tasks like having the newest models of products. This makes sense since having improved products may help them complete their tasks more efficiently. As predicted, instrumental materialism was negatively related to psychological obsolescence. This suggests that those who find importance in their possessions for the reason of completing tasks are more resistant to becoming unsatisfied with their current belongings. This is a beneficial outcome environmentally since disposing of possessions before their useful life is over is wasteful. References are available upon request.

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DEMOGRAPHIC DIFFERENCES ACROSS FACETS OF ENVIRONMENTAL CONCERN: IMPLICATIONS FOR PUBLIC POLICY AND PUBLIC HEALTH

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SUMMARY

Environmental concern has been an issue of critical interest for nearly 40 years when early green research focused primarily on ecology (e.g., Kelly 1971; Kinnear, Taylor, and Ahmed 1974). Since then, the general topic of environmental concern has re-emerged in various forms across different disciplines. Most recently, it has reappeared in the academic and popular press in terms of sustainability and renewable resources. In particular, a stream of this research has centered on segmentation of the population, based on individual as well as group perceptions and behaviors regarding environmental concern (Newell and Green 1997; Straughan and Roberts 1999; Loureiro, McCluskey, and Mittelhammer 2002; Diamantopoulos et al. 2003; D'Souza, Taghian, Lamb, and Peretiatko 2007).

A critical issue within the natural progression of environmental research relates to attitudes and beliefs toward green issues among the population as a whole, and how these attitudes and perceptions vary across different segments. The majority of U.S. consumers indicate they are "environmentalists" (Shrum, McCarty, and Lowrey 1995; Ottman 1998; Osterhus 1997; Setlow 2001). But although most consumers have some level of environmental concern, this general concern does not necessarily translate into green purchasing behavior (Kaiser, Wolfing, and Fuhrer 1999) indicating an attitude-behavior gap. One explanation for this discrepancy may be the lack of consumer education about green packaging. This lack of education and knowledge may lead to uncertainty about and skepticism toward green labeling (Gray-Lee, Scammon, and Mayer 1994). The end result is an otherwise environmentally concerned consumer unwilling to purchase and consume green products (Moor, Eroglu, and Ellen 1998). Existing research has also found that some consumers are willing to pay more for green products, while other consumers are not (Vlosky, Ozanne, Fontenot 1999; Laroche, Bergeron, and Barbaro-Forleo 2001; Loureiro, McCluskey, and Mittelhammer 2002). This research blends with the concept of consumer skepticism

based on lack of knowledge and information, and offers recommendations for consumer education to reduce, or possibly eliminate this skepticism.

To understand perceptions of difference types of environmental concern and how they might be utilized to market to and educate consumers, we collected data at a major southeastern university on Sustainable Technologies Awareness Day. More specifically, our goal was to better understand the role that demographics play in perceptions of the different facets of environmental concern. In addition, we sought to understand which demographic groups would be willing to spend more on green products.

Data were collected as part of Sustainable Technology Awareness Day (STAD) at a major Southeastern Metropolitan University in October 2008 where attendees were invited to complete a brief survey measuring demographics and attitudes toward seven different types of environmental concern. We also asked respondents to indicate how much more they would be willing to spend on an environmentally friendly product.

Our research indicates that women are significantly more concerned about waste and popular issues than are men. Thus, household products marketed to women would benefit from eco-labeling environmental benefits about re-use and recyclable containers.

For ethnicity, we found a significant difference for three of the different types of concern: waste, wildlife and popular issues. For waste, Asian Americans were significantly more concerned than African Americans and Caucasians. For wildlife, Caucasians and Asians were significantly more concerned than African Americans. Hispanic/Latinos demonstrated the most concern for popular issues and were significantly more concerned than African Americans and Caucasians, but the difference between African Americans and Caucasians was not significant. Moreover, African Americans were willing to spend significantly more than Caucasians on an eco-friendly product, and Caucasians were willing to spend

the least. Hispanics would be most influenced by actions that affect quality of life of a community or the family.

The results for age indicate that older individuals are more concerned than younger individuals for several different facets of environmental concern, but they are not willing to spend significantly more money than their younger counterparts for an eco-friendly product. The fact that older respondents are very concerned about the health related aspects is hardly surprising in light of today's health care environment. The elderly are particularly vulnerable to environmental issues related to motor vehicle air pollution and global climate change (U.S. Climate Change Program 2008).

Because younger consumers currently show less concern for several ecological issues than their older counterparts, it seems there is a need to begin educating youth about the need for adopting sustainable behaviors. As such environmental issues become more complex, it is evident that future generations will have even more critical choices regarding their health and well-being. Therefore, policy-

makers can use the findings from this research to implement young consumer education programs in schools and other youth programs.

In today's environment, it is critical that researchers and practitioners continue with meaningful research that contributes to encouraging a consumer to nurture his or her environmental concern and marry that concern with appropriate behaviors. If concern is to lead to behavior, then consumers must be clearly identified based on their innate susceptibilities as well as their individual characteristics, and encouraged to alter current behaviors. That is, it is unlikely that one environmental campaign can be created that will appeal to such a broad range of consumers. Therefore, each segment identified herein may need to be treated very differently with specially designed programs and messages. This is a tactic that marketers have used for years with much success. Since past research has shown to be fragmented and ineffective in segmenting consumers with regard to current environmental concern, the current study lends insight not previously established in the literature. References are available upon request.

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TRADING-OFF SUSTAINABILITY: CHOICE AND WILLINGNESS-TO-PAY GIVEN A TRADE-OFF BETWEEN SUSTAINABILITY AND FUNCTIONAL PERFORMANCE

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SUMMARY

Prior research suggests that consumers are willing to pay a premium for “sustainable products” (Trudel and Cotte 2009), i.e., products with superior environmental and social attributes, thus affirming the value of sustainability to consumers. In many situations, however, consumers may have to make trade-off decisions, e.g., between products with superior sustainability attributes (and average functional attributes) and products with superior functional attributes (and average sustainability attributes). Our research addresses consumer responses given this trade-off. Specifically, our research seeks to determine if, when and why consumers will choose a product with superior sustainability attributes over a product with superior functional attributes. Our research also explores consumers’ willingness-to-pay (WTP) given this trade-off.

Chitturi et al. (2007) argue that in the context of a trade-off between products with superior functional attributes and products with superior hedonic attributes, the moral superiority of the former (Berry 1994) contributes to a variety of competing negative emotions that mediate a choice of the product with superior functional (vs. hedonic) attributes. However, in trade-offs involving sustainability attributes and functional attributes, the sustainability attributes are likely to be perceived to be the morally superior alternative. Based on the appraisal theory of emotions, we know that choosing a morally inferior option evokes greater guilt (Roseman 1991; Kivetz and Simonson 2002; Chitturi et al. 2007). Further, functional attributes fulfill prevention goals (Chernev 2004) and, therefore, choosing a functionally superior product is likely to evoke greater confidence (Higgins 1997; Chitturi et al. 2007). We sought evidence for these emotions in the context of a trade-off between a product with superior sustainability attributes and one with superior functional attributes as well as their effect on choice and willingness-to-pay.

In Study 1, we provided participants with a forced trade-off between two pairs of shoes where one pair was depicted as having superior sustainability attributes and average functional attributes (hence, “sustainable shoes”), while the other pair had superior functional attributes and average sustainability attributes (hence, “performance shoes”). In addition, we manipulated the scenario within which participants were making their choice such that some participants were presented with a scenario in which only average ratings across both dimensions were necessary to satisfy their needs (gain-gain scenario) while other participants were presented with a scenario in which superior ratings across both dimensions were necessary (loss-loss scenario).

Of the one hundred and nineteen participants in Study 1, more chose the performance shoes than chose the sustainable shoes (75 and 44 respectively), $\chi^2 = 7.89, p < .01$. Choice did, however, depend on the scenario, $\chi^2 = 4.38, p < .05$, such that while participants in the loss-loss scenario strongly favored the performance shoes over the sustainable shoes (44 and 17), participants in the gain-gain scenario were indifferent between the two pairs of shoes (27 chose the performance shoes, 31 chose the sustainable shoes). Thus, while participants overall favored the performance shoes over the sustainable shoes, choice given this trade-off exhibited a functional dominance effect such that performance was chosen over sustainability only until a satisfactory threshold of performance had been achieved.

Further, choice depended upon participants’ rating of Sustainability Importance, $\chi^2 = 7.49, p < .01$. Specifically, the likelihood of choosing the pair of shoes with superior sustainability attributes increased as Sustainability Importance increased. This moderation, in turn, was mediated by the higher levels of both anticipatory guilt, $\chi^2 = 9.25, p < .01$, and anticipatory confidence, $\chi^2 = 8.71, p < .01$, of choosing the performance shoes over the sustainable shoes.

In Study 2, we provided participants with the same trade-off as that presented in Study 1 to determine whether, after making a choice, they would indicate different willingness-to-pay (WTP) for either pair of shoes. Confirming our expectation, not only were participants more likely to choose a product with superior functional attributes over one with superior sustainability attributes, consumers who chose performance over sustainability were willing to pay 27 percent more, on average, for performance, while those choosing sustainability over performance were only willing to pay 11 percent more, on average, for sustainability. When the performance shoes were chosen, however, WTP once again depended on Sustainability Importance such that WTP for the performance shoes decreased as Sustainability Importance increased, $F(1, 75) = 3.81, p = .05$.

Thus, our research demonstrates that consumers are more likely to choose a functionally (vs. sustainably) superior product until a minimum threshold of functionality is achieved. Further, choice in this context depends upon how important sustainability is to the individual consumer, which influences the degree to which they experience the mixed emotions of guilt and confidence. Further our results suggest that consumers are actually willing to pay less for sustainably (vs. functionally) superior products given this trade-off. Pending research seeks to demonstrate how an understanding of the emotions mediating choice and WTP in this context can be used to promote the consumption of sustainably superior products. References are available upon request.

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VOICES OF THE SHADOW: POLICY CONSTRAINTS IN THE MARKETPLACE, CONSUMER VULNERABILITY, AND CONSUMER ACCULTURATION

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SUMMARY

... a substantial "shadow population" of illegal migrants-numbering in the millions-within our borders. This situation raises the specter of a permanent caste of undocumented resident aliens, encouraged by some to remain here as a source of cheap labor, but nevertheless denied the benefits that our society makes available to citizens and lawful residents.

Plyler v. Doe 1982

Since 2000, growth in the unauthorized population has averaged approximately 470,000 persons per year (Hoefler, Rytina, and Baker 2008). Given these numbers, it is no surprise that federal and state legislators are working on policies to address the growing trend of unauthorized immigration. Over the past decade, we have witnessed changes in the implementation and enforcement of immigration policy. What was once a federal issue is increasingly becoming an issue tackled in vastly different ways from state to state (NCSL 2007). States are changing the nature of immigration policy by creating laws that directly restrict access to basic services and resource opportunities. Most state resolutions attempt to discourage unauthorized immigration by making it harder to access employment, education, health care, and other basic consumer services (e.g., transportation, housing) and are likely to negatively affect the lives of millions of immigrants in the U.S. Although these restrictions directly create consumption barriers, no marketing studies have examined the impact of these restrictive policy changes.

The purpose of this research is to examine the impact of restrictive state immigration policies on Hispanic consumers and communities. Specifically, we examine the consumption constraints that emerge from the state policies and the adaptation that occurs as consumers renegotiate the marketplace. In our investigation, we first review the current status of immigration policy at the state level and highlight particular aspects of this policy that may lead to changes in marketplace behavior. We then summarize the current work on environmental constraints and consumer vulnerability to better understand the potential

effects of the restrictive policies. Our research focuses on the case of a specific southern state that has passed what has been called the "toughest" immigration reform in the U.S. Drawing from participatory observation, archival data, and in-depth interviews, we gain insight into the lived experiences of undocumented immigrants faced with restrictive shifts in immigration policy.

We found that undocumented immigrants experienced fear, profiling, and other consumption constraints following the policy passage. They felt vulnerable in the marketplace and in response they developed adaptation strategies which included exiting the marketplace for other states, depending on others to attain consumer goods, limiting marketplace interaction, and uniting with others to fight the policy change. These responses are helping the immigrants to build a sense of resiliency, at least in their immediate lives. Some immigrants navigate around vulnerability with temporary solutions such as leaving the state, limiting consumption, or depending on others, but these types of resiliency do not seek to change or remove that which is triggering the vulnerable state. Through community, a transformative resiliency is attempting to change or eliminate the enforcement of the restrictive, threatening policy. It was a collective, community effort which united, gave voice, and collectively empowered individuals.

The immigration policy in our analysis accomplished its goal of seeing large numbers of undocumented workers leave the state. As a result, some state burdens such as healthcare and education were reduced. Large numbers left, but most did not. Most disconcerting was the withdrawal in accessing services like healthcare and education, services which help ensure a more secure future for the immigrants and their children. The out flux of both documented and undocumented immigrants and the movement of immigrants to other states highlight the need for national immigration policy. If the federal government does not create national immigration reform, states will continue to create increasingly restrictive state policy that leads to constraints, vulnerability and dependency, and an environment viewed as intolerable for even documented

immigrants. The tax burdens, if they exist, will continue to be shifted to other states. At most, these are temporary fixes for some states. At worst, they are creating a marginalized second class living in the shadows of some states,

removing labor benefits, and shifting any burdens that did exist to other states. Fair, national immigration reform is past due. References are available upon request.

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AN EMPIRICAL STUDY ON THE EFFECTIVENESS OF NUTRITION LABELING IN GERMANY

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SUMMARY

Under pressure from consumer protection institutions as well as various government ministries, labeling requirements for pre-packaged food have been scrutinized, revised, and modernized. In light of these concerns, it is not surprising that interest in better educating the public of the nutritional value of various foods has risen. In the EU this heightened concern recently led to the development and proposal of new regulations for food general labeling. Prior research suggests that consumers appear to be largely satisfied with current labels and their information provision (cf., Harper et al. 2007; Loureiro, Gracia, and Nayga, Jr. 2006). However, empirical findings have called certain aspects of nutritional labeling into question. In fact, several studies, most conducted in the U.S., have pointed out a lack of consumer understanding of nutritional issues in spite of nutritional labeling programs being in effect (cf., Hieke 2009).

This study examines whether the system of nutritional labeling in Germany, the largest European economy, is effective in helping consumers identify which products are healthier than others. A quasi-experiment is conducted in which consumers are shown three different types of nutritional labeling information: (1) a nutrition facts panel on the back of a package; (2) the percent Guideline of Daily Amounts (percent GDA); and (3) a “traffic lights” system. Results of the study suggest that only the “traffic lights” system, which is not yet widely in use, had a significant impact on consumers more accurately classifying products as healthy or unhealthy. While more research is needed and implementation of a color-coded scheme may not be simple, this study is suggestive of the traffic lights system having higher impact than the current systems being used in Germany.

The present study focuses on the effectiveness of existing labeling formats on consumers’ ability to identify which products are healthy as opposed to those that are of inferior health quality. As this research is exploratory in the sense that it is testing actual existing labeling formats, the primary conceptual basis for the study is that the provision of information on nutritional value of foods should, if effectively communicated, improve consumer

knowledge of whether a food is nutritionally valuable or not. Thus, the following research question has been developed: “Do consumers rate food products differently based on the different food labeling schemes?” (RQ1). Second, if there are differences, are there possible moderators or additional factors influencing consumer evaluation? Based on prior findings in this area that suggest both nutritional knowledge and gender to have a certain influence on consumer attitude and evaluation, however also taking into account that these findings are very different and heterogeneous among various studies (cf., Hieke 2009), the following additional research questions have also been developed: “Does prior nutritional knowledge make a difference in the effectiveness of the labeling?” (RQ2) and “Are there gender-based differences that influence the effectiveness of the different formats?” (RQ3).

Based on conducting several ANOVA procedures for different product categories (healthy and unhealthy products), it can be shown that the three nutrition labeling systems used in this study (nutrition facts panel, percent GDA, and traffic lights) do account for significant differences in product health ratings. Whereas ratings for the nutrition facts and GDA conditions differ in mean values, statistically significant differences can only be detected when compared to the traffic lights condition, thus leading to the highest and the lowest product ratings for healthy and unhealthy products, respectively. This finding is suggestive of the newly created percent GDA labeling system being ineffective in helping consumers better differentiate pre-packaged food products on both ends of the health spectrum. Since health ratings do not significantly differ to those made on the basis of products with nutrition facts panels, these findings suggest that this type of labeling is not making a difference with consumers.

For unhealthy food products, this study suggests that the traffic lights labeling system is able to produce more consistent (i.e., with less variance) product ratings, regardless of nutrition knowledge and gender of the participants. This finding is suggestive of color coding being a simple, yet at least somewhat more effective mechanism for labels having a significant impact on consumer perceptions of the healthiness of a product, even across very heterogeneous consumer strata. It may

be that the simplicity of this system has substantial advantages in helping consumers to process information in the context of busy lifestyles and exposure to large amounts of information in many purchase contexts. An additional finding of this study is that there was a general significant difference in product health evaluation between male and female respondents, with men constantly rating products healthier than women. This finding corresponds with many results reported in similar literature (cf., Hieke 2009) and should be taken into account when designing health and dietary education programs.

The lack of proof for a moderating effect of nutrition knowledge can, in part, be assigned to the previously described “convergence” effect (i.e., more consistent health ratings) for the traffic lights signposting. A split-sample analysis for all nutrition labeling systems revealed that it was only in the traffic lights condition that nutrition knowledge and gender did not cause significantly different group ratings on product healthiness. However, it must be acknowledged that there may be a bias in the measurement of nutrition knowledge as it was a self-

reported measurement, not accounting for the problem that many consumers believe their knowledge to be greater than it actually is (Feunekes et al. 2008; van Kleef et al. 2007). Taking this limitation into account can make for a potential improvement in future studies.

With existing nutrition labeling under current review, both on a national as well as on a European level, there is a great need of research in the area of labeling, information provision, graphical illustration, and subsequent consumer perception and behavior. Given the results of the study at hand, a deeper look at the effects of color coding may prove useful when designing new label formats. Decomposing methods could reveal desired insights on how the interplay of colored bars and absolute values of various nutrients and calories may affect consumers in their perception, attitude, and subsequent behavior. Also, future research will have to intensify the experimental character of such studies, including the improvement of testing actual consumer nutrition knowledge as opposed to self-reported statements. References are available upon request.

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EFFECTS OF PRODUCT UNIT IMAGE ON FOOD CONSUMPTION

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SUMMARY

Consumers everywhere are becoming more and more over-weight, which is partially due to dramatically increased portion and package sizes over the last decades (Wansink 2004). Although accurate serving and package size information is indicated on nutrition labels, consumers very rarely read and adhere to that information (Cole and Balasubramanian 1993). Instead, they unknowingly use external and sometimes unrelated cues to estimate package size and generate consumption norms, and that in turn leads to biased judgments that influence consumption volume (Raghubir and Krishna 1999; Wansink 2004).

The present research introduces the product image on the package as a new influential contextual cue that affects consumer perceptions and consumption volume. Across three studies we demonstrate that the number of product units displayed on the package influences consumer perceptions of package size, serving size and product consumption. We show that subjects use the numerosity heuristic (Pelham, Sumarta, and Myaskovsky 1994) to estimate package size where the more product units they see on the package the larger they perceive the package to be. Importantly, subjects use the anchoring heuristic (Tversky and Kahneman 1974) to infer a more specific estimate, namely serving size. We demonstrate the robustness of the image effects even in the presence of verbal information and more importantly for actual consumption.

In packaging, the product image performs an informational function that directly affects consumer beliefs about the intrinsic attributes of the product such as look and taste (Underwood and Klein 2002). Given its accessibility for judgment and choice (Kisielius and Sternthal 1986), the product image may serve as a very diagnostic piece of information that sets expectations for the contents of the package (Underwood and Klein 2002). We suggest that consumers make inferences about the product quantity from the product picture on the package. We argue that consumers apply the numerosity heuristic where the number of units into which a stimulus is divided is a cue for judgment of quantity (Pelham et al. 1994). Thus, we hypothesize (H1) that packages with more product units

on the package will be perceived as larger in size than packages with fewer product units.

We next suggest that when estimating serving size consumers actually anchor their estimate on the particular number of product units on the package. Anchoring is the psychological process by which a salient number is presented to subjects which subsequently influences their estimation judgments to be close to the anchor (Tversky and Kahneman 1974). Thus, we hypothesize (H2) that packages with more product units displayed will be perceived to have larger individual serving sizes than packages with fewer product units.

Research has shown that graphics affect beliefs even when accurate verbal information is provided (Bone and France 2001). Thus, we expect the numerosity and anchoring effects to persist even in the presence of verbal label information on the package. In addition, because people differ in the extent they rely on visual information (Pavio 1971) we expect level of visual processing to moderate the effects of product image. Therefore, we hypothesize (H3) that high visual processors will consume more and estimate a larger overall package size for packages displaying a greater number of product units than for packages displaying fewer product units.

We confirm both our numerosity and anchoring hypotheses in the first study (Studies 1a and 1b). The results show that the package is perceived as bigger in size when it displays seven as opposed to four cookies. We show the persistence of the numerosity effect by varying the size of the cookies and confirm that the number rather than the perceived weight of the cookies is driving our results. Importantly, the results also indicate that subjects use that number as an anchor for serving size. The second study (Study 2) was run as a 2 (number of product units: 5 pretzels vs. 30 pretzels) by 2 (visual processing: low, high) design, with level of processing as a measured variable (Blazhenkova and Kozhevnikov 2008). We also include a nutrition facts panel invariant across conditions. Subjects anchor their consumption on the number of product units they see on the package and consume more pretzels from the 30 pretzel package. Importantly, high visual processors perceive the package to be larger and

consume more pretzels when there are 30 pretzels displayed than when there are 5.

The present findings contribute to perceptual research in the consumer domain and have important public policy

implications. Understanding of how consumers use environmental cues to generate consumption norms has both theoretical and practical significance. References are available upon request.

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THE IMPACT OF SODIUM KNOWLEDGE, SODIUM CONTENT LEVEL, AND HYPERTENSION TREATMENT STATUS ON PERCEIVED VASCULAR DISEASE RISK AND PURCHASE INTENTIONS

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SUMMARY

More than 80 million people in the United States have some form of cardiovascular disease (CVD), the leading cause of death and disability worldwide. High blood pressure is a primary cause of CVD. Numerous studies have shown that age-related increases in blood pressure levels are directly related to sodium intake (Havas, Dickenson, and Wilson 2007). The general goal of this experiment is to provide some insight into the following issues. First, will consumers being treated for hypertension have lower intentions to purchase a meal higher (versus lower) in sodium than non-hypertensive consumers? Second, how will the provision of sodium information influence disease risk perceptions and purchase intentions for those with and without hypertension? Third, how do these disease risk perceptions influence purchase intentions? Finally, to what extent will the provision of a sodium knowledge manipulation moderate the effects of sodium content level on disease risk perceptions and purchase intentions?

The results of the experiment are expected to show that consumers' intentions to purchase a meal are influenced by product sodium level, hypertension treatment status, and the provision of sodium health-related information. In addition, purchase intentions are predicted to be influenced by an interaction between sodium content and the sodium knowledge manipulation. Prior research has demonstrated that the effect of nutrition-related attributes (e.g., calorie content) and personal characteristics (Moorman 1990) on purchase intentions may be mediated by other product-related beliefs (Burton et al. 2006). In this study, perceived vascular risk associated with a meal is expected to mediate the effects of sodium level, hypertension treatment status,

the sodium knowledge manipulation, and the sodium information by sodium level interaction.

Study

The design was a 2 (hypertension treatment status: yes vs. no) x 2 (sodium level manipulation: high [75% recommended daily value] vs. low [20% recommended daily value]) x 2 (sodium information manipulation: information provided vs. not provided) between-subjects design. Sodium level was manipulated in the Nutrition Facts panel of a frozen quick meal. All other information was invariant across conditions. The two dependent measures were perceived vascular disease risk (Howlett, Burton and Kozup 2008) ($r = .92$) and purchase intention (Burton et al. 2006). Members of a nationwide internet research panel over the age of 45 served as participants ($n = 321$). Respondents in the sodium information present manipulation read a brief article about the health risks associated with a high sodium diet. In the no sodium health-related knowledge condition, an unrelated article on the dangers associated with identity theft was presented instead.

Results

The predictions were tested using regression. As expected, purchase intentions were higher when (a) sodium content is low ($b = -0.20, p < .0001$), (b) consumers are *not* being treated for hypertension ($\beta = -0.17, p < .001$), and (c) consumers have *not* received information regarding the risks associated with excessive sodium consumption ($\beta = -0.36, p < .0001$). There was also a meal's sodium content by sodium knowledge interaction ($\beta = -0.12, p < .05$). The sodium knowledge manipulation significantly decreases purchase intentions when the sodium content is high

compared to low ($M = 2.25$ vs. $M = 3.63$; $p < .01$). Conversely, without the sodium knowledge manipulation, there is not a significant difference in intentions ($M = 4.67$ vs. $M = 4.34$; $p > .10$).

Next, we examine the effects of the independent variables on perceived vascular disease risk (i.e., the proposed mediator). For perceived disease risk, the effects of high sodium levels are stronger for those with hypertension ($\beta = 0.16$, $t = 3.0$, $p < .01$), but this interaction does not extend to purchase intentions. More specifically, the effect of sodium level on purchase intention is equivalent, regardless of hypertension status. There is a significant effect of perceived disease risk on purchase intentions ($\beta = 0.52$, $p < .001$). Both the coefficients for the interaction and main effects are reduced when perceived disease risk is entered in the model. In addition, Sobel tests are significant ($p < .05$ or better), supporting the mediating role of disease risk perceptions. These findings highlight the influence disease-related risk perceptions can have on purchase intentions.

Conclusion

Findings from the experiment show that without explicit promotion and health-related sodium knowledge, even a very high sodium level has little influence on consumers' purchase intentions. Of even greater concern was the limited knowledge among those currently being treated for hypertension. This points to the need for more effective health communications. While these findings are subject to limitations, results suggest some important potential implications for public health. Specifically, effective communications regarding sodium and its health consequences potentially will favorably influence the effect of a product's sodium level on product evaluations and choices. Given the millions of cases of hypertension that could be eliminated and the billions of dollars that could be saved in reduced health care costs by keeping sodium consumption within the recommended daily value, more effective communication efforts appear to have substantial public health benefits. References are available upon request.

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GENDER AND CHRONIC REGULATORY FOCUS: REGULATORY FIT EFFECTS ON PERSUASION

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SUMMARY

Introduction

The purpose of this research is to demonstrate that congruence between the regulatory focus of a message and the gender of the recipient is a form of regulatory fit, and like other forms of regulatory fit, enhances persuasion. To our knowledge, this is one of the reports of the persuasive effects of regulatory fit between message content and gender. Similarly, to our knowledge, this is one of the first reported examinations of the role played by the message recipient's emotions in regulatory fit effects on persuasion. Chronic regulatory focus of participants was measured with both the Regulatory Focus Questionnaire (RFQ) (Higgins et al. 2001) and the General Regulatory Focus Measure (GRFM) (Lockwood, Jordan, and Kunda 2002) and to our knowledge, this is the first reported evidence of consistent regulatory fit effects when chronic regulatory focus is measured with either the RFQ or the GRFM.

Theoretical Background and Hypothesis Development

Regulatory Focus Theory (RFT) (Higgins 1987) suggests that promotion-focused individuals take risks in pursuit of their goals whereas prevention-focused individuals prefer risk-averse strategies (Bryant and Dunford 2008). There is also evidence in a variety of domains that males are risk takers and women are risk averse (e.g., seat belt use, flossing teeth, checking blood pressure) (Hersch 1996). Given these differences between males and females, we expect that males are more likely than females to be chronically promotion-focused, whereas females are more likely than males to be chronically prevention-focused. We hypothesize that, regardless of whether chronic regulatory focus is measured with the RFQ or the GRFM, males will be more likely than females to be dominantly promotion-focused and females will be more likely than males to be dominantly prevention-focused.

Regulatory fit had been defined as congruence between the regulatory focus of message content and that of the message recipient (e.g., Wang and Lee 2006). Given that males and females differ with respect to dominant regulatory focus, by extension, congruence between the gender

of the message recipient and the regulatory focus of the message content can be considered to be a form of regulatory fit. That is, regulatory fit will occur when males are exposed to a promotion-focused message and when females are exposed to a prevention-focused message.

Regulatory fit enhances persuasion (e.g., Zhao and Pechmann 2007). Thus, because males are expected to experience regulatory fit when they perceive promotion-focused messages, and because regulatory fit enhances persuasion, we hypothesize that males will be more persuaded than females by promotion-focused messages and that females will be more persuaded than males by prevention-focused messages.

Method and Results

The hypotheses were tested in a 2 (gender: male/female) X 2 (chronic regulatory focus: promotion/prevention) X 2 (message focus: promotion/prevention) factorial design in which gender and regulatory focus were measured variables and message focus was manipulated. Two hundred and seventy-six students from a U.S. university (52.2% female; 77.6% age 18–19, 20.5% age 20–21, and 1.9% over 21) participated in the study. Participants completed both the RFQ and the GRFM chronic focus measures. After participating in two unrelated studies, participants were randomly assigned to a promotion or prevention experimental conditions in which they were asked to slowly and carefully read a specially developed promotion- or prevention-focused marketing message that advocated being physically active. Immediately after reading the message, participants responded to measures to assess attitudes toward physical activity, feelings about their physical activity, and intentions to be physically active. These measures were followed with manipulation check and demographic questions.

Consistent with other researchers, individuals were assigned to RFQ or GRFM prevention or promotion regulatory-focus groups based on median splits of the difference between promotion and prevention scores (Zhao and Pechmann 2007; Lockwood, Jordan, and Kunda 2002). A significant association between gender and dominant regulatory focus was evident both when

regulatory focus was measured with the RFQ ($\chi^2(1, N=264)=7.47, p<.01$) and with the GRFM ($\chi^2(1, N=264)=8.04, p<.01$). Males were more likely than females to exhibit a chronic tendency to be promotion-focused whereas females were more likely than males to exhibit a chronic tendency to be prevention-focused, regardless of whether chronic regulatory focus was measured with the RFQ or the GRFM.

Although no regulatory fit effects on attitudes were observed for either males or females, regulatory fit effects on both emotions and intentions were evident for males but not females. Furthermore, for males, both *positive* and *negative* emotions fully mediated regulatory fit effects on intentions. The relationship between positive emotions and intentions was positive ($\beta=.703$) and the relationship between *negative* emotions and intentions was negative ($\beta=-.602$). A possible explanation for the lack of regulatory fit effects for females may be that the succinct, factual

message content was less compatible with females' preferred processing style and was not processed thoroughly enough for the expected pattern of regulatory fit effects to emerge.

This research has provided new evidence of the importance of gender and emotions in regulatory fit effects on persuasion. These are important findings given the relevance of both gender and emotions to marketers who design messages to influence health behavior. The present research also raises some interesting questions worthy of further investigation. Further investigation of the role of emotions in regulatory fit effects needs to be undertaken. A better understanding of the effects of gender and emotions on persuasion offers the promise of more effective health marketing messages and more positive health outcomes. References are available upon request.

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SPECIAL SESSION

CONTRIBUTIONS BY MARKETING SCHOLARS TO THE EMERGING FIELD OF SOCIAL ENTREPRENEURSHIP

Participants:

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SUMMARY

Social entrepreneurship is an emerging field that has captured the attention of practitioners, students, public policy makers, and academics.

- Practitioners are seeking out websites, business plan competitions, consultants, and conferences focused on this topic.
- Courses in social entrepreneurship are now being offered at most major universities and students are clamoring for even more exposure to the thinking in this field.
- Elected officials have been touting social entrepreneurship as a way to address social problems without the heavy hand of bureaucratic government agencies.

- New books, journals, scholarly papers, and academic conferences on social entrepreneurship are appearing on the scene in large numbers, and contributions are being made by scholars from fields such as strategy, entrepreneurship, management, finance, engineering, public health, and, finally, marketing.
- Indeed, the *Journal of Public Policy & Marketing* is devoting a special issue to social entrepreneurship in 2012.

This proposed session would highlight recent works completed by marketing scholars that attempt to make contributions to the emerging field of social entrepreneurship. The session should attract interest from scholars looking for a new, important context in which to apply their theories and methods. Four papers would be presented, each seeking to contribute to the field in very different ways. Abstracts of the papers follow.

COMMUNICATIONS STRATEGIES FOR SCALING HEALTH-FOCUSED SOCIAL ENTREPRENEURIAL ORGANIZATIONS

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SUMMARY

Poor health and inadequate health care have become enormously difficult issues to address in the 21st century. The need for innovation in health issues is being addressed by many new, health-focused, social entrepreneurial organizations, yet scaling their efforts to produce broad social impact has proven to be challenging. This

paper reviews the types of social entrepreneurial initiatives that have been tried in the health care area and then presents a set of health-communication propositions about how these initiatives might be scaled up to have greater impact. We offer case examples of organizations that have had success with the recommended communications strategies.

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WHOSE CHANGE ARE WE TALKING ABOUT? WHEN MULTIPLE PARTIES AND MULTIPLE AGENDAS COLLIDE

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SUMMARY

We endeavor to articulate why reducing conflict is critical to scaling impact in the social sector. In so doing, we begin by articulating the benefits and costs ascribed to social entrepreneurs when engaging in partnerships with public sector individuals and organizations. We then

demonstrate how the application of well-established best practices in alliance management benefit social entrepreneurs by reducing the conflict inherent in these partnerships, with a particular attention to scaling. Finally, we illustrate our prescriptions with a case that includes effective and ineffective efforts by public-private partnerships to scale social impact.

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SCALING SOCIAL IMPACT THROUGH BRANDING SOCIAL CAUSES

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SUMMARY

Before social impact can scale, affinity for the cause must scale. The cause and its importance must become broadly appreciated and enthusiastically embraced. What helps causes to scale? The central thrust of our paper is to report on the experiences of people on the ground who were intimately involved in trying to scale causes. Using a case

method approach, we interviewed people who were involved in attempting to scale 21 causes. We report our findings as themes related to collaboration, mission, branding, messages, commercial marketing communication, and grassroots movements. We also offer some insights from scholarship on agenda setting theory and diffusion of innovation that lend credence to the observations of our informants.

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METHODOLOGICAL CHALLENGES IN CONDUCTING SOCIAL IMPACT RESEARCH

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SUMMARY

Conducting meaningful research, or “research that matters,” is an important and potentially rewarding activity for many researchers. This type of research has been described as social impact research, social entrepreneurship, social marketing, altruistic marketing, and transformative consumer research (Mick 2006), among other terms. In pursuing research that matters, researchers often agree to conduct studies to evaluate the effectiveness of social marketing campaigns, social entrepreneurship programs, or related social initiatives, often on behalf of government entities, nonprofit groups, or firms. Successfully measuring the effectiveness of social initiatives that affect large segments of a society is an extremely important endeavor (Bloom 2009) and focusing on behavior change is arguably the ultimate objective (Andreasen 1994). However, there can be numerous methodological challenges and problems inherent in such studies that can limit their generalizability and/or their ability to prove causal effects. In many instances, social impact research is subject to research design trade-offs; that is, methodological decisions that increase some aspects of a study’s internal or external validity also unfavorably impact other aspects (Cook and Campbell 1979). While all research involves methodological tradeoffs, they seem to be especially visible and problematic in social impact research because of the high stakes involved in determining whether an initiative worked or not, and thus whether it merits further funding or not.

We will discuss two key aspects of social impact research: design and implementation. Under design, we will discuss the technical aspects of conducting the research. We will

identify some of the main research design options available to researchers, give examples of each, and discuss the pros and cons of using that design. We will discuss both expensive, comprehensive, multi-year research designs and more limited designs that can be used when there is a shortage of money and/or time. The major design dimensions that we will consider are experiments versus quasi-experiments (we do not consider nonexperiments because they cannot assess causal impact; Cook and Campbell 1979), and field versus lab settings.

Under implementation, we will discuss the human aspects of carrying out social impact research and dealing with the various stakeholders. In particular, we will discuss some of the challenges in working with different constituencies with widely varying perspectives on the social initiative, in terms of goals and processes. It is often necessary to balance the conflicting recommendations and mandates of government agencies, funding agencies, advertising agencies, marketing research firms, public relations firms, legislators, government oversight groups, nonprofit groups, consumer advocacy groups, diverse consumer groups, outside evaluators, and/or academic and practitioner consultants. We will identify several major sources of conflict and potential ways to resolve the conflicts, by drawing on real-world examples from our own research and consulting.

For parsimony, we will focus on research that we conducted or closely followed, that evaluated different anti-drug and anti-smoking campaigns in the U.S.A. However, the designs we describe and the conflicts we identify are broadly applicable to other types of social impact research.

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ROUNDTABLE SESSION

CONNECTING THE DOTS: LINKS BETWEEN MARKETING & PUBLIC POLICY RESEARCH AND SUSTAINABILITY

Roundtable Session Chair:

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SUMMARY

In addition to growing concerns about ecosystem limits, sustainability also comprises issues related to the future viability of social and cultural systems, and the public policy dimensions of these issues. Marketing and public policy (MPP) scholars have long championed these issues. However, the links between the macro perspective of sustainability and the many important topics investigated by scholars in this research community have not always been articulated.

This relatively simple step may significantly increase the benefits available to public policymakers from the scholarship produced by our community. The focus of this proposed roundtable is to provide tools to help marketing and public policy scholars better understand the links between their work and what many consider to be an emerging paradigm shift toward sustainability throughout our societies.

Sustainability, Systems, and the Tragedy of the Commons

Among many definitions of sustainability, perhaps the most widely adopted comes from the UN World Commission on Environment and Development: sustainable development is that which “meets the needs of the present without compromising the ability of future generations to meet their needs” (1987). Implicit in this definition is a systemic orientation. The recognition that the market, or “agora,” represents a complex system was one of three principle findings identified by Mittelstaedt, Kilbourne, and Mittelstaedt in their integrative analysis of the macromarketing literature (2006). The other principle findings were that “the structure of the agora is heterogeneous,” (ibid, p. 134), and that “the choices of agora participants have consequences far beyond

themselves, for better or for worse” (ibid, p. 135). These three principles may be found to apply just as aptly to the MPP research tradition, once the macro implications of each study are illuminated.

Thus the greater adoption of a systemic perspective may provide catalytic leverage for MPP scholars seeking to inform public policymakers, who are charged with the macro management of the well-being of the market/agora. For example, many topics examined by marketing and public policy scholars are related to externalities and social dilemmas. Alcohol and tobacco marketing, product labeling and warnings, product safety issues, privacy issues, and deceptive or covert marketing are but a few specific cases.

The “tragedy” of the commons was famously presented by Hardin (1968), who outlined the paradoxical lack of incentives for individual choices that result in collective stewardship of common resources, such as air and water quality, public health, and competitive markets. Schulz and Holbrook (1999) identified important relationships between social dilemmas, externalities, regulation, and the communication role that marketing often plays in these systemic dilemmas. They called upon MPP scholars to further develop theoretical foundations for such analysis. More recently, these same authors did just that by exploring the paradox in which “marketing both reduces and contributes to consumer vulnerability” (2009, p. 124).

Research on well-being has particular potential to be influential in the public policy of the future. Sirgy (2008) and others have consistently demonstrated that beyond a certain level, increased income does not correlate with higher quality of life. This research finding will provide crucial guidance for the transitions ahead as our marketing practice and public policies come increasingly into

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alignment with the carrying capacity of the earth's ecological and social resources. The thorough integration of well-being into our work, even as an analytical afterthought, can go a long way in helping policymakers connect those dots.

Marketing & Public Policy Scholars Can Meet Theory Needs

Marketing and public policy scholars are positioned to provide solutions through research that connects the dots between micro and macro perspectives. As with any paradigm shift, MPP scholars must be willing to reconsider habits and assumptions that may define outdated disciplinary norms. According to Elinor Ostrom, who was awarded the 2009 Nobel Memorial Prize in Economics,

[S]cholars have tended to develop simple theoretical models to analyze aspects of resource problems and to prescribe universal solutions. For example, theoretical predictions of the destruction of natural resources due to the lack of recognized property systems have led to one-size-fits-all recommendations to impose particular policy solutions that frequently fail (2009, p. 419).

The adoption of a systemic perspective appears to involve a developmental process for companies (Nidumolu, Prahalad, and Rangaswami 2009; Anderson, Amodeo, and Hartzfeld 2010). It is plausible if not likely that parallel developmental processes would be necessary for consumers, public policymakers, and scholars. This roundtable session aims to offer tools for MPP scholars at whatever stage they may find themselves and their research in relation to sustainability.

Given the urgency and necessity of collectively learning to live within our means, it is important for marketing and public policy scholars to understand the macro implications of their work in relation to this shift. This may include a greater recognition and integration of:

- The conditions under which systemic solutions to the commons dilemma are possible,
- The importance of well-being in identifying workable solutions,
- The pivotal role of both marketing practices and public policy in the construction and adoption of cultural values and norms, and
- The rise of sustainability-related innovation among leading firms, with implications for marketing and public policy.

A Roundtable Discussion

The roundtable discussion will begin with a short presentation illustrating links and opportunities for marketing and public policy scholarship. Next, the research programs of several distinguished scholars in the area of marketing and public policy will be discussed in relation to the macro context of sustainability. Finally, members of the audience will be invited to engage in discussion with the presenters to identify and articulate links and opportunities for their work in relation to the sustainability paradigm shift. References are available upon request.

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RISKY BUSINESS: REDUCING DEMAND FOR COUNTERFEIT GOODS

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SUMMARY

The market of counterfeit and pirated goods is increasingly a cause for concern among firms and policymakers worldwide. The Motion Picture Association estimates that in 2004 the motion picture industry lost in excess of \$6 billion worldwide from the sale of counterfeit and pirated movies (MPA 2005). However, due to the growth of online piracy and the increasing incidences of theft of movies before their cinematic release, the actual amount lost is likely to be much higher.

Both government and business have invested significant resources to reduce the demand for counterfeit goods. From public service campaigns that appeal to the consumer's sense of morality to threatening consumers with legal repercussions, policy makers have attempted to reduce the demand for counterfeit goods in the hope that the supply of counterfeit goods will follow (Miyazaki, Rodriguez, and Langenderfer 2009). However, based on data on the quantity of counterfeit goods seized by customs officials entering either the European Union, the supply of counterfeit goods is rapidly increasing (European Commission 2007).

Previous literature on counterfeit goods has focused on understanding counterfeit purchases after they have occurred (Commuri 2009; Wilcox, Hyeong, and Sankar 2009; Eisend 2006). However, beyond the argument that consumers choose counterfeit goods over legitimate ones primarily based on price considerations (Eisend 2006), research on why consumers would prefer counterfeit goods to legitimate goods is generally lacking. The present research is an attempt to fill this gap by building on prior work (Grossman and Shapiro 1988a) which has alluded to the role that perception of risk may play in the decision to choose counterfeit goods over legitimate ones. Counterfeit goods are inherently of lower quality than their legitimate alternatives due largely to the fact that they are illegal – should they fail to work or break, the consumer has no recourse to recover their loss. The fact that counterfeit goods offer no recourse to consumers serves to enhance the amount of risk consumers take on when purchasing

counterfeit goods compared to legitimate goods. Consumers must determine if the risk of the counterfeit product not working properly is greater than the benefits they may derive from the product.

The present study investigated the impact that the level of perceived risk can have on consumers' decisions to purchase counterfeit goods over legitimate goods. Specifically the present study investigated how varying levels of risk may reduce consumer preferences for counterfeit goods. Prior research has indicated that consumer preferences for counterfeit are dependent upon their level of perceived risk associated with the product (Majid and Johansson 2010).

In order to test the proposition that consumer preferences for counterfeit goods was dependent upon the level of risk perceived with the product we employed three studies using an experimental studies which manipulated the level of risk and price of products that varied on different degrees of risk. The level of perceived risk was manipulated through usage of two different products; pharmaceuticals and DVDs. Through pre-testing it was determined that both of these products differed significantly on levels of perceived risk with the counterfeit pharmaceutical being considered to contain a higher degree of perceived risk ($F(1,43) = 33.943, p < 0.001, M_{\text{pharmaceuticals}} = 4.09, SD = 1.34$ vs. $M_{\text{DVD}} = 1.98, SD = 1.05$).

A total of 135 undergraduate business students from a private U.S. university participated in the three studies in exchange for extra credit in one of their courses. Participants were asked to read one of four scenarios where they were told that they had \$35 to spend on pharmaceuticals (DVDs) and that there were two prices for these products in the marketplace, either a \$6 version or a \$15 version. Study 1 tested the basic proposition that when faced with a choice between two prices for different goods participants would choose to consume more units of the less expensive good when the perceived risk was low and more units of the expensive good when perceived risk was high. Overall we found that this was the case, consump-

tion of the lower priced good was dependent upon the level of perceived risk associated with the product ($F(1, 48) = 29.973, p < 0.001$).

In Study 2 we tested whether the above relationship would sustain itself once participants became aware that counterfeit goods are present in the marketplace and any good they purchase, regardless of price, could be counterfeit. Under this condition we observed a similar interaction effect ($F(1, 115) = 99.476, p < 0.001$) as that observed in Study 1. Thus, when the possibility of purchasing a counterfeit good was introduced into the marketplace the participants would continue to purchase more units of the low cost of the DVD and the high cost pharmaceutical than their alternatives; therefore, choice remained dependent upon the level of perceived risk associated with the item.

Based on the earlier finding that consumption of counterfeit goods was dependent upon the level of perceived risk, the purpose of Study 3 was to test the proposition that preferences for counterfeit goods could be reduced by increasing the level of perceived risk. Similar to Study 2, participants were given a fictitious \$35 and told that they could purchase as many \$6 DVDs or as many \$15 DVDs as they desired given their budget constraints. In the present study however, participants were told that the DVDs they were buying were for their boss and that their boss would not be very impressed if they were given a counterfeit DVD. In pre-testing it was found that this manipulation significantly increased the level of perceived risk that participants associated with the purchase

($F(1, 43) = 21.30, p < 0.001$, $M_{Study2} = 1.98, SD = 1.05$ vs. $M_{Study3} = 3.956, SD = 1.31$). Once the level of perceived risk was increased participants chose significantly less units of the \$6 DVD than they did in the earlier study ($F(3, 108) = 30.61, p < 0.001$) and more units of the \$15 DVD on average than in the earlier study ($F(3, 108) = 13.06, p < 0.001$) which revealed a significant interaction effect ($F(3, 108) = 30.61, p < 0.001$).

The findings outlined above have significant implications for firms and policy makers alike. Legitimate firms often employ advertising to extol to consumers the immorality of purchasing counterfeit or pirated goods which they portray as stealing (Cordell, Wongtada, and Kieschnick 1996). However, as previous researchers have found, the purchase of counterfeit goods is often viewed as being less immoral than stealing goods directly from a manufacturer (Cordell et al. 1996). Therefore, appeals based on a consumer's sense of morality regarding counterfeit goods may not create as great an impact as intended. Rather, our results demonstrate that it may be more fruitful to pursue a strategy where the legitimate firm emphasizes the risks of purchasing the counterfeit product. For example, instead of conveying to consumers that buying a pirated DVD is a form of stealing, the firm may wish to warn consumers of the risk that the counterfeit DVD could do to one's DVD player or the possibility that a counterfeit DVD may discontinue working shortly after purchase. By increasing the amount of perceived risk from product failure, even for a product that may not have a high degree of perceived risk associated with it, consumers may choose the legitimate product more often than the counterfeit.

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TRADEMARK DILUTION AND THE MANAGEMENT OF BRANDS: IMPLICATIONS OF THE TRADEMARK DILUTION REVISION ACT FOR MARKETING AND MARKETING RESEARCH

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ABSTRACT

The Trademark Dilution Revision Act (TDRA) of 2006 was intended to clarify and reinstate aspects of the Federal Trademark Dilution Act, which was overturned by the U.S. Supreme Court, in the *Moseley* case. The TDRA constitutes a major shift in trademark jurisprudence, and while several authors have considered the legal implications of the TDRA, few have considered its effects on how brands are managed. The purpose of this paper is to consider the implications of this important change in trademark protection on brands.

INTRODUCTION

A trademark is “any word, name, symbol or device, or combination thereof, adopted and used by a manufacturer or merchant to identify his goods and distinguish them from those manufactured or sold by others” (15 U.S.C. 1127). Trademarks are an important form of intellectual property protection for companies, as they serve as the legal foundation for brands. While the definition of a “brand” is similar to a trademark (“name, term, design, symbol, or any feature that identifies one seller’s good or service as distinct from those of other sellers,” Bennett 1995), the concept of brand is more encompassing than its legal foundation. Though brands distinguish goods “so as to source,” they also serve as promises to consumers. We talk about brands as market-based sources of firm equity (Keller 2008), and as such strategic tools (Aaker 1996; Aaker and Joachimsthaler 2000; Kotler and Keller 2009). We talk of them as having personalities (Aaker 1997), as sources of emotional attachment (Thomson, MacInnis, and Park 2005), and as entities around which consumers form communities (Muniz and O’Guinn 2001). So, while brands are founded in trademarks, they possess values to organizations that have never been protected under trademark law, because a brand’s equity extends far beyond a firm’s ability to reduce consumer confusion.

Legal protection of trademarks in the United States grew out of the common law concept of “passing off” as a form of unfair competition, through the copying of products

(McCarthy 1996). Historically, trademark protection was intended to prevent confusion among consumers by ensuring that they were able to distinguish among different competitors, and so they could identify particular products with particular manufacturers. By eliminating confusion, trademarks benefit consumers in two ways. First, trademarks serve as indicators of quality to consumers, since the ability to tie a product to a source enhances the likelihood that a firm will stand behind its product. Second, trademarks allow firms to differentiate their products from competitors. Trademark protection, like copyright and patent protection, serves as an incentive for firms to produce products of the highest quality, to the benefit of consumers. The primary mechanism for trademark protection today is section 43(a) of the Lanham Act of 1946, as it has been interpreted by the Supreme Court. Like other regimes of intellectual property protection, trademark protection serves to encourage fair competition in the marketplace. Unlike patents or copyrights, however, trademark law has never protected the interests of the owner of the intellectual property; instead, it has always protected the interests of the consuming public. And in this way the law’s interest in protecting trademarks has always differed from the managerial interests of a brand.

That is, until recently. In 2006, Congress passed the Trademark Dilution Revision Act (TDRA), which revised and clarified the trademark dilution protection of the Federal Trademark Dilution Act of 1995. As a result, the institution of dilution protection more closely aligns the concepts of trademarks and brands, and changes how firms should think about the management of their brands.

The purpose of this paper is to consider the implications of this important change in trademark protection on brands and brand management. While there has been much discussion about the legal implications of dilution protection (cf., Bird 2007, 2008; Goldman 2006; Goodberlet 2006; Jacoby 2001, 2003; Saunders 2007; Scholer 2006), few have considered the marketing implications of this change in jurisprudence. This paper will review trademark protection regimes, and the change in law. Then it will consider two questions of importance to marketers

and marketing scholars. First, how does trademark dilution protection change the way we manage brands and brand equity? Second, what implications does dilution protection have for how we measure brands in the marketplace, and in the courtroom?

A BRIEF HISTORY OF BRAND DILUTION

Trademarks protect the signs, sounds or images by which consumers recognize producers in the marketplace. The intent of trademark law is to protect the customer, not the producer. The legal philosophy of trademark law has its origins in the principle of confusion: the intent of protection of marks is to provide the consumer with an assurance of knowledge “so as to the source,” of the products and services they purchase. As Simonson (1994) puts it, trademark infringement is the equivalent of cashing a check on someone else’s bank account, where the teller (consumer) cannot distinguish between the identity of the check casher and the account holder. “From the buyer’s perspective, confusion between trademarks implies that consumers do not get the brand they intended to buy” (Simonson 1994, p. 181). From the trademark holder’s perspective, a sale is lost, to the detriment of the original (senior) brand. The consequences of confusion for marketers have a long history in the marketing literature (Miaoulis and D’Amoto 1978; Cohen 1986).

Throughout the 20th Century, however, there was a second perspective on trademark infringement, the principle of dilution, discussed among legal scholars and philosophers. The idea of dilution is first introduced by Frank Schechter, in 1927 (Schechter 1927). At the time, the view of the Supreme Court was that the purpose of a trademark was “to identify the origin or ownership of the goods to which it is affixed” (*Hanover Star Milling v. Metcalf* 1916). This was the basis of the confusion perspective, and would become the basis of the Lanham Act, in 1946, which codified intellectual property law in the United States.

Schechter (1927) argued that the confusion standard served only to indicate ownership or origin, but that the complexities of commerce of the day had moved well beyond these notions. “It has been repeatedly pointed out by the very courts that insist on defining trademarks in terms of ownership or origin that, owing to the ramifications of modern trade and the national and international distribution of goods from the manufacturer through the jobber or importer and the retailer to the consumer, the source or origin of the goods bearing a well-known trademark is seldom known to the consumer” (p. 814). What becomes important to the consumer is not that the product came from a particular place known to the user, but that “the

goods in connection with which it is used emanate from the same – possibly anonymous – source or have reached the consumer through the same channels as certain other goods that have already given the consumer satisfaction, and that bore the same trademark” (p. 816). In this case, the nature of the trademark changes, from a signifier of *source* to a signifier of *quality*. “The true functions of the trademark are, then, to identify a product as satisfactory and thereby to stimulate further purchases by the consuming public . . . today the trademark is not merely the symbol of good will but often the most effective agent for the creation of good will, imprinting upon the public mind an anonymous and impersonal guaranty of satisfaction, creating a desire for further satisfactions. The mark actually *sells* the goods. And, self-evidently, the more distinctive the mark, the more effective is its selling power” (pp. 818–819, emphasis in original). It is not the assurance of source that matters to the consumer, as much as the assurance of quality that emanates from the source that is important. In short, by the early part of the 20th Century a trademark was valued by the consumer because it had become what we in marketing call a “brand.”

What the theory of dilution adds to our understanding of trademark infringement is the acknowledgement that the value of a brand comes from the efforts of the producer, as much as it does from the consent of the consumer. This is a compelling argument, and has found its way into state statutes governing intellectual property. Massachusetts passed the first dilution statute in 1947, and by the turn of the 21st Century 37 states had provisions for trademark dilution, though they differed in form and coverage (Chicoine et al. 2004). What was lacking was a uniform statute governing trademark dilution.

Federal Trademark Dilution Act and Moseley

The Federal Trademark Dilution Act (FTDA) of 1995 was intended to unify dilution protection across the United States. It defined dilution as “the lessening of the capacity of a famous mark to identify and distinguish goods or services, regardless of the presence or absence of (1) competition between the owner of the famous mark and other parties, or (2) likelihood of confusion, mistake or deception” (15 U.S.C. 1127). The intent was to extend to famous marks protection against dilution, over and above protections already afforded under confusion provisions of the Lanham Act. Standards for famousness were not included in the law, but it was expected that these would emerge through court interpretation.

The first major challenge under the FTDA was *Moseley v. V. Secret Catalogue* (537 U.S. 418 (2003)). The Moseley case centered on a dispute between Victoria Secret and a

retailer of adult products, called “Victor’s Secret.” While all agreed that no one would reasonably mistake Victor’s Secret for a Victoria Secret store (i.e., no confusion), V. Secret Catalogue, Inc. argued that their trademarks could be associated in the minds of consumers, tarnishing Victoria Secret’s reputation and, in doing so, diluting its brand.

In *Moseley*, the Supreme Court ruled that no actual dilution had been shown, and that no standards for either likelihood of dilution or dilution by tarnishment were offered. In its unanimous ruling the Court narrowed the provisions of the FTDA, in two important ways. First, it required evidence of actual dilution. Second, it limited the form of dilution to blurring, excluding tarnishment. What this meant was that a famous brand could only claim dilution protection if it could show actual blurring of its trademark. This set the standard so high as to eliminate dilution as a practical form of intellectual property protection.

Trademark Dilution Revision Act

In 2006, Congress passed the Trademark Dilution Revision Act (TDRA), to clarify the intent of the FTDA, in light of the *Moseley* ruling. The Act includes several important provisions that shape dilution protection.

First, dilution protection is afforded to (and only to) “famous” marks. Famous is defined in the statute as one that is “widely recognized by the general consuming public of the United States as a designation of source of the goods or services.” Excluded from dilution protection are niche, regional or similar brands that may have significant meaning to a specific audience, but which are otherwise anonymous to the general public.

Second, the TDRA provides protection against both dilution by blurring and by tarnishment. Dilution by blurring is the result of an association arising from the similarity between the famous brand and the diluting mark “that impairs the distinctiveness of the famous mark.” Dilution by tarnishment, on the other hand, is an association arising from the similarity of marks “that harms the reputation of the famous mark.” The former diminishes the ability of a firm to control the destiny of its brands, while the latter recognizes that the equity of their brand can be compromised by the actions of others.

Third, it overturns the “actual” standard set in *Moseley*, and allows for restrictions of junior marks in cases where likelihood of dilution can be shown. This means injunctive action can be pursued if the possibility of dilution exists, rather than waiting for actual dilution to occur. The likelihood standard is borrowed from infringement by

confusion, where the Court recognizes that in cases of consumer perception, damage to a trademark cannot be easily undone. The law sets out six factors to assess the likelihood of blurring, but no factors to assess the likelihood of tarnishment.

IMPLICATIONS FOR BUSINESS PRACTICE

The Trademark Dilution Revision Act of 2006 reverses the *Moseley* decision, and clarifies the intent of Congress in the Trademark Dilution Act of 1996. The impact of this is to bring into closer alignment the legal notion of a trademark and the managerial notion of a brand. Trademarks are recognized as signifiers to consumers of quality, not just of source. Trademarks are to be protected as assets of an organization, not just signifiers that reduce confusion. Brands can be protected for the good of the firm, not just the consumer.

Managers and attorneys have very different views of brands and trademarks (Peterson, Smith, and Zerillo 1995). Managers see brands as a source of firm equity to be managed. Attorneys see trademarks as property to be protected from the infringement of others. And while there definitions appear similar, the protected dimensions of a trademark have always been more narrowly defined than the managerial dimensions of a brand. One important consequence of Federal dilution standards, as they are now codified in the TDRA, is that trademarks and brands are more closely aligned, and attorneys and managers need to be more cognizant of each others views of brands as property and as equity. Two important issues arise from this: the management of fame, and the need to monitor brand health for legal purposes.

TDRA Creates Two Classes of Brands

The TDRA effectively creates two classes of brands, famous and not famous. It does this by creating two classes of trademark protection, confusion and dilution (Goodberlet 2006). While all brands enjoy protection against infringement by confusion, brands that rise to the standard of famous enjoy protection against dilution, as well. For the first time the law protects famous marks as assets of the mark holder, rather than on the basis of confusion or potential confusion of the consumer. This means that if you hold a famous mark, you can align your legal thinking of trademark protection with your branding strategies. Protection against dilution protects the equity in your brand, its cognitive position – in addition to its distinctiveness – and extends protection to your relationship with communities of consumers. Trademark protection becomes brand protection.

For famous brands, dilution will likely become the first line of brand defense. One need not show that the image of one's brand is confused, or likely to be confused, with the image of someone else's. Instead, it suffices to show that the actions of another affect, or are likely to affect, the distinctive brand image cultivated by one's marketing efforts. One need not show that the consumer is harmed, only that the brand is harmed.

For brands that do not rise to the standard of "famous," the picture is more complex. Managers of brands that are less than famous must decide if the costs of fame are worth the protection it affords. If your brand is distinctive, but not famous, should you take the steps necessary to establish fame? If your brand is well known within a niche market or subpopulation, are the legal benefits of dilution protection worth the investment of the resources to become a nationally recognized brand? Managers must calculate the value and likelihood of dilution protection against the cost of establishing famousness. As well, they must consider the legal risks associated with challenging more famous brands for market share or market leadership, expecting that the more famous mark will argue that any erosion of market share represents dilution of its brand. Nothing in the standards for dilution require confusion, or even suggestion. While no one would confuse Victor's Secret with Victoria Secret, one can see how the former is suggestive of the latter, and therefore holds the potential to dilute. If, on the other hand, Automaker A runs a series of aggressive advertisements against Automaker B, and B's research indicates a shift in some measure of effect (awareness, liking or consideration, for example), can B argue that A's efforts have blurred the image of its brand, and therefore diluted its value? A good attorney would make such an argument.

If fame is important, how is it measured? Peterson, Smith, and Zerrillo (1995) offer two standards for famousness, typicality and dominance. Typicality means the extent to which a brand is considered "typical" of its product category. Typicality can be operationalized as the extent to which a trademark elicits recall of its product category (Simonson 1995). "When you think of Nike, what product category comes to mind?" Dominance, on the other hand, is a measure of the strength of a brand as representative of a category. "When you think of televisions, what brand comes to mind?" The greater the typicality of a brand, the greater its famousness. The greater the dominance of a brand, the greater its famousness. Typicality and dominance are both top-of-mind questions, the form that Simonson (1994) found generated the highest rates of confusion in trademark infringement studies.

Brand Health Must Be Tracked

Second, the codification of dilution means that brand management decisions must now take into account legal aspects of brand tracking and brand health. Most of the academic research on the effects of dilution is experimental in nature (cf., Morrin and Jacoby 2000; Morrin, Lee, and Allenby 2006; Pullig, Simmons, and Metemeyer 2006). While valuable for understanding how blurring and tarnishment occur, they rely on the ability to measure the associative networks of brand images before and after the experimental treatment.

In reality, if a brand manager believes that their brand has been diluted, either by blurring or tarnishment, it is too late to measure the "before" condition. This means that a brand manager must be able to demonstrate, at any point in time, whether or not their brand is famous (the precondition for dilution protection), as well as measures of brand recognition, distinctiveness and health. The ability of a firm to show that its brand is famous, and has been for some time, and to have benchmarks for association, strengthens its hand if or when an issue of dilution arises. For firms with famous brands, it is likely worth the investment to track brand health over time, and in accordance with the needs of the legal department, as well as marketing. The needs of legal representation may well differ from the needs of the brand manager, but all are probably discoverable documents in legal proceedings.

Tests of dilution are more complex than tests of famousness. Both are summarized in Table 1. Scholars (Morrin and Jacoby 2000; Morrin, Lee, and Allenby 2006; Pullig, Simmons, and Netemeyer 2006) argue that dilution is best understood in the context of associative network theory. Associative network theory is built on the premise that memory is made up of nodes, which hold concepts, and links, which constitute relationships or associations (Jacoby 2003). Brands are held in nodes, and around them are associative networks that constitute perceived brand image, personality, and the like. When a node is activated, the network of associations is activated. Blurring occurs when the strength of associations is weakened. Morrin and Jacoby (2000) measured blurring by accuracy and speed of response to associative questions, and found both weaken in the presence of diluting brands, while Morrin, Lee, and Allenby (2006) found that dilution through logos reduced brand exclusive recall. Pullig, Simmons, and Netemeyer (2006) found that blurring was least likely to occur when copycat strategies were employed, and Howard Kerin and Gengler (2000) found significant involvement effects.

TABLE 1
Summary of Measures of Fame and Dilution

Study	Construct Tested	Approach	Finding
Peterson, Smith and Zerrillo (1999)	Famousness	Offers two approaches to measuring famousness: Typicality – the extent to which the brand is able to elicit recall of its own category), and Dominance – the strength of brand to category relationship Telephone Survey	Offers metrics for typicality and dominance
Morrin and Jacoby (2000)	Dilution by blurring	Speed and accuracy of response; Experiment	Recognition accuracy decreases when diluted; reaction time varies when diluted, depending on the category similarity and familiarity; familiarity is used as proxy for famousness
Pullig, Simmons and Netemeyer (2006)	Dilution by Blurring (weakening of the associations between a brand and its distinctive aspects)	Brand name accessibility (aspect → brand name) and aspect accessibility (brand name → aspect); Test of associative network theory; Experiment	Blurring is least likely to occur in copycat strategies, when a junior brand emerges in a similar category to the senior brand and with other similar aspects.
Morrin, Lee and Allenby (2006)	Dilution by Blurring	Logos diluted, then asked to freely recall the original product category associated with brands; Experiment	Logo dilution reduces exclusive brand recall.
Howard, Kerin and Genzler (2000)	Confusion	Tested similarity of sound and meaning in high and low involvement conditions; Experiment	Find that similarity of sound leads to highest brand source confusion in low involvement conditions; similarity of meaning leads to highest confusion in high involvement conditions.

No research to date has been done on methods of assessing dilution by tarnishment. Perhaps this reflects the complications of experimental testing of these concepts without doing actual damage to a brand image. More likely it reflects a sense that tarnishment is a more apparent when it happens. Solid benchmarks of attitude toward a brand would go a long way to toward assessing tarnishment, *ex post facto*.

Combined, these suggest that good brand management practices should include threshold and benchmarks measures for fame, association and attitude toward the brand, and should be tracked over time. While these serve a managerial purpose in the context of brand health, they would serve the purpose of establishing the context of, and the commitment to, brand dilution and its prevention.

CONCLUDING THOUGHTS ON THE ROLE OF MARKETING IN ASSESSING IMPLICATIONS OF THE TDRA

After a decade of legislative and court involvement, it appears that trademark dilution is now, and is likely to be, a key component of public policy in the United States. This will have substantial effects on how firms manage and protect high profile brands. The TDRA serves as acknowledgement that the value of a brand comes from the efforts of the producer, not just the consent of the consumer. The extent of the impact is yet to be known.

What we do know is that the consequences will depend on the benchmarks and metrics used by industry and the courts to understand the boundaries of dilution on the behavior of consumers and organizations. Marketing scholars should play a role in establishing the standards by which courts and companies evaluate the extent and form

of trademark dilution. Questions for future research are offered here.

First, what standards should measure the threshold for fame? The standards offered by Peterson, Smith, and Zerrillo (1999), typicality and dominance standards, are different. If consumers were asked for brands of airlines, and Delta was frequently mentioned, then a case can be made for its dominance. If asked to describe the product category of Delta, and the answers are split between airlines, faucets and dental insurance, then is the standard of typicality met? Conversely, when asked what brand of MP3 player one thinks of most, Apple may come to mind. But when asked to indicate the product category for which Apple is typical, computers, music or cell phones may be most frequently mentioned. Here, Apple meets the criteria for dominance, but does it meet the criteria for typicality. Must a brand be both typical and dominant to be famous? Which serves as a necessary condition for fame?

Second, what constitutes likelihood of dilution? While standards and methods for assessing likelihood of confusion exist (Simonson 1994), we need to understand the threshold points for dilution. While Morrin and Jacoby (2000) offer valuable metrics, we need benchmark measures for associative networks.

Third, are there universal standards for threshold effects on fame, or dilution by blurring or tarnishment, which transcend product or service categories? If so, then marketing scholarship should play a role in establishing regulatory standards.

Finally, how will dilution protection change the way we think about brands? While the concept of a trademark has been constrained by law, the notion of the brand has not. Will the effective merger of trademarks and brands constrain how we think about brands?

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WHAT IS CONSUMER CONFUSION AND HOW IS IT MEASURED? AN INTEGRATED EXAMINATION FROM THE MARKETING AND LEGAL DISCIPLINES

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SUMMARY

The purpose of this paper is to address the issue of consumer confusion from both marketing and legal perspectives. Examining the issue at the intersection of these two disciplines can provide marketing managers with important insights into how the courts measure and incorporate “likelihood of confusion” into their rulings. Likewise, marketing research that explores the phenomenon from a consumer behavior perspective may provide the courts with the information necessary to yield consistency and greater predictability in findings across the circuits. Understanding how consumer confusion is defined both from the marketing and legal perspectives is foundational to issues of measurement and management.

Consumer Confusion from a Marketing Perspective

There is wide discrepancy in the marketing literature as to the definition of consumer confusion. The definitions provided range from conscious to unconscious and have cognitive, affective, and behavioral components. While over 15 different definitions have been offered by various authors, when aggregated, three categories of confusion emerge (Mitchell, Walsh, and Yamin 2005). The marketing literature suggests that these categories form the three antecedents to consumer confusion: brand similarity, information overload, and ambiguity (Mitchell, Walsh, and Yamin 2005). Confusion has not been separated from its antecedents as a construct; instead, the definitions that have been developed consider each antecedent as a discrete form of consumer confusion. As a result, discussions of consumer confusion in the marketing literature have largely focused on the *process* of consumer confusion rather than the *consequence*, with an emphasis on the environmental stimuli that lead to such a state.

Consumer Confusion from a Legal Perspective

The legal perspective of consumer confusion addresses the phenomenon as a form of trademark infringement. The “likelihood of consumer confusion” is one of the key

criteria used to decide trademark infringement cases (McCarthy 2009). As such, consumer confusion is tied to trademark law which is governed by the Trademark Act of 1946 (commonly referred to as the Lanham Act).

The Lanham Act defines a trademark as “any word, name, symbol, or device or any combination thereof adopted and used by a manufacturer or merchant to identify his goods and distinguish them from those manufactured or sold by others” (15 USCS § 1127). Similar provisions are also given to service providers under the term “Service Mark.” Trademarks perform four value-added functions that merit legal protection: (1) identify sellers’ products and distinguish them from products sold by others; (2) indicate that all trademarked goods come from, or are controlled by, a single source; (3) signify trademarked goods as having equal quality; and (4) are central to marketing activities such as advertising and selling (McCarthy 2009).

Marketing Implications

The discrepancy in focus between the marketing and legal disciplines regarding consumer confusion provides marketers with multiple research opportunities. Currently, the marketing literature has examined consumer confusion as an individual difference characteristic with little attention given to consumer perceptions of factors falling outside the three types of confusion recognized by the discipline. Of particular importance is perceived trademark strength. While this factor will be unique to each trademark infringement case, marketing research could establish conditions conducive to determining consumer perceptions of “strong” and “weak” trademark (brand) perceptions. To date, this important component of the legal perspective of consumer confusion has been largely ignored within the marketing literature.

Public Policy Implications

One interesting aspect of the issue of consumer confusion is that the marketing perspective desires for the brand leader to capitalize on obtained equity and for its compe-

tition to associate with said leader. Relatedly, the legal perspective essentially forces the leader to protect its mark or risk losing its status. At the same time, the non-leader

is seemingly looking to blur the boundaries between its brand and the leader, making consumer confusion both a legal and ethical issue of concern to policy makers.

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BORROWED PLUMES: WHAT DRIVES US TO BUY COUNTERFEIT BRANDS?

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SUMMARY

From the companies' point of view problems with counterfeit brands gain more and more importance. Duplicates which are much cheaper than the original branded goods flood international markets. Today the trade with counterfeit products amounts between 5 to 9 percent of the world trade volume (Green and Smith 2002; Nicoli 2005). Whilst in the 70s and 80s counterfeits were mainly to be found among expensive luxury brands in sectors like fashion, jewelry, leather goods and accessories, they have spread to all fields of consumer and industrial goods meanwhile. Nowadays products of the entertainment and media industry as well as the computer industry are especially affected. In Europe more than every third CD and computer program is a pirate copy (Chiou, Huang, and Lee 2005). Counterfeit brands can also be found in the high-tech industry, electrical industry and spare parts industry (Harvey and Ronkainen 1985; Jacobs, Samli, and Jedlik 2001). Food, alcoholic beverages and to a rising extent also pharmaceuticals are duplicated as well (Lybecker 2008).

Counterfeit products cause damage with serious economic and financial consequences. In the US, for example, the macroeconomic damage provoked by the trade with counterfeit products amounts to approximately 200 to 250 billion USD. Counterfeit brands flood the global market with a cheap price offering almost the same features most of the time.

Over the last decades counterfeiting has increasingly attracted academic research. The majority of the existing marketing-related literature focuses on describing counterfeiting and legal issues (Chaudry and Walsh 1996; Wilke and Zaichkowsky 1999) as well as approaches of restricting counterfeiting (Chaudry, Cordell, and Zimmerman 2005; Green and Smith 2002). It has been discussed, however, that consumer demand for counterfeit brands is one of the leading drivers for the existence of the counterfeiting phenomenon (Gentry et al. 2001). This approach has been admitted by several researches, who

suggested that further investigation of consumer behavior and counterfeits is needed (Penz and Stöttinger 2008; Veloutsou and Bian 2008).

Whenever goods are consumed in public, they can provide a symbolic value, which is caused by their visibility and exclusiveness (Sirgy 1982). Hence, products can be characterized by their luxurious character and their visibility (Bearden and Etzel 1982). Especially luxury goods can gain a high symbolic meaning if consumers can flaunt them to others. In consideration of the in-group/inter-group concept (Lee and Ottati 1995) luxury goods help people to show their eligible social status or affiliation. Therefore, purchasing counterfeit brands can be a possible strategy for consumers with low budget to satisfy their emotional and social needs. Since such purchase decisions are made consciously, marketers have to know the key antecedents to buying counterfeit brands.

The aim of our study was to identify the key factors influencing the attitude toward the purchase of counterfeit brands and the willingness to buy. Thus, our analysis focuses on counterfeit brands of well-known luxury brand manufacturers that are consumed in public. We focus on product categories like textiles (exclusive fashion), jewelry (e.g., watches) leather goods or accessories (e.g., bags, purses, belts) of brands like Gucci, Prada, Dolce & Gabbana, Rolex, and Louis Vuitton.

Our study deals with two kinds of antecedents: supply-oriented and consumer-related antecedents. The supply-oriented determinants in this study consist of the (1) perceived quality which can lead to a distinctive functional benefit, (2) the perceived prestige benefit of the counterfeit brand that enables people to transfer the prestige and the status of those products to themselves. In addition, we examine the (3) perceived price difference between the original and counterfeit brand. The results of a structural equation model show that these antecedents lead to a positive attitude toward the purchase of counterfeit brands and to a greater willingness to buy. Furthermore, the results highlight that consumers with a negative atti-

tude toward large companies, a so called anti-big-business-attitude (ABBA), are more willing to buy counterfeit brands than others. This can be explained by consumers' perception that large-scale enterprises are primarily interested in increasing their own profit and scales. Moreover, we identify consumer-related factors that influence the attitude toward counterfeit brands negatively, like legal, ethical and moral doubts as well as negative subjec-

tive norms – such as the rejection of counterfeits by personally relevant reference groups.

The results of our study can help academics to understand why consumers do buy counterfeit brands. In addition, markets are able to develop communication strategies and product policies on the basis of our findings.

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SPECIAL SESSION

ROLE OF QUALITATIVE AND QUANTITATIVE CONSUMER RESEARCH IN POLICY DEVELOPMENT AT FEDERAL AGENCIES: TWO CASE STUDIES

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Michael Long, ICF Macro, Beltsville*

SUMMARY

Many marketing academics and consumer researchers have a deep-seated interest in conducting research that informs public policy decisions and outcomes. At the same time, regulatory agencies such as the Federal Trade Commission (FTC), the Federal Reserve Board (FRB), and the Food and Drug Administration (FDA) are constantly looking for empirical research that provides insight into the way consumers may process, interpret, comprehend, or react to provisions and disclosures in existing and proposed regulations. Nevertheless, it has been suggested that with some notable exceptions, academic research has not played a major role in the policy-making process, and that input in the form of consumer research is particularly lacking at the early stages of policy deliberation when the input may be significantly valuable (Hastak, Mazis, and Morris, JPPM 2001).

This session focused on how consumer research can assist the work of regulatory agencies by providing an in-depth look at two large-scale, multi-year consumer research projects specifically designed to inform policymaking. The first project (collaboratively commissioned by seven regulatory agencies including the FTC and the FRB) focused on the use of consumer research to develop and test privacy disclosures for financial institutions. The second project, commissioned by the Federal Reserve Board, focused on the development of effective financial disclosures for credit card users. Both projects relied on a two-phase approach – a first phase devoted to developing disclosures through iterative cognitive interviews with

consumers, and a second phase that relied on an experimental study to further test whether a subset of disclosures and design elements had a significant impact on consumer understanding. For the multi-agency project, detailed findings from the two phases and the revised regulations are available at [http://www.ftc.gov/privacy/privacyinitiatives/financial_rule_inrp.html]. For the FRB project, findings from the Truth in Lending studies are available at [<http://www.federalreserve.gov/dcca/regulationz/20070523/Execsummary.pdf>], [<http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20081218a7.pdf>], [<http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20081218a8.pdf>].

Several features of these projects made the session interesting to the conference attendees. First, the projects relied on both qualitative (focus groups, one-on-one interviews) and quantitative (mall intercept) methodologies and thus appealed to researchers with different methodological backgrounds and interests. Second, the projects involved the collaborative work of academic researchers, policymakers from regulatory agencies, and researchers from industry. Finally, both projects had been completed and had already had a significant impact on policy outcomes. The presenters discussed these outcomes as well as lessons learned that may be valuable for academics, agency personnel, and industry researchers contemplating similar collaborative efforts.

Craig Andrews (Marquette University, discussant) then presented his analysis and views, and moderated the general discussion.

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CAN YOU UNDERSTAND WHAT THIS PRIVACY NOTICE SAYS? A REPORT ON THE GLB INTERAGENCY RESEARCH PROJECT

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SUMMARY

In early 2001, privacy notices from financial institutions first began appearing in consumers' mailboxes. Congress had passed a law requiring financial institutions to provide a privacy notice to all their customers describing how they used and disclosed the personal information of their customers and what, if any, rights consumers had to "opt out" or to limit certain types of information sharing. When the privacy notices arrived, the notices were lengthy and generally incomprehensible. The media, consumer and other advocacy groups, individual consumers, members of Congress all joined in the complaints. The eight federal agencies¹ responsible for implementing the regulations for privacy notices decided to explore how to make the notices more understandable and usable for consumers.

Thus, began a unique joint agency undertaking: an inter-agency notice research project. The project would culminate eight years later in a new regulation with a standardized model privacy form based on extensive consumer research. This new model form is available to financial institutions to use at their option.

This presentation explored the process whereby the Agencies, though consensus, developed a common set of goals, worked collaboratively through the research process,

and ultimately coalesced around a model form. The presentation discussed findings from extensive qualitative research (focus groups, one-on-one depth interviews) designed to develop a model privacy notice and quantitative research (mall intercept) designed to assess the communication effectiveness of several competing notice formats. Finally, the presentation discussed some of the lessons learned and special challenges from this project for both regulatory and academic audiences:

- How do you take very complex laws and translate them into concepts that consumers can quickly and easily understand so they can make a decision based on that information?
- How do you make the notice neutral – so that it presents this complex information in a way that does not drive behavior?
- How do we shift privacy policies from a compliance model in which financial institutions write so that they comply with highly technical regulations to a consumer model in which financial institutions write to ensure understanding and use by consumers – the real intent of the law?

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LISTENING TO CONSUMERS: THE USE OF EMPIRICAL RESEARCH IN THE DEVELOPMENT OF REQUIRED CREDIT CARD DISCLOSURES

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SUMMARY

In 1968, the Truth in Lending Act (TILA) was enacted by Congress to ensure that consumers provide meaningful disclosures of credit terms so that they could make informed financial decisions. Congress assigned the Federal Reserve Board (the “Board”) the responsibility of implementing TILA, through its Regulation Z.

In 2004, the Board began a review of portions of Regulation Z related to open-end credit, most notably general-purpose credit cards.² This presentation discusses the primary goal of ensuring that credit card disclosures were easy-to-read and provided information that allowed consumers to (a) shop between offers and (b) understand the cost of the credit they were receiving.

In April 2006, the Board began a project to develop notices that would meet these criteria, using both qualitative and quantitative study designs. Results from both these qualitative and quantitative phases of consumer research formed the foundation of the Board’s revisions to Regulation Z that were published in December 2008. Although additional substantive provisions were made in the Credit Card Accountability, Responsibility and Disclosure Act (Credit CARD Act, PL 111-24), most of the disclosures developed within this project were retained.

This presentation discussed findings from extensive qualitative research (focus groups, one-on-one depth interviews). The purpose of the focus groups was to gather information about the types of information that consumers currently use for financial decision making. Early interviews focused on the effectiveness of existing credit card disclosure forms and how these forms are used by

consumers in the “real world.” For later rounds of interviews, new model disclosure forms were developed and revised on an iterative basis based on findings from each round of research.

The presentation also discussed findings from the quantitative experimental study (mall intercept methodology) that was used to validate the final design elements in the notice designs. The study used a fractional factorial design, in which forms differed on a small number of format and wording variables to determine which variables had a significant impact on consumer understanding.

The presentation addressed several questions related to the Board’s use of consumer research in its review of Regulation Z, including the following:

- How can complex information about credit card accounts be presented most effectively to a population that varies greatly in terms of general financial knowledge and experience?
- How can qualitative and quantitative methods support one another in a large-scale consumer research project?
- How can regulatory agencies work most effectively with outside consultants when designing consumer disclosures?
- What are the implications for consumer research when an agency is not requiring an overall disclosure format, but instead regulating only a set of design elements?

Special Session: Role of Qualitative and Quantitative Consumer Research in Policy Development at Federal Agencies: Two Case Studies

ENDNOTES

1 The privacy notices were required by the privacy provisions of the Gramm-Leach-Bliley Act, enacted in 1999. 15 U.S.C. 6801-6809. The eight federal agencies responsible for implementing these privacy provisions are: the Commodity Futures Trading Commission, Federal Deposit Insurance Corporation (FDIC), Federal Reserve Board (Board), the Federal

Trade Commission (FTC), National Credit Union Administration (NCUA), Office of the Comptroller of the Currency (OCC), Office of Thrift Supervision (OTS), and the Securities and Exchange Commission (SEC).

2 The Board is also currently reviewing portions of Regulation Z related to other financial products, including mortgages and home equity lines of credit.

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ROUNDTABLE SESSION

FDA AND TOBACCO CONTROL: THE ROLE OF MARKETING RESEARCH

Conrad J. Choiniere, U.S. Food and Drug Administration, Rockville

Corinne Husten, U.S. Food and Drug Administration, Rockville

Catherine Lorraine, U.S. Food and Drug Administration, Rockville

Nancy Ostrove, U.S. Food and Drug Administration, Rockville

Kathleen K. Quinn, U.S. Food and Drug Administration, Rockville

Rosemary Rosso, Federal Trade Commission, Washington, D.C.

SUMMARY

Curbing the significant adverse consequences of tobacco use is one of the most important public health goals of our time. Approximately 46 million U.S. adults smoke cigarettes in the United States, resulting in death or disability for half of all regular users. Cigarettes are responsible for more than 440,000 deaths and an estimated \$193 billion annually in medical expenditures and lost productivity from premature death each year.

The passage of the Family Smoking Prevention and Tobacco Control Act (Tobacco Control Act) in June 2009 granted authority to the U.S. Food and Drug Administration (FDA) to create the Center for Tobacco Products (CTP) to regulate tobacco products. CTP's responsibilities under the law include the determination of manufacturing and product standards, the review of premarket applications for new tobacco products, and the establishment and enforcement of advertising, promotion, and labeling restrictions. The Tobacco Control Act also mandates that FDA consider the population as a whole when setting policies and taking actions in support of the statute. These considerations include the impact FDA actions will have on the risks from tobacco to users and non-users; on the likelihood that current users will cease to use tobacco products; and on the likelihood that non-users, particularly youth, will initiate use of tobacco products.

In this roundtable session, representatives from FDA will discuss the marketing research needed to make science-based decisions to implement the law while achieving an improvement in the public health. Research topics will be discussed in the context of three broad categories: communications between manufacturers and the public about their specific products; communications between FDA and the public related to product specific information; and

communications between FDA and the public about the risks of tobacco products.

The statute gives CTP substantial oversight of the communications in the first category, which includes product labels, advertisements, promotions, and claims. In particular, the law directs CTP to promulgate regulations for the use of graphic warning images on cigarettes labels and advertising and warning statements on smokeless tobacco products on labels and advertisements; grants CTP the authority to restrict advertising and other promotions when appropriate for the protection of public health; and authorizes CTP to review and assess the use of claims on tobacco product packages and advertisements prior to the marketing of tobacco products. The challenge for CTP will be to design regulations appropriately tailored to restrict those advertising and promotional practices which are most likely to be seen or heard by youth and to affect their initiation or use of such products. Similarly, the presence of label claims and descriptors on packages and in advertising may affect how current or former smokers and non-smokers perceive the risks of tobacco use or how they use those products.

In the second category, the statute requires that CTP publish lists of the ingredients of individual tobacco products and harmful constituents of those products. In many cases, consumers benefit from the provision of complete information about the products they use and consume. However, in the case of tobacco products, the information could consist of lists of hundreds of tobacco products, each containing potentially thousands of harmful ingredients and constituents. CTP must carefully consider the manner and format for publishing and publicizing these lists and the impacts they will have on consumer perceptions and decisions regarding tobacco use.

Roundtable Session: FDA and Tobacco Control: The Role of Marketing Research

Although the statute makes no express requirements with respect to the third category, implementation of the law in a manner consistent with the achievement of public health goals will likely necessitate that FDA engage in ongoing communications with the public about the risks of tobacco use. This communication may cover a wide range of activities, such as providing information about adverse events with tobacco products, providing context for the actions that FDA takes, educating youth and adults about the health effects of tobacco, and counter marketing to moderate the impacts of tobacco advertising. In addition, FDA may need to consider the role of communications for mitigating the potential impact that regulation of tobacco

products may have on consumer perceptions about the absolute and relative safety of tobacco products.

These topics will be covered in detail during the roundtable session. A panel of FDA representatives will make brief presentations about the Tobacco Control Act, the recent history of tobacco control, and the roles of social science, marketing and communication research at CTP. The session will conclude with an open discussion between FDA representatives and audience members of the research community involved in tobacco control, marketing, communications and public health policy.

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AN EXPLORATORY INVESTIGATION OF ENVIRONMENTAL MESSAGE EFFECTS: THE WATER CRISIS IN AUSTRALIA'S MURRAY-DARLING BASIN

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Samantha Yates, The University of Sydney, Australia

SUMMARY

Water resource management is a critical aspect of the global environment debate (Kaiser, Woelfing, and Fuhrer 1999). Australia, the world's driest continent, has been in drought for seven years and is 44 percent drought declared (Alexander 2009). The most important environmental water systems in Australia are the Murray and Darling Rivers as they support 40 percent of Australia's total agricultural income (MDB Commission 2008) and 70 percent of Australia's total water usage occurs within the Murray Darling Basin (MDB) (Hunt 2006).

Since the concept of environmental sustainability was developed in the 1970s, there have been hundreds of studies from various academic disciplines and water authorities about the (mis)management of the MDB (cf., Hanson-Young 2008; Pigram 2006, pp. 8–9). However it is now clear that drastic action needs to be taken in order to restore the MDB's health (Senate Inquiry 2008) to counter widespread environmental degradation that includes land and water salinity, algal blooms, wetland destruction, turbidity and loss of biodiversity (CSIRO 2008; MDB Authority 2009). The MDB's dire situation suggests the findings from the scientific literature have been disregarded and/or the scientific literature has been unsuccessful in communicating the need for policy change.

Stake and Public Communications Analyses

This research adapts Fassin's (2008) Stake Model to model the reality of the MDB's intra-stake tensions and the positions of the various stake-holders and stake-keepers. Study One, a conventional content analysis into the nature of communications in the public domain about the MDB, gains insight from a judgment sample of 50 newspaper articles from one month during 2009 that provided 69 useable messages. It reveals the message sources are identifiable in most messages (88%), however less than half had identifiable target audiences or stakes (42%). Those messages that were targeted were often directed toward governmental stakeholders. This is understandable as these stakeholders are expected to have

real power and the ability to make change. The large but dormant stakeholder groups of MDB Public and City Public had the lowest involvement in the debate (representing 4.39% of message sources), farmer stakeholders were more active in the debate (representing 17.49% of message sources) and the stakeholders (government and scientists) were highly active in the debate (representing 66.58% of message sources). (11.6% were unidentifiable message sources.)

Seventy-three percent of the messages used specific appeals to communicate a message, of which most were Scientific (51%) or Emotional (29%), or a combination of both Emotional and Scientific of both these appeals (25%). Although identified as a category in the coding process the only occurrence of Rational Appeals was as hybrid with a Scientific Appeal (3%). This supported the previously untested three message appeal categorisations identified by Karna, Juslin, Ahonen, and Hansen's (2001).

However, it remained unknown which message appeal would be most effective in changing attitudes in the largest and therefore potentially the most politically important stake group, the urban public stakeholders. Study Two was developed to experimentally test the effectiveness of the three types of message appeals to change urban public stakeholder attitudes.

MDB Message Appeals: Method and Results

After pre-testing measures and message themes (through storyboards), three randomly allocated treatment video-clip messages were created: Scientific Appeal versus Emotional Appeal versus Rational Appeal. The experiment was pre-tested ($n = 68$). The final research sample size was $n = 384$ drawn from a demographically representative sample of the Australian urban population obtained from a commercially available panel.

The results of the between groups analyses shows statistically significant differences between the message appeals on the combined dependent variables for message relevance ($F(4, 760) = 4.69, p = 0.00$). Perceived rele-

vance was significantly higher for the alternative appeals (Rational and Emotional) compared to the Scientific Appeal. This provides support for the argument that Scientific Appeals (that currently dominate the MDB debate) are not perceived to be as relevant by urban stakeholders as the alternative appeals and that the Rational and Emotional message appeals are currently underutilized. More prominent use of these alternative message appeals potentially provides a way in which scientific information can be communicated to urban populations in a more meaningful and relevant way.

There was a statistically significant difference between the message appeals on the combined dependent variables for MDB salience: $F(4, 760) = 5.22, p = 0.00$. It is suggested that MDB salience was low for this stake group because of large geographical distance of urban areas from the MDB and absence of a domestic water connection to the MDB's hydro-resources.

A MANOVA was used to test for statistically significant differences between the message appeals on the combined dependent variables: $F(4, 760) = 3.56, p = 0.01$. Overall,

responses to the alternative message appeals (Rational and Emotional) were stronger than the Scientific Appeal responses regarding all research questions. These responses provide evidence that the alternative message appeals (1) had more impact on perceived message relevance, (2) had more impact on perceived MDB salience and (3) had more impact on intended activism in the MDB debate.

Conclusions

The scientific messages so far communicated in the mass media have not been relevant or understood by the strategically important urban public. The resulting effect is that the environmental crisis affecting the MDB is largely irrelevant to most voters. This has made it very easy for policy makers to ignore the issue and to placate smaller and more vocal groups of stakeholders. A formal challenge is issued for environmental scientists to express their findings in terms that make the environmental debate more relevant and easier to understand. References are available upon request.

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ETHICAL CONSUMPTION: AN ANALYSIS OF CONSUMERS' BELIEFS AND CHOICE BEHAVIORS

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SUMMARY

Consumers' growing concern over ecological and societal problems has paralleled marketers' increasing interest in demonstrating their corporate social responsibility. However, despite consumers' expressed support for ethical consumption, their purchase behavior has not always reflected their opinions (Carrigan and Attalla 2001). These discrepancies may occur when consumers trade-off competing attributes, such as environmental benefits and price (Gallastegui 2002). However, they may also result from confusion over terms such as "environmentally friendly" and difficulty in validating these, particularly when consumers need to interpret and respond rapidly to these claims, and must do so in distracting contexts.

Past research highlights a wide variety in ethical consumption claims, which range from those approved by independent assessment agencies to vague statements that lack external corroboration. Furthermore, even claims that appear to have been conferred by an external authority may have undergone differing levels of scrutiny and analysis, information that consumers cannot normally access or assess.

Consumers' difficulty in obtaining validated information to assess marketing claims is complicated by the fact that few engage in deliberative decision-making when purchasing fast-moving consumer goods. However, many researchers appear to assume that consumers engage in detailed central processing where they reflect on product attributes, evaluate these, consider trade-offs and arrive at reasoned decisions (see Schlegelmilch et al. 1996). In contrast, others have argued that consumers are "cognitive misers" (Fiske and Taylor 1984) and use truncated pathways to reduce the cognitive demands of decision-making (Nord and Peter 1980; Gleitman et al. 2007).

If consumers are faced with information they cannot assess and that requires them to engage in processing they do not normally undertake, claims promoting ethical attributes may have one of two very different effects. First, skeptical consumers may reject the claims, on the

grounds they lack supporting evidence; however, others may treat the claims as heuristics, and respond to them without evaluating them. In the former case, the claims would have no effect while in the latter they could sway consumers' decision making. Because few studies have examined which of these alternatives best describes consumers' behavior, we undertook in-depth interviews to explore how consumers responded to ethical claims and labels, and their trust in these.

A flexible interview protocol guided the discussion, which began with participants describing a typical shopping expedition and factors they considered important when making purchases. This led into a broader discussion of ethical consumption claims and participants' responses to these. Interview transcripts were coded using Braun and Clarke's six phases of thematic analysis; key themes were identified inductively and the thematic analysis was data-driven. Participants commented on seven claims: "eco-friendly"; "Made in New Zealand"; "GM free"; "fair trade"; "no animal testing"; "natural ingredients," and "recycle." Participants were generally skeptical about the claims' authenticity, particularly partial claims such as "GM Free," which they felt were ambiguous and difficult to test. Because they found unattributed statements difficult to assess, participants supported labeling that would help them validate claims. These findings suggest consumers' responses to ethical consumption labels are discerning and thoughtful, and imply they test and evaluate product claims. To explore this finding further, we undertook a choice modeling experiment that estimated the influence ethical claims exert on consumers' choice behavior relative to other product attributes. This study used an online sample and comprised 401 respondents who completed a survey on laundry soap powder. Each respondent saw ten choice sets containing three images of fictional laundry soap powder brands that were paired with one of four different claims ("eco-friendly," "natural ingredients," "no animal testing," and a control no-claim condition), chosen to reflect the qualitative findings, and two price levels. We hypothesized that, in conditions less conducive to central processing, the claims would function as heuristics and influence consumers' choices. While

we did not expect the claims to outweigh the influence of price, evidence documenting ethical consumer segments, led us to hypothesize that the sample would contain a group that was more responsive to claim than price.

As expected, each claim had a significant effect on respondents' choice patterns; "eco-friendly" was more attractive than either "natural ingredients" or "no animal testing," and all were more attractive than the no claim (control) condition. This contrasts with the depth interview findings, but may reflect the more evaluative and critical process the qualitative participants engaged in and the rapid decision-making that characterized the choice study. While the Green Tick logo had a positive co-efficient, this was not significant. As hypothesized, price had a dominant influence on choice behavior and none of the three claims was sufficiently attractive to compensate for the higher price. To test whether a segment sensitive to ethical consumption claims existed, three statements about use of environmental information were employed as classifying

variables in a K-Means cluster analysis. This resulted in two distinct clusters of 236 and 165 respondents; the first was highly price sensitive but the second was more responsive to some claims than to price, and suggests ethical consumption claims function as heuristics that stimulate behavior among a sizable minority.

Despite the skepticism evident in qualitative interviews, the claims tested had a significant influence on consumers' choice behaviors, and were more influential than price for a substantial segment. These findings thus suggest ethical consumption claims simplify consumers' decision-making, although this finding requires replication. They also raise questions about claim substantiation; studies examining whether ethical consumption claims go beyond puffery and mislead consumers are now urgently required. Such work will enable policy makers to promote fair and accurate competition that does not deceive consumers. References are available upon request.

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THE ROLE OF COLOR IN ENVIRONMENTAL MESSAGES: GREEN CAN BE BOTH BENEFICIAL AND DECEPTIVE

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SUMMARY

With the increasing concern over the environment, it is increasingly important for marketers to design more persuasive environmental messages. At the same time, as consumer confusion regarding environmental claims is growing, it is critical to understand how environmental claims might mislead consumers in order to develop public policies to help consumers avoid falling into the trap of greenwashing. In this paper we approach these issues by investigating the role of color in environmental messages and claims. Although color is an essential element of marketing communications, color is an under-explored aspect of marketing (Garber and Hyatt 2003). Can green enhance message persuasiveness, or does it have only aesthetic values with little impact on how consumers respond to the message? If there is an effect, how can that be explained? Answering these questions is important since green color may influence consumer interpretation in positive or negative ways. On one hand, the use of green might enhance consumer evaluations of environmentally superior products and activities. On the other hand, its use could potentially mislead consumers by enhancing their evaluations of products that are not truly eco-friendly. We address these issues by linking processing fluency theory to the color literature. Research on processing fluency suggests that consumer judgments are often influenced by the ease or difficulty with which new information can be processed (Schwarz 2004). Building on this research, we propose and demonstrate in three experiments that color that matches the content of target information makes the information easier to process conceptually, thereby increasing the appeal of the target information.

Experiment 1

Experiment 1 provides evidence that a pro-environmental message presented with green (vs. red) is evaluated more favorably. Participants read an article that encouraged using a reusable bag in shopping trips. The background color of the title of the article was either green or red. Red was chosen since green and red are often considered to be opposite colors (Fehrman and Fehrman 2004) while these two colors are similarly popular. Participants then reported

how worthwhile and important it is to use and their intentions to use a reusable bag. Using a reusable bag was considered more important and worthwhile in the green (vs. red) condition. Moreover, participants were more willing to use a reusable bag when the message was presented with green.

Experiment 2

We had two purposes in Experiment 2. The first was to show that a product with an environmental claim is considered environmentally superior when its package is in green rather than red. The second was to rule out explanations of this effect based on the influence of color on perceptual fluency (i.e., ease of reading) or mood. Participants were shown either a green or red product package which included a short product description and environmental claim. They then rated the product in terms of its environmental impact. They also reported how easy or difficult it was to read the package and their current mood. Participants' perceptions of environmental impact of the product were more positive in the green (vs. red) package condition. There were no significant differences in ease of reading or mood, ruling out these variables as alternate explanations of the effect.

Experiment 3

In experiment 3 we examined whether consumers' environmental consciousness moderates the influence of package color on perceptions of the product's environmental impact. A 2 (green vs. red product package) X 2 (high vs. low environmental consciousness) between-subjects design was used. As in Experiment 2, participants saw a product package that included an environmental claim. The package was accented with either green or red. Then, they rated the product in terms of its environmental impact. Finally, they indicated their interest and involvement in environmental protection. We categorized participants into low or high environmental conscious groups via a median split. We then conducted simple ANOVAs on each level of environmental consciousness. Among the participants highly conscious about the environment, perceptions of the environmental impact of the product were more positive in the green package condition. Participants

who were less conscious about the environment were not influenced by the package color when judging the environmental impact of the product.

Discussion

The finding that color plays a significant role in consumer responses to environmental messages and claims has important implications for marketing and public policy. Our research has clear implications for campaigns in the area of environmental protection and of products with positive environmental attributes by providing empirical evidence that the color green can add to the persuasiveness of environmental messages and claims. Our findings also have important implications for the regulation of environmental claims. The use of the color green on

product packages can enhance consumer perceptions of the environmental impacts of the product. Thus consumers can be misled if green is used in combination with products that are not truly environmentally superior. The current FTC Green Guides do not comment on package color of consumer products. In the absence of such guidance we suggest that governmental or public policy action in the form of marketer and consumer education is required. Our findings also suggest that it is important for consumers to understand that the color of a product package does not provide any factual information about the environmental impact of the product. This is particularly important for consumers who are highly concerned about environment protection, because they are more likely to be biased by package color. References are available upon request.

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IMPACT OF PRODUCT ATTRIBUTE WORDING ON CONSUMER ACCEPTANCE OF BIOTECHNOLOGY APPLICATIONS IN PRODUCE

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SUMMARY

A better understanding of consumer preferences and behavior toward genetically modified (GM) foods is essential for designing new market strategies and information policies for GM products. While the interest in local food is popularized, the availability of certain foods to be grown locally may depend upon either chemical sprays or laboratory techniques. Such is the case with apples grown in the Midwestern U.S. This research addresses the trade offs made by consumers, as measured via conjoint analysis, between locally grown produce, genetically modified produce (through gene cloning), and retail price of produce and how these trade offs are affected by wording of the product attribute.

A split sample of 400 Midwestern U.S. adult consumers was administered one of two nearly identical conjoint questionnaires. Each questionnaire had the same demographic questions and the same three-paragraph description of Midwest apple production. Apple production was described as being susceptible to various diseases, necessitating up to 20 chemical sprays per year on conventionally produced apples. However, a naturally occurring gene for resistance to the apple scab disease has been found in uncommon varieties and through laboratory techniques could be inserted into apple varieties that people normally buy. Thus, spraying could be significantly reduced for locally grown apples.

Using standard conjoint techniques, the respondents were asked to rate (on a scale of 1 to 10) twelve different combinations of three apple attributes: three price levels, local vs. not local, and conventional (with chemical applications as necessary) vs. genetically modified (disease resistant). However, for half the sample (200) the genetically modified apples were referred to as “reduced environmental impact (REI),” referring to the reduction in chemical applications, while the same apples were referred to as “genetically modified (GM)” for the other half of the sample, referring to the cloning procedure *hypothetically* used to accelerate incorporation of the apple gene into other varieties of apples. Local was

described as being grown within 150 miles of where the apples were purchased. Non-local was described as being grown in commercial apple growing regions such as Washington, Michigan, or New York. There were no differences in the demographic characteristics of the two samples (age, gender, marital status, income distribution, education level, and household members).

The preference function of *i*-th individual can be described as the following:

(1)

$$P_i = a_{i1} + a_{i2}PLACE + a_{i3}METHOD + a_{i4}PRICE + e_i$$

where $i = 1, 2, \dots, I$,

P_i = the preference rating for the *i*-th individual (scale 1 to 10),

PLACE = a binary variable representing the place of apple production, 0 if non-locally grown; 1 if locally-grown,

METHOD = a binary variable representing the method of apple production: 0 if conventionally produced; 1 if genetically modified, and

PRICE = a continuous variable represented by the following levels: Low – \$1.39; Medium – \$1.59; High – \$1.79.

Fundamentally, respondents value “GM” negatively, while referring to the same attribute as “reduced environmental impact” (REI) results in a positive valuation. The part-worth score of the METHOD attribute has a negative sign for the GM apples and positive sign for the REI apples (-0.296 and 0.354 for GM and REI groups, respectively; Table 1). Furthermore, the relative importance of METHOD compared to the other attributes (PRICE and PLACE), diminishes significantly for the REI group, indicating less concern over method when referring to it as “reduced environmental impact” (Table 2).

TABLE 1
Aggregate Preference Functions by Group and Their Comparisons

	GM Group		REI Group		<i>t</i> -test	<i>p</i> -value
	Mean	St. Dev.	Mean	St. Dev.		
<i>Constant</i>	12.050	0.305	12.372	0.351	0.373	0.709
<i>Place</i>						
Part-Worth: Local	0.466	0.032	0.484	0.036	0.246	0.806
Part-Worth: Non-local	-0.466	0.032	-0.484	0.036	0.246	0.806
<i>Method</i>						
Part-Worth: Conventional	0.296	0.032	-0.354	0.036	5.122	0.000
Part-Worth: GM/REI*	-0.296	0.032	0.354	0.036	5.122	0.000
<i>Price</i>						
Coefficient	-3.773	0.191	-3.799	0.219	0.049	0.961

*Note: GM/REI means that apples were referred to as “GM” for GM group and as “REI” for REI group

TABLE 2
Averaged Relative Factor Importance Scores and Their Comparisons by Group

Attribute/Measure	GM Group	REI Group	<i>t</i> -test	<i>p</i> -value
Place	23.66	25.61	0.816	0.415
Method	39.17	33.76	2.073	0.039
Price	37.17	40.63	1.261	0.208

The study results suggest that consumer preferences for apples are influenced by place and method of production. Although price is still one of the dominant attributes, it may play a different role for consumers who are willing to

pay a premium for locally grown apples in conjunction with environmental benefits provided by the method of genetic modification.

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SPECIAL SESSION

HELPING CONSUMERS AVOID POOR FINANCIAL DECISIONS

Session Chair:

Paul N. Bloom, Duke University, Durham

Participants:

Keith Wilcox, Babson College, Babson Park

Lauren G Block, Baruch College, New York

Lisa E. Bolton, Pennsylvania State University, University Park

Joel B. Cohen, University of Florida, Gainesville

Punam Anand Keller, Dartmouth College, Hanover

Annamaria Lusardi, Dartmouth College, Hanover

SUMMARY

The ability of consumers to avoid making poor decisions about credit, savings, investments, insurance, retirement plans, and other financial products has increasingly become the focus of attention among public policy makers, consumer advocates, and academic researchers. The tendency for many consumers to get in over their heads with credit cards and mortgages, and for others to procrastinate about important decisions like where and how to save for retirement, has led to serious consideration in the U.S. Congress about the need for new laws, regulations, and enforcement approaches to protect consumers in the financial marketplace. At the same time, academic researchers in the field of marketing are providing empirical evidence and proposed interventions that could provide guidance on how to limit the harm that comes to consumers from making poor financial decisions. This session will showcase three research programs involving marketing academics that are focused on consumer financial decision-making.

Three papers will be presented during the session, followed by a discussant who will focus on identifying potential research avenues that would build on the work in the three papers. The first paper will be by Keith Wilcox (Babson College) and Lauren Block (Baruch College), who have done work on the potentially harmful choices that consumers make when facing growing credit card balances. Understanding the thought processes of consumers in these situations will help in designing ways to guide consumers to better choices.

The second paper will be by Lisa Bolton (Penn State), Paul Bloom (Duke), and Joel Cohen (Florida), who have investigated a similar phenomenon as Wilcox and Block, which they have labeled the “get out of jail free card effect.” They have completed several studies that document that when exposed to promotional materials for debt consolidation loans, some consumers (i.e., those with a problem with credit) will continue to borrow beyond their means, thinking that they could apply for a debt consolidation loan later to bail them out. Bolton, Bloom, and Cohen will also discuss findings they have obtained about potential ways of preventing consumers from adopting a get out of jail free card mindset.

Lastly, Punam Anand Keller (Dartmouth) and Annamaria Lusardi (Dartmouth) will present a paper on the work they have done to test strategies to encourage people to save for retirement. The interventions they have tested in a field setting have obtained promising results.

The Discussant for the session has yet to be recruited. We are likely to seek someone from the National Endowment for Financial Education, which is providing financial report to the research programs covered in the second and third papers. This foundation is headquartered in Denver, the site of the conference.

The session should draw well, both because there is much current interest in financial decision-making and because the research being reported is at an advanced stage and can provide many stimulating insights. Abstracts of the three papers follow.

THE IRONIC EFFECT OF CREDIT CARD BALANCES ON CONSUMERS' SPENDING CONTROL

Keith Wilcox, Babson College, Babson Park
Lauren Block, Baruch College, New York

SUMMARY

This research examines how credit card balances affect consumer choice. We propose that a balance on a credit card signals a violation of a behavioral goal, which leads consumers to disengage from their savings goals. Thus, we show that carrying a credit card balance, rather than

reducing unnecessary or indulgent purchases, actually increases the likelihood of making such purchases. This effect is strongest, ironically, for those who are typically most concerned about avoiding debt. Interestingly, increasing the credit limit attenuates this effect because it acts as an external reminder of potential debt problems.

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HELPING CONSUMERS RESPOND TO THE ADVERTISING AND AVAILABILITY OF DEBT CONSOLIDATION

Lisa E. Bolton, Penn State University, University Park

Paul N. Bloom, Duke University, Durham

Joel B. Cohen, University of Florida, Gainesville

SUMMARY

Our experimental and survey research suggests that the promotion and availability of debt consolidation loans can produce potentially harmful thinking and behaviors among those consumers who find it difficult to manage credit wisely. These credit-challenged consumers are more likely to treat debt consolidation as a “get out of jail free card” that would allow them to continue their heavy borrowing, since they view debt consolidation as a future “easier” way out of their credit dilemma and/or as a way to further increase their borrowing. It appears that this mentality

seems more likely to develop with younger, less educated, less credit savvy females who have used debt consolidation in the past. They are more likely to form positive beliefs about the offering. And those with positive beliefs are more likely to intend to use debt consolidation, but more so if they have lower FICO scores. In turn, those with more positive intentions to use debt consolidation are more likely to expect to go deeper in debt, but more so if they have lower FICO scores. Ongoing research is exploring message themes and message-delivery mechanisms that would be effective at mitigating the get out of jail free card mindset.

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EMPLOYEE RETIREMENT SAVINGS: WHAT WE KNOW AND WHAT WE ARE DISCOVERING FOR HELPING PEOPLE TO PREPARE FOR LIFE AFTER WORK

Punam Anand Keller, Dartmouth College, Hanover
Annamaria Lusardi, Dartmouth College, Hanover

SUMMARY

We use consumer research to develop aids to enhance motivation and ability to save for retirement. We rely on the choice, inter-temporal discounting, planning, and self-control literatures to identify methods to encourage saving for the future. A series of field studies were conducted to assess the relative effectiveness of overturning lay

theories, acknowledging and overcoming barriers to saving, and providing a plan with concrete steps to aid decision-making. The combination of videos, flyers, and brochures resulted in increasing voluntary saving accounts four-fold among new hires at Dartmouth College. While this program was implemented at a single institution, it is suitable to be applied to a variety of employers and employee groups.

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ROUNDTABLE SESSION

HOME FINANCE WE CAN LIVE WITH: INFORMATION POLICIES AND PRACTICES TO PROMOTE SUSTAINABLE HOMEOWNERSHIP

Ellen A. Merry, Federal Reserve Board, Washington, D.C.¹

Michael C. Long, ICF Macro, Calverton

J. Michael Collins, University of Wisconsin, Madison

Michael S. Staten, University of Arizona, Tucson

SUMMARY

The recent and ongoing housing crisis in the U.S. has turned a spotlight on lending products and practices that in hindsight promoted home buying but did not facilitate long-term homeownership. Many buyers were drawn into purchasing a home or refinancing to cash out equity by loans that were initially affordable and by rapidly rising house prices that made housing seem like a sure-fire investment. Unfortunately, many borrowers did not understand the complex and risky features that led to the lower initial payments and were not prepared when their payments rose. Both borrowers whose loans had risky features and many with loans that might be considered relatively “safe” have struggled in the face of falling house prices, tighter credit standards, and personal financial hardship.

This session will explore what we know – and what we need to know – about the role of information in mortgage decisions. Panelists will highlight findings and issues from their research in areas including financial education, disclosure, and counseling. Session attendees will be invited to respond with questions and ideas to inform future research and with strategies policymakers should consider in mandating disclosure and providing educational information to consumers. The discussion may touch on related policy questions, such as the role of substantive regulation in light of the limitations of disclosure.

The session will begin with brief presentations by the roundtable panelists to provide a foundation for discussion among the panelists and session attendees.

Ellen A. Merry is a Senior Economist at the Federal Reserve Board in the Consumer Education and Research Section of the Division of Consumer and

Community Affairs. Her responsibilities include research and education initiatives related to consumer financial behavior. Most recently, her work has been focused on the Board’s review and revision of Truth in Lending Act mortgage disclosures. She will chair the session and outline key issues and objectives for the roundtable discussion.

The overview of information policies will begin with disclosure. While disclosure has both merits and limitations as a policy tool, laws requiring that certain information be provided to consumers imply that disclosure is a “given” in the realm of financial products.

Michael C. Long is a Technical Director at ICF Macro who specializes in research in consumer financial literacy. Some of his most recent work has focused on consumer’s understanding of the working of bank accounts, credit cards, mortgages, bank privacy practices, and business opportunities. Currently he is directing several projects ICF Macro is conducting for the Federal Reserve Board, including work to redesign mortgage disclosures that are required under the Truth in Lending Act.

Disclosure is a necessary policy tool, legally and practically. However, disclosure may not be sufficient for ensuring consumers make well-informed financial decisions. The last two panelists will look at what research in areas such as financial education and counseling shows about the potential for improving consumer financial decisions through other means of information provision.

J. “Michael” Collins studies consumer decision-making in the financial marketplace, including the role of public policy in influencing credit, savings and investment choices. He is an assistant professor at the University of Wisconsin and faculty director of the Center for Financial Security. Currently he is

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researching consumer responses to foreclosure, and is a PI for the Social Security Administration Financial Literacy Research Consortium.

Michael E. Staten holds the Take Charge America Endowed Chair in the Norton School of Family and Consumer Sciences at the University of Arizona. He is also director of the Take Charge America Institute for personal financial education and research. His personal research agenda includes projects that examine the causes and consequences of personal bankruptcy and mortgage foreclosures; the rehabilitative effects of credit counseling on long-term borrower behavior; the accuracy of credit reporting; the

impact of financial education mandates and programs on financial behavior of young consumers; and the pros and cons of improved loan disclosures and regulatory limits on loan products in helping consumers to make good credit choices.

After the introductory presentations, session attendees will be invited to respond with ideas and questions in an extended time of discussion. Topics for discussion include areas for future research to inform policy development and assess the impact of information “treatments” and lessons learned from successes and failures in other product markets that can inform information provision for financial products and services.

ENDNOTE

- 1 The analysis and conclusions set forth in this presentation represent the work of the author and do not indicate concurrence of the Federal Reserve Board, the Federal Reserve Banks, or their staff. Mention or

display of a trademark, proprietary product, or firm in the presentation by the author does not constitute an endorsement or criticism by the Federal Reserve System and does not imply approval to the exclusion of other suitable products or firms.

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SPECIAL SESSION

PERSPECTIVES FROM PUBLIC HEALTH ADVOCATES AND MARKETING ACADEMICS ON POLICY IMPLICATIONS OF FOOD MARKETING TO CHILDREN: CLASHING OR COLLABORATIVE VIEWS?

Jerome D. Williams, University of Texas at Austin

SUMMARY

Obesity is a serious threat to our nation's health, economy, and even security. Some experts estimate that the current generation of children may have shorter lifespans than their parents. The public health community understands that food and beverage marketing influences people's diets, and, in particular, influences children's food preferences. Among other childhood obesity prevention strategies, public health advocates and policymakers are exploring the various legal and policy mechanisms that could be used to limit junk food marketing to children. Such mechanisms exist at the local, state, and federal levels of government. Furthermore, some advocates have worked with the food industry to craft self-regulatory guidelines that limit marketing targeted at children under the age of 12.¹

This session will bring together public health and marketing experts to discuss public health's perspective on food marketing and the various legal and policy mechanisms available for limiting junk food marketing to children. The public health experts on the panel have worked with communities and states across the country on tobacco control and obesity prevention policy and are knowledgeable about the strengths and limitations of using the law to address marketing. The marketing experts contribute a

thorough understanding of the marketing literature, especially as it pertains to targeted marketing to minorities and advertising ethics. The objective of the session is to bridge the gap between the public health and marketing communities. It will generate discussion of the roles of government regulation versus voluntary regulation of marketing in protecting children's health. And finally, the session aims to lay the foundation for non-traditional partnerships between marketing researchers and the public health community.

The intended audience for this session is marketing researchers, industry representatives, and government officials. During the session, the panelists will give 20-minute presentations on each of the three topics identified above about his/her area of expertise. The audience will then have 30 minutes to react to the and engage with the panelists.

ENDNOTE

- 1 Council of Better Business Bureaus. *Fact Sheet on CFBAI and CARU*, 2008. Available: [<http://www.bbb.org/us/storage/16/documents/Fact%20Sheet%20on%20CFBAI%20and%20CARU%20Dec%202008.pdf>].

HAVE IT THE HEALTHY WAY RIGHT AWAY? PUBLIC HEALTH PERSPECTIVES ON FOOD MARKETING

Christine R. Fry, Public Health Law & Policy, Oakland

SUMMARY

The childhood obesity epidemic is a public health issue of unparalleled dimensions. Nearly one-fifth of children ages 12–19 are obese, putting them at risk for a host of serious illnesses.² The epidemic is the product of energy imbalance; in other words, children are eating more calories than they are expending through physical activity. Many in public health use an ecological model to describe this problem.³ At the most basic level, health is determined by individual choices. However, people do not make choices in a vacuum. These choices are influenced by what is available and promoted in the environment.

The ecological model suggests that an environmental change strategy will be most effective in preventing childhood obesity and improving health. This strategy requires public health advocates and policymakers to think broadly about the environmental factors that influence people's choices. For example, people cannot eat more fresh fruits and vegetables and other healthy foods if they do not have access to those foods in their neighborhoods. People cannot reduce junk food and fast food consumption if those are the only food options surrounding them. And people cannot be physically active in their daily lives if their communities do not have safe sidewalks, bike lanes, and parks.

A major focus of the childhood obesity prevention movement is to implement policies at the local, state, and federal levels that create environments supportive of healthy choices. Public health advocates recognize that the environment in which people make food and activity choices is more than just their physical surroundings (e.g., streets, parks, restaurants, stores). Marketing is another obvious and influential aspect of the environment, present in nearly any place that people are.

Public health advocates are particularly concerned with the health effects of food marketing to children. In its 2006 report on this topic, an Institute of Medicine expert study committee conducted a systematic review of peer-reviewed literature and other sources to understand the impact of food marketing on children. The committee concluded that “television advertising influences children to prefer and request high-calorie and low-nutrient foods and beverages.” This conclusion focused on television advertising because that is where most of the research has been done. Very little is known about the impact of other forms of marketing, such as digital marketing, on children.⁴

This presentation will set the context for the next two presentations. The speaker will describe food marketing through the lens of the public health ecological model. She will also identify the various possible public health strategies to reduce obesity rates and explain why policy change is a critical strategy.

ENDNOTES

2 Centers for Disease Control and Prevention. *NHANES Surveys (1976-1980 and 2003-2006)*, 2009. Available: [<http://www.cdc.gov/obesity/childhood/prevalence.html>].

3 Institute of Medicine. *Preventing Childhood Obesity: Health in the Balance*. Washington, D.C.: National Academies Press, 2005. pp. 83–85.

4 Institute of Medicine. *Food Marketing to Children and Youth*. Washington, D.C.: National Academies Press, 2006. pp. 6–9.

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THE LEGAL AND POLICY LANDSCAPE FOR LIMITING JUNK FOOD MARKETING TO CHILDREN: A PUBLIC HEALTH PERSPECTIVE

Samantha Graff, Public Health Law & Policy, Oakland

SUMMARY

Public health advocates and policymakers have options to limit junk food marketing to children at the federal, state, and local levels. At all three levels, marketing could be limited through statute, regulation, or litigation.

The authority to regulate food marketing falls to three agencies: the Federal Trade Commission (FTC), the Federal Communications Commission (FCC), and the Food and Drug Administration (FDA). These agencies' regulatory actions are defined and bounded by federal law, including the First Amendment, the Federal Trade Commission Act, the Children's Television Act, the Children's Online Privacy Protection Act, and the Nutrition Labeling and Education Act.

Although federal policy change would likely have the broadest impact on marketing to children in this country, options for change also exist at the state and local levels. Due to the First Amendment and preemption (discussed above), states and localities have limited power to regulate marketing to children through legislative and administrative processes. Despite these limitations, states and localities do still have some creative policy options to deal with junk food marketing to children. These options include bringing consumer protection lawsuits at the state and even potentially the local level, restricting advertising on government-owned property like bus shelters, and regulating some marketing tactics that fall within the government's police power.

State and local officials have much more authority to regulate junk food marketing to children in schools than in other venues. The First Amendment gives a public school district considerable leeway to curb advertising to its students but cautions against two types of policies: those forbidding advertisements for food products that are allowed to be sold on campus; and those prohibiting students from wearing, carrying, or discussing materials promoting junk food. School officials can regulate sales from and branding on vending machines, can restrict marketing of foods prohibited on the school campus, and/or can restrict marketing of all foods on the school campus.

This presentation will first provide a map of the federal legal landscape that affects food marketing to children since federal law affects state and local powers to regulate. The speaker will discuss the current interpretation of the First Amendment as it pertains to restricting commercial speech, the rulemaking authority of the FTC and FCC over marketing to children, and current federal laws that address children's experiences on the Internet. She will then discuss current policy options for regulating marketing to children, including active proposals before Congress. She will define the authority state and local officials have to regulate junk food marketing to children and identify creative options for state and local policy. Finally, the speaker will provide recent examples of successful and unsuccessful attempts at regulating marketing to children and identify strategies for future success.

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RESPONSIBLE AND ETHICAL CORPORATE RESPONSE TO THE OBESITY CRISIS: AN ACADEMIC MARKETING PERSPECTIVE

Minette E. Drumwright, University of Texas at Austin
Jerome D. Williams, University of Texas at Austin

SUMMARY

The food and beverage industry in the U.S. has viewed children as attractive market segments, often targeting them with intense and specialized food marketing and advertising efforts from an early age. In fact, one recent academic marketing study concluded that marketers should be targeting children before they even turn five years old, in order to build lifetime brand recognition (Harris 2009).

Public health advocates take a dim view of such aggressive marketing and advertising efforts. Therefore, the perspectives of public health advocates and commercial marketers on marketing to children typically have been at odds with one another. Academic marketers also often find themselves caught up in this fray, as there are varying perspectives within the academic marketing community that align themselves on both ends of the spectrum. At times, this has resulted in a tension between public health advocates and the marketing academy.

The presenters will argue that many academic marketers and public health advocates often are in greater tacit agreement than one would expect, given the characterization of their perspectives, with the publicized differences being more artificial than real. The presenters will suggest that there are opportunities to find common ground in addressing issues and solutions for food and beverage marketing to children.

Both the public health community and marketing academics recognize the extensiveness of the problem. For example, from the marketing academic literature side, Moore and Rideout (2007) conducted a systematic content analysis of food marketers' Web sites that either target children directly or contain content of interest to them, identifying 11 online marketing practices of public policy relevance. From the public health side, Story and French (2004) published a comprehensive review describing what constitutes advertising and marketing to children in schools, including television advertising, in-school marketing, product placements, kids clubs, the Internet, toys

and products with brand logos, and youth-targeted promotions, such as cross-selling and tie-ins.

In this age of digital marketing, the food industry is spending millions of dollars to reach children, often without the knowledge of parents, with much of this effort falling in the area that public health advocates say is "flying under the radar" (Harris, Yeo, Brouwer, and Siegel 2009). In the domain of behavioral targeting, the advertising industry has delivered a set of self-regulatory principles, urging industry efforts instead of legislation. However, from the public health advocacy side, a coalition of privacy advocates has delivered a Legislative Primer, calling for a broad set of laws (Brock 2009).

No doubt there are industry accountability issues that need to be addressed. One area where academic marketers can work with public health advocates and with the food and beverage *advertising* industry is to review codes of practice and ethical conduct to assess what these industries can do to alleviate the childhood obesity problem. Corporations wield great power in influencing the environment in which consumers make choices about food. They determine what types of products are available, and they choose the marketing strategies and messages that permeate the world in which consumers make their choices. What are the obligations of an individual company and the industry in the context of the current obesity crisis? What would ethical and effective self-regulatory behavior look like?

Many of these companies have committed to various pledges, e.g., PepsiCo's Smart Spot, Smart Choices Program, Healthy Weight Commitment Foundation, Alliance for a Healthier Generation's business agreements, Children's Food and Beverage Advertising Initiative (CFBAI), and corporate commitments to support WHO's global strategy on diet and physical activity (DPAS). However, despite these pledges, many public health advocates have noted that there still is tremendous room for these companies to strengthen their self-regulatory programs, especially in the area related to in-school

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marketing. According to some advocates, these pledges seem to allow more types of marketing than they limit. For example, the Institute of Medicine's comprehensive 2006 report, *Food Marketing to Children: Threat or Opportunity?* (cited above), identified several activities as food and beverage marketing practices that are out of balance with healthful diets, some of which have been disqualified by some of these pledges.

The presenters address issues of self regulation in a variety of ways. They examine conceptual and theoretical concepts related to ethics, responsibility, and justice to derive guiding principles. They analyze existing company

and industry codes and guidelines to determine how they measure up to the principles that should guide self regulation, e.g., codes of the marketing and advertising professional and academic associations including American Association of Advertising Agencies, American Advertising Federation, American Marketing Association, American Academy of Advertising, Marketing Research Association, Advertising Research Foundation, Internet and Mobile Marketing Association, etc. They also interview industry and academic leaders to solicit their observations and advice. They conclude with recommendations for best practice. References are available upon request.

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AN EXAMINATION OF THE ANTECEDENTS TO INFORMATION SENSITIVITY IN THE WAKE OF WEB 2.0

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SUMMARY

Web 2.0 is changing how consumers learn about the marketplace and the terms under which personal information is collected, shared and used. A myriad of applications allow users to create and distribute content, share preferences, online personas and participate in online communities. Companies can use this platform to gather information about individuals to tailor advertising efforts, offer customized benefits and enhance the overall consumer experience. While this platform is driven by consumer information and provides favorable rewards, there is a privacy risk in providing personal details to peers and companies. Often personal information is given up to third parties knowingly, but mostly it's obtained surreptitiously through tools like Web 2.0 applications (Milne, Rohm, and Bahl 2008; Miyazaki 2008).

Typically consumers consider personally identifiable information (PII), which can be used to identify, locate or contact an individual (FTC 2000, 2009), sensitive. Recently, the discussion pertaining to sensitive information has expanded, to include non-personally identifiable information (also referred to as anonymous information), such as religious affiliation and online behavior. It is important to note that harm is not limited to the Internet, but includes offline purchases and information collected via surveys and other forms that can be aggregated (Solove 2008; FTC 2009) and sold to third parties. Growing participation in blogs and social networks is seeing a surge in information sharing and virtual profiles; resulting in more peril from the collection, aggregation and reuse of information (FTC 2000; Solove 2008; Miyazaki 2008), ultimately calling attention to the following questions: What types of information do consumers perceive as sensitive? In which context is this information sensitive? Addressing sensitive information in the changing marketplace is an important issue for the FTC, consumers and public policy makers. In academia, especially in Marketing, the focus is still on overall privacy concerns and PII. Limited research has focused on the construct of sensitive information and even less so on anonymous information.

As such, the purpose of this paper is to address this gap in the marketing and privacy literatures. In this study, an online experiment was conducted where participants were directed to one of four context conditions and answered questions about sensitivity related to both PII and anonymous information. The antecedents to information sensitivity are information type (PII, anonymous) and viewer context (friend, trusted marketer, unknown marketer, and stranger). The privacy and extended self literatures are used to develop an understanding of information sensitivity and the self-disclosure literature is used to develop hypotheses related to information sensitivity in different contexts (viewers). Our findings indicate that while both types of information are perceived as sensitive overall, PII is more sensitive than anonymous information. Notably though, in some viewer contexts, anonymous information is perceived more sensitive than PII. Notwithstanding, the perceived sensitivity of both types of information varies by viewer context.

Up until recently PII has been the focal point; however, Web 2.0 applications and sophisticated technologies are triggering the need for more encompassing information protection (FTC 2009). The findings herein that consumers consider anonymous information as sensitive as PII directs attention to a recent FTC report wherein updating the definition of sensitive information outside the traditional scope of PII is urged (FTC 2009). Reexamining sensitive information is increasingly important because as technology continues to evolve and more transactions occur online, behavioral and other anonymous data will drive customer relationships and exchanges. One advantage is that companies can use this knowledge to better address their customer base and securely handle data, especially if using behavioral advertising tools (Miyazaki 2008).

Our research is a starting point in identifying consumer concerns that may in turn help formulate an updated definition of sensitive information. As technology evolves, policy revisions will be required so as to ensure consumer protection in the form of guidelines and laws. New technological developments that directly impact consumers

and carry the potential for harm warrant revision. Consumer advocates and policy makers could benefit by reconsidering the significance of anonymous information

and inclusion of this in the privacy principles guidelines and future legislation (FTC 2000, 2009).

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ITEM-LEVEL RFID: CONSUMER PRIVACY ISSUES AND ALTERNATIVE REMEDIES

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SUMMARY

In 2003, Walmart issued a mandate to suppliers to adopt radio frequency identification (RFID) technology. In fact, item-level RFID tags will be implemented in Sam's Clubs by October 2010. Soon, average consumers will be exposed to this potentially intrusive technology on a regular basis. This has important implications for the acceptance of RFID technologies, consumer protection, and privacy research.

RFID Technology and Privacy Issues

RFID uses radio waves in order to allow objects to be identified at an individual level (*RFID Journal* 2008). It consists of a RFID tag, which contains the product's unique identifier, a reader that is needed in order to interpret the tag, and an enterprise system to collect and hold the data (Roberts 2006). Its use is considered superior to that of bar codes since each RFID chip contains a unique identifier that allows products to be recognized at item-level instead of recognized only as a class of goods (Juban and Wyld 2004). This ability has many potential benefits for both companies and consumers. For example, RFID technology can: (1) help monitor whether items are being removed from a store without payment, (2) reduce checkout times through automated self checkout, (3) improve inventory stocking/restocking efficiencies, and (4) be used to promote certain products and stimulate up-selling at point of purchase (Jones et al. 2004). All of these benefits have the potential to change the way retailers do business, but they also have the ability to greatly affect the level of privacy consumers experience in a retail-shopping environment.

RFID privacy issues are unique. First, the technology has the capability to determine the distance of a tag from the reader location (Roberts 2006). With such technology already available, it is not difficult to imagine a situation in which retailers could determine the location of people within a business, and thus target specific advertisements to that customer based upon past purchases. In effect, a store could create a personal record of past purchases, immediate shopping patterns, and ultimately forecast long-

term behaviors. Information gathered in this manner may be considered intrusive by many consumers and the danger that such information could be sold to other retailers (in a manner similar to current database commerce) could create serious individual information vulnerabilities. Some RFID critics have suggested that allowing RFID to develop without some type of consumer protection will eliminate the possibility for consumers to voluntarily provide, or opt out of providing, this valuable information to retailers (Cobb and Macoubrie 2004; Juban and Wyld 2004).

Consumer Protection Alternatives

The degree of privacy protection available at the consumer, manufacturer/retailer, industry, state, federal, and international levels varies. First, any type of consumer self protection requires something beyond the tag that causes physical alteration or interference, or provides the consumer with further information. Some examples include destruction of the tag, use of a Faraday Cage, use of a blocker tag, labeling on the product, tag killing equipment, or use of "SMART" RFID tags. The next form of consumer protection comes in the form of industry self-regulation. Several organizations have offered guidance or suggestions as to what industry members might undertake as privacy protection standards. These include variations of the "Fair Information Practices" recommended by the U.S. Privacy Protection Commission in 1977, which comprise Notice, Choice/Consent, Access/Participation, Integrity/Security, and Enforcement/Redress. Aside from industry self-regulation, a few states have attempted to address the consumer privacy issue and bills have been introduced over the past five years in various state legislatures. However, very few of these bills have been made into state law. As with technological and self-regulatory alternatives, the approaches that states have taken have varied considerably. Currently, no national regulation regarding RFID truly exists in the United States. It is clear that because RFID technology covers many different areas that any attempt at national regulation will be very complex. Finally, other countries have addressed RFID in different ways. Canada and Japan have both offered regulations at the national level, whereas the

European Union has released a set of non-binding recommendations.

Future Consumer Protection Issues

Privacy control in the RFID industry is proving difficult. With guidelines varying within the United States and worldwide, it seems that clear technical standards have yet to be established. At present, self-regulation is the preferred option in the U.S., with the FTC recommending the industry rely on Fair Information Practices. These practices have been modified in order to better respond to the uniqueness of RFID, but likely still need to evolve due to the complexity of the technology. The lack of appropriate regulation combined with the infancy of the consumer

applications associated with RFID technology suggests consumer research may contribute to policy decision making. Some potential areas for consumer researchers to investigate include (1) establishing consistent signage to be used in stores and on items that are equipped with RFID, (2) examining how people's perceptions of privacy and personal information changes with technological advances, (3) exploring the concept of consumer choice as it relates to widespread item-level RFID tracking, and (4) creating a regulatory framework that will incorporate all levels of privacy protection and control. If these issues are addressed, policy makers will gain insight as to how to protect consumers from the potentially harmful use of this technology in the future. References are available upon request.

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PRIVACY BEHAVIOR, TRUST, AND SOCIAL CONNECTEDNESS OF FACEBOOK CONSUMERS

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SUMMARY

Social networking sites (SNS) are unique environments where consumers *connect, create, consume and control* their place in the SNS (Hoffman and Novak 2009). However, SNSs face the problem of how to offer marketers the ability to reach consumers and yet avoid taking advantage of consumers or violating their privacy rights. Previous research on privacy in general show mixed results for the relationship between age, gender and consumer privacy concerns. We report on a study designed to examine SNS users' beliefs and behaviors regarding trust and privacy with Facebook.

Four-hundred and nineteen people volunteered to fill out an online survey on social networking. Forty-two percent of respondents were undergraduate students at a large U.S. public university and the remaining respondents were not students. Our analyses are based on the 321 registered Facebook users in our sample. They answered online survey questions measuring beliefs about their

online privacy-concerns/behavior, their use of social networking sites generally, their trust in social networking sites and members, their use of Facebook more specifically, their privacy-control related behaviors on Facebook, self-construal (Singelis 1994; considered as two separate self-construal variables based on Oyserman and Lee 2008), and demographic variables.

Our results show that trust in the sites and trust regarding potential embarrassment by other social network site members was related to privacy control behaviors. Our findings also show that females are more likely to engage in Facebook privacy control behaviors than males and age may be negatively related to Facebook privacy control behavior. The older you are, the less often you control your Facebook privacy. Our measure of social connection did not significantly relate to trust of Facebook privacy control behaviors. However, Facebook usage intensity is related to trust in the site and users' monitoring and editing of Facebook privacy settings. References are available upon request.

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DO THE DIGITAL NATIVES REALLY HAVE A DIFFERENT VIEW OF ONLINE INFORMATION SHARING AND PRIVACY CONCERNS? AN EXTENDED COHORT ANALYSIS

George R. Milne, University of Massachusetts, Amherst
Jason A. Gabisch, University of Massachusetts, Amherst

SUMMARY

Research has suggested that the younger generation of internet users is less concerned about protecting their privacy online (Palfrey and Gasser 2008). However, past research has relied on cross-sectional analysis for investigating the differences between age cohorts while neglecting to account for cohort and period effects. The authors develop and test a privacy framework through the application of cohort theory that includes age, cohort, and period effects. The results differ from previous research in that age effects are not found to be a significant factor in explaining differences between the digital native (ages 10–24), pre-native (25–39) and analog cohorts (ages 40–55). Furthermore, the younger and older cohorts were not found to differ significantly in terms of privacy concern, willingness to exchange personal information, or propensity to take action in protecting their privacy. The authors find that over time as privacy concern has increased, willingness to exchange personal information has also increased for each age cohort, and this relationship is driven by changes in the online environment. The findings are consistent with literature suggesting that privacy on the internet is beginning to be perceived as transactional, a type of exchange between personal information and website content (Rust, Kannan, and Peng 2002). The authors discuss the public policy implications of an emerging transaction-based perspective of online privacy and use of a multi-method approach for comparing age groups.

Review of Cohort Analysis

Generational cohorts are people born at the same time who experienced similar defining moments while coming of age (Noble and Schewe 2003). Cohort analysis has been defined as “any study in which one or more cohorts, an aggregate of persons within a given population who experienced the same event within the same time interval, are measured on some variable at two or more points in time” (Rentz and Reynolds 1991). Cohort analysis is used to explain the impact of cohort, age, and period effects on consumers’ values, attitudes, and behaviors. Age effects refer to biological aging of individuals, while period

effects reflect changes in the environment, and cohort effects are a result of differences in socialization. An age effect is a cross-sectional comparison of two or more age groups at any single point in time. A cohort effect is a longitudinal effect that compares a cohort in one time period with the same cohort in another time period. A period effect is the comparison of populations or groups across time. When two separate cohorts are compared across time for the same age level, we refer to this as comparative cohort analysis.

Methods

In this paper we define three cohorts in terms of their first exposure to the internet: the digital natives (ages 10–24), pre-natives (ages 25–39), and analogs (40–55). Digital natives grew up during the time that the internet had become popular with the public, pre-natives witnessed the transitional period in which the internet became popular, and analogs have had to adapt to the technology. In Study 1, an online survey was conducted that examines the evolution of pre-natives (ages 25–39) and the analog cohort (ages 40–55), by comparing them now to fifteen years prior. In study 2, we compare pre-natives to the digital native cohort (ages 10–24). In both studies we examine the relative impact of age, period and cohort effects on consumers’ internet usage behavior, general and specific privacy concerns, willingness to share information, and propensity to take action to protect their online privacy.

Findings

In both studies 1 and 2, the younger and older cohorts have experienced an increase in privacy concern over time, are more apt to protect their privacy, but are also more willing to provide information online. The comparative cohort analyses (period effects) suggest that the younger cohorts today, as compared to the younger cohorts 15 years ago, are more concerned about their privacy, more apt to take protective action, yet have a higher willingness to provide information online. The study results call attention to three key insights which have substantial policy and

methodological issues. First, the results seem to counter assertions that have been made about privacy being futile in the current technological environment. Second, our paper emphasizes the importance of using a multi-method approach in comparing age groups through the inclusion of longitudinal analysis (cohort effects), and comparative

cohort analysis (period effects). Finally, our study provides support for a transaction-based perspective of online privacy. It is evident that the concept of privacy on the internet is being redefined and offers important opportunities for future research in this area.

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ROUNDTABLE SESSION

PLANNING, MITIGATION, AND RECOVERY IN NATURAL DISASTERS: A TRANS-DISCIPLINARY APPROACH TO PUBLIC POLICY

Roundtable Discussion Leaders:

Ingrid M. Martin, California State University, Long Beach
Stacey Menzel Baker, University of Wyoming, Laramie

Roundtable Participants:

Edward Barbier, University of Wyoming, Laramie
Carol Raish, U.S. Forest Service Rocky Mountain Research Station, Ft. Collins
Debra L. Scammon, University of Utah, Salt Lake City

Moderator:

Josh Wiener, Oklahoma State University, Stillwater

GOAL OF THE ROUNDTABLE

The primary goal of this roundtable is to examine the role of consumers, policy makers, and institutions in times of natural disasters across disciplinary lines. The roundtable is organized as follows:

1. A short presentation of three research papers on three different types of natural disasters that sets the context and tone for the roundtable.
2. This will be followed by a set of discussion questions that focus on the disaster management phases from the perspectives of consumers, institutions, and public policy researchers.
3. The outcome is to develop a set of research ideas to move this field forward while demonstrating the importance of the field to others in marketing and public policy.

ROUNDTABLE SUMMARY

In the last few years we have witnessed natural disasters in some of the most vulnerable areas of the world (e.g., Indonesia – tsunami, Haiti and Chile - earthquakes) as well as the threat of natural disasters such as the H1N1 virus threatening to kill millions. Areas such as California, Greece, Portugal, and Australia continue to be devastated by wildfires and subsequent flooding. One outcome of this is the resiliency and the lessons that we learn from

each and every natural disaster. In this roundtable we continue to build upon a 2009 MPPC Special Session on Risk, Vulnerability, and Improvisation in Natural Disaster Planning, Mitigation and Recovery and a special section of the *Journal of Public Policy & Marketing* edited by John Mittelstaedt as well as the on-going research published in numerous multi-disciplinary journals (e.g., *Risk Analysis*, *Journal of Environmental Management*). A recurring theme throughout this work, and what we are proposing in this session is the need to understand whether and how consumers mitigate risks from natural disasters and the role of institutions in a trans-disciplinary framework.

The three papers in this roundtable provide a glimpse at the on-going research on natural disaster from different perspectives and contexts to begin to understand how different types of natural hazards affect risk mitigation and risk recovery (wildfires, tsunamis, influenza pandemics). The first paper by Guion and Scammon focuses on the evolving risk mitigation policies that emerged in response to the H1N1 pandemic over a 1-year period. The second paper by Barbier focuses on the risk recovery choices for future risk mitigation in the aftermath of the 2004 tsunami in the Indian Ocean. The third paper by Martin, Baker, Martin, and Raish investigates how risk perceptions and perceived vulnerability influence risk mitigation and risk recovery behaviors as well as the influence of policy on the choices that communities make.

THE 2009 “NOVEL” H1N1 PANDEMIC: ARE WE REALLY READY FOR IT?

Deirdre Guion, North Carolina Central University, Durham
Debra L. Scammon, University of Utah, Salt Lake City
Bo Liang, University of Utah, Salt Lake City

SUMMARY

On June 11, 2009, the World Health Organization (WHO) declared a swine flu pandemic in light of the nearly 30,000 cases documented worldwide. The declaration of this global flu epidemic was the first of its kind in 41 years. From the first known case of swine flu in Mexico on March 28, 2009 the WHO along with experts and public agencies around the globe, including the Centers for Disease Control (CDC) and the U.S. Department of Health and Human Services (DHHS), launched an aggressive program of monitoring and reporting the progression of the virus. With unprecedented speed, the vaccine was decoded such that the first human trial of swine flu vaccine started in Australia on July 22, 2009. In this country, by the time President Obama declared the swine flu outbreak a national emergency, nearly every state in the country has documented cases of H1N1. This paper describes the global and national administrative efforts and explores how communities and their health care systems are responding to the pandemic. This analysis includes a timeline of trigger events and reaction of local health care providers (especially local health departments) to them. The analysis of the trigger events also includes a description of the public health messages that were issued and how those messages changed and evolved in light of the triggers. We will also interview leaders of the State and Local Departments of Health for various states to compare response times and efforts. Particular attention is given to how directives are communicated, how the communication has evolved, and how vaccine distribution worked in the field during the pandemic. This study concludes with lessons from this pandemic and direction for future study.

From the first confirmed case of swine flu in March 2009 to President Obama's declaration of a national emergency due to outbreak of swine flu in October 2009, recommendations given by public health officials have changed dramatically. Some of the changes occurred as a result of trigger events that helped to quantify and clarify the scope of the pandemic. Early policy directives included closing

schools and keeping suspected flu victims at home for at least four days. The public health message was primarily one of isolation and confinement in suspected cases of flu since no vaccine was readily available. Travelers were discouraged from visiting places like Mexico and were encouraged to limit all non-essential travel.

By the end of April with the number of confirmed cases in the U.S. up to sixty-eight, two events happened that heightened public reaction while shifting public health response – President Obama asked for \$1.5 billion in emergency funds to fight the disease and for the first time, WHO raised the pandemic level to five. A level five pandemic along with emergency funding allows researchers to pool their global resources and focus their efforts to quickly begin to decode the virus to develop an effective vaccine against this novel H1N1 strain of the flu. Although this provided hope that a safe and effective vaccine would be available in the future, in the face of a full-blown pandemic, nearly 300 schools closed across the country in an effort to stop the spread of the infection. School closures interfered with graduations, end of school athletic competitions, etc. and thus were not popular among U.S. school children and parents. An example of short-run costs vs. long run benefits. Although during the late spring and early summer immunologists and infectious disease experts predicted that the flu virus is typically dormant during the summer months, they cautioned people that both the regular flu and the H1N1 strain, though dormant, do not completely disappear. Problems reemerged in early fall.

When college students returned to campuses across the country in late August and early September, the number of new H1N1 cases spiked with some schools cancelling sporting events and again attempting to quarantine infected students. The public health message has shifted and became more about prevention than about isolation. People were encouraged to wash their hands, avoid close personal contact and if sick, to stay home. School age children were trained to wash their hands for 20 seconds

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or more, sneeze into their elbows and not to share food and drinks. These preventive strategies were supported by a variety of PSAs, reinforced by schools, and employers. In early October, the Department of Health and Human Services had joined efforts with the Ad Council to launch a series of national television PSA's aimed at encouraging high-risk populations to get the H1N1 vaccination. Efforts were also made to have hand sanitizers widely available in the work place.

The message of prevention was the focus of communication efforts until the FDA announced the approval of an H1N1 vaccine that was being tested and that 90,000 sites across the country should have the vaccine by mid-October. The recommendation was for everyone to get vaccinated with special attention and/or priority given to healthcare workers, pregnant women, young children (6 months. – 24 years) and anyone at increased risk due to existing medical conditions. This announcement triggered a shift from a message of prevention tactics to one of vaccination as the best form of prevention; emphasis shifted to vaccination as the most effective way to not contract the H1N1 influenza.

The development of the vaccine has been much slower than expected with both product and supply delays. Production delays have resulted with the incubation process

taking longer than expected and supply delays have emerged with the inhalers, used to deliver the mist version of the vaccine, being unavailable. The message however is working as across the country people are lined up and waiting for the vaccine. The distribution of the vaccine to each State's health department has also been an area of concern as most states are reporting lower than expected deliveries. The distribution bottle-neck is further exacerbated by the fact that while schools are an efficient channel to administer the vaccine to school age children, no system exists in this country to effectively administer the vaccine to adults (Michael Osterholm).

While local public health officials continue to struggle with local shortages and long lines, national agencies must attend to myriad issues including the mixed messages in the medical community (some physicians recommending that their patients not get vaccinated) and the opinions of television personalities urging their viewers not to get vaccinated. The FDA for example is monitoring and attempting to curtail the growing criminal activity associated with the sale of fraudulent products associated with the H1N1 influenza. The CDC and HHS are working together to provide social medial tools like buttons and badges (for websites), image sharing and twitter/microblog updates.

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COASTAL PROTECTION FROM NATURAL DISASTERS: A MARKET, DEVELOPMENT, AND POLICY PERSPECTIVE

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SUMMARY

The December 2004 Indian Ocean tsunami generated a “sea change” in the attitude of policy makers and the public toward mangroves in the region. As a result of the tsunami, governments of Indian Ocean countries and the wider international community became convinced of the need to replant mangroves as “natural barriers,” and plans to fund large-scale rehabilitation programs commenced. For example, the United Nations, the World Conservation Union (IUCN) and the UN Development Programme in October 2006 launched a 6-year, \$62 million initiative called “Mangroves for the Future” that involved replanting mangroves and rehabilitating other coastal systems as “natural barriers” in the 12 tsunami-hit Indian Ocean countries (Stone 2006). Behind this initiative is the belief that widespread mangrove deforestation left Asian coastlines and communities vulnerable to the devastating damages caused by large-scale storm events, such as tsunamis and cyclones.

While Asian policymakers and international donors are convinced of the need to replant mangroves as “natural barriers” against tsunami, cyclones and other catastrophic storm events, scientists express concerns whether mangroves can always effectively reduce coastal damages during extreme events. Although initial assessments suggested that healthy mangroves might have mitigated damages caused by the Asian tsunami (Danielson et al. 2005; Dahdouh-Guebas et al. 2005), other scientists have concluded that there is little evidence that mangroves reduced the damage caused by the tsunami (Kerr et al. 2006, 2007). In sum, with respect to extremely large events such as the Asian tsunami, the evidence on mangroves as natural barriers is at best mixed: “in several locations (particularly farther away from the tsunami source), mangroves and other vegetation probably provided some protection against the 2004 tsunami” (Cochard et al. 2008).

Lost in this debate over whether or not to replant mangroves as natural storm barriers are three fundamental questions:

- Why has widespread mangrove deforestation been occurring in Asia in recent decades?
- Has this widespread loss of mangroves increased the vulnerability of coastal populations?
- Are current institutions and incentives adequate to encourage local coastal communities to participate in mangrove replanting schemes and have a stake in the long-term management of the rehabilitated forests?

Mangrove forests are among the most threatened global ecosystems, especially in Asia. Traditional uses of the mangroves by these communities involve harvesting fish, wood products, honey and even medicines from the mangrove forests and swamps and fishing in the nearby coastal waters stocked by fish that depend on the mangroves for breeding grounds and nurseries (Walters et al. 2008). In contrast, commercial shrimp farming and aquaculture, logging operations, salt ponds, large-scale agricultural developments and resort hotels are usually owned and financed by outside investors who profit handsomely from these developments. The traditional livelihoods of whole communities are often laid to waste along with the mangroves that support these livelihoods.

With regard to the second question, Thailand experienced both a rise in the number and frequency of coastal natural disasters in Thailand and the simultaneous rapid decline in coastal mangrove systems. This suggests an important hypothesis worth examining: Did the widespread loss of mangroves in coastal areas of Thailand increase the vulnerability of these areas to more incidences of economically damaging natural disasters? A recent study tested this hypothesis statistically using a count data model (Barbier 2007). The analysis for Thailand over 1979–1996 and across 21 coastal provinces shows that a one-km² decline in mangrove area increases the expected number of disasters by 0.36 percent. This relationship was statistically significant, and suggests that one cannot reject the hypothesis of correlation between mangrove deforestation and the incidence of damages from coastal

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storms in Thailand over 1979–1996. In sum, consistent with most of the prevailing ecological literature on the coastal protection service of mangrove forests, the Thailand study shows that widespread deforestation over a significant period of time will increase the vulnerability of coastal areas to a variety of economically damaging storm events.

In other words, even if we think that current calls to expand mangrove replanting and rehabilitation in Asia for coastal protection are worthwhile, will such schemes succeed? Although the post-tsunami change in attitude toward mangroves in the region is welcomed, focusing solely on replanting projects is not sufficient to reverse the decades-long decline in mangrove forests in the region. Unless local coastal communities have more of a say in the control, use and protection of mangroves, current and future restoration projects will fail to have any lasting results. Instead, a new institutional and policy framework that involves local communities more directly in coastal mangrove management could make a difference to the sustainability of mangrove rehabilitation projects in the Indian Ocean region, and may improve community participation in these projects.

Two studies of replanting mangroves in Thailand illustrate this connection and will be presented (Barbier 2008; Erfemeijer and Bualuang 2002). Our research presents some important policy implications. First, the remaining mangrove areas should be designated into conservation (i.e., preservation) and economic zones. Second, the decision to allow such local management efforts should be based on the capability of communities to effectively enforce their local rules and manage the forest to prevent over-utilization, degradation, and conversion to other land uses.

Third, the community mangrove forests should be co-managed by the government and local communities. Such effective co-management will require the active participation of existing coastal community organizations, and will allow the representatives of such organizations to have the right to express opinions and make decisions regarding the management plan and regulations related to the utilization of mangrove resources. Finally, the government must provide technical, educational and financial support for the local community organizations participating in managing the mangrove forests.

To conclude, a narrow focus on whether to replant or not to replant “in the wake” of the December 2004 tsunami fails to address the wider social, ecological and economic issues of mangrove management in the region. As pointed out by Baker (2009), in any natural disaster, such issues prove vital to designing the appropriate market and policy responses to a disaster, particularly with regards to reducing the vulnerability of the affected populations. The case study of replanting mangroves as storm barriers in Thailand and the rest of Asia is a good illustration of this development and policy perspective with respect to preventing future natural disasters. A successful strategy for mangrove rehabilitation, restoration and conservation in Asia needs to look beyond an overly simplified replanting debate. We must understand, first, why mangrove deforestation is taking place in Asia, and second, under what conditions mangroves can act as successful barriers to frequently occurring coastal storm events in the region. Finally, even if it is worth replanting mangroves for their storm protection value in certain areas, restoration projects may still fail unless local communities are not used as labor for replanting but are more actively involved in the long-run management of the restored mangrove systems.

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MANAGING RISK AND RECOVERING FROM VULNERABILITY: THE ROLE OF PUBLIC POLICY IN WILD FIRE PROTECTION MEASURES

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SUMMARY

Based on a narrative analysis of people living with both threats of and actual wildfire destruction, this paper examines specific coping responses to perceived risk from potential damages of wildfires and to experienced vulnerability and loss from fire destruction. We seek to explain why different groups develop the mentalities or “perceived realities” that affect their views and response concerning risk and disaster preparedness and recovery. If two residents have the same knowledge of a natural hazard risk, why does one attempt to mitigate risk and the other do nothing? If two people experience the same loss from a natural hazard risk, why does one wait for assistance and the other begins digging out from the wreckage?

Years of suppression of natural fires, an increase in populations living in and around the forests (WUI), changes in climate including prolonged droughts and beetle infestations are just some of the factors that contribute to an increased risk of catastrophic wildfires in various regions of the world. Given that the incidence of and destruction resulting from wildfires is increasing, we ask what can social marketing and public policy do to encourage risk mitigation behaviors that give the most protection possible to consumers?

Our research was a multi-phase process that focused on fire-prone communities in New Mexico and Arizona over a four-year period including two high-fire damage seasons (2004–2007). We conducted focus groups with homeowners living in the WUI communities (*informed public*), we interviewed locally knowledgeable experts from WUI communities (*local experts*), and interviews with national level policy experts on fire and climate change (*policy experts*). The *informed public* includes active homeowners, recreationists, representatives of environmental

groups, and extractive users groups. The *local experts*, are primarily responsible for implementing fire policy including local firefighters and local fire management officers. The *policy experts* are primarily responsible for establishing guidelines and policy direction for implementation of wildland fire policy and include members of National Wildfire Coordinating Group, and national/international experts in climate change and wildfires.

The three groups were identified through a snowball sampling technique and interviewed in either a focus group setting or in a one-on-one setting. The *informed public* and the *local experts* were asked the same sets of questions with some customizing to fit the individual group. The transcripts were analyzed with the aid of QSR (qualitative data analysis program) to uncover the themes that were consistent within each group as well as across the various groups. For the *policy experts*, the interviews were done either face-to-face or in a telephone interview. These experts are responsible for the development and implementation of policies within and across agencies and were identified as experts in wildfire management and climate change policies.

Narratives are analyzed to understand differences in how individuals describe and respond to risk and vulnerability. In the literature there is great confusion between the constructs of vulnerability and risk (Baker 2009; Wisner 2004); however, our informants show clear understandings of the distinctions between the two. In the literature, risk is conceptualized as both objective (Johnson 2004) and subjective (Martin et al. 2010; Martin et al. 2007).

Vulnerability also has been conceptualized in a variety of ways, including demographic, environmental, situational, and contextual/proactive (Baker 2009). Today, most disaster scholars reject a static conceptualization of vulnerability (demographic and/or environmental) and

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embrace a situational, dynamic and processual, perspective of vulnerability (Wisner 2004). The situational approach to vulnerability analysis views vulnerability as a state of dependence and lack of control, which is not fixed and objective, but rather fluid and socially constructed (Baker, Gentry, and Rittenburg 2005). This perspective holds for three primary reasons: (1) desire to distinguish risk from vulnerability, (2) recognition that people can and do move in and out of states of vulnerability, and (3) defining vulnerability as a status marginalizes some social groups and assumes environments are not adaptable to individual characteristics.

Our informants' accounts indicate their social understanding of risk is both subjective and objective, and they see vulnerability as powerlessness and dependence embedded in complex social, ecological, and material relations and processes (Baker 2009; Hilhorst and Bankoff 2004; Martin et al. 2007, 2010). Fundamentally, these issues are important because how risk and vulnerability are understood and operationalized determine how and to whom resources are distributed. The market, policy, and consumer response to risk is mitigation (potentially), while the response to vulnerability is reduction and recovery (potentially).

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SPECIAL SESSION

EFFECTS OF FRONT-OF-PACKAGE HEALTH AND NUTRITION CLAIMS ON CONSUMERS COMPREHENSION OF PRODUCT HEALTHFULNESS

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SUMMARY

This session focuses on how consumers use front-of-package (FOP) nutrition or health claims on labels for food products, with particular interest in how FOP claims can potentially be ineffective or even misleading. The use of FOP nutrition information and health claims has been growing in popularity, perhaps reaching a tipping point in the U.S. with the introduction of the “Smart Choices” nutrition labeling program. The “Smart Choices” program has drawn the ire of lawmakers (DeLauro 2009), and has helped lead to the Food and Drug Administration’s open letter to industry regarding the use of confusing or misleading information (FDA 2009).

However, the use of FOP nutrition information can have benefits, particularly for consumers unwilling or unable to effectively use the information provided by the Nutrition Facts panel on labels. Many food manufacturers have responded to the World Health Organization’s call for sodium labeling by offering FOP information. In the U.K., the Food Standards Agency has adopted FOP traffic light labeling, which show not only the fat, saturated fat, sugar, and salt content, but also give a color-coded indication of the level of each nutrient (FSA 2009). Given the FDA’s finding that consumers will use FOP information in lieu of the information found on the Nutrition Facts panel, typically on the side or back of the package, this topic has additional relevance for policy makers.

The papers in this session examine informational characteristics of FOP claims on food labels. Andrews and Burton (2010) compare the effects of consumer evaluations on product healthfulness in the presence of the “Smart Choices” FOP label versus the presence of traffic light labeling. Gau et al. (2010) compare the effects of a “Heart Healthy” and different styles of traffic light labeling on the FOP. McLean, Hoek, and Mann (2010) also examine different styles of FOP labeling, and focus on the effects of consumer evaluations of sodium evaluation. Overall, these papers share a common thread by examin-

ing the differential efficacy of FOP labels that provide overall product healthiness information (e.g., the “Smart Choices” or “Heart Healthy” icons) versus those that offer specific nutrient information (e.g., traffic light labeling), and the different styles in which this information can be conveyed.

FOP labels that provide overall product healthiness information can simplify decision making for consumers by giving them information that is concrete, and conducive to heuristic thinking. However, this has the potential to mislead consumers if the information provided is not accurate. FOP labels that contain specific nutrient information are sometimes proposed as an effective alternative to labels that provide overall healthfulness claims. However, their effectiveness may be contingent on a number of factors including the format in which information is presented (pictorial vs. verbal) and the literacy level of the audience. Various issues surrounding the problems and benefits with these different styles of labeling will be explored in this session.

This session should be of interest to a broad audience, as the papers all take a theoretically-grounded approach to better understand a timely and relevant topic. Marketing academics will gain further insight into the ways in which consumer processing of nutrition information on food packages is influenced by different types of FOP claims. Policy makers will gain insights into how consumers process the information acquired from FOP labels, leading to more insightful policy. Practitioners will see how experimental techniques can be applied to practical problems to yield insights about consumer decision making. We believe this session will lead to further discussion that is of interest to scholars inside and outside the academy. Importantly, Alan Levy of the FDA is our discussion leader. We expect him to provide important insights into the FDA’s view in this important area as well as to suggest directions for future research that may have the greatest potential to influence regulatory policy.

Special Session: Effects of Front-of-Package Health and Nutrition Claims on Consumers Comprehension of Product Healthfulness

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ARE WE MAKING “SMART CHOICES” IN EVALUATING FRONT-OF-PACKAGE NUTRITION ICONS? ASSESSING EFFECTS OF SMART CHOICES VS. TRAFFIC LIGHT – GUIDELINE DAILY AMOUNTS

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SUMMARY

Consumers of packaged goods products in the U.S. now face a dizzying array of front-of-package (FOP) nutrition icons and symbols, including (at one time) the controversial “Smart Choices” single summary indicator. Immediately upon introduction in August 2009, the “Smart Choices” front-of-package nutrition icon received substantial criticism, primarily because some products that qualified for the symbol had relatively high levels of unfavorable nutrients (e.g., sugar) or they were viewed as inappropriate as a ‘healthier for you’ option. It is within this context that the FDA submitted a letter addressing its concern to the Smart Choices program and has decided to undertake an independent evaluation of various FOP systems (Neuman 2009; Taylor and Mande 2009). Michael R. Taylor, Senior Advisor to the FDA Commissioner noted that there would be concerns with any front-of-package system that may in “any way be based on cherry-picking the good and not disclosing adequately the components of a product that may be less good” (Neuman 2009).

Thus, the primary purpose of our study is to test the simpler, Smart Choices icon, a more complex Traffic Light – Guidelines Daily Amounts (TL-GDA) icon, and a no front-of-package icon control for their effects on nutrition evaluations, product attitudes and purchase intentions. In a 3 (front-of- package icons) x 2 (presence or absence of the Nutrition Facts Panel) between-subjects experiment with 520 adult participants, we compare the effects of the front-of package icon conditions for a mixed (moderate) nutrition value food that qualifies for the SC icon. Of importance to current policy questions, levels of cholesterol (60 mg per serving) and sodium (480 mg per serving) that meet the criteria for the Smart Choices icon (Smart Choices Program 2009, p. 2) are set at levels

determined to be *high* by FDA Food Labeling Rules (*Federal Register* 1993, p. 2411). Drawing from signal theory, we predict and find that the SC icon can lead to positive (and potentially misleading) nutrient evaluations and product healthfulness when compared to the TL-GDA icon or no FOP package icon control. In addition, we assess the potential moderating role of nutrition consciousness on both presence or absence of FOP nutrition icon information and the Nutrition Facts Panel on the back of the package. Results show that nutrition consciousness is more likely to moderate effects related to the Nutrition Facts Panel than the FOP nutrition icon information.

Based on these findings, we consider the favorable and less favorable aspects of Smart Choice vis-à-vis TL-GDA front-of-package icon information. As indicated in past research (Feunkes et al. 2008), most consumers place substantial value on simplicity. When attempting to evaluate scores of brand alternatives at the shelf, the array of comparisons involving the diverse calorie and nutrient information in the Facts Panels is an extremely challenging task. Summarizing the information into a single dichotomous icon allows use of simple generalized conjunctive or satisficing heuristics that may be sufficient for many consumers. The downside of this simplicity is that by *not* examining detailed information on various attributes (without examining the Facts Panel), results show that consumers may overgeneralize the favorability of some product nutrients and perceptions of the overall healthfulness of the product (Andrews et al. 1998). We also offer important policy implications of results for researchers, food manufacturers, and the public health community, as the FDA reviews front-of package nutrition alternatives currently in use in the United States and elsewhere.

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CAN FRONT-OF-PACKAGE NUTRITION CLAIMS HELP LOW-LITERATE CONSUMERS ASSESS PRODUCT HEALTHFULNESS?

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Haeran Jae, Virginia Commonwealth University, Richmond
Madhu Viswanathan, University of Illinois at Urbana–Champaign

SUMMARY

In our research on low-literate consumers, we have observed that these consumers have a predilection toward the use of pictorial information, which aids in the concretization of decision making processes (e.g., Viswanathan, Hastak, and Gau 2009; Viswanathan, Rosa, and Harris 2005). Front-of-package (FOP) nutrition information and health claims represent such pictorial information. Examples of FOP information include “heart healthy” icons and the color-coding employed by the Food Standards Agency (U.K.) in their traffic light labeling. Prior research has suggested that consumers with lower literacy levels will rely more on this type of information, due to its pictorial nature (Viswanathan, Rosa, and Harris 2005), and that the use of this information often comes at the expense of processing additional information, particularly the Nutrition Facts Panel on the side or back of packaging. Thus, the diagnosticity of FOP information should be of particular concern for policy makers.

Our study examines the effects of FOP information on the ability to distinguish healthy products from unhealthy products when information from the Nutrition Facts panel is also available. Specifically, we examine the effects of

three types of FOP information (American Heart Association’s “heart healthy” icon, traffic light labeling of overall product healthiness, and traffic light labeling of product attributes - fat, calories, sugar, salt). The study also includes a control product with no FOP information.

We hypothesize that the presence of FOP information that is diagnostic, or useful in solving a problem at hand, (i.e., the traffic light labeling) will be of particular benefit for consumers with lower levels of literacy, compared to those with higher levels of literacy. Namely, we would expect the presence of this type of information to help consumers better recognize healthy and unhealthy products. Additionally, we hypothesize that the presence of FOP information that is non-diagnostic, (i.e., an AMA “heart healthy” icon on an unhealthy product) will have an opposite effect, preventing consumers with lower literacy from effectively recognizing healthy and unhealthy products. Consistent with our hypotheses, our preliminary results suggest that individuals with lower levels of literacy (0–8 grade equivalent) are more reliant on pictorial information than those with higher levels of literacy (undergraduate students). Additional findings and their implications will be presented at the conference.

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Special Session: Effects of Front-of-Package Health and Nutrition Claims on Consumers Comprehension of Product Healthfulness

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TAKE WITH A GRAIN OF SALT? FRONT-OF-PACK SODIUM NUTRITION CLAIMS

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SUMMARY

Reducing sodium consumption is one of the most effective means of lowering blood pressure and has the potential to reduce mortality from cardiovascular disease including stroke by up to 14 percent and coronary heart disease by up to 9 percent (He et al. 2002; Asaria et al. 2007). Despite this, achieving population level reductions in sodium consumption has proven difficult. While many consumers have an intuitive understanding of ingredients such as fat and sugar, their understanding of sodium and its relationship to salt is more ambiguous. Furthermore, consumers are more likely to appreciate the risks of high fat and sugar intake than they are to understand those of high sodium consumption.

The WHO recently recommended compulsory nutritional labeling for the salt/sodium content of manufactured foods that is clear, simple, and easily understood by consumers, irrespective of their literacy, numeracy or socioeconomic level (WHO 2006). In response, many food manufacturers have complemented mandatory nutrition facts panels with front of pack percent daily intake labels (PDI); however, recent research suggests consumers find both difficult to understand (Gorton 2007). These difficulties are compounded for salt labeling, since labels

refer to salt as sodium, which consumers typically do not link to salt. Complex nutrition information, such as that provided in mandatory panels and PDIs, actually reduces consumers' ability to evaluate a product's overall nutrition profile and compare competing brands. These problems mean many consumers also find it difficult to evaluate front of pack nutrition claims, and so may have little understanding of "reduced sodium" claims or how they should use foods featuring these claims in their overall diet.

This paper will outline research that investigated how alternative information formats affected consumers' beliefs about the sodium/salt content of products and explored the interaction between information format and front-of-pack nutrition claims. More specifically, the research examines how effectively current nutrition information labels communicate information about the sodium content of food and explores alternative formats, the ease with which these are understood, their effects on consumers' food choices, and their interaction with front-of-pack claims. A 2*2*3 (product variant*nutrition (salt) profile*FoP claim) experimental design will be used in an online study of 600 main household shoppers. The study will be in the field in early 2010 and the full results will be available for discussion in May.

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Special Session: Effects of Front-of-Package Health and Nutrition Claims on Consumers Comprehension of Product Healthfulness

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INCREASING RETIREMENT SAVINGS: THE INFLUENCE OF FUTURE SELF, IMAGERY, AND SAVINGS EFFICACY

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SUMMARY

U.S. savings for retirement is abysmal. In terms of actual retirement savings, Helman, Copeland, and Van Derhei (2009) found that 53 percent of Americans have total savings of less than \$25,000, excluding their home value and any defined benefit plan. Of those over 55 years of age, 28 percent have less than \$10,000 in retirement savings. Personal savings that includes retirement savings has shown a two-decade declining trend, “dropping from averages of around 9 percent in the 1980s, to approximately 5 percent in the 1990s, to almost zero in the first years of the new century,” (Guidolin and La Jeunesse 2007, p. 491).

During this decline, the dominant view has been that stable individual traits, one’s stage in the life cycle, and consumer knowledge determine voluntary savings. This led to development of structural approaches by government (i.e., tax benefits and mandated social security contributions) or employers (i.e., matching contributions, pre-commitment, and automatic enrollment/automatic escalation) and to the development of massive educational efforts.

This research tests the power of three factors to influence a person’s savings behavior: valence of future self, vividness of future imagery, and savings efficacy. Each can be influenced by persuasive communications, providing a base for the development of marketing communication strategies which could complement the extant structural and educational strategies.

Future self theory focuses on a person’s very specific, individualized representations of what a person may become (Cross and Markus 1991; Markus and Nurius 1986). Future selves may be positive or “hoped-for” selves (e.g., a travel-filled retirement); alternatively, they can be negative or “feared” selves (e.g., a decrepit nursing home patient). These possible selves serve as “incentives for future behavior” and “provide the means-ends patterns for new behaviors” (Markus and Nurius 1986, p. 955).

Three future selves were deemed relevant to retirement preparation – somatic, connective, and material. The somatic, or physical, future self deals specifically with the projected physical aspects of a person’s body – how she/he will look as well as how healthy and active she/he will be. The connective future self combines social and family relationships (Berndt and Burgy 1996) and represents both support and responsibilities for the future. A material future self addresses the accrued financial and other material needs to care for oneself and family.

The valence of the future self – either a positive or a feared self – can provide motivation. (Markus and Nurius 1986). Positive selves can generate approach behaviors (e.g., greater focus on future needs). Feared selves may either motivate to avoid the negative situation (i.e., increasing investment) or paralyzing (i.e., do nothing).

The vividness or degree of imagery associated with the future self should affect retirement savings because it is a richer representation, involving encoding, processing and evoking information that incorporates sight, sound, taste, and tactile sensations (Bone and Ellen 1992; MacInnis and Price 1987). More detailed portrayals of the future would allow one to minimize the distortion between the present and the future, thereby increasing intentions to save.

To promote action, higher levels of savings efficacy are expected to lead to greater retirement planning behavior and intentions to increase future savings. This savings efficacy captures a person’s perception that she/he can engage in a behavior that will result in reaching a goal and is a well-studied construct which has been found important in predicting future behaviors.

Mall intercept interviews were conducted by professional interviewers with 236 adults in four U.S. cities to test the influence of these factors on retirement savings. Two dependent variables were used. A reflective measure captured preparation for retirement and was measured by the Retirement Readiness Rating, used by the Employee

Benefit Research Institute (EBRI) and its sponsors to measure past financial preparation for retirement (Employee Benefit Research Institute 2000). A second projective measure was used to assess whether respondents could put an extra \$10 into their retirement savings this week and whether they could do that from now on.

To investigate the relative additional explanatory power of our primary constructs of interest - future self, imagery vividness and savings efficacy, we included several commonly explored personality traits and demographic variables as controls. Regression models were used to test the predicted relationship after controlling for demographics (household income, actual age and dependent children) and psychological trait controls

(impulsiveness, self-control, long-term orientation, present orientation and internal rate of discounting).

We found that having a positive perception of a future state – i.e., a positive future material self – is associated with planning to take (projective) and having taken (reflective) actions that can bring about that state. Additionally, both self efficacy and vivid imagery are positively related to retirement savings behaviors. Theoretically, this research advances marketing theory by introducing future self theory applied to adults. As a discipline, our next step is to examine how to effectively evoke positive future selves coupled with vivid imagery with the goal of increasing retirement savings behavior. References are available upon request.

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MARKUPS, LOAN PACKING, AND “YO-YO” DEALS: AN ANALYSIS OF AUTO LENDING PRACTICES

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SUMMARY

Automobile lending obtained at the dealership has become a topic for policy debate regarding creation of a Consumer Financial Protection Agency (CFPA). The House Financial Services Committee approved an amendment in October 2009 that exempted automobile dealers from the proposed CFPA’s authority. Though auto loans at the dealership are often thought of as a service provided to assist in marketing the sale of cars, it may be more accurate to view auto sales today as a marketing tool used to sell finance and insurance (F&I) products at the dealership. The majority of dealership profit currently comes from F&I rather than from the sale of automobiles. The growth in F&I as a profit center has been accompanied by a growth in practices that have the potential to harm consumers. A random national phone survey was conducted in November 2008 of 1,007 adults to gather data on some of these practices including: dealer markups, loan packing, yo-yo deals, and binding mandatory arbitration terms.

Markups create perverse incentives for dealer staff to put a borrower in a worse loan than they would otherwise qualify for. This has important implications for the sustainability of financial markets as we have seen with mortgage brokers and the mortgage market. Dealer markups are also a pervasive practice. Using data from two industry sources, we estimate that auto loan markups cost consumers across the country over \$20.9 billion in 2007. We found that 58 percent of respondents did not try to negotiate their loan APR with the dealer. Forty-two percent of people did not negotiate either because the dealer told them they were getting the best rate or because they trusted the dealer to give them a good rate.

When credit risk factors and other variables are controlled for in a regression, believing a dealer when they said they were giving the customer the “best” rate was significantly associated with a higher APR for non-factory incentive APR’s, with rates that are between 1.9 and 2.1 percentage points higher than rates for people with similar credit scores and other credit risk factors. Rates were higher for people experiencing other potentially exploitative practices including yo-yo loans, multiple add-on products, and binding mandatory arbitration. Two of these three factors were statistically significant with people with a

high APR given their credit risk also likely to have experienced a yo-yo loan and to have received at least two add-on products.

Dealers often sell a variety of add-on products with their loans, which generally are underused and overpriced for what each product is worth. The most commonly purchased add-on product was a service contract or extended warranty, followed by GAP insurance. Other add-on products included in this survey include theft deterrent products and credit/life or accident/health insurance. Fifty-nine percent of customers who took a loan from a dealer bought at least one of these add-on products, and 27 percent purchased two or more add-on products. It is likely the numbers here for add-on products purchased are underestimates because people may forget that they purchased a product or not even be aware they did so at the time of purchase. Some respondents (4.3%) reported that they did not know they had purchased at least one of their add-on products. Even though it is illegal to require these add-on insurance products, 8.5 percent of respondents were told that at least one of these products was required. In addition, 14.7 percent of people purchased a product they did not want because it was part of a package.

On average, African Americans purchased 1.6 add-on products while other respondents purchased an average of 1.0. Those respondents with lower income (less than \$40,000) also purchased more add-on products, with an average of 1.2. Both these differences were statistically significant. In economic terminology, the negative association with income could be evidence of an “inferior good.” Though there are other possible interpretations, the negative relationship with income could be a sign that these products are part of a loan that takes advantage of vulnerable consumers with few options. Borrowers with higher education levels also took fewer add-ons. Low-income consumers were also more vulnerable to purchasing add-on products under false pretenses. They were significantly more likely to purchase a product without knowing it (13%), or to be told the product was required (19%).

Over two-thirds (67.8%) of respondents stated they did not know if they had a mandatory arbitration clause in

their contract, which severely limit a consumer's options for legal recourse. The lack of consumer awareness concerning arbitration clauses is not surprising considering that the clauses are usually poorly disclosed and buried in fine print.

In a "yo-yo" loan, a conditional offer of credit is revoked and the buyer has to return the vehicle and renegotiate the loan terms, often after their trade-in vehicle and down payment are no longer available. Eleven percent of people with fair or poor credit scores had experienced a yo-yo loan. Among people with incomes below \$40,000, 12 percent and for people with incomes of \$25,000 or less, a quarter reported having experienced a yo-yo loan. Yo-yo loans were also associated with much higher interest rates. This was true even after accounting for risk factors such as credit rating and income in a regression analysis. People with the same risk level who had experienced a yo-

yo loan received on average an interest rate that was five percentage points higher than someone with characteristics who had not experienced a yo-yo loan.

In order to further test the apparent result that questionable loan terms are associated with other questionable terms in loans, a 4-point "exploitation scale" was created. Each practice was significantly correlated with the scale after eliminating that practice from the scale, suggesting that each individual practice is more likely to occur in loans with other questionable practices. While minorities and women did not differ significantly from the general population, renters and households with low income had significantly higher scores on average on the exploitation scale. The APR measure on this scale takes into account income and home-ownership status. Therefore, the difference appears to not be due to pricing loans for risk. References are available upon request.

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UNDERSTANDING LOBBYING FROM A MARKETING AND PUBLIC POLICY PERSPECTIVE: A REVIEW OF LOBBYING'S REGULATORY ENVIRONMENT

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SUMMARY

Lobbying is both a constitutionally guaranteed right of United States citizens as well as a prime means by which marketers attempt to influence the policy development process in their favor. The purpose of the present commentary is twofold. First, we endeavor to provide marketing and public policy (MPP) scholars a basic understanding of the complex legal context in which lobbying is practiced. Second, we hope to stimulate MPP scholar interest in, and discussion on, lobbying law and practice.

Lobbying and its Role in the Public Policy Development Process

Lobbying activity is intimately involved in the public policy development process, as individuals, organizations, and alliances thereof, frequently with the assistance of professional lobbyists, competitively seek to influence policy makers and legislation in their respective or collective favor. While marketing scholars have long recognized the importance of working with public policy makers, lobbying's role in the policy development process has not been examined from a marketing perspective. This void warrants the attention of MPP scholars due to the strong possibility of widespread, potentially life-impacting externalities associated with policy decisions related to (1) heavily lobbied social issues (e.g., healthcare and financial sector reform), and (2) lobbying-intensive industries (e.g., tobacco, alcohol, prescription drugs, real estate, insurance, banking, and investments). MPP scholars' ability to meaningfully contribute to our understanding of lobbying and its role in the public policy development process is predicated on possessing at least a basic understanding of highly complex and dynamic lobbying law.

Lobbying's Regulatory Environment

Federal lobbying law and practice, the focus of the present inquiry, has been significantly shaped by relatively recent regulatory reform (e.g., the Lobbying Disclosure Act of 1995 and the Honest Leadership and Open Government Act of 2007). However, many other statutes, regulations, and rules interact with and augment these bills (e.g., the IRS code, the Federal Election Campaign Act, the Ethics in Government Act, the internal rules of both the House

and Senate, and the U.S. Criminal Code). The complexity and interactivity of these statutes, regulations, and rules yield a state of affairs where (1) lobbying law exists within a largely immutable context of Constitutional rights and basic U.S. history, (2) there exists, for many Americans, a sharp contrast between what the lobbying law *should* be and what it *can* be, and (3) many apparently logical suggestions for regulatory reform are rendered impractical.

We review parameters defining the legal limits of what both policy makers and the lobbyists targeting them can and cannot do in the marketplace for public policy. Two key areas regarding prohibitions on policy makers are addressed: (1) employment limitations pertaining to the "revolving door" (i.e., the practice of politicians or staff workers leaving office, becoming lobbyists, and then targeting policy makers, including former colleagues, on behalf of clients), and (2) limits on a policy maker's ability to accept gifts. With respect to requirements placed on lobbyists, two areas of the law are examined: (1) disclosures concerning lobbyist activities, and (2) I.R.S. regulations concerning how lobbying activities must be paid for. It should be noted that the restrictions placed on lobbyists are far broader and more detailed and exclusionary than those placed on policy makers.

Key general conclusions of our review of lobbying law include the applicability of key limitations on lobbyists being predicated largely on whether or not an entity fits the restricted legally specified definition of "a lobbyist." Further, our review of lobbyist disclosure law – arguably the heart and soul of lobbying law – suggests that it is at least important to know what lobbyists *do not need* to disclose as it is to know what they *do need* to disclose about their interactions with policy makers and other activities.

Conclusion

In theory, lobbying is central to the functioning of democracy. As a result, the right of U.S. citizens to engage in lobbying activity is strongly protected. As practiced, however, lobbying often leads many citizens to question how democratic the public policy development process is. MPP scholars are uniquely qualified to play a lead role in

addressing this dilemma as a result of (1) their concern for understanding law and its marketplace consequences, and (2) their concern for marketplace equity and fairness.

It is our hope to stimulate MPP scholar discussion on lobbying law and practice, with the end result being

meaningful regulatory reform benefitting consumers, policy makers, and ethical and socially responsible marketers. We encourage scholars to take advantage of the great opportunity before them; and to use our review of lobbying's regulatory environment as a starting point for their efforts.

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CONSEQUENCES OF OVERSPECIALIZATION IN THE INDUSTRIAL FOOD SYSTEM

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SUMMARY

The last five to ten years have seen an increase in the number and visibility of voices in the public space discussing our nation's diet and the industrial food system that has helped mold that diet. Even if you haven't read or watched them you've probably heard titles like: *Fast Food Nation* by Eric Schlosser, *Omnivore's Dilemma* by Michael Pollan, *In Defense of Food* also by Michael Pollan, *Food, Inc.* and let's not forget *Super Size Me*. These voices paint a picture of what we might call the dark side of our American cornucopia of caloric plenty. For the food system they highlight potential weaknesses, not only in the practices of individual companies but in the system itself – a system that, from a production perspective, has become a testimonial for specialization and industrialization. Collectively these commentaries suggest that our industrial food system is a contributing factor to nutritionally depleted food and environmental damage and is thus unsustainable (Kenner 2009; Pollan 2006).

This dialog on the sustainability of our industrial food system in the popular press coupled with our own academic interest in issues like nutrition/health and sustainability begs us to take a new look at the industrial food system. Not from the food labeling perspective but from a whole marketing system perspective. So, in the spirit of Wilkie and others (Bhattacharya and Korschun 2008; Wilkie and Moore 1999) who have called for marketers to look at the aggregate marketing system and an acknowledgment that sustainability will require a new look at the traditional marketing system (Miles and Munilla 1995; Neace 1995; Sheth and Parvatiyar 1995), it is the intent of this paper to offer a system level perspective on the unsustainable nature of our food system through the lens of specialization.

Overspecialization and the Industrial Food System

That specialization, often called Division of Labor, is a bedrock principle of economy and an acknowledge key to prosperity are well-accepted ideas within our society. Since Adam Smith cataloged these ideas in his well-known *Wealth of Nations*, it's been accepted that the more you can break work into specialized tasks the more productive you'll be (Smith 1776) and ultimately the more prosperous.

Given the individual and societal benefits of specialization, it is sometimes easy to overlook or minimize the costs particularly because the costs are not necessarily linearly incurred (they grow larger with increased specialization), are subtle in nature and are often externalities (not born by the specializing entity). Some of these costs have been acknowledged in the theoretical discussions of specialization since Adam Smith cataloged the idea but increased levels of specialization have magnified these costs and uncovered new ones.

I identify four basic costs associated with specialization: Alienation is the cost Marx worried about; he felt specialization would lead to spiritually and physically depressed workers (Marx 1843). Abstraction, or being removed from other parts of a system due to extreme specialization, can result in diversification of responsibility and a lack of accountability. Power imbalance is the result of unequal distribution of efficiencies and can lead to exploitation. System Compromise happens as naturally complex systems are broken apart and oversimplified. As a result specialization can create unwanted waste (naturally absorbed in the original system) and/or remove natural product richness.

Ultimately, when the costs of specialization outweigh the benefits of specialization we see are in a state of overspecialization and see unsustainability. Collectively identifying and coming to agreement on where that point of ideal specialization is not a feasible objective. But understanding that such a point conceptually exists and better understanding the costs and benefits of specialization and how they are incurred helps us understand the challenges of sustainability.

We see an example of overspecialization in the industrial food system. This system is highly specialized and while that specialization has led to incredible productivity it has also cost. Prominent among these costs is system compromise which has resulted in artificially rather than naturally nutritious food and a huge amount of environmental waste. I suggest that despite the great benefits we have gained from a specialized food system the costs we have collectively concurred are higher and thus the system is overspecialized and not sustainable.

Building a Sustainable Food System

Based on the discussion presented in this paper, I suggest that to move to a sustainable food system is to, in a sense, to resist the guiding of Adam Smith's invisible hand; to at some point choose not to specialize and thus forfeit the benefits of increased specialization because of their costs. To do so will necessitate change for consumers, marketers and government alike. For customers the call to action is to start investing more time and money in food consump-

tion or even food production. The challenge for marketers (producers) is to embrace the idea of change and, instead of plowing forward with specialization, look for ways to encourage and link into less specialized food systems. Some of the most important work in moving to a sustainable food system is going to need to be done by policy makers. While policy certainly needs to address existing health and waste issues, if the goal is a truly sustainable food system, policy needs to encourage the growth of a new sustainable food system.

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DE-COMMODIFICATION AND VALUE

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SUMMARY

Environmental sustainability is a growing concern for businesses, consumers, and policy makers alike. A national survey of U.S. consumers found that 69% actively seek to buy environmentally responsible products (Cone Inc. 2009). For marketers, this creates both pressure and an opportunity to meet customer demand. At the same time, firms are responding to pressure from other sources to demonstrate more environmentally sustainable practices. For example, the EPA recently classified carbon dioxide as a threat to the environment (Weisman and Hughes 2009) and Congress has sought to pass cap-and-trade regulations requiring firms to address emissions. In response to this and other pressures on businesses, a recent survey of 1,254 companies by the Economist Intelligence Unit (2008) found that 53 percent of the firms reported adopting a “coherent strategy” for environmental sustainability and another 23 percent claimed to have one in the works.

While much prior research on sustainability has focused on issues related to the outputs of consumer products (i.e., the environmental impact of a product’s use and disposal), relatively less has focused on inputs (i.e., the resources invested in making a product). However, in order to successfully address today’s “throwaway society,” inputs should be considered, not only as a factor in lengthening product life spans but also as a way of motivating more responsible rates of consumption (Cooper 2005). This research investigates whether increasing the consumer’s knowledge of a product’s system of provision (Fine 2006) might cause them to value the product more. If so, this higher value might motivate consumers to consume more mindfully and make more sustainable consumption decisions.

Conceptualization

Consumer culture theory (CCT) posits that consumption represents much more than a simple economic exchange; instead, this stream of research illuminates the sociocultural, symbolic and ideological aspects of consumption (Arnould and Thompson 2005). Some researchers in marketing and other disciplines have concluded that macro-level changes in markets and economic systems have

fundamentally changed the meanings associated with products and consumption. For example, Sayer (2003) describes the “commodification” of products by which products are de-contextualized or distanced from their inputs. Similarly, Borgmann (2000) emphasizes the prevalence of “paradigmatic consumption,” in which the pleasure of consumption has become dislocated from the toil of production, thereby allowing consumer desire to “run wild” (p. 420). In other words, because consumers have lost the appreciation for the exertion required to produce most of today’s goods, the goods have consumption value only; the inherent value that stems from an appreciation for the investment required to make them is missing.

Building on these views, we argue that an important issue in promoting sustainable levels of consumption is the relative paucity of meaning and value attributed to products in today’s consumer culture. Perhaps if products were in some way de-commodified, consumers might attribute more value to the products and thus be more likely to purchase less initially and to reuse and repair what they own instead of disposing. Research on the value of possessions (e.g., Richins 1994) and on scarcity and abundance (e.g., Lynn 1991; Worchel, Lee, and Adewole 1975; Folkes, Martin, and Gupta 1993; Ailawadi and Neslin 1998) imply that knowledge of the scarce resources used in their production may help de-commodify products, thereby leading consumers to value them more highly and to consume more mindfully.

Methodology

To test the effect of making consumers mindful of the system of provision of a product they consume, we conducted an experiment in which we made the production inputs more concrete. Subjects were asked to value a pair of blue jeans based on the information in an ad. To manipulate their cognizance of the system of provision, one-third of the subjects were also provided with a description of 10 steps in the production of the product, ranging from planting and growing the cotton through the production and delivery of the jeans to a store. Another third saw a similar description of 10 steps in the production of an advertisement. The control group saw only the ad. The dependent variable was the perceived value of the product, measured as “Given what you know about this

product, how much do you think these jeans are worth?" using a sliding, whole-dollar scale. The subjects also answered manipulation checks and several covariate scales and demographic items.

Results

The manipulation checks revealed significant differences in the perceived effort to produce the jeans and advertisement in the respective groups (jeans production: $F = 15.54$, $p < 0.01$; advertising production: $F = 20.20$, $p <$

0.01). Subjects who viewed the steps involved in making jeans attributed a higher value to the jeans than subjects in the advertising production group ($F = 2.93$, $p < 0.10$) and the no-information group ($F = 3.85$, $p < 0.10$). Though preliminary, these results support the hypothesis that increasing a consumer's awareness of the resources invested in making a product will result in higher perceptions of value. No significant effects were found for the covariates or demographics. References are available upon request.

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DISASTERS, SUSTAINABILITY, AND PUBLIC RELATIONS: USING PUBLICITY CAMPAIGNS TO PROMOTE OR OPPOSE SUSTAINABLE DISASTER RECOVERY

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SUMMARY

This working paper describes a study that is examining how public relations campaigns help shape whether a city devastated by a disaster adopts sustainable practices when rebuilding. In past years, there has been increased recognition that when a city is recovering from a disaster, sustainable practices should be a key part of the rebuilding process. This recognition has emerged from the realization that, in many cases, it is unsustainable practices that cause disasters or worsen the impact of disasters. For example, depletion of coastal vegetation increases vulnerability to storms and deforestation increases the risk of floods (Eadie et al. 2001).

The post-disaster reconstruction period is seen by many governments, non-profits, and others as a chance to correct past mistakes and create better, sustainable cities. Various conferences and research institutes currently promote sustainable disaster recovery: rebuilding in a manner that enhances environmental quality, improves people's quality of life, and strengthens resiliency to future disasters (Eadie et al. 2001). The Public Entity Risk Institute's Ideas for Building Local Sustainability after a Natural Disaster monograph provides guidelines on how to rebuild sustainably. FEMA now offers courses that teach how to manage sustainable disaster recovery.

Despite increased recognition that sustainable disaster recovery is important, carrying out reconstruction in a sustainable manner has proven to be difficult. The difficulty is due to the complicated nature of disaster recovery. In the immediate aftermath of a disaster, rebuilding is often seen as an opportunity to create a better, sustainable community. Residents in disaster affected cities often start the rebuilding process with the goal of not just rebuilding but also addressing past sustainability problems (e.g., inadequate mass transit). Unfortunately, as the reconstruction proceeds, the goal of sustainable reconstruction is often abandoned. Reasons for abandonment include cost (rebuilding sustainably is viewed as costly) and pressure from interest groups (sustainable reconstruction is viewed as a threat to industries) (Pettersen 1999).

Public relations campaigns play a key role in shaping the disaster recovery process and what role sustainable prac-

tices play in it. Interest groups (e.g., business owners) use public relations to build support for their vision regarding how a city should be rebuilt. Those with significant resources can use publicity campaigns (e.g., advertisements, meetings) to ensure that sustainable practices are included or excluded from the disaster recovery process.

In this project, I am seeking to accomplish two things. First, I am examining how interest groups in New Orleans, New York, and the United Kingdom have used public relations campaigns to oppose or support sustainable practices during disaster recovery. Second, I am identifying the themes that are prevalent in the campaigns and how residents have responded to these themes.

In the first part of my data collection, I am examining the print, audio, and video materials used in post-disaster public relations campaigns carried out by interest groups. These include websites, posters, radio ads, and blogs. I am also examining media coverage (print, television, radio, and web) of the campaigns and how various residents have responded to the campaigns.

My preliminary findings are as follows. First, a prevalent theme in post-disaster public relations campaigns that oppose sustainable practices is the championing of gentrification as a key to revitalizing devastated cities. Campaigns that oppose sustainable practices highlight the return of middle class business owners as integral to successful rebuilding. Middle class business owners are portrayed as valuable because they can contribute economic capital necessary for reconstruction. In addition, the middle class are said to be a buffer against the loss of well-paying jobs and neglect by politicians that can trigger urban decline. Sustainable practices are portrayed as unnecessary burdens that hinder middle class business owners hence slowing down disaster recovery. Proponents of these campaigns argue that it is important to first rebuild and then worry about sustainability issues later when resources are not limited.

Critics of campaigns that oppose sustainable practices argue that gentrification does not necessarily help the underprivileged. These critics argue that disasters enable middle class business owners to easily take over poor

neighborhoods. Encouraging the middle class to take a lead in disaster recovery can displace the poor who lack the resources to reconstruct quickly. Championing gentrification over sustainability is portrayed as discriminatory and backward thinking because it adds more problems to the post-disaster context than it solves.

A second prevalent theme in post-disaster campaigns that support sustainable practices is the idea that disasters are the result of human neglect which can be rectified through technological and ecological measures. In these campaigns, catastrophic events like hurricanes are portrayed not just as natural disasters but the result of human mismanagement of the environment. Disaster reconstruction is presented as a process in which deficiencies that contributed to the disaster can be rectified through sustainable technological and ecological solutions.

Critics of this pro-sustainability theme note that disasters cannot be mitigated solely through technological and

ecological solutions. Championing technological-ecological solutions fails to address underlying issues that make people vulnerable to disasters. These critics argue that focusing on sustainability disadvantage those who can't afford the high cost of sustainable living.

A third prevalent theme in the campaigns that oppose sustainable practices is the idea that a strong psychological sense of community is key to efficient rebuilding after a disaster. Proponents of this view argue that sustainable practices that significantly alter a community (e.g., force people to move) are a threat to the sense of community that existed prior to a disaster.

Critics of these campaigns note that promoting a psychological sense of community at the expense of sustainability is problematic. Without sustainable practices, it is likely that a community may no longer exist in the future thus preserving sense of community pointless. Reference are available upon request.

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PROMOTING SUSTAINABLE CONSUMPTION: THE INFLUENCE OF MINDSETS AND CONSUMER TEMPORAL ORIENTATION

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SUMMARY

In promoting sustainable consumption, for-profit, non-profit, and government organizations are targeting consumers with messages framed in a variety of ways. For example, US Department of Energy material promoting Energy Star qualified products tends to promote products using two methods. First, there is material prominently displaying phrases such as, "Fight Global Warming," which is intended to appeal to broad *why* motivations. Second, there is material prominently displaying specific details *how* to "reduce greenhouse gas emissions." With the proliferation of such material, an interesting avenue for exploration involves understanding how consumers process this information and if certain individual difference variables influences consumers. This paper discusses two experiments which examine the moderating influence of a consumer's elaboration on potential outcomes (EPO) on a high (*why*) or low-level (*how*) mindset message on attitudes toward sustainability and intentions to consume sustainable products. The results have implications for researchers and marketers interested in promoting sustainable consumption.

Conceptual Background

Action identification theory contends that people have a tendency to construe events in high or low-level terms (Vallacher and Wegner 1985, 1987). Low-level [High-level] identifications describe how [why] an action took place and is typically thought of in concrete [abstract] terms. In addition to the mindsets, the influence of a consumer's EPO is of interest. Nenkov et al. (2008) describe EPO as a predisposition toward considering consequences and evaluating future consequences. Given the literature, it is predicted that future-oriented participants are more likely to have more positive attitudes toward sustainability and higher purchase intentions toward sustainable products compared to present-oriented consumers. It is also predicted there will be an interaction between mindset and consumers' EPO.

Experiment 1

The first experiment manipulates mindset using a public service advertisement (PSA) promoting living sustain-

ably. Undergraduate students participated in the study ($n = 134$). Mindset was manipulated and EPO was measured. The mindset manipulation involved a PSA describing reasons *why* or ways *how* to live sustainably. The dependent variables included attitude toward sustainability ($\alpha = .96$) and purchase intentions toward sustainable products ($r = .93$).

A 2(low/high-level mindset) x 2(EPO: present/future) between subjects MANOVA was used to test the predictions. There was a significant positive effect of EPO on the two dependent variables (p 's < .05). The mindset manipulation x EPO interaction was significant for both attitude ($F = 5.01, p < .05$) and purchase intentions ($F = 4.49, p < .05$). Contrasts indicate that, given the low-level mindset future-oriented participants had higher attitudes and purchase intentions (p 's < .0125) compared to present-oriented consumers, while given a high-level manipulation there was no significant influence of EPO (F 's < 1). Thus, the effect of a consumer's EPO was damped in the high-level mindset condition.

Experiment 2

The purpose of the second study was to replicate the results from the first study using a different mindset manipulation and a more generalizable sample, and to determine if guilt mediates the relationship between the interaction and dependent variables. Participants were recruited from a nationwide online panel ($n = 102$). In the low-level [high-level] mindset, participants were given a passage that explained a thought exercise describing *how* people can [*why* people] live sustainably (Freitas et al. 2004). Next, participants completed a counter-balanced guilt misattribution task (Baumeister et al. 1995) or an unrelated filler task, followed by dependent variables, attitude toward sustainability ($r = .85$) and purchase intentions ($r = .89$).

There was a positive main effect of EPO for both attitude toward the environment ($\beta = .25, p < .01$) and purchase intentions ($\beta = .35, p < .01$). There was a significant interaction between mindset manipulation and EPO for attitude ($\beta = -.17, p < .05$) and purchase intentions ($\beta = -.17, p < .05$). Similar to experiment 1, in the low-level mindset there was a positive influence of EPO for both

dependent variables (p 's < .001), while in the high-level mindset there was no influence of EPO (p 's > .30).

Discussion

Both studies indicate that a consumer's EPO moderates the effects of a mindset manipulation. Results indicate that when primed with a low-level mindset, future-oriented

consumers have more positive attitudes toward sustainable products and purchase intentions versus present-oriented consumers. Thus, from a managerial standpoint, using a low-level persuasive message to promote sustainable consumption may influence a greater portion of consumers than a high-level message. References are available upon request.

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SELLING GOOD FEELINGS, BUT DO YOU REALLY COMPLY?

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SUMMARY

This research project addresses the public request for sustainability compliance, investigating how brand-owners can ensure that their branded products are produced by all supply chain partners without violating claimed brand values.

Background

Committing to “sustainable” business practices can be used as a key element to differentiate from competitors (Luo and Bhattacharya 2006; Sen, Bhattacharya, and Korschun 2006). Past research demonstrated that brand-owners’ care about environmental and social aspects is an important factor influencing consumer perceptions such as brand evaluation, brand choice, and brand recommendation positively (Brown and Dacin 1997; Hoefler and Keller 2002; Klein and Dawar 2004; Sen and Bhattacharya 2001). By labeling a product with “sustainability,” the brand-owner promises to consumers that the product was produced in compliance with communicated environmental and social values. This brand promise must be entirely fulfilled in order to avoid any boomerang effect (Luo and Bhattacharya 2009). Since consumers hold the focal brand-owner responsible for all practices involved in the making of the product, suppliers not complying with the brand-owner’s promised values can damage brand reputation and decrease brand value. Nike and Mattel are prominent examples of brands that suffered from non-compliant suppliers (Wagner, Lutz, and Weitz 2009).

Brand-owners typically specify their sustainability commitment in sustainability standards (e.g., codes of conduct) which may become a contractual element between brand-owners, suppliers and their suppliers’ upstream (Frenkel and Scott 2002). A common problem of sustainability standard implementation in the supply chain lies in ensuring that suppliers have and reliably make use of the capabilities needed (King and Lenox 2000; Lee 2008). Consequently, brand-owners need to establish effective safeguarding mechanisms (e.g., supplier monitoring or development) to ensure suppliers’ compliance. Yet, those mechanisms were found to have varying effects (Egels-Zanden 2007), suggesting that an aligned combination may be required to better ensure supplier compliance. Current literature provides little information on how these

safeguarding mechanisms influence each other and what effective combinations are (Boyd et al. 2007; Ryu, Kabadayi, and Chung 2007). Furthermore, little is known “about the conditions under which suppliers will resist or comply with their customers’ requests to improve their (. . .) practices beyond regulatory compliance” (Delmas and Montiel 2009, p. 172; King, Lenox, and Terlaak 2005).

This leads us to the following research question: *What elements define a mechanism to safeguard supplier compliance to brand-owner sustainability standards, and what factors determine their appropriate set-up?*

Case Studies

Our explorative research is based on 19 comparative case studies within the European retail, fashion and paper industry. The cases reveal that brand-owners with high supplier compliance crafted a comprehensive “sustainability compliance strategy” – yet, varying in scope. A key concern of most brand-owners is to limit their efforts needed to ensure supplier compliance. Only when they decided to differentiate among their suppliers and apply mechanisms of different scale, economic feasibility became possible (cf., Delmas and Terlaak 2001; Neilson and Pritchard 2007).

Proposition 1: To successfully limit their expenses for safeguarding supplier compliance to their sustainability standards, brand-owners use different mechanisms for different types of suppliers.

Brand-owners’ approaches to safeguard supplier compliance appear to follow a similar concept: a repetitive process of observing suppliers’ practices, comparing those with the own sustainability standards (e.g., auditing), and taking corrective action when needed (e.g., supplier trainings). The major difference in the application by brand-owners and for different suppliers is the thoroughness and the frequency of this cycle.

Proposition 2: Mechanisms safeguarding supplier compliance are repetitive and comprise the elements “monitoring” and “corrective action.”

Successful brand-owners usually applied different safeguarding mechanisms that they considered most appro-

priate to the purpose. We observed risk, trust and power to determine the appropriateness of safeguarding mechanisms. In case of perceived high risk from a potential non-compliant supplier, brand-owners applied more comprehensive mechanisms. Also, brand-owner's trust into a supplier determined the degree of control required to ensure this suppliers' compliance beyond self-declaration (cf., Canning and Hanmer-Lloyd 2009). Further, brand-owner's power over a supplier determines which elements of a safeguarding mechanism can be applied. While dependent suppliers easily follow a brand-owner's request, independent suppliers pursue their own agendas (cf., Millington 2008).

Proposition 3: Risk, trust, and power mainly influence the appropriateness of a safeguarding mechanism.

Conclusion

The case studies showed that ensuring supplier compliance with brand-owner's sustainability promises has become a must demanded by the public. It requires from brand-owners adjusted approaches to ensure that suppliers really comply with focal brands' communicated sustainability standards, that in particular all "relevant" suppliers comply, that the "proof-of-compliance" is comprehensible and credible for the public, and that costs and efforts needed remain in ratio with the public perception of the sustainability concern in question. To do so, brand-owners apply different safeguarding mechanisms which are selected individually per supplier (or supplier group) based on the perceived risk, trust and power. These safeguarding mechanisms consist of "monitoring" and "corrective action" elements that are applied repetitively.

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SUSTAINABILITY: WHAT CAN WE LEARN FROM CONSUMPTION CONSTRAINTS?

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SUMMARY

A recent special issue of the *Journal of Public Policy & Marketing* explored how restricted consumption could help researchers understand a broader set of shopping decisions and behaviors. Constraints can result from various conditions that limit access to choices, such as geographic isolation or lack of knowledge (Baker, Gentry, and Rittenburg 2005). Several types of constraints, including poverty, disabilities, limited, or insufficient health care, can affect the ways in which consumers evaluate needs, make decisions, search for and evaluate products, purchase and consume them, and dispose of their wastes (see Baker, *JPP&M Special Issue*, Spring 2009).

In the present manuscript, I propose that the findings of such studies can inform us about opportunities for sustainability, which in turn can involve a broadened view of consumption constraints, including persons who choose voluntary constraints as well as those who experience involuntary consumption constraints.

According to the Merriam-Webster online dictionary, the word “constraint” can have several meanings. While it can refer to: *the state of being checked, restricted, or compelled to avoid or perform some action*, it can also include behaviors that are chosen, such as *a repression of one’s own feelings, behavior, or action*. This second definition suggests that consumption constraints can also be self-imposed and chosen by the individual, or by a group, or even by a larger entity such as a government or a country.

Involuntary Consumption Constraints

Interviews with consumers with disabilities reveal that they often confront potential consumer vulnerabilities with strategies that increase sustainability. For instance, persons with mobility disabilities who cannot drive often request rides from friends or take mass transit to their shopping destinations (Kaufman-Scarborough 1999). Persons who have attention deficit disorder may deliberately choose shopping environments that do not overload their senses with noise, bright lighting, or distracting merchandise displays, such as a “wall of televisions tuned to the same station” (Kaufman-Scarborough and Cohen

2004). Finally, persons with visual impairments report shopping online to participate in the marketplace while maximizing their ability to access online information (Kaufman-Scarborough and Childers 2009; McKenna and Bargh 1998). While losing the ability to touch products while inspecting them (Peck and Childers 2003; Peck and Childers 2008), online shopping takes shoppers with visual impairments into the marketplace while using a minimum of energy.

Voluntary Consumption Constraints

When a person, group, community, or organization chooses to place constraints on their choices, they may be following a specific motivation to reduce consumption in a specific area. Such constraints may result from various motivations, such as the desire to contribute to environmental well-being, the goal of losing weight, or making a public statement regarding a governmental policy. For instance, some consumers are known to be “voluntary simplifiers.” There are many approaches to voluntary simplicity, and its advocates generally follow what they define as “simple living.” Issues such as frugal consumption, ecological awareness, and personal growth are key themes that may result in the choice of voluntary constraints, or limits, placed by individuals as a result of their analysis (Huneke 2005), such as recycling, buying environmentally friendly products, limiting/eliminating TV, composting, making rather than buying gifts, and eating a vegetarian diet.

More broadly, voluntary consumption constraints are thought to occur when an individual, location, organization, or society places limits upon themselves for a specific reason. As consumers become increasingly interested in sustainability, they may also be interested in reducing their energy consumption through methods such as solar heating, hybrid cars, and purchasing organic products.

Preliminary Propositions and a Proposed Consumption Constraints Matrix

Proposition 1: When faced with reduced resources, persons with involuntary consumption constraints may attempt to participate in the marketplace in less costly and more efficient ways. Such methods may have the unintended consequence of placing less

demands on the environment through reduced energy use. Researchers may gain new insights into additional ways that individuals, organizations, and various groups can seek to preserve environmental well-being through the strategies of these consumers.

Proposition 2: Persons with voluntary consumption constraints may choose to contribute to sustainability by limiting their use of specific products resulting in the intended consequence of less demands on the environment.

The matrix that can be constructed maps the involuntary and voluntary constraints dichotomy against the various societal levels at which sustainable actions can be identified: these range from the individual, the group, the organization, government, and society. It is thought that this broader perspective might provide a more thorough representation of marketplace constraints. While the range of possibilities is vast, it is thought that researchers might develop a deeper understanding through the consideration of these possibilities. References are available upon request.

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THE IMPACT OF SUBJECTIVE AND OBJECTIVE KNOWLEDGE ON ECO-FRIENDLY BEHAVIORS

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SUMMARY

As environmental consciousness increases, sustainability initiatives are being undertaken by college campuses across the nation. Some schools are considering compulsory environmental education for their students. Underlying this policy proposal is the assumption that more knowledge about environmental issues will lead to more eco-friendly behaviors.

Consumer behavior researchers often make a distinction between objective knowledge (OK) and subjective knowledge (SK; Alba and Hutchinson 2000; Brucks 1985; Carlson et al. 2009). Past work has suggested that these two types of knowledge are often only weakly correlated and that SK can play an important role in decision making (Moorman et al. 2004). One context in which the impact of OK and SK has received less attention is societal issues (Carlson et al. 2009). A notable exception is Ellen (1994), who examined the role of OK and SK on pro-ecological behaviors and found SK to be predictive of a wider variety of behaviors than OK. We extend this work by examining the relationship between OK and SK and the relationship between each type of knowledge and eco-friendly behavior both before and after an educational intervention.

Hypotheses

Based on past work, we expected to find no correlation between OK and SK (H1), a positive relationship between OK and recycling behavior (H2a), and a positive relationship between SK and recycling behavior (H2b) prior to an educational intervention. We additionally tested the relationships between both types of knowledge and environmental communication, which we conceptualized as a form of activism. In line with prior findings on political action behaviors (Ellen 1994), we predicted OK would be unrelated to environmental communication (H3a) and SK would be positively related (H3b).

Alba and Hutchinson (2000) and others have suggested it is important to close the gap between OK and SK so individuals are able to base their decisions on correct information. We examined the effectiveness of an educa-

tional intervention on closing the gap between OK and SK and making OK a predictor of eco-friendly behavior. We predicted exposure to the intervention would lead to a correlation between OK and SK (H4) and result in positive relationships between OK and recycling behavior (H5a) and OK and environmental communication (H6a). We expected the relationships between SK and recycling behavior and SK and environmental communication would remain positive (H5b and H6b, respectively).

Methodology

Subjects were approached at environmental education presentations. Prior to the presentation, they were asked to fill out a short questionnaire assessing environmental OK and SK and recycling and environmental communication behaviors. Two weeks after attending the presentation, students were contacted to fill out a second survey with identical questions. Data were collected from 51 students, and analyses were conducted at the aggregate level.

Results

Pre-Intervention Analysis: OK and SK were uncorrelated, $r(49) = .12, p = .40$, confirming H1. A model regressing recycling behavior onto OK and SK revealed a main effect of SK ($\beta = .293, t = 2.58, p < .05$), confirming H2b. There was no main effect of OK, disconfirming H2a. A model regressing environmental communication onto OK and SK revealed a main effect of SK ($\beta = .627, t = 7.25, p < .001$), confirming H3b. There was no main effect of OK, confirming H3a.

Post-Intervention Analysis: We first examined whether the intervention was successful in increasing environmental knowledge and behaviors by testing for differences between the pre- and post-intervention groups in recycling behavior, environmental communication, OK, and SK. The post-intervention group's mean scores were higher than the pre-intervention group's in all cases ($ps < .05$).

OK and SK were uncorrelated, $r(49) = -.01, p = .95$, disconfirming H4. A model regressing recycling behavior

onto OK and SK revealed a main effect of SK ($\beta = .570$, $t = 3.88$, $p < .001$), confirming H5b. There was no main effect of OK, disconfirming H5a. A model regressing environmental communication onto OK and SK revealed a main effect of SK ($\beta = .820$, $t = 6.96$, $p < .001$), confirming H6b. There was no main effect of OK, disconfirming H6a.

Discussion

Consistent with past work, we find OK and SK to be uncorrelated and SK to be positively related to recycling behaviors prior to an intervention. We also find, as expected, that SK has a positive relationship with environmental communication, while OK is unrelated. After an educational intervention, we find an increase in OK but no correlation between OK and SK. This suggests

that the intervention was not successful in closing the gap between OK and SK. We also find SK to be positively related to both recycling behaviors and environmental communication, while OK remains unrelated to either behavior.

Conclusion

Our findings suggest the environmental education intervention was not successful in closing the gap between OK and SK. It also appears SK is more predictive of eco-friendly behaviors than OK. This suggests implementing mandatory environmental education programs may not be enough to ensure eco-friendly behavior. In addition to increasing OK (what individuals know), it is necessary to increase SK (what individuals think they know) to impact behavior. References are available upon request.

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UNDERSTANDING CONSUMER RESISTANCE TO GREEN INNOVATIONS: A STRUCTURAL EQUATION MODELING APPROACH

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SUMMARY

The development and marketing of green innovations provide great potential to reduce carbon emissions, ease fossil fuel dependency and stabilize energy costs. However, the diffusion of many green innovations remains low, often facing significant resistance amongst consumers (e.g., Garcia et al. 2007). Consumer resistance to green innovations is generally an under researched area and empirical evidence is scarce (e.g., Laukkanen et al. 2007). The objective of this study is therefore twofold. Building on recent advances in the literature, the study firstly aims to operationalize and empirically validate a measure of consumer resistance to green innovations. Secondly, the research aims to anchor this measure in a theoretically grounded model based around status quo bias theory (Samuelson and Zeckhauser 1988) and empirically test the relative influence of factors leading to consumer resistance to green innovations.

Based on a comprehensive literature review and qualitative research Kleijnen et al. (2009, p. 9–10) identify two distinct resistance behaviors toward innovations: *postponement* (i.e., an active decision to not adopt an innovation at that moment in time) and *rejection* (i.e., an active decision to not at all take up an innovation).¹ Although this classification is not intrinsically new and is broadly in line with previous research (e.g., Bagozzi and Lee 1999; Garcia et al. 2007; Gatignon and Robertson 1991; Lapointe and Rivard 2005; Martinko 1996; Penalzoza and Price 1993; Ram 1987; Ram and Sheth 1989; Rogers 2003; Szmigin and Foxall 1998), Kleijnen et al. addressed the lack of consistent terminology and varying definitions across previous resistance studies.

In this study resistance is therefore understood to stretch from postponement (i.e., weak resistance) to rejection (i.e., strong resistance), constituting the two end-points for the measurement of resistance.

One common underlying explanation for resistance is that consumers are often satisfied with their current situation

and might prefer the status quo over change brought by an innovation (e.g., Ram 1987; Sheth 1981). Following an approach used by Kim and Kankanhalli (2009), antecedents of resistance will be researched within a broader framework of status quo bias theory (Samuelson and Zeckhauser 1988) including variables around *cognitive misperception* (e.g., loss aversion), *rational decision making* (e.g., cost-benefit and risk evaluations) and *psychological commitment* (e.g., perceived image and control). The relative influence of the underlying antecedents will be assessed via structural equation modeling techniques (e.g., Bollen 1989).

Before testing the structural model the resistance scale was empirically validated. After two pre-tests conducted in autumn 2009, the final scale constitutes of 6 items:² (1) *You can see yourself installing __ in/ on your house at some stage in the near future?*; (2) *You intend to find out more about the benefits of installing __ in/ on your house in the near future?*; (3) *If the cost of __ dropped significantly, you would install __ / it in/ them on your house tomorrow?*; (4) *For you personally, the benefits of installing __ in the near future would outweigh the costs?*; (5) *If your house or roof needed renovations, you would consider installing __ in/ on your house?*; (6) *If the technology improves you will install __ in/ on your house?*

The data were collected via computer-assisted telephone interviews (CATI) with $n = 1012$ home owners in the Republic of Ireland in December 2009. Each respondent was asked about one of the following four technologies, including solar panels ($n = 227$), micro wind turbines ($n = 234$), solar thermal systems ($n = 224$), and wood pellet boilers ($n = 241$). Using an adaptive survey design, a first set of question distinguished between adopters (i.e., home owners intending to adopt the respective technology within the next 12 months) and non-adopters. In a second step, the latter group was asked another set of questions (see above) to identify their level of resistance.

An initial analysis of the resistance scale revealed a one-factor solution³ with all factor-loadings higher than .6 and

TABLE 1
Confirmatory Factor Analysis: Resistance Scale

Construct	Items	Across Subsamples (N=926)		Wood Pellet Boilers (N=241)		Micro Wind Turbines (N=234)		Solar Panels (N=227)		Solar Thermal Systems (N=224)	
		Std Loadings	R2 Meas. Eq.	Std Loadings	R2 Meas. Eq.	Std Loadings	R2 Meas. Eq.	Std Loadings	R2 Meas. Eq.	Std Loadings	R2 Meas. Eq.
Resistance	I1	0.71	0.50	0.70	0.49	0.73	0.54	0.71	0.50	0.68	0.46
	I2	0.79	0.62	0.75	0.56	0.81	0.65	0.80	0.64	0.77	0.59
	I3	0.71	0.51	0.77	0.59	0.68	0.46	0.69	0.47	0.64	0.41
	I4	0.65	0.42	0.71	0.50	0.62	0.38	0.61	0.37	0.66	0.44
	I5	0.70	0.50	0.76	0.58	0.66	0.44	0.63	0.40	0.72	0.51
	I6	0.77	0.60	0.77	0.59	0.81	0.65	0.75	0.56	0.71	0.51
RMSEA		0.053		0.08		0.03		0.015		0.069	
X2/df		3.65		2.38		1.18		1.053		2.15	
GFI		0.99		0.97		0.99		0.99		0.98	
CFI		0.99		0.99		1		1		0.99	

an inter-item reliability of .85. Further, a confirmatory factor analysis (Table 1) was conducted in LISREL 8.80, showing that overall the model fits the data reasonably well with all χ^2 / df between 1.05 and 2.38. Further, the RMSEA is below or equal to the threshold of .08. Comparing our specified model with the null model, the comparative fit index (CFI) suggests a reasonable fit, with all values exceeding .95 (Schumacker and Lomax 2004).

The factor loadings are all statistically significant at the .05 level. The standardized solutions show satisfactory results, with all loadings below or equal to 0.6. Further, the

R^2 of the respective measurement equations, with two exceptions, all exceed .4, indicating that the variables are reasonably well accounted for by the underlying factor *resistance*.

In order to assess the relative influence of the antecedents of consumer resistance, this measure has yet to be incorporated and tested in the above indicated structural model. However, the full findings will be available for poster-presentation at the Marketing and Public Policy Conference in May 2010. References are available upon request.

ENDNOTES

1 Kleijnen et al. (2009) identify opposition (i.e. active behavior directed in some way towards opposing the introduction of an innovation) as a third resistance behavior. However, opposition is least likely to be

experienced in relation to green innovations and is excluded from any further analysis in this study.

2 All Items were measured on a 5 point Likert scale stretching from very unlikely (1) to very likely (5).

3 Common factor analysis with oblique (non-orthogonal) rotation.

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THE APPLE WON'T FALL FAR FROM THE TREE: AN INVESTIGATION INTO FOOD ATTITUDES AND BEHAVIORS AMONG ADULTS IN HOUSEHOLDS WITH 6–11 YEAR-OLD CHILDREN

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SUMMARY

Although it has been long understood that obesity contributes toward significant health risks, public policy interest in obesity in general, and media coverage of the issue, gained prominence after the release of *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity* in December 2001 (Kim and Willis 2007). In particular, the increase in media attention was attributed to the “prestige and authority” of the medical community defining obesity as a significant social problem (Kim and Willis 2007). Law makers, regulators, marketers, consumer and medical groups, and others have engaged in this discussion via multiple venues. According to the International Food Information Council (2009), U.S. reporting of obesity-related news jumped from 9,575 stories in 2001 to 14,356 stories in 2002. The number peaked in 2007 with 30,989 news stories. The notion that media coverage can increase the salience of an issue or topic in the public sphere is known as the agenda-setting role of news (McCombs and Shaw 1972). As noted by Cohen (1963), media “may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about” (p. 120).

Based on Agenda Setting Theory (McCombs and Shaw 1972), the documented increase in obesity-related news stories over these years should have resulted in an upsurge in obesity salience among the public that in turn should have resulted in changes in food attitudes and behaviors. Grier, Mensinger, Huang, Shiriki, and Stettler (2007) note, “as policy makers consider ways to address the pediatric obesity epidemic, parents’ influence on children’s food intake takes center stage in the debate” (p. 221). From a practical standpoint, parents are the primary gatekeepers and role models when it comes to their children’s food choices and consumption. Seiders and Petty (2007) advocate that studies investigating childhood obesity include the parental component. This study uses the secondary data from a nationally representative sample, Experian Simmons, from 2002 and 2008 to inves-

tigate the potential change in food-related attitudes and behaviors of adults with children ages six to 11 during the time.

Hypotheses

- H1a: Food-related attitudes among adults in households with children ages six to 11 will be more reflective of a healthy diet in 2008 compared to 2002.
- H1b: Food-related behaviors among adults in households with children ages six to 11 will be more reflective of a healthy diet in 2008 compared to 2002.

Method

Data from the Experian Simmons National Consumer Study for Fall 2002 and Fall 2008 was used. Experian Simmons, and its competitor Mediamark Research and Intelligence (MRI), data have been used on a limited basis in prior studies to provide insight into health-related issues. Simmons data provides a nationally representative sample. Total adult sample size for the 2002 data was 20,024 individuals and 24,801 for 2008. The samples were filtered to focus on households with at least one child between the ages of six and 11. Defining the filter to allow other adults in the household, besides parents, captures the broader direct influence of adults as influencers and role models for food attitudes and behaviors. The resulting analysis samples were 3,227 (2002) and 4,461 (2008) and are projectable to 35,110,100 and 36,154,000 households, respectively. Two psychographic categories (diet and health, food) provided salient measures for the study. Respondents were presented several statements within each category and asked to agree/disagree on a five-point Likert scale.

Results

Most measures showed significant movement in the predicted direction (i.e., more reflective of a healthy diet and

lifestyle). In 2008 compared to 2002, consumers agreed more that: “fast food is junk,” “nutritional value is most important in the food I eat,” “fattening food makes me feel guilty,” and “there’s nothing wrong indulging in fattening foods.” Applying the Bonferonni correction factor to reduce Type I error, Hypothesis 1a shows support.

Comparable to changes in consumer attitudes, several measures show positive change in food-related behaviors to reflect a healthier diet. Consumers in 2008, compared to 2002, agreed more that “I work at eating a well-balanced diet” and “I usually only snack on healthy foods.” Similarly, in 2008, consumers agreed less that “I frequently eat sweets and “I eat foods I like regardless of calories.” Applying the Bonferonni correction factor to reduce Type I error, Hypothesis 1b shows support. There were no significant differences between 2002 and 2008 and consumers’ agreement with “I often snack between meals” and “I often overeat.”

Conclusion

The analysis of Experian Simmons data, representative of a national sample, shows positive change in healthier

food-related attitudes and behavior in 2008 compared to 2002 among adults in households with children six to 11. These findings are encouraging as they reflect the impact that multiple communication sources have made in enhancing obesity awareness since the December 2001 *Surgeon General’s Call To Action*.

The nutritional gatekeeper of the household influences roughly 72 percent of all the food the family consumes Wansink (2006). This study found adults in households with children ages six to 11 are showing positive change in healthy food attitudes and behaviors which should in turn influence those children. These facts highlight the need for new focus in the obesity research arena. Nontraditional families call for nontraditional research with more diverse subsets of the population deserving extra attention, especially in regards to different ethnic, socio-economic, and geographical segments (Seiders and Petty 2007; Grier et al. 2007). A shift in focus from investigating children and parents to addressing obesity in relation to adults with children in the household is needed. This study provides a first step. References are available upon request.

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THE PERSUASIVENESS OF VIDEO GAME ADVERTISING

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SUMMARY

The effectiveness of video game advertising has implications for consumer welfare, especially when considering the impressionable nature of the target market and the seemingly-benign atmosphere in which the ads are encountered. The Elaboration Likelihood Model (ELM, Petty and Cacioppo 1983) may be particularly relevant to in-game advertising since its basic tenants hinge on one's level of involvement with the message. Research has found that the degree that a consumer is persuaded by an ad depends on the resources that they are willing and/or able to devote to message processing. This allocation of resources is determined by things such as the individual's level of involvement with the message, characteristics of the advertising message, and the context in which the message is received (Petty and Cacioppo 1983). Playing a video game involves a high level of concentration and individuals may have little cognitive resources left to dedicate to ad processing (Nelson et al. 2006). However, there are characteristics of in-game advertising that could encourage the use of central route processing by increasing message involvement, thereby increasing the persuasive ability of the ad. For example, the extent to which the player is led to become involved with the brand (i.e., the player chooses a model of car to drive) or the degree of intrusiveness of the message (i.e., a voiceover announces the brand message vs. the brand is only seen in the background) may have an impact on the ad's effectiveness.

Study 1

Study 1 investigates whether the player is "for" the advertised brand or "against" the brand while playing the game. For example, a player could either drive the Budweiser sponsored car in a racing game, or race against the Budweiser car. The second characteristic of the ad is whether the player is "for" or "against" a brand within the same or different product category. That is, the Budweiser car could race against the Miller Light car, or against the Tide car. A unique video game was developed to manipulate the variations of same/different product category and for/against the brand. In this shooting-type game, players were instructed that they represented one brand

and the object of the game was to shoot as many of the other target brand as possible. The target brand was either the same or different product category depending on their condition (full factorial design, four conditions with a control). Subjects (N = 100) were male and female undergraduate students. After being recruited to test a new video game, participants played the video game in a controlled lab setting and then responded to the dependent measures. Dependent measures included product and brand recall, and summed scales to measure attitude toward the brand and purchase intentions toward the advertised brand.

MANOVA and Logistic Regression were used to analyze the data. The results indicate that brand attitudes and purchase intentions were more favorable when the advertised brand was the target of the game, versus the shooter. A similar result was found for brand recall. That is, recall was significantly better for the brand when the brand was the target compared to the shooter. No significant results were found for the same/different product category variable.

Study 2

Study two investigates auditory vs. visual ads and participatory vs. passive ads. In an auditory ad, the brand message is spoken in the video game, while in a visual ad the brand is seen but not heard. Likewise, a participatory ad requires player interaction (i.e., choosing a model of car to drive) whereas a passive ad does not (i.e., a billboard in a game). Ads should be more effective at persuading game players when they encourage central-route processing. In general, involvement with the advertising message is proposed to be higher for auditory and participatory ads because they force the player to pay more attention to the brand message. Passive and visual-only ads may only be viewed as part of the game background, and thus may only be viewed in a low-involvement manner.

A unique racing-type video game was developed to test auditory/visual and participatory/passive ads. The player can select the sponsored raceway they want to drive (participatory), and also sees billboards of brands as they

race (passive). For the auditory/participatory condition, upon selection of the raceway the announcer verbally says the brand (i.e., “You have chosen 7-up Raceway”). For visual/participatory, the name of the raceway is only seen on the screen. For the auditory/passive condition, the

voiceover announces the race sponsor during the race (i.e., “This race is brought to you by Vitamin Water”). For visual/passive, the target brand was seen on a billboard but not verbally announced. Study 2 results are forthcoming. References are available upon request.

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CHANGES IN CHILDREN'S AND GUARDIANS' ATTITUDES AND BEHAVIORS TOWARD SCIENCE, TECHNOLOGY, ENGINEERING, AND MATH (STEM) DISCIPLINES AFTER PARTICIPATION IN KIDS TECH UNIVERSITY

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SUMMARY

Background and Need

Policymakers have a need and responsibility to identify strategies that effectively capture the enthusiasm of students for STEM subjects that result in bright students pursuing careers in these technical disciplines. The American Recovery and Reinvestment Act of 2009 includes \$2.5B in additional funding for NSF for incremental research and programs in science, technology, engineering and mathematics (STEM) education initiatives. Recent Congressional Subcommittee Hearings also focus on discovering local and state programs that are effective. The recovery funds allow continuation of other recent federal programs designed to increase support for STEM education. In addition the importance of focusing on STEM education and research is detailed in the 2009 report: "Rising above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future by the Committee on Prospering in the Global Economy" that highlights the critical need for more graduates in the STEM disciplines to solve global problems. Generally, the research needed is in three areas:

1. Develop and sustain students' interests and enthusiasm toward STEM subject areas;
2. Facilitate successful completion of STEM education programs by students from K-16; and
3. Encourage pursuit of careers in the science, technology, engineering and math disciplines.

Purpose

This multi-disciplinary research among the social marketing, science, and education disciplines is focused on the

first area which is to create a sustainable interest and enthusiasm toward STEM disciplines in students so that they are motivated to take courses and elect careers in STEM areas. The cumulative findings should help public policy decision-makers in their support of informal science programs. The focus is on changes in students' and their guardians' attitudes and behaviors toward STEM disciplines as a result of participating in informal science activities, such as Kids' Tech University. The first year of Kids' Tech University (KTU) was held in the Spring Semester 2009 on four Saturdays as an outreach function of a major bioinformatics research institute at a large state research university. KTU is a program for children between the ages of 8 and 12 and is modeled after a European program. The children attended four lectures by experts given at the University on Science, Technology, Engineering, and Mathematics (STEM) subjects once a month on Saturdays during the spring semester by experts. They also participated in question and answer sessions with the lecturer, had lunch on campus, and anticipated in hands-on lab activities in the afternoon. The activities were supported by volunteers within the higher education environment and community.

Methods and Results

We administered a total of four pre- and post-paper Likert surveys that were completed by children ages 8 to 12 each session before the lecture and four post online surveys completed by their guardians to determine any changes in attitudes and behaviors toward science, technology, engineering, and math by participants. An average of 275 participants completed the four paper surveys. An average of 103 guardians completed the online surveys after each day on campus. Guardians responded that they perceived a cumulative increase in interest in their children of "some or high" interest in the STEM areas with each lecture. Specifically, in the area of science there was

a perceived increase of “some or high” interest by the students from 50% in Science in Lecture 1 to 72 percent in Lecture 4. The same positive trends occurred with Technology from 46% with “some or high” interest in Lecture 1 moving to 73 percent in Lecture 4. In the area of Engineering, guardians perceived that 28 percent of the children had an interest in Engineering after Lecture 1 and this increased to 69 percent in Lecture 4. In the area of mathematics, guardians perceived that 45 percent of participants had some or high interest in mathematics after Lecture 1 and this increased to 61 percent after Lecture 4.

The children were asked before each lecture to select the areas that they were looking forward to for the day. For each lecture the hands-on activities were the highest ranging from 67 percent to 74 percent for each of the four lectures. Similar to the guardians’ perceptions, 27 percent of the children indicated that they were looking forward to the lecture on the first day and by the fourth lecture 56 percent said that they were looking forward to the lecture indicating a positive change in attitude.

Discussion and Recommendations

Atjen and Fishbein’s (1980) theory of reasoned action is applied to understanding the favorable changes in stu-

dents’ and guardians’ attitudes toward the science disciplines. Behavior is seen as being determined by intention, and intention, in turn, is a joint product of attitude toward the behavior and the subjective norm (i.e., beliefs about how other people would regard one’s performance of the behavior). In marketing terms, this relates to the degree that children, their peers, and guardians’ perceived the STEM disciplines to be “forever cool.” In Osbornes’ review of the literature the theory of reasoned action has been successfully applied to prior attitudinal and behavioral studies in science education (Crawley and Black 1992; Crawley and Coe 1990; Norwich and Duncan 1990). They found that social support from peers and attitude toward enrolling for a course are strong determinants of student choice to voluntarily pursue science courses. Our initial findings and these prior studies indicate that the theory has partial validity in explaining students’ attitudes and behaviors toward STEM disciplines; therefore, public policy that encourages the funding and participation of students and their families in informal science activities are of value in the achievement of the goal of creating an adequate and well-educated STEM workforce. These studies also identified some relationship between parent’s involvement with their children in informal science activities. References are available upon request.

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EXPOSURE TO ALCOHOL ADVERTISING AND ALCOHOL CONSUMPTION AMONG AUSTRALIAN ADOLESCENTS

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SUMMARY

Introduction

Underage alcohol consumption is a major problem in Australia, as in the U.S. and other countries, contributing to a range of negative health and social effects among young people. There is increasing evidence from the U.S. that exposure to alcohol advertising is an important factor in the initiation and continuation of underage drinking, but this has not been examined in an Australian context. A considerable focus on alcohol advertising among both researchers and policy makers has resulted in recent efforts to improve the regulation of unacceptable advertising practices. This paper examines the association between exposure to advertising and alcohol consumption in a sample of Australian adolescents.

Methods

The participants were 1,114 Australian high school students aged 12 to 17 years. Participants completed a survey on their drinking patterns and recall of exposure to advertising across a variety of mediums (e.g., magazine advertising, in-store promotions). Alcohol consumption was assessed using two separate questions. The first question examined frequency of consumption in the previous 12 months (coded as “more than monthly” and “less than monthly”); and the second question whether they had consumed any alcohol in the previous four weeks (coded as “some consumption” and “no consumption”).

The association between exposure to different types of alcohol advertising and alcohol consumption was examined using logistic regression; the results are reported as adjusted odds ratios (AOR), with 95 percent confidence intervals. The analyses were conducted on the entire sample, as well as analyses by age and sex groups.

Results

In the entire sample, exposure to alcohol advertising in magazines (AOR = 1.42: 1.02 – 1.98) or in a pub/bar (AOR = 1.76: 1.34 – 2.33) was associated with regular

alcohol consumption in the previous 12 months. Among males aged 12–15 years, none of the forms of alcohol advertising were associated with alcohol consumption; whereas among males aged 16–17 years, reported exposure to alcohol advertising in a bottle shop (AOR = 3.02: 1.33 – 6.87) or bar (AOR = 2.17: 1.20 – 3.92) was associated with increased alcohol consumption. Exposure to alcohol advertisements in a bar/pub predicted greater alcohol consumption among females aged 12–15 years (AOR = 2.75: 1.39 – 5.45); and among females aged 16–17 years, alcohol advertising in a magazine (AOR = 1.69: 1.00 – 2.84) was associated with regular alcohol consumption.

In the entire sample, alcohol consumption in the previous four weeks was predicted by reported exposure to alcohol advertising in a magazine (AOR = 1.61: 1.17 – 2.02), on the internet (AOR = 1.34: 1.02 – 1.76) or in a pub/bar (AOR = 1.76: 1.34 – 2.33). When analyzed by age and sex, alcohol advertising in magazines (AOR = 2.40: 1.03 – 5.61) and on the internet (AOR = 3.00: 1.46 – 6.16) predicted alcohol consumption in males aged 12–15 years; whereas in males aged 16–17 years none of the advertising types were associated with four week alcohol consumption. Among females aged 12–15 years, recalled exposure to advertisements in newspapers (AOR = 2.08: 1.12 – 3.87) and bars/pubs (AOR = 2.41: 1.28 – 4.56) was associated with four week alcohol consumption; and among females aged 16–17 years, exposure to pub/bar advertising was associated with increased four week alcohol consumption (AOR = 1.55: 1.01 – 2.36).

Discussion

In the present study we observed that many young people were regularly consuming alcohol, consistent with findings from state and national surveys of Australian adolescents. For example, nearly half of the young people surveyed had consumed alcohol in the previous four weeks, and 38.3 percent indicated that they had consumed alcohol on a regular basis in the previous 12 months. The vast majority of the present sample indicated that they had been exposed to alcohol advertisements on television, in newspapers and magazines, on the internet, on billboards/

posters and promotional materials, and in bottleshops, bars and pubs. Importantly, we found that reported exposure to some of these types of alcohol advertisements was associated with increased alcohol consumption.

There are several possible explanations for the observed associations in this study. First, it is possible that increased exposure to alcohol advertising contributes to increased alcohol consumption in young people, by promoting positive attitudes to alcohol. However, it is also possible that young people who consume alcohol are more likely to notice and recall alcohol advertisements. Unfortunately, because the present data are cross-sectional, we are unable to determine the direction of causation.

To our knowledge, this study provides the first insights into the potential impacts of different types of alcohol advertising on underage drinking in an Australian sample. The results are consistent with overseas studies and suggest that exposure to alcohol advertisements across a variety of mediums is strongly associated with drinking patterns. These findings are important because in the current environment young people are exposed to at least some form of alcohol advertising – much of which is subject to limited, if any, regulation of its placement, frequency and content. Researchers and policy makers therefore need to develop ways to minimize young people's exposure to alcohol advertising in order to reduce its impact on their drinking-related attitudes and behaviors.

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PRODUCT ENJOYMENT, CONSUMER HARM

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SUMMARY

Introduction

Several decades of research on violence in the media has questioned the impact of video games and electronic media on youth (Anders 1999; Kaye and Sapolsky 2004; Wilson and Linz 1990). Much of this research focus has been on the violence involved in the game and its impact on youth development and learning. Social norms are also affected by these gaming environments that blur what is or is not acceptable behavior (Bandura 2007).

Important questions that have yet to be addressed are first, are there types of harm in addition to violence that video games can cause? Second, what characteristics of games have the most potential to cause harm?

A Dark Side of Flow

Desire to play a video game can lead to flow experiences or even peak experiences. Flow has been characterized as the optimal experience where the individual feels more active, alert, concentrated, happy, satisfied, and creative (Csikszentmihalyi 2008, c1990; Csikszentmihalyi and LeFevre 1989). Consumers who achieve flow online become highly focused and enjoy being fully immersed in the virtual world (Mathwick and Rigdon 2004). These experiences that result from both the social aspect of the community as well as the attributes of the brand have been found to enhance the customers' ability to experience flow that is an outcome that is valued by customers.

Unfortunately, a dark side may exist in these motivations to play video games that can be understood through transcendence theory. Flow and other outcomes can lead to a strong, for some insatiable, desire for these experiences. As Schouten, McAlexander, and Koenig (2007) have noted "there may be a fine line between the well-being of transcendence (flow) and the dangers of addictive escapism . . . it appears that one person's path to bliss may be another person's road to ruin (Schouten et al. 2007, p. 366). Belk, Ger, and Askegaard (2003) have described this addictive nature of consumptive desires and have warned that: *addiction involves a strong appetite, devotion, obsession, and dependence . . . so the fires*

of desire can potentially warm or burn the body (Belk et al. 2003, p. 334).

Addiction Theory

Addiction is "an impulse-control disorder that does not involve an intoxicant" (Young 1998). Internet addiction disorder has been based on the same DSM IV criteria for addiction and obsession and has been used to study video gaming addiction (Ng and Wiemer-Hastings 2005; Young 1998). Signs of being addicted to online video games include (1) a preoccupation with the video game, (2) lying or hiding the amount of time spent playing the video game, (3) social withdrawal from family and friends in the real world (4) loss of interest in other activities, (5) difficulty withdrawing from socialization in video game, (6) continuing to socialize in the virtual space after harmful consequences to ones job, education, or relationships have been realized (Ahn 2007; Fisher 1994; Young 2007).

Some types of games that have the potential to lead to addiction are massively multi-player online role-playing games (MMORPGs) or multi-user domain games (MUDs) (Young 2007). These games enable product users to interact with each other in 3-D graphic gaming environments over gaming networks using the internet. Such online games allow the gamer to socialize with others within the game in real time – 24 hours a day seven days a week. Because these games are run continuously in real time the social and competitive aspects make it difficult to stop playing (Ng and Wiemer-Hastings 2005).

MMORPGs have been the focus of much addiction research due to the characteristics of the product to attract and retain players even after the player attempts to quit playing the game (Wan and Chiou 2006; IGDA 2003). It has been estimated that as many as 40% of players of the most popular MMORPGs are addicted (Ahn and Randall 2007).

In this research, I attempt to argue and illustrate that the gaming addiction problem is behavioral, learned and rewarded incrementally through product features, involves socialization by other consumers into a progression of behavior, offers highly hedonic and escapism experiences that further feed the desire for the product experience, and

can lead to compulsive or addictive behavior that is hard to forgo.

Discussion

While FTC involvement has been used to implement labeling on the issue of video game violence, little policy has given thought to the addictive elements of the product. Reducing exposure or monitoring the addictive nature of

these games is a growing area of concern that may need stronger legislation. Given the product characteristics and gaming environment that we describe, addictive behavioral patterns related to the games are unlikely to be corrected by education alone (Wilson and Linz 1990). Creative industry and policy solutions developed for the interactive gaming environments of today are needed. References are available upon request.

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THE ROLE OF PARTICIPATORY ACTION RESEARCH IN DESIGNING SUCCESSFUL YOUTH RISK BEHAVIOR INTERVENTIONS

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SUMMARY

We report findings from a South African youth risk behavior intervention which used participatory action research to generate a narrative persuasion-based curriculum. We use a field experiment to evaluate the effectiveness of the classroom intervention in terms of knowledge and attitudes on four topic areas: HIV/AIDS, alcohol, conflict resolution, and peer pressure. We find the intervention curriculum to be more effective than the control curriculum.

Substantive and Theoretical Considerations

A significant shortcoming of extant risk interventions is the lack of community involvement in the planning/implementation phases of projects (Singer 2007). One paradigm that emphasizes the value of collaboration with local communities is participatory action research, which involves the target community in terms of problem identification, design, data collection, analysis, and application of research findings (Ozanne and Saatcioglu 2008; Reason and Bradbury 2001). We used this approach in partnering with a South African youth development NGO. The emergent topics of focus included peer pressure, conflict resolution, alcohol abuse, and HIV/AIDS.

The next step of the process involved the collaborative identification of a platform from which to deliver intervention. As our conversations evolved, we discovered the target population had a strong history of oral tradition and performing arts. We worked with members of the local community to develop a school-based behavior change curriculum using narrative persuasion as a platform. Narrative persuasion has been demonstrated to impact beliefs and behaviors in terms of alcohol usage (Slater and Rouner 1996), nutrition and food choice (Slater et al. 2003), and safe-sex practices (Perloff 2001). We collaborated with life orientation teachers to develop a curriculum incorporating narratives. The resulting course was cyclic in nature; for each topic there were several phases;

classroom discussion, activity, informational instruction, small group skit development, and skit presentation. This pattern was repeated with each of the units. In this way, the creation of the curriculum was a collaborative, ongoing, and emergent process.

Methodology

We used a field experiment to evaluate the narrative-based classroom intervention. One hundred sixty-eighth-grade students from a township high school were randomly assigned to experimental or control conditions. Students in the experimental condition received the intervention during a time block usually reserved for their life orientation (health) course, while students in the control condition received the standard life orientation curriculum. We measured knowledge and attitudes on the four main intervention topic areas: HIV/AIDS, alcohol, conflict resolution, and peer pressure.

Results

Evaluation of the curriculum included informal discussions with students and volunteers and a formal questionnaire-based assessment designed to measure the effectiveness of the intervention curriculum. To formally measure narrative involvement for students in the experimental group, we took items from several narrative engagement scales to create a measure of transportation, or the extent to which the narrative persuasion emotionally and attentionally engaged participants.

Knowledge

The intervention program was successful in increasing students' knowledge. The experimental group was significantly more knowledgeable than the control group on measures of sex knowledge ($t(158) = 3.046, p < .01$), alcohol knowledge ($t(157) = 2.655, p < .01$), and conflict resolution knowledge ($t(158) = 2.275, p < .03$).

Attitudes

Individuals in the experimental group were marginally more likely to demonstrate concern for another person while in a conflict ($t(158) = 1.954, p < .05$) and to view conflict negatively ($t(158) = 1.736, p < .10$). When controlling for previous sexual activity, the experimental group was more likely to think that condoms were a good thing than the control group ($t(31) = 2.901, p < .01$). That is, within the group of control and experimental students who already had sex, the experimental students had more positive attitudes toward using condoms than sexually active control students.

Impact of Transportation

Degree of transportation was positively correlated with attitude and knowledge items; for example, higher levels of transportation were related to likelihood to have a positive attitude toward condoms ($r(74) = .444, p < .01$), increased likelihood to have thought about what one would do in a situation involving alcohol, peer pressure,

sex, and conflict resolution ($r(74) = .359, p < .01$), and increased conflict resolution related knowledge ($r(74) = .320, p < .01$).

Conclusion

Participants in the experimental condition differed in positive ways from the control group, and those in the experimental condition who experienced higher levels of transportation experienced greater benefits from the intervention. These findings support the contention that narrative appeals have a greater impact on their audience than traditional, informational communication, and impact levels may vary with level of engagement. Participatory action research ethos played a central role in guiding our research and intervention efforts. We gained a more thorough and nuanced understanding of the target research context and host of subtle cultural factors, and our collaborators were empowered through developing a set of skills that will continue to enable them to work with and for their community. References are available upon request.

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CONSUMER FAST FOOD EVALUATIONS GIVEN CALORIE DISCLOSURES

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SUMMARY

While the Nutrition Labeling and Education Act (NLEA) required standardized nutrition labels on most packaged food products, food prepared for immediate consumption has been exempt from this legislation. Recent calorie disclosure mandates for restaurant chains have been either passed or implemented in New York City, Seattle, Philadelphia, and the state of California. In addition, national legislation mandated the provision of calorie information on menus and menu boards for chains nationwide (Tate and Roche 2009). Given the recent legislative activity and the inconsistent findings of recent restaurant nutrition labeling studies (Howlett et al. 2009; Chandon and Wansink 2007), the goal of this research is to help clarify the relationship between nutrition information provision and consumer evaluations in a fast food restaurant context.

Study 1

We first conducted an experiment that examined the direction and extent of (mis)estimation of calorie information for different meal categories from different fast food restaurants. More specifically, we examined healthfulness perceptions for four restaurants, two perceived as offering less healthful meals and two perceived as offering more healthful meals. We also examined two different categories of food offered by all four restaurants, chicken sandwiches and salads. In addition, we tested two versions of each food type, one more and one less healthful version actually marketed by each restaurant.

Business students ($n = 102$) from a southern University were used as study participants. A description of each meal was provided and participants were then asked to estimate the calories in each meal. From these calorie estimates, we computed both (1) percentage accuracy and (2) raw accuracy scores, based on the deviation of the estimated levels from the actual calorie levels for the meal items from the four restaurants.

For both percentage accuracy and raw accuracy, there was a significant interaction (p 's $< .001$) between the three factors, indicating that the combination of perceptions regarding healthfulness of restaurants, category of food, and healthfulness of the meal appear to influence consumers' estimates of calories. These findings indicate that the estimation of calories is a difficult task in the current information environment, and the accuracy of consumer calorie estimates are subject to a myriad of potential biases. Results also indicate that consumers tend to estimate calories within a restricted range and suggest that certain inaccuracies may result. This is consistent with range theory (Volkman 1951) and the anchoring and adjustment heuristic (Tversky and Kahneman 1974).

Study 2

Study 2 examined calorie disclosures for two different restaurant chains and two menu item categories shown to differ in perceptions of healthfulness. Study 2 participants were members of a web-based consumer panel. The dependent measures were perceptions of weight gain and heart disease risk from regularly eating the meal, and perceptions of two nutrients associated with disease risk, evaluations of sodium content and saturated fat content. The study stimuli employed two different item categories that varied in level of perceived healthfulness (lower calorie salads and sandwich-based value meals including a side item and beverage) for two restaurant chains (Subway and Burger King). The experiment had one between subjects' manipulation, a menu calorie disclosure consisting of two levels, (1) no calorie disclosure control and (2) a calorie disclosure condition. Fast food restaurants and the menu item category (lower calorie salads vs. sandwich-based value meals) were administered within subjects.

Results showed significant three-way interactions between calorie disclosure, the restaurant, and item type for perceptions of weight gain and heart disease likeli-

hood (p 's $< .05$). Generally, the findings support the conclusion that effects of calorie disclosures will not be consistent across menu items, given their different positioning that has led to varied perceptions and health halos (Chandon and Wansink 2007).

Implications for Consumer Health and Welfare

These studies offer potential implications for policy makers and consumer welfare advocates. Both studies support the notion that consumers have considerable difficulty estimating calorie content of restaurants meals. Study 2

suggests that menu labeling can help consumers avoid less healthful items that substantially exceed calorie estimates, and they can benefit from accurate information regarding meals that have *lower* than expected calorie levels. In addition, consumers seem to utilize calorie information to evaluate levels of other health-related nutrients (e.g., saturated fat and sodium). In sum, the current findings suggest that it would be beneficial to further examine the effect of menu and menu labeling on choice at the point of purchase. References are available upon request.

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E-WORD-OF-MOUTH ON HEALTH SOCIAL NETWORKING SITES: POTENTIAL BENEFITS FOR CONSUMERS, POLICY MAKERS, AND MARKETERS

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SUMMARY

Word-of-Mouth (WOM) communication often has a positive impact on consumers' behavior. Electronic Word-of-Mouth (eWOM) is no different. Health social networking sites on which consumers actively share their experiences and views about health problems and treatments with others are a rich venue for eWOM communication.

The essence of eWOM is online interpersonal communication (Litvin et al. 2008). Research suggests there are two primary motives for eWOM: utilitarian and hedonic (Goldsmith 2006). Users of social networking sites are moderately connected and like to share information with others (Smith 2007). Users of specialized health social networking sites can share information with others interested in specific health concerns. Because of this these sites may be perceived as preferred sources for communications that fit an individual's motivational orientation and health locus of control. Such "tailored health communication" has been shown to be effective in supporting behavior change.

The current study investigates how eWOM is generated and developed on health social networking sites. We are particularly interested in who is participating, what participants talk about, and how threaded discussions with multiple participants develop. Since obesity is one of the major health concerns facing U.S. consumers, we selected an obesity support group on *Dailystrength.org*, a popular health social networking site, as our online community. We use netnography to study communication among members. At the time the data for this pilot study were collected, the group had 520 members.

The primary unit of analysis is one discussion thread containing one initial posting and several subsequent responding postings. The secondary unit of analysis is one posting generated by one individual. We developed a

coding scheme based on past studies (Maloney-Krichmar and Preece 2002; Ginossar 2008; Donelle and Hoffman-Goetz 2008; Eichhorn 2008) and preliminary analysis of data from a pilot study. Each thread was coded for topic and length, and each posting was coded for theme, length, timeliness, and characteristics of posters (e.g., gender and age).

We found that two types of help seeking elicited corresponding types of support: informational help seeking evoked informational support, and emotional help seeking evoked emotional support. Active supporters are middle- and older-aged females, reflecting their role as primary caregivers for families. Questions about self-support evoked more responses from supporters than did other questions, reflecting the fact that obesity is not only a medical problem but also a lifestyle problem.

There are several ways in which participation in eWOM on social networking sites can help consumers. Writing can improve consumers' health and well-being (*Pennebaker 1997*). eWOM on these sites disseminates both informational and emotional support, and can help consumers cope with health-related issues. eWOM on these sites focuses on experiential health information, something that cannot be provided by doctors. This information can facilitate consumers' participation in shared decision-making with doctors. This experiential information comes from "similar others" who are "the most effective supporters" (Thoits 1995, p. 67).

Because eWOM on health social networking sites reveals consumers' concerns and preferences for treatments for specific diseases, such sites can provide insights for policy makers in developing health programs and for marketers for product improvements and new products that address consumers' concerns. References are available upon request.

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EATING YOUR FEELINGS: UNDERSTANDING EMOTIONAL EATING AND OVERCONSUMPTION

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SUMMARY

I was just feeling lonely. I am in a relationship, but I'm not married. I've been married. So when I am by myself, I'll just eat . . . a tortilla makes me feel very comfortable. I guess because growing up they were always at home and they smelled so good (Virginia, p. 5).

Food overconsumption has become a growing concern, especially as it has led to the rising obesity epidemic (Ferraro, Thorpe, and Wilkinson 2003). Approximately 32 percent of U.S. adults aged 20 and older, are obese (Ogden et al. 2006). As a result, many initiatives and campaigns have been launched to change eating habits and the way that food is marketed (Eldrige et al. 1998; Goldberg and Gunasti 2007; Gibson 2007). Additionally, numerous studies have examined the effects of health claims and the provision of nutrition information on consumer behavior (Burton and Creyer 2004; Brinkley 2006; Chandon and Wansink 2007). Although past and current efforts to persuade consumers to eat healthier have focused primarily on the provision of objective information (e.g., nutrient content), policy initiatives and social marketing programs should also consider the role that psychological and social factors play in food related consumption. This research seeks to provide insight regarding food overconsumption by examining how it might be linked to emotional eating behavior and the subsequent psychological and social processes that drive such behavior.

Emotions have a profound effect on our consumption and purchase behavior. Evidence from the consumer research literature suggests that individuals may engage in consumption to “down-regulate” or decrease the negative emotions they experience (Kemp and Kopp in press; Garg, Wansink, and Inman 2007; Andrade 2005). Individuals may especially use eating to regulate their emotions. Emotional eating is a common phenomenon in response to stress or sadness and has been blamed for the failure of most diets in women (D'Arrigo 2007). Research suggests that individuals may receive positive chemical reinforcement from consuming some foods, particularly those high in carbohydrates (Martin 2001). After contin-

uous reinforcement, these behaviors become habits. Thus, each time the behavior is reinforced, the habit is strengthened (Thayer 1996; Hirschman 1992). Although consumer research has been conducted in both the nutrition and emotions areas, limited research has examined the psychological and social processes that underlie the emotional eating phenomenon. Understanding the intricacies of such a process may lead to successful efforts in reducing overconsumption.

Method

This research employed a qualitative methodology to the study of emotional eating (Thompson 1997). Such an approach allowed for a more comprehensive discovery of consumers' thoughts, feelings and behaviors, which could be used in designing meaningful interventions. In-depth interviews were conducted with 13 women that self-identified as emotional eaters. The 13 informants were diverse in race/ethnicity, occupation, and marital status. Studies suggest that there is a higher prevalence of obesity among African Americans, Latinos, American Indians, and Pacific Islanders than Caucasians (Ogden et al. 2006; U.S. Department of Health and Human Services 2000). Six of the informants were African American, four were Asian American, two were Hispanic and two were Caucasian. Informants ranged in age from 18 to 59. Each interview was recorded and transcribed. Data was analyzed using an interpretive approach.

Emotional Eating Narratives

Five prominent themes emerged from the narratives of the informants. First, emotional eaters are more prone to consume and even overconsume hedonic food products when experiencing negative emotional states, such as stress/anxiety, loneliness and sadness. Second, many of these emotional eaters expressed difficulties in exercising self-control in their eating behaviors when exhausted or depleted, either physically or emotionally. Third, informants often engaged in psychological processes such as prefactual thinking and rumination before consuming hedonic food products. Hedonic rationalizations (Moore and Bovell 2008), a form of prefactual thinking, were used

by many of the informants to justify conceding to a temptation or a consumption experience. Additionally, informants entertained repetitive thoughts, or ruminations, about a particular food item.

Informants also indicated that they were engaging in “normative behaviors.” They were more likely to have friends and family that consumed hedonic and unhealthy food products with them. Finally, the marketing of hedonic food products also played an important role in overconsumption for emotional eaters. Specifically, emotional eaters found advertisements for food products to be especially provocative, convincing and persuasive. These emotional eaters also expressed an inherent disinterest in processing nutrition information provided on the packaging of food products.

Studying the nuances of emotional eating has significant consumer welfare implications due to high obesity rates in the United States and the failure of most diets (Flegal et al.

2002). This research provided an in-depth examination of both the internal and external processes that underlie the emotional eating phenomenon. As demonstrated by many of the informants in this research, regulating emotional distress often took precedence over impulse-control, and individuals engaged in consumption to achieve short-term gratification from negative feelings. In order to develop effective social marketing programs to combat such destructive behavioral patterns, an understanding of consumer psychological and social processes is paramount. Social marketers can then develop tactics to match individual levels of motivation, opportunity and ability (Rothschild 1999; Goldberg and Gunasti 2007). Such approaches may include increasing consumer motivation to seek out and make healthier food choices, or finding ways to equip individuals with the psychological resources to resist the temptation to overconsume unhealthy food products. Additional research can provide insight into specific approaches.

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EFFECTS OF TRANS FAT LABELING ON CHIP AND COOKIE INTRODUCTIONS IN THE U.S.

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SUMMARY

Background

Medical evidence linking dietary intake to a wide range of diseases and medical conditions is causing researchers, policymakers, consumers, and food manufacturers to become increasingly engaged in an ongoing debate about the best ways to optimize the quality and quantity of nutrients in the average American diet. The mandatory labeling of *trans* fat content in packaged food products offers a case study of a food policy supported by medical evidence and created to influence both consumers and food manufacturers. Evaluating the demand and supply impacts of *trans* fat labeling is necessary to develop a better understanding of how these groups respond to policy changes and is essential to creating effective food and nutrition policy in the future. Several important medical, food science, consumer science and policy articles have been published on the subject of *trans* fats and how they impact diet, health, and the quality of food products. This previous work provides an important context for this study of food manufacturers' response to mandatory *trans* fat labeling.

Although it is clear from previous research that there has been a significant effort to reduce the amount of *trans* fatty acids in several types of food products, the current literature provides a limited assessment of the extent of changes in the food supply due to *trans* fat labeling. Large-scale investigations of food manufacturer response have previously been limited by the rapidity, scope and proprietary nature of product reformulations (Ratnayake et al. 2009). Case studies and random samples tested over short periods or in limited geographical regions provide valuable insights, but cannot be generalized to all food products and do not provide enough evidence to determine if changes in fat profiles have been significant. One of the most concerning conclusions in the current literature is that ingredients high in saturated fatty acids may be common replacements for *trans* fats, especially in bakery products, which may lead to additional health concerns (Eckel et al. 2007; Ratnayake et al. 2009). This study

seeks to complement the current literature by using a detailed product innovation database, Global New Product Database (GNPD) – Mintel, to analyze packaged food products released in the U.S. from 2001–2009.

Methods

Summary statistics were prepared by year, including total number of observations, share of observations carrying a *trans* fat declaration of amount (e.g., “0g *trans* fats”), share of observations containing partially hydrogenated oils, and share of observations reporting nutrition information. Chip and cookie innovations were specifically chosen to examine the impact of the policy intervention for changes in ingredient and nutritional profiles, because these are major sources of artificial *trans* fats. Previous research suggests that the replacement of *trans* fats in these categories was more challenging than in simpler foods, such as margarine. “Cookie” innovations were considered to be any foods classified under the sweet biscuit/cookie subcategory in the GNPD database, including all types of cookies, sweet biscuits or rice cakes, and cookie/sweet spread combinations. “Chip” innovations were considered to be any foods classified under the savory/salty snack subcategory in GNPD, with the exception of popcorn products. Popcorn was considered to be significantly different from chips. All innovations with popcorn as one of the first five ingredients were removed.

Innovation-level nutrition information was run through a database macro and hand-cleaned to report serving size as well as total fat, saturated fat, and *trans* fat contents. The FDA allows some flexibility in reported serving sizes and permits manufacturers to print nutritional information in terms of amounts that may reasonably be consumed. Therefore, fat contents were then standardized to 30g (FDA defined standard reference amount for chip and cookie products) to control for variations in serving size. The standardized saturated fat content per serving and the ratio of saturated fat to total fat content were the two measures selected to analyze significant changes in cookie and chip products. Descriptive statistics were calculated and frequency distributions were plotted to test

normality assumptions. Outliers were identified as any observation more than three standard deviations above or below the mean. Analysis was conducted in two parts. First, a curve fit (linear regression) of the mean of each variable by year (outliers excluded) was plotted. If the regression was significant ($p < 0.02$), then a one-way ANOVA (Scheffé posthoc, $\alpha = 0.02$) was run on the variable comparing products introduced from 2001–2002 (pre) to products introduced in 2008–2009 (post). All analysis was conducted using SPSS Statistics 17.0 software (IBM Chicago, IL).

Results and Conclusions

Trans fat content was not included in significance testing, since labeling was not required until 2006. However, for products introduced from 2006–2009, descriptive statistics were reported by category, including the shares of products reporting 0g *trans* fat and containing partially hydrogenated oil.

Both the average saturated fat [$F(1,9) = 40$; $p < 0.001$] and the average saturated to total fat ratio [$F(1,9) = 60$; $p < 0.001$] linear regression models were significant for cook-

ies. However, neither the average saturated fat [$F(1,9) = 5$; $p < 0.058$] nor the average saturated to total fat ratio [$F(1,9) = 1$; $p < 0.291$] models were significant for chips. Two one-way ANOVAs respectively showed the average saturated fat content of cookies was 0.49g (0.010g, 0.975g) higher in 2009 than in 2001 [$F(3,917) = 4$; $p = 0.006$] and the average saturated to total fat ratio [$F(3,917) = 12$; $p < 0.001$] was 9.1 percent (3.2%, 15.0%) higher in 2009 than in 2001. Both measures were significant at a 98 percent confidence level.

A pre/post analysis of the effects of mandatory *trans* fat content labeling on chips and cookies found that the policy has resulted in a significant increase in average saturated per serving and in average ratio of saturated to total fat content in cookie products introduced from 2001 to 2009. No statistically significant changes were observed in the same measures in chips.

The shares of chip and cookie introductions containing partially hydrogenated oils declined 45 percent and 42 percent respectively. Additional research is needed to link these results to effects of the policy on consumption and medical research to determine public health impact.

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ENVIRONMENTAL CUES AND FOOD CONSUMPTION AMONG DIETERS AND NON-DIETERS

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SUMMARY

As the holidays approach, individuals are bombarded with advice regarding ways in which to avoid indulgence. Shape magazine touts its “No Weight Gain Holiday Guide” (2009) while Men’s Health tells its readers “how to indulge, without showing a bulge” (“Season’s Cheatings” 2009). Yet most of us are not following such advice. The average person gains about a pound each holiday season, and most individuals do not shed this pound, causing holiday weight to accumulate year after year (Parker-Pope 2007).

In the domain of eating behavior, individuals often face self-control dilemmas, whereby temptations interfere with the pursuit of long term goals (i.e., a slice of pumpkin pie with whipped cream) threatens to interfere with your diet. Recent research provides support for the contention that specific occasions or special events (e.g., holidays, birthdays, etc.) engender a sense of entitlement for individuals in terms of their consumption behavior; this justification cue results in a greater likelihood of relaxing self-control and selecting vices (e.g., chocolate cake) over virtues (e.g., fruit salad; Kivetz and Zheng 2006). On the contrary, research also shows that environmental cues can result in a heightened defensive state for people who are actively guarding against indulgence, such as dieters (Fishbach, Friedman, and Kruglanski 2003).

In this research, we explore how individual differences in dieting behavior interact with the presence of an environmental cue, such as a special occasion or holiday, to either justify indulgence or bolster self-control, leading to a choice of more versus less indulgent food items, respectively. We posit that dieters will exert more self-control when such environmental cues are present (vs. absent). We argue that for these individuals, cues involving a holiday or special event are interpreted as situations that are characteristic of indulging and, therefore, can automatically signal higher efforts at self-control. Instead of acting as justification for indulgence, these cues will act as triggers for guarding against dieters’ long-term eating goals (Myrseth, Fishbach, and Trope 2009; Trope and

Fishbach 2005). Additionally, we hypothesize that the absence of such cues will lead dieters to be unprepared to bolster their self-control efforts, thus resulting in a self-control failure and indulgence. On the other hand, since non-dieters do not exert the constant attempts at self-control and monitoring that dieters do, we expect that non-dieters will utilize holiday cues as justifications to indulge. We, therefore, would expect these individuals to relax their efforts at self-control in the presence of these cues.

We test these predictions in a series of experimental studies in which individuals are faced with a variety of holiday-related indulgence cues and are asked to make food choices. For our first study, we examined the effect of a specific environmental cue (i.e., a birthday) on people’s consumption behavior. Half of the participants were told that a hypothetical dinner was being held in honor of their own birthday, while the other half were told that it was for a friend’s birthday. All participants were then asked to choose from a range of desserts from extremely unindulgent (i.e., a healthy fruit salad), to extremely indulgent (chocolate cake à la mode). Results support our hypotheses; dieting participants who were told that they were out to dinner in celebration of a friend’s birthday chose the most indulgent dessert significantly more than dieting participants who were told that they were out to dinner celebrating their own birthday. By contrast, non-dieting participants chose the most indulgent dessert more when they were told that they were celebrating their own birthday. We also found that choice for the most indulgent option was significantly higher for dieters than non-dieters overall.

In our second study, we explored the impact of dieters’ defense bolstering in the presence of a holiday justification cue on actual food consumption. We varied the saliency of the holiday cue by administering half our study on Halloween, and the other half on another day the week following the holiday. All participants were given a bag with 50 M&M candies and a questionnaire to complete. Participants were told that they could enjoy the candy as they filled out the questionnaire. At the end of the study, participants were asked to count the number of

candies remaining in their bag. Our results again support the hypothesis that dieters experience a bolstering of self-control when the holiday cue is available and consequently eat less than dieters who do not have such cues available (i.e., an ordinary day). The opposite effect occurs for non-dieting participants, who consumed less of the candy on an ordinary day compared to Halloween.

A third study (currently underway) seeks to examine the proposed psychological mechanisms underlying the effects found in our prior studies, with a particular emphasis on the processes involved in the heightened efforts of self-control for dieters when holiday cues are present. As in study 2, in this study we assess participants' actual consumption behavior, this time in the presence or absence of holiday-related food cues (i.e., highlighting the food-related characteristics of Thanksgiving versus the

non-food characteristics). In sum, our research demonstrates that certain cues in the environment that have been traditionally considered justifications for indulgence can also have the opposite effects for certain individuals, namely dieters. On one hand, this bodes well for dieters, who may be better equipped to handle holiday-related consumption cues (e.g., a big bowl of mashed potatoes and gravy). On the other hand, it also demonstrates that these individuals might be less well equipped to deal with everyday indulgences (e.g., the candy jar on a co-worker's desk). These findings carry implications for dieters as well as those individuals striving for weight maintenance. Future research might explore other factors that contribute to the bolstering versus licensing effects so that individuals might be better equipped to handle environmental cues linked to overconsumption. References are available upon request.

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FIBER CLAIMS: DO THEY MATTER?

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SUMMARY

Foods like margarines and sugary cereals that were once viewed as unhealthy foods are getting a facelift as companies add essential nutrients, such as calcium to them. The industry calls these products “nutraceuticals” or “functional foods” (Marchione 2009). These “functional foods” account for more than \$27 billion in sales a year and future growth is expected to range from 8.5 percent to 20 percent per year (Marchione 2009). Recently, many companies have added fiber to their existing products or launched new products touting fiber. In 2009, 6.5 percent of new foods are claiming to be fiber-enriched (Horovitz 2009). Critics express concern that the fiber craze is not necessarily a good thing for consumers since many companies are using isolated fiber which does not have the same benefit as whole grains (Wong 2009). Given this concern regarding nutritional claims, the Food and Drug Administration is working to define the criteria manufacturers must meet in order to use nutrition claims on product packaging (Skidmore 2009).

Consumers’ use of nutrition information has been extensively studied. Although there has been much research conducted on nutritional labeling and claims (Keller et al. 1996; Kemp et al. 2007; Howlet, Burton, and Kozup 2008), there has been limited research examining fiber claims. A study by Ippolito and Mathios (1991) did find that fiber claims in the cereal industry did increase consumer knowledge of the fiber-cancer relationship and cereal consumption. This research extends that study by focusing on the individual consumer and addressing whether consumers perceive products with fiber claims to be healthier. With the FDA concerned that some nutritional claims may be misleading, this research bears strong public policy implications.

Methodology

One hundred and four undergraduate students were randomly assigned to one of two conditions. In one condition, participants were presented with a picture of the front panel of a cereal box. The cereal was a fictitious brand, “Drakers Cinnamon Jacks.” On the front panel was a nutrition claim indicating that the cereal “Now Provides Fiber.” In the other condition, participants were presented

with the same front panel of the cereal box but there was no claim present. After being presented with the front panel of the Drakers Cinnamon Jacks box, subjects were asked to rate the nutrition level of the cereal (Garretson and Burton 2000). Next, subjects were asked about the perceived cardiovascular risks associated with consuming the target product (Kozup, Creyer, and Burton 2006). Specifically, they were asked to consider if consuming the cereal regularly would increase or decrease their likelihood of having (1) heart disease, (2) a stroke, and (3) high blood pressure. All of these items were measured on a 7-point scale. Participants were also asked whether consuming the cereal would contribute to certain health benefits often associated with the regular intake of fiber. These benefits were assessed by asking whether eating the cereal would decrease or increase regulatory digestion, levels of energy, and swings in blood sugar levels. Finally, individuals indicated whether eating the cereal regularly would decrease/increase their likelihood of weight gain. Again, a 7-point scale was used.

Results and Discussion

Univariate analyses were performed to determine if there were any differences in participants’ perceptions of nutrition levels, cardiovascular disease risk, weight gain, and health benefits between the fiber claim versus no fiber claim conditions. Results indicated that there were significant differences between participants’ perception of nutrition levels ($F = 18.5, p < .01$) between the two conditions. With higher values indicating higher nutrition levels, those individuals exposed to the cereal with the fiber claim rated the cereal as more nutritious ($M = 3.45$) than those that saw the cereal without the claim ($M = 2.65$). There was also a main effect for cardiovascular disease risk ($F = 5.51, p > .05$). With higher numbers indicating greater likelihood of disease risk, those exposed to the cereal with the fiber claim felt their likelihood of disease risk would be lower ($M = 3.58$) than those presented the cereal without the fiber claim ($M = 4.09$). Those in the fiber claim condition felt that their likelihood of weight gain would be lower ($M = 3.87$) than those that were in the no fiber claim condition ($M = 4.86, F = 12.15, p < .01$).

Results regarding participants’ perceptions of health benefits derived from consuming the target product were

assessed. Results indicated that there was a main effect for fiber on perceptions of regulatory digestion ($F = 12.6, p < .01$). Individuals in the fiber claim condition felt that the cereal would be better for digestive health ($M = 4.3$) than those in the no fiber claim condition ($M = 3.48$). However, results revealed that there were no significant differences on perceived health benefits related to higher levels of energy between the fiber claim and no fiber claim conditions ($M = 4.22$ and $M = 3.95, p > .05$). Similarly, there were no significance differences between the fiber and no fiber claim conditions for regulation of blood sugar levels ($M = 3.87$ and $M = 3.35, p > .05$).

The findings suggest that people do associate fiber with decreased health risks and increased health benefits. In

addition, a product with a fiber claim is viewed as more nutritious. This raises the concern whether consumers can distinguish between whole grain and isolated grain fiber since it is the whole grain fiber that offers the health benefits. The claim on the front of the package does not usually note the type of fiber. Programs may need to be developed to educate consumers about the types of fiber, the amount of fiber recommended and role of fiber in a diet. Given the positive impact of the fiber claim on the perceived nutrition level, future research needs to examine whether the fiber claim leads consumers to choose a product without assessing other nutritional aspects of the product. The FDA may need to consider developing guidelines on using the fiber claim. References are available upon request.

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REWARDING SELF-EFFICACY: EXAMINING ANTICIPATED REGRET AND INFLUENCE OF AWAY-FROM-HOME CONSUMPTION DECISIONS

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SUMMARY

The decreased consumption of more healthful home-cooked food and increased consumption of less healthful away-from-home food has become of increased interest in recent years. Based on the National Restaurant Association (NRA 2010), more than 130 million Americans will be patrons of at least one foodservice provider today. Per-capita spending on full-service establishments and quick-service restaurants alone are projected to rise 18 percent and 6 percent, respectively, between 2000 and 2020 according to the Keystone Center (2006). Further, recent research has found that restaurant patrons typically underestimate the number of calories consumed while overestimating the healthfulness of the menu items (Howlett et al. 2009; Chandon and Wansink 2007; Young and Nestle 2007; Wansink and Chandon 2006; Burton et al. 2006, 2009). Less healthy food choices have been shown to be positively related to major health complications according to the Centers for Disease Control and Prevention (CDC 2010). Due to this health crisis, national legislation that would mandate of the provision of nutrition information on both menus and menu boards is under consideration. Popular fast food restaurants such as KFC, Taco Bell, Pizza Hut, and Long John Silver have voluntarily agreed to start placing product calorie information on menu boards at its U.S.-based restaurants by January 2011.

Research has been conducted to examine how external factors impact consumers' behavioral intentions toward health-related decisions. However, limited research has examined both the external influences (e.g., consumption episode location) and internal mechanisms of the self (e.g., anticipated regret and self-efficacy). The combination of these factors may result in the overconsumption of foods high in fat and calories. Understanding the interworking of such interactions may lead to innovative solutions for the reduction of overconsumption.

A 2 (anticipated regret: regret vs. control) X 2 (consumption location: restaurant vs. non-restaurant) X 2 (self-efficacy: high vs. low) between-subjects experimental

design was used to examine the effects on health-related consumption intentions and behavior. This study tests predictions concerning the effects of anticipated regret, away-from-home consumption and self-efficacy on likelihood of consuming a heavy meal, exercise intention, and actual caloric intake.

Likelihood of Consuming a Heavy Meal

The three-way interaction for likelihood of consuming a heavy meal was nonsignificant ($p > .05$), but there was an anticipated regret by consumption location interaction ($F(1, 91) = 4.46, p < .05$). Follow-up contrasts indicate that even when anticipated regret is induced, participants indicate a greater likelihood of consuming a heavy meal in a restaurant setting than in a non-restaurant setting ($M = 3.98$ vs. $M = 2.73$). No two-way interactions were found for anticipated regret by self-efficacy ($F(1,91) = 2.55, p > .05$) and consumption location by self-efficacy ($F < 1$). However, there was a main effect of anticipated regret ($F(1,91) = 9.28, p < .05$), with means indicating that those in the anticipated regret condition were less likely to consume a heavy meal than those in the control condition ($M = 3.23$ vs. $M = 4.20$). Further, a main effect was found for consumption location ($F(1,91) = 5.10, p < .05$) on the likelihood of consuming a heavy meal, with means indicating a greater likelihood of consuming a heavy meal in a restaurant setting as compared to a non-restaurant setting ($M = 4.11$ vs. $M = 3.42$). No main effect was found for self-efficacy ($F < 1$) on likelihood of consuming a heavy meal.

Intention to Exercise

The three-way interaction was nonsignificant, but there was an anticipated regret by consumption location interaction ($F(1,91) = 6.14, p < .05$). Contrasts revealed that when anticipated regret is induced, consumers indicate they have greater intention to exercise, given that they did *not* eat at a restaurant as compared to those who did eat at a restaurant ($M = 5.90$ vs. $M = 4.67$). No two-way interactions were found for anticipated regret by self-

efficacy ($F < 1$) or consumption location by self-efficacy ($F(1,91) = 2.44, p > .05$). No main effects of anticipated regret or consumption location (p 's $> .05$) were found. However, a main effect was found for self-efficacy ($F(1,91) = 7.79, p < .05$), with means indicating greater exercise intentions for high self-efficacy compared to low self-efficacy individuals ($M = 5.23$ vs. $M = 4.73$).

Actual Caloric Intake

A three-way interaction was found for actual calories consumed ($F(1,91) = 7.24, p < .05$), with follow-up contrasts indicating that even when anticipated regret is induced, high self-efficacy individuals report consuming more calories when they eat at a restaurant than at a non-restaurant location ($M = 931.8$ vs. $M = 511.9$). Additionally, there was an anticipated regret by consumption location interaction ($F(1,91) = 4.86, p < .05$). Contrasts indicate that even when anticipated regret is induced, consumers' caloric intake is greater in a restaurant setting than in a non-restaurant setting ($M = 804$ vs. $M = 548$). Further, there was an anticipated regret by self-efficacy interaction

($F(1,91) = 4.64, p < .05$); contrasts reveal that when anticipated regret is not induced, high self-efficacy individuals consume fewer calories than low self-efficacy individuals ($M = 750$ vs. $M = 956$). No two-way interactions were found for consumption location by self-efficacy ($F < 1$). However, there was a main effect of anticipated regret ($F(1,91) = 9.28, p < .05$) on caloric intake, with means indicating that those in the anticipated regret condition consumed fewer calories than those in the control condition ($M = 650$ vs. $M = 851$). Main effects for consumption location and self-efficacy (F 's < 1) on caloric intake were nonsignificant.

Results offer evidence that self-efficacy plays a key role in consumption and exercise decisions, particularly for those who dine away-from-home. Based on these initial findings, even those categorized as high self-efficacy individuals appear to give into temptation when eating out. Taking these findings into consideration, other external cues should be examined to determine potential solutions to overconsumption episodes in away-from-home settings.

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THINKING MAKES ME HUNGRY: DIFFERENCES IN RESTRAINED AND UNRESTRAINED EATING BEHAVIORS

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SUMMARY

Researchers are concerned with the over-consumption of food and its negative effects on society. This paper synthesizes research from the field of psychology in the area of dietary restraint with research on how marketplace and product cues influence overeating. Using these two research streams as a platform, we examine the differences between how some consumers, those classified as restrained eaters, respond to consumption cues. Specifically, we propose that the cognitive demands of perpetual restraint may make diet conscious consumers more susceptible to some triggers to overeat and less susceptible to others. Understanding these differences has important public policy implications because food packaging and labeling may not have the intended effect for restrained eaters, resulting in more, rather than less, consumption for this group. In addition, understanding how the behaviors of restrained eaters differ may help nutrition advocates better educate these consumers.

The characteristics and behaviors of restrained and unrestrained eaters have been widely explored in the field of psychology over the past 40 years (Herman and Mack 1975; Herman and Polivy 1980; Heatherton, Striipe, and Wittenberg 1998). Restraint is the perpetual “cognitively mediated effort that an individual makes to combat the urge to eat and restrict food intake to control body weight” (Herman and Mack 1975). Restrained eaters constantly monitor and regulate the food they eat through “self-imposed dietary rules and restrictions” (Ward and Mann 2000, p. 755). However, this constant focus on food does not result in dietary perfection. In fact, the continuous attention and effort required to restrain ones’ eating behavior despite the plethora of temptations faced daily, often results in dietary lapses and overeating by this group (Herman and Mack 1975). By contrast, unrestrained eaters spend less time and cognitive effort focusing on food; they eat when they feel hungry or want the food and generally stop eating when they are full. This important distinction may make restrained eaters more likely to rely on product cues such as package size, specific product claims such as “low-fat” or “high fiber” or their own

health beliefs such as the perceived healthfulness of one restaurant as compared to another to determine how much they should eat rather than their own body’s signal of satiety.

Research on the role of marketplace and product cues in consumption has increased our understanding of how package size (Scott et al. 2008), serving size (Rolls, Morris, and Roe 2002), serving dishes and utensils (Wansink and Cheney 2005) and product assortment and variety (Kahn and Wansink 2004) influence how much consumers eat. We have also learned more about the underlying factors that prompt eating behaviors. For example, Scott et al. (2008) explore the emotional response of restrained eaters to food. By prompting restrained eaters to consciously think about the food they would consume as nonfood objects, these researchers were able to reverse the consumption differences between restrained and unrestrained eaters (Scott et al. 2008).

Beyond their emotional response to food, restrained eaters are susceptible to dietary lapses whenever outside factors interfere with their ability to devote the cognitive attention required to restrict what they eat. Consumption differences have been attributed to the depleted cognitive (Ward and Mann 2000) or self-control (Baumeister 2002) resources restrained eaters possess due to their continuous efforts to regulate their behavior. One challenge restrained eaters face is the steady stream of daily activities that require their cognitive attention and self-control resources. Recent research shows how the act of continuous decision making during a shopping trip actually reduces both the accuracy and persistence consumers display in subsequent cognitive tasks (Vohs et al. 2008). Similarly, constant pursuit of specific eating goals by restrained eaters may deplete their self-control resources, leading to choices that conflict with their restraint goals.

More recently, researchers are looking beyond the depletion hypothesis to explain why some consumers make poor eating decisions and why, in some cases, marketplace efforts seem to backfire and trigger less healthy choices. Wilcox and his colleagues (2009) find that the mere presence of healthy choices among less healthy

alternatives may actually increase indulgence, particularly for those with greater self-control. This research demonstrates how the inclusion of healthy menu choices fulfills health-related goals in high self-control individuals and licenses them to choose the least healthy menu option (Wilcox et al. 2009). Social cues also influence eating behaviors. The physical size of our dining partner as well as how much our dining partner eats influences our food choices and how much we eat (McFarren et al. 2010). Eating with people who are perceived to be thin but consume higher amounts of food increases the consumption of their dining partners (McFarren et al. 2010). In these streams of research, consumers rely on external cues to make food choices and decide how much to eat.

Consumers use a wide variety of external cues to judge the healthfulness of a food product. Perceptions of healthfulness have been shown to negatively influence consumers' perceptions of taste and enjoyment (Raghunathan, Naylor, and Hoyer 2006). The stigma of healthy food as being less tasty is important considering how consumers associate weight loss goals with eating the "right" foods (Antonuk and Block 2006). This research explores how restrained and unrestrained eaters respond to packaging cues that prompt assumptions about product healthfulness. We hypothesize that while foods expected to "taste great" prompt restrained eaters to concentrate on fighting the temptation placed before them, foods they view as healthy choices license restrained eaters to let their guard down resulting in increased consumption.

We test this hypothesis in an experimental setting by exposing participants to a fictitious new cereal box that contained one of two product packaging cues, "All Natural" vs. "Great Taste." Despite the fact that the nutritional profile (i.e., the calories and fat displayed along with other macronutrients and the ingredient list) of the product was the same on both packages, participants rated the cereal with the "All Natural" packaging cue as healthier than the package labeled "Great Taste." While we find support for the "tasty = unhealthy intuition" in both groups of consumers (Raghunathan, Naylor, and Hoyer 2006), our research shows it only affects the consumption amounts of restrained eaters. Those trying to restrain their eating behavior ate an average of 38 calories more when the product contained the "All Natural" packaging cue. These findings demonstrate how packaging cues may influence consumers differently and how these consumption differences may actually work against a consumer's explicit health goals.

This research adds to our understanding of how product and marketplace cues influence consumption for restrained and unrestrained eaters. In addition, we hope our research provides information to empower consumers to use their cognitive and behavioral resources to facilitate healthy food choices. As public policy officials work to combat the obesity epidemic, understanding the influences on food consumption will inform decision-makers as they implement remedies designed to reduce over-consumption and promote healthy lifestyles.

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WHY BUY LOCAL? THE MODERATING ROLE OF NUTRITION KNOWLEDGE ON CONSUMER ATTITUDES TOWARD LOCAL FOOD

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SUMMARY

Locavore: one who eats food locally grown whenever possible.

—Word of the Year 2007, New Oxford American Dictionary

The United States Department of Agriculture (USDA) announced a new initiative on September 15, 2009 entitled “Know Your Farmer, Know Your Food.” This initiative is expected to energize a national conversation and help develop local and regional food systems, which in turn, will stimulate economic development. According to Secretary Vilsack, “An American people that is more engaged with their food supply will create new income opportunities for American agriculture. Reconnecting consumers and institutions with local producers will stimulate economies in rural communities, improve access to healthy, nutritious food for our families, and decrease the amount of resources to transport our food.” As others have noted, the number of Americans who are interested in food and agricultural issues is greater now than at any other time since the Great Depression. Specifically, interest in “local food” continues to grow.

Many consumers and experts argue that locally raised and produced food is not only better for the environment and better for local communities, they also suggest that it is healthier and better tasting as well. As the local food movement expands, major food retailers such as Wal-Mart and Kroger are offering a greater variety of “local foods.” Thus, it is becoming increasingly convenient to buy local fruits, vegetables, meat, poultry, flowers and so forth, especially in markets that lack farmers’ markets, food co-operatives, and community supported agriculture (CSA) farms. Many retailers use in-store signage to identify those foods which are “local.” In fact, several national, nonprofit organizations working to rebuild community-based food systems provide communication tools, such as labels, signs and placards that promote the purchase of local food, to both producers and sellers.

The rising visibility of “local food” coincides with new labeling regulations regarding a food’s “country of ori-

gin.” The Agricultural Marketing Act of 1946 was amended by both the 2002 and 2008 Farm Bills and now requires retailers to notify consumers of the country of origin of beef, lamb, pork, chicken, goat, wild and farm-raised fish and shellfish, perishable agricultural commodities, peanuts, pecans, ginseng, and macadamia nuts. This modification of existing U.S. food labeling laws and the ever-increasing interest in local food has resulted in dramatic changes to the retail environment (Newman and Kopp 2009).

Thus, the purpose of this research is to extend prior research and examine consumer attitudes, beliefs, and purchase intentions within the context of the local food movement. In addition, how attitudes and beliefs are influenced by the interaction between a consumer’s level of nutrition knowledge and the provision of information that identifies a food as “LOCAL” is considered.

Design, Procedures, and Study Participants

A between subjects experiment was conducted to test the effects of a *Local* food label on consumers’ product evaluations. A 2 (nutrition knowledge: high vs. low) X 2 (information provision: control (no information) vs. food identified as locally grown) between subjects design was utilized. The product used in this experiment was bagged lettuce grown by a fictional company identified as Harvest Farms. A photograph of a supermarket produce section was presented to respondents. For half the respondents, a sign which read “LOCAL LETTUCE” appeared in front of the bagged lettuce section. In addition, the lettuce was identified as locally grown in a written description of the focal product which was presented in a sidebar to the right of the photo. In the control condition, the origin of the food was not mentioned. Nutrition knowledge was a measured variable and assessed by three, seven-point items. The items were summed and then a median split was performed in order to classify respondents as either high knowledge or low knowledge.

One hundred and twenty-six students from a southern university served as subjects. Students were presented a packet containing the stimulus and questionnaire items at

the beginning of a normal class period. After completing the experiment, which took approximately 15 minutes, class commenced.

Dependent Measures

Three of dependent measures are used to address questions of interest. The first measure is attitude toward the product assessed by three, seven-point scales. The second measure is purchase intention, also assessed by three scales. The final measure was product freshness and this was assessed by eight, seven-point scales. Higher values indicate more positive attitudes, higher purchase intentions, and greater perceived freshness.

Results

The results of the analyses indicate main effect of information provision. When the bagged lettuce was identified as “local” it was perceived to be fresher ($F(1,123) = 7.99$, $p < .01$) and attitudes ($F(1,123) = 13.38$, $p < .001$) and purchase intentions ($F(1,123) = 4.98$, $p < .05$) were more positive. However, this main effect of “local” on perceived freshness was qualified by an interaction with nutrition knowledge ($F(1,123) = 4.76$, $p < .05$). That is, nutrition knowledge moderated the effects of the “LOCAL LETTUCE” information. When nutrition knowledge was low, local lettuce was perceived to be fresher. However, when nutrition knowledge was high, the perceived freshness of the lettuce was not influenced by whether or not the lettuce was locally grown.

Discussion

Significant resources have been allocated to the “Know Your Farmer, Know Your Food Program.” One of the key goals of this initiative is to increase the consumption of local and regional foods. Most of the funding associated with this program will go toward helping farmers establish and expand local-scale sustainable operations and better connect with larger customers such as restaurants, grocers, and schools. However, we believe that the success of such initiatives will ultimately depend on “the average consumer” who typically shops at the local supercenter (e.g., Wal-Mart) or grocery store (e.g., Wal-Mart Neighborhood Market, Kroger’s, Winn Dixie). There have been a number of initiatives to promote the consumption of local or domestic products, both within the United States and in other countries around the world. Unfortunately, many of these programs have not been successful because a basic understanding of factors influencing market responses was lacking.

This research in an initial step toward improving our understanding of consumer response to locally raised food. Preliminary analyses of data collected in this research indicate that information which identifies produce as locally grown is used in consumers’ choice processes. However, greater understanding of the role played by information about a food’s origin is needed. This research will continue to explore how attitudes, beliefs and purchase intentions are shaped by the use of signage, labels, and placards identifying a food as “local.” References are available upon request.

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DIRECT-TO-CONSUMER ADVERTISING FOR PRESCRIPTION DRUGS

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SUMMARY

Direct-to-consumer (DTC) advertising continues to be a controversial approach to the marketing of prescription pharmaceuticals. DTC print advertising commenced in 1981, with the Food and Drug Administration (FDA) requesting a prohibition until it could study the situation in greater detail. Print ads and infomercials were allowed in 1985.

In 1997, the FDA allowed the use of televised DTC ads, resulting in quick and direct response by pharmaceutical firms. Ad budgets in the pharmaceutical industry amounted to \$12 million in 1989 and now exceed \$40 billion annually, although the majority is dedicated toward advertising to physicians. DTC advertising budgets are more than 15 times larger than a decade ago.

Commentators attribute industry growth to DTC ads (see, e.g., Richardson and Luchsinger 2005). DTC advertising influences physician prescribing behavior because of pressure by patients who have observed DTC messages (Abel et al. 2009; Gellad and Lyles 2007; Handlin et al. 2003; Paul, Handlin, and Stanton 2002). DTC advertisers are more prevalent in the media than are competitors who do not advertise (Hartley and Coleman 2008).

The unexamined research questions are whether DTC advertising (1) spurs product development and (2) is a profitable investment for pharmaceutical firms.

We sampled firms from SIC code 2834 (pharmaceutical preparation), selecting companies from the COMPUSTAT database. We thus developed a research sample of a nine-year cross-sectional database (1997–2005) comprising the 102 publicly traded pharmaceutical firms.

Using *Factiva* as the source, we located news announcements about pharmaceutical product introductions by screening articles for keywords: premier, release, launch, introduce, unveil, roll out, replace, and product. We coded new product introductions for each firm and summed them at the annual level.

We developed return-on-assets measures from COMPUSTAT, averaging the ROA for each firm to develop an industry-wide annual measure. DTC advertising was supplied by the U.S. Government Accountability office on an annual level for the industry. Likewise, annual spending on promotion to physician was provided by the same source.

Using OLS regression analysis, we found that DTC advertising was associated with increases in the number of new pharmaceutical products introduced annually. Spending on promotion to physicians was significantly related to ROA, but DTCA was not.

Thus, pharmaceutical may be well advised to concentrate on promotion through physicians and reducing their use of DTC advertisements. References are available upon request.

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ELECTRONIC HEALTH RECORDS AND PRIVACY CONCERNS: A HIERARCHICAL MODEL TO UNDERSTANDING PRIVACY TRADEOFFS

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SUMMARY

In 2004, Congress passed a bipartisan bill to create a National Health Information system. The system would combine information across health care providers (i.e., doctors, pharmacies, hospitals, public health officials, insurance companies) to provide a central source. The National Health Information Infrastructure (NHII 2009) and specifically the Electronic Healthcare Records (EHR) systems are designed to improve healthcare delivery but realizing the intended benefits will occur only through wholesale participation of individuals and healthcare providers.

One issue affecting participation is Americans' concern for privacy and their desire for greater control over their own information, particularly when it comes to their health information (Govtech.com 2009). While many believe that the creation of an Electronic Healthcare Records system can improve the quality of health care and reduce costs, there are still concerns about the safety of their records, the possibility of fraud or inappropriate use of personal health information (The Harris Poll 2008; Westin 2008). Individuals and privacy advocates express their concern for privacy by asking for increased legislation and protection from the government.

In prior research, privacy concerns are shown to be a function of stable individual traits (Hui et al. 2005) while others indicate that consumers' concern about their own privacy vary with context (Hann et al. 2005; Hui et al. 2005; Sheehan 2002; Smith 1996). Studies also indicate that there is a discrepancy between stated privacy concerns and actual behavior (Berendt et al. 2005; Hann et al. 2005), with strong evidence that situational factors play a significant role in defining an individual's concern for privacy.

To test the effects of both individual traits as well as the context dependent responses, this study tested a hierarchi-

cal model to determine whether attitudes toward specific programs that use private data are a function of the combination effect of very broad individual traits (i.e., elemental traits such as materialism, openness, and introversion) to more specific traits (i.e., compound traits such as control over possessions), situational traits (e.g., general privacy), and surface traits (e.g., consumer privacy). This study also tested whether attitudes vary as a function of who is the perceived primary beneficiary of the system; that is, does attitude change if the primary benefits are described as accruing to (1) the individual consumer or (2) the broader population (i.e., the country as a whole).

Method

Five hundred thirty-two students from universities in three states participated in an online survey. The sample was 52 percent male and 63 percent white/Caucasian. Respondents were asked to respond to Likert-type statements measuring Mowen's (2000) eight elemental individual traits (i.e., introversion, material needs, body resources, arousal needs, emotional stability, openness, agreeableness, and conscientiousness), three compound traits (i.e., control over possessions), (i.e., scale from Frost, Hartl, and Williams 2005), risk orientation (i.e., modified scale from Gomez-Mejia and Balkin 1989), and self-monitoring (i.e., modified scale from Lennox and Wolfe 1984), one situational trait (i.e., general privacy), and one surface trait (i.e., a three-dimensional consumer privacy scale modified from Smith 1996). Then respondents were presented with a description of the federally-mandated Electronic Health Records (EHR) system, using the benefits described by the program developers and implementing agencies. Half were shown the benefits prefaced with "YOU as an individual may benefit through . . ." and the rest saw "The country, as a whole, may benefit through. . ." Respondents then asked if they supported the EHR system and if they would want their personal medical information included.

Results

Structural equation modeling was used to test the hierarchical model, that is, to see if individual traits in sequence predict attitudes toward an EHR system. The model was specified to test the hypothesized path relationships in a progression from elemental trait to compound trait to situational trait to surface trait to outcome.

The structural equation model demonstrated acceptable fit (i.e., $X^2 = 36227.09$, $df = 2015$, $p = .000$, $CFI = .930$, $RMSEA = .039$, $SRMR = .055$), indicating that EHR attitudes (i.e., outcome) are a function of individual traits. Specifically, EHR attitudes were sequentially a function of consumer privacy concerns, general privacy concerns, compound traits (e.g., control over possessions and risk orientation), and a unique combination of elemental traits.

Unexpectedly, there was no difference in EHR attitude for the respondents who saw the benefits affecting them personally versus respondents who saw the benefits affecting the country as a whole. This suggests that attitudes toward the EHR system do not vary by who benefits.

Conclusion

Reaping benefits from EHR depend on cooperation of consumers and care providers. This research demonstrates that attitudes toward EHR and their willingness to participate are affected by individual traits as manifested through compound and situational traits. This challenges promoters to design effective communication strategies that address the basis for consumer privacy concerns, beyond stable traits. References are available upon request.

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STRANGER-OWNED LIFE INSURANCE AND ITS REGULATORY ENVIRONMENT: A CASE OF CONSUMER PROTECTION GONE TOO FAR?

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SUMMARY

Life insurance settlement (LIS) involves the controversial practice of investors (1) acquiring the life insurance policies of living persons and then (2) paying all future policy premiums, and (3) receiving the proceeds of the policy (i.e., the “death benefit”) upon the death of the insured person. Of greatest concern is a type of LIS transaction known as “stranger-owned life insurance” (STOLI). Here, the initial acquisition of the life insurance policy is motivated by (1) the desire to sell the policy to an investor (i.e., the stranger), and (2) the marketing efforts of the investor. Recently, concern over STOLI has led to highly restrictive legislation in several U.S. states. The present inquiry assesses the extent to which these laws may represent over-restriction of marketplace choice for both consumers and marketers.

The LIS Industry and STOLI Transactions

LIS holds vast potential to meaningfully expand consumer choice in that it provides life insurance policyholders the unique opportunity to dispose of an unwanted and largely illiquid asset for immediate and significant cash; typically three to four times as much as received via surrendering the policy back to the insurance firm issuing it. This helps explain the LIS industry’s spectacular growth in recent years – from sales of US\$5 billion in 2002 to US\$16 billion in 2008 – as well as forecasts of US\$160 billion in sales by 2040. However, LIS marketplace activity, largely due to the inherent “betting on death” nature of the business, has long been accompanied by controversy.

Of particular moral and legal concern are STOLI transactions, which account for roughly ten percent of LIS industry sales. In these transactions, the initial acquisition of the life insurance policy is motivated by reasons far removed from those typically associated with such purchases (i.e., the desire to protect family members against the risk of loss of income or to create an estate for dependents). In a STOLI transaction, the policy is acquired solely to gain access to the settlement amount via a prior agreement to sell the policy to an investor (the

“stranger”). Further, it is commonplace for the investor to (1) recruit potential consumers and make them aware of the opportunity to engage in LIS exchange, (2) be present during the acquisition of the policy, and (3) loan consumers money to pay insurance premiums during the waiting period prior to actual policy transference. STOLI transactions are also typically at least twice as large as other LIS exchanges (involving policies valued at US\$1 million or more).

STOLI’S Regulatory Environment

In the United States, the LIS marketplace is regulated at the state level (as LIS products are classified as “insurance” products). As is common in specialized areas of the law, the 34 states regulating LIS base regulation on a “model act” (i.e., a proposed statute drafted by industry trade associations or other interested parties). Currently, state legislators rely on either of two model acts for LIS regulation; one drafted by the National Association of Insurance Commissioners (NAIC), the other by the National Conference of Insurance Legislators (NCOIL).

In states where LIS activity is regulated, the nature of STOLI regulation is a function, primarily, of which of the two model acts has been adopted. The key difference between the two models is the definition of STOLI. The NCOIL model act specifically defines STOLI, defines it relatively narrowly, and bans that fairly narrow set of transactions. The more widely used NAIC model act takes a more blunt-instrument approach and is even more restrictive than its NCOIL counterpart. Rather than attempting to define STOLI, the NAIC model bans the transfer of any life insurance policy for a full five years following inception (versus two years in the NCOIL model). The recent surge in restrictive STOLI legislation has brought to 26 the number of states currently having STOLI-specific protections in place. While these protections are typically positioned as a means of deterring abuse of vulnerable senior citizens, they also mirror broader criticism of STOLI on grounds that it (1) epitomizes moral “gambling on death” concerns at the center of LIS criticism, and (2) violates insurable interest laws.

Marketplace Choice and STOLI Regulation

While there is much about STOLI practice to be legitimately concerned about, marketing and public policy (MPP) scholars and other proponents of marketplace choice may question the appropriateness of recent legislation restricting STOLI activity. We review two distinct approaches to understanding marketplace choice from a MPP perspective; one supportive of the notion that both consumers and marketers typically benefit from the presence of higher levels of marketplace choice, the other holding that marketplace choice should exist within policy-defined limits. We conclude, regardless of perspective taken, that the current STOLI regulatory environment fails to optimally serve either consumers or marketers.

Public Policy Recommendations

We recommend that policy makers, rather than banning or severely restricting STOLI activity, focus on (1) enhancing marketplace choice and value for consumers and (2) expanding marketplace choice and opportunity for ethical STOLI marketers via regulatory reform that both simplifies and better informs consumer decision making as well as encourages marketers to develop trust-based relationships with prospective STOLI consumers. We also note that necessary first steps toward such regulatory intervention include the enactment of LIS legislation in presently unregulated states and agreement upon a definition of exactly what constitutes a STOLI transaction.

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COUNTERFEIT VS. AUTHENTIC: THE IMPACT OF SITUATIONAL FACTORS ON THE ABILITY OF CONSUMERS TO DIFFERENTIATE

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SUMMARY

Counterfeit goods threaten not only the viability of legitimate businesses but they also pose a significant danger to consumers. They are not simply non branded or “grey market” goods, but rather counterfeit goods are illegal imitations of legitimate goods which offer no duty of care to consumers (Bamosy and Scammon 1985; Grossman and Shapiro 1988; Nill and Schultz II 1996). The market for counterfeit goods is a subject of increasing concern for firms and policymakers worldwide. The Organization for Economic Cooperation and Development (2007) estimates that the global counterfeiting market is worth over \$200 billion annually, but this does not take into consideration intangibles such as the harm inflicted on consumers by counterfeit goods.

Both government and business have invested a considerable amount of resources to reduce the demand for counterfeit goods. From public service campaigns that appeal to the consumer’s sense of morality to threatening consumers with legal repercussions, policy makers have attempted to reduce the demand for counterfeit goods in the hope that the supply of counterfeit goods will follow (Miyazaki, Rodriguez, and Langenderfer 2009). However, the key assumption behind any method which attempts to reduce demand for counterfeit goods is that consumers are able to distinguish counterfeit goods from legitimate ones. The reality is that consumers often purchase counterfeit goods believing that they are purchasing legitimate versions of the product. In many product categories such as pharmaceuticals or automobile parts, counterfeiters work very hard to portray their products as legitimate products (Grossman and Shapiro 1988a). The rationale for counterfeiters is that certain goods are perceived to have high risks and if consumers could distinguish between counterfeit and legitimate versions of the product they would not purchase the counterfeit product (Majid and Johansson 2010).

Previous work on counterfeit goods has indicated that consumers ascertain the authenticity of the product through

cues associated with the product such as the packaging (Hoe, Hogg, and Hart 2003) the sales outlet (Tom, Garibaldi, Zeng, and Pilcher 1998) the country the product was manufactured in (Chakraborty and Allred 1996) and the price of the product (Bloch, Bush, and Campbell 1993). Increasingly however, the strength of these traditional cues is waning due to counterfeiters which replicate the packaging of legitimate products and then either infiltrate supply chains of unsuspecting retailers or sell to consumers online where many of these cues can be manipulated (Maziarz 2004). This research attempts to move beyond the impact of the traditional cues on product authenticity by exploring the impact that situational variables may have on the ability of consumers to ascertain counterfeit products from legitimate ones. Specifically, this exploratory study examines factors unique to the purchase situation, such as the purpose of the purchase or the visibility of other consumers, and argues that these factors may influence a consumer’s perceived probability that a product is counterfeit.

The present research employed three studies to test the influence of situational factors on perceived probabilities of purchasing a counterfeit good. The first study was a two factor (Type of Product: Drug vs. DVD) between participants and two factor (Price of Good: \$6 vs. \$15) within-subject design. The type of good was manipulated in order to test perceived probabilities of a good being counterfeit across goods with varying levels of perceived risk. We pre-tested the two products using a measure of perceived risk adapted from the work of Bettman (1973) and Kaplan (1974). The resulting measure contained four items along the following four dimensions: legal risk, physical risk, social risk, and economic risk. In a reliability analysis based on a pretest sample of 44 participants, the alpha level was 0.805. In a between-subjects design (n anti-malarials = 22, n DVDs = 22), participants first read a scenario that defined what constituted a counterfeit product and then were asked to rate the perceived risk level of a counterfeit anti-malarial drug and a counterfeit DVD. A one way analysis of variance revealed significant differences in the perceived risk between the two product

categories ($F(1,43) = 33.943, p < 0.001$). Participants rated the counterfeit anti-malarial as having a significantly higher amount of perceived risk ($M = 4.09, SD = 1.34$) than the counterfeit DVD ($M = 1.98, SD = 1.05$). The prices of the products were manipulated to represent market conditions where price is generally the most visible clue as to the authenticity of the product. Once the manipulations were pre-tested a total of sixty participants from a large Atlantic University were randomly assigned to either the DVD condition or the Drug condition. Participants were told that they were traveling in South Asia and that they decided to purchase some DVDs (or anti-malarials) from local shops. They were told that there were two different prices for the items and that one, both, or none of the products could be counterfeit. They were then asked to state the probability of each product being counterfeit at each of the two price points. The results found a significant main effect for price across the two products ($F(1, 96) = 111.57, p < 0.001$) with participants consistently believing that the \$6 products were more likely to be counterfeit than the \$15 products ($MDVD_ \$6 = 0.803$ & $MDrug_ \$6 = 0.687$ vs. $MDVD_ \$15 = 0.256$ & $MDrug_ \$15 = 0.307$). It is worth noting that the results also revealed a significant two-way interaction effect within the type of good dyad ($F(1, 57) = 4.361, p < 0.05$) which seems to indicate a moderating role for the level risk in terms of perceived probabilities of a good being counterfeit.

In Study 2 we manipulated the level of risk beyond simply the product categories. We manipulated risk by telling participants that the DVDs were a gift for their boss or someone they were trying to impress. It was felt that the purpose of the gift can increase the desire to make a good purchase (Joy 2001) and hence the level of risk of making a poor decision. In line with the work on elaboration and processing by Petty and Cacioppo (1986) when consumers are fearful of making a poor decision they will elaborate on the information in greater detail and be more critical of the information than if the outcome of their decision was of no consequence to them. Therefore we suspected that participants would consider both the \$15 and the \$6 DVD as more likely to be counterfeit than those DVDs that were purchased for oneself in Study 1. A manipulation check found that participants rated the purchase of counterfeit DVDs under the present scenario to have a much higher degree of perceived risk than under the original scenario used in Study 1 ($F(1, 43) = 21.30, p < 0.001$, $MStudy1 = 1.98, SD = 1.05$ vs. $MStudy2 = 3.956, SD = 1.31$). The results revealed that when the level of risk was manipulated by the situational factor of buying a gift for one's boss, participants felt the DVD priced at \$15 was significantly more likely to be counterfeit than earlier when the \$15 DVD was being purchased for oneself in

Study 1 ($MDVD_ Study1 = 0.256$ vs. $MDVD_ Study2 = 0.422, F(1, 54) = 4.82, p < 0.05$). This indicates as suspected that the level of risk participants perceive with the good can impact their assessment of its authenticity.

We further explored how situational factors could impact the probabilities consumers would place on a good being counterfeit by conducting a third study whereby participants were told that others had also purchased the product. The decision to explore the impact that others could have on the perceived probabilities of a good being considered counterfeit was motivated by a recent court decision regarding the only marketplace: eBay Inc. In 2007, L'Oreal Inc. launched a civil suit against eBay Inc. arguing that eBay was fostering the spread of counterfeit goods through its online marketplace (see L'Oreal S.A. v. eBay International AG). Though, the British High Court ruled that eBay was not liable for the sale of counterfeit goods via its online marketplace due largely to the fact that it does not take ownership of the products, the court did note that certain features of the online marketplace may make it susceptible to penetration by counterfeiters. One of the features that was argued to reduce the probability of a good being perceived as counterfeit is consumers being allowed to view how many people are competing for the product in the online auction house. Study 3 attempted to explore the impact that the knowledge of others pursuing the good may have on the perceived probabilities of a good being viewed as counterfeit. In study 3, a total of 24 participants underwent a similar procedure as those in Study 1, participants were asked to rate the likelihood a \$6 version and a \$15 version of an anti-malarial drug being counterfeit. The primary difference was that participants in Study 3 were told that they had viewed others purchasing the drug, though they were not told the outcome of those purchases. We felt that the knowledge of others purchasing a product would reassure consumers as to the authenticity of the product and reduce the probabilities of a good being perceived as counterfeit. The results partly support this view, participants felt that the \$6 drug in Study 3 was significantly less likely to be counterfeit than the \$6 drug in Study 1 ($MDrug_ Study1 = 0.687$ vs. $MDrug_ Study3 = 0.4892, F(1, 50) = 7.80, p < 0.001$). This finding is noteworthy because it demonstrates that viewing others purchasing a product can provide assurances that a potentially counterfeit product may be legitimate. In actuality though, the consumers and others who had purchased the less expensive drug may all be buying counterfeit products and have no way of communicating this until they consume the product.

The three studies above are intended to investigate how consumers may identify counterfeit products from authentic ones. With products such as counterfeit pharmaceuticals

experiencing strong growth and counterfeiters becoming more sophisticated in disguising their products as legitimate, it is critical from a product safety perspective for consumers to distinguish between authentic and counter-

feit goods. The present research was an exploratory first step toward providing insights as to how situational factors impact consumers' ability to distinguish counterfeit goods from authentic goods.

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A COMPARISON OF TWO INTERVENTIONS FOR REDUCING AGGRESSIVE DRIVING

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SUMMARY

Aggressive Driving – An Important Challenge

Citizens recently identified aggressive driving as the greatest threat on American roadways, rating it *three times higher* than other listed threats (and equal in risk to drunk driving), according to a survey from the American Automobile Association (2009).

Understanding the path to aggressive driving is an important starting point for research. To accomplish this, we tested a path analysis model specifying several dispositional antecedents and mediators of aggressive driving in Study 1. In Study 2, we propose to evaluate a social media campaign to reduce aggressive driving. After screening drivers on the relevant personality variables identified in Study 1, we will compare the effectiveness of two social marketing interventions (visualization vs. self-prophecy).

Theoretical Background: The General Aggression Model

A majority of researchers agree that aggression is often the result of a complex interplay among personal and environmental factors. To account for this complexity, Anderson and Bushman (2002) proposed an integrative framework of aggression called the General Aggression Model [GAM]. The GAM is a mediational model of aggression that proposes that various inputs (individual differences and features of the situation) affect eventual outcomes (aggressive vs. constructive behavior) via several interrelated routes (including negative affect, hostile cognition, arousal, and the resulting appraisal and decision-making processes). In the end, the resulting action influences the nature of the social encounter, which in turn can act to further shape both the person and the situation (Anderson 1997; Anderson, Anderson, and Deuser 1996; Anderson, Deuser, and DeNeve 1995). Recent research on the GAM suggests that aggression is predicted by three interconnected personality traits which may be consid-

ered to be among the core characteristics of low self-control – *impulsivity, sensation seeking, and (low) consideration of future consequences (CFC)*. In this study, the GAM is employed as an analytical framework to understand the relationships between these three personality traits and aggressive driving.

Study 1 – Initial Study and Preliminary Findings

The following research hypotheses were examined:

1. Aggressive driving will be associated with sensation seeking (+), impulsivity (+), and CFC (-)
2. Trait aggression and risky driving will mediate the relationship between aggressive driving and the three antecedents specified, though sensation seeking is likely to show an additional direct relationship with aggressive driving

Method

American university students completed the survey in exchange for course credit (70.4% female, median age = 19). Participants completed an impulsivity scale (Zuckerman et al. 1993), sensation seeking scale (Zuckerman 1979), the CFC scale (Strathman et al. 1994), a trait aggression scale (Buss and Perry 1992) and scales assessing risky driving and aggressive driving.

Major Findings

To test our hypotheses, we conducted a path analysis. Results showed the following: the effect of impulsivity on aggressive personality was mediated via CFC, whereas the effect of sensation seeking on aggressive personality was not mediated via CFC. In addition, the effect of CFC on risky and aggressive driving was mediated via aggressive personality, while the effect of sensation seeking on aggressive driving was partly mediated via aggressive personality and risky driving.

Study 2 (Proposed) – Comparing the Effectiveness of Two Social Marketing Interventions

The path analysis (Study 1) identifies key personality traits in the path to aggressive driving. In our future work, we propose to (a) screen drivers on the main personality traits that lead to aggressive driving, (b) inform drivers of their standing on those traits, (c) help drivers to understand how their traits predispose them toward aggressive driving (e.g., by helping them understand the underlying mediating mechanisms we have identified in our initial work, described above), and (d) offer drivers one of two interventions (visualization vs. self-prophecy effect) based upon the important individual differences. These interventions will assist drivers in overriding their natural response to situational triggers which typically lead them to engage in aggressive driving.

Research has shown that when people use mental simulation to rehearse a process, goal attainment is more likely (Taylor et al. 1998). Mental simulation research has also been extended into the consumer behavior literatures in the area of the adoption of new products (Castano et al. 2008) and preference consistency (Zhao, Hoeffler, and

Zuberman 2007). However, to our knowledge, this will be the first study to incorporate mental simulation into this type of a social marketing campaign.

Because a visualization simulation may be time consuming, and resource intensive, we will also assess the impact of a relatively more simple intervention based on the self-prophecy effect. Research has shown that when individuals make a prediction regarding future behavior, that prediction serves as a self-prophecy and increases the probability of them performing in congruence with their prediction (Spangenberg and Greenwald 1999). Thus, we will ask subjects to make a prediction of what they would do in an aggressive driving situation. We anticipate that most will say they would not engage in aggressive driving (i.e., offer the socially desirable response), which should, according to the self-prophecy effect, reduce aggressive driving.

In sum, Study 2 will compare the effect of mental simulation against self-prophecy in reducing aggressive driving behaviors, which offers insight for effective social media campaigns.

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ASSESSING THE IMPACT OF PRODUCT EXPOSURE AND AVAILABILITY ON BEHAVIOR MODIFICATIONS AND CONSUMER WELL-BEING IN UNDERPRIVILEGED NEIGHBORHOODS

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SUMMARY

Marketing has played an important role in the determination of quality of life in market economies as consumers are affected directly and indirectly by marketing factors, such as product quality and safety, price, product availability and distribution, promotion, etc. For food products, such impact could be even more obvious as research has documented how the marketing of food products has affected the general consumer well-being. One of the urgent issues is the cumulative research evidence that points to the effect of food marketing on obesity in the U.S. (Crister 2003; Ford and Calfee 2005; Moore 2007; Seiders and Petty 2004, 2007). Research also shows that there is a significant disparity between well-to-do consumers and disadvantaged consumers (Teisl, Levy, and Derby 1999); between socioeconomic groups (Brinberg and Axelson 2002; Mathios 1996), and between ethnic groups (Grier et al. 2007). Among ethnic groups, the Hispanic and African populations have been reported being unfairly targeted by food marketers due to their higher level of media exposure and low media literacy.

In SE U.S., such issue has become an urgent public policy as the Hispanic population represents the highest growth ethnic group with a large number of newly arrived immigrants who are often at lower socioeconomic ladders with below average education achievement and above average household size and the number of children. As a result, many are heavily influenced by the media and not making health appropriate food choices. Furthermore, low-income Hispanic residents are often under-served by mainstream grocery chains and rely on neighborhood corner stores to provide basic daily grocery needs. According to the Center for Disease Control (2009), during 2006–2008, obesity prevalence was 21 percent higher for Hispanics, compared to their Non-Hispanic White counterparts. Furthermore, racial and ethnic health disparities take a toll on the entire household. Hispanic children and youth are particularly vulnerable exhibiting disproportionately higher childhood rates of hunger, food

insecurity and obesity than their Caucasian peers (Johnson 2008). Given the overall high prevalence of obesity among Hispanics, effective strategies and policies that promote healthy eating and active lifestyles are needed.

In resolving the problem of inadequate access to healthy food in consumer constrained neighborhood environments, public policy makers have considered community-based intervention alternatives to alleviate the impact on vulnerable populations. The current study intends to investigate the effectiveness of an existing community health initiative in building small business capacity with a social market orientation to promote healthy consumer options in low-income Hispanic neighborhoods in a major metropolitan area of the Mountain region. The initiative was financially supported by a public health agency in cooperation with a state high education institution. Residents of the subject neighborhoods live in a food desert without a major supermarket to meet their basic needs. Using a social market orientation framework, the initiative provided coaching, marketing and outreach to store owners. To create a sustainable community model and enhance consumer well-being, the program sought to increase the consumption of healthy fruits and vegetables by the low-income residents while improving business performance of the corner stores. To increase consumers' consumption of fruits and vegetables, the initiative has built relationships with the participating corner stores, distributors, as well as the local community, in an effort to strengthen the program. As store space is limited, the corner store owners were given incentives in the form of free supply of vegetables and fruits in exchange for shelf space allocated for such products. With greater exposure to healthy alternatives, consumers might gradually modify their purchases with an increase in the intake of fruits and vegetable. In the long run, the initiative seeks to modify consumption behavior through product exposure and availability. As intake of healthy food alternatives is built into consumer routine purchases, incentives for stores are expected to gradually decrease eventually to a sustainable level, meaning without subsidy. The end

results could be a sustainable retail environment for underprivileged residents with enhanced consumer well-being.

The primary focus of the present research is to evaluate the community health initiative and its impact on the food desert environment common in low-income neighborhoods sponsored by the public health agency and an outside national health-promoting organization. Measuring the effectiveness of the intervention program will help address the health disparity of inadequate access to healthy food, which in turn affects consumer health and quality of life. During the study period, the following will be conducted:

1. Assess the impact of the health initiative in changing physical (capacity building, access and availability), consumer (behavior and well being), and social (seller and consumer interactions) aspects of the food environment; and

2. Leverage the knowledge gained for continuous improvement that to form more effective community-based interventions.
3. Inform policy makers as it relates to direct and indirect obesity-related health care costs for vulnerable consumer populations.

We expect to complete a store audit, a shopper survey, and a household inventory survey. A store audit is to be developed to examine the availability and display of healthy and unhealthy food items in the corner stores and selected benchmark stores in other neighborhood markets. A shopper survey will be conducted in the store and in the market areas served by the three stores where the initiative has been implemented. Finally, a household inventory audit is designed to discover what food items are actually present in the household.

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HOW MUCH RISK CAN YOU HANDLE? THE DEVELOPMENT OF A NEW RISK TOLERANCE QUESTIONNAIRE

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SUMMARY

The 2008 credit market debacle and subsequent “Great Recession” accompanied by the stock market crash of 2008 has caused many investors and their advisors to reevaluate their risk tolerance and investment asset allocation choices (McCarthy 2009). In light of the so-called “Black Swan” events of 2008, many financial institutions and investment advisors are rethinking the advice they give to both individual and corporate clients about the level of risk that is appropriate to meet their investment objectives.

Risk tolerance questionnaires have been used by financial advisors for the past 25 years as a way of beginning a dialogue with a client on how much risk they can tolerate in their asset allocation. Since the first risk tolerance questionnaire was published in 1984, the use of risk tolerance questionnaires by investment advisors has become increasingly common. Recently in the literature, there have been several critiques of a number of risk tolerance questionnaires and a suggestion that a new questionnaire that combines the “good questions” from some of the surveys and eliminates the “bad questions” be developed (i.e., Roszkowski, Davey, and Grable 2005; Yook and Everett 2003).

Many of the critiques have suggested that the current risk tolerance questionnaires were not originally designed using a scientific scale development process; they may have just been written based on the company’s opinion of what needed to be asked (Roszkowski et al. 2005). As such, this research is a scale development project in which we will subject the current set of risk tolerance questionnaires in addition to selected other psychological risk questions to a scale development process. By using a scientific scale development process, the initial set of

items will be narrowed down through a series of steps to create one scale that will both reliably and validly assess an investor’s desired level of perceived risk in their investment portfolio.

Conceptual Development

Risk tolerance is a term that has been used repeatedly in the financial literature to describe how much risk an individual is willing to tolerate in their investment portfolio. Essentially, risk tolerance is currently used as an overarching term to capture what we believe are three distinct dimensions of financial risk: psychological risk tolerance, financial capacity for risk, and the individual’s time horizon. These three dimensions represent three important components of an individual’s desired level of risk in their portfolio: risk tolerance (the level of the individual’s risk aversion), risk capacity (the financial capacity of an individual to bear risk), and time horizon (the length of time the money will be invested).

We propose to develop an investor risk profile instrument that captures all three dimensions of an investor’s ability to bear investment risk and to relate this risk profile to an appropriate investment asset allocation. We posit that it is a combination of all three of these dimensions of investment risk that should dictate which type of asset allocation strategy is pursued in a client’s investment portfolio. For example, a highly risk averse investor with a long time horizon would be advised differently than a highly risk-tolerant investor with the same time horizon. Similarly, even a highly risk-tolerant investor would be advised to structure a relatively conservative portfolio if the investor’s time horizon is short and a highly risk averse investor would be advised to structure a relatively aggressive portfolio if the investor’s has a long time horizon.

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MAYBE I WOULD, BUT ACTUALLY I DON'T: THE EFFECT OF HYPOTHETICALITY ON THE PREDICTIVE ACCURACY OF ATTITUDES AND BEHAVIORAL INTENTIONS

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SUMMARY

Surveys and research consistently show that consumers are voicing strong support for environmental protection, but these conscious attitudes do not always translate into actual behaviors (Diamantopoulos, Schlegelmilch, Sinkovics, and Bohlen 2003; Dolliver 2008; Roberts 1996; Schwepker and Cornwell 1991), mostly because consumers seem to be paying lip service when an investigator asks whether they are taking actions to save the planet from climate change (Dolliver 2008). But why do environmentally conscious consumers tend to express recurrent equivocal or “aspirational” commitment to the environment (Dolliver 2008)? According to Cotte and Trudel (2009), we should not be surprised that consumers state to hold very positive attitudes toward the environment when surveyed about their environmental opinions, since survey researchers seem to rarely try to find subtle ways of eliciting more “true” responding. This suggests that the way consumers are surveyed about their pro-environmental attitudes and behavioral intentions can hinder their “true” reporting, and the goal of this paper is to better understand how survey formats can influence attitudinal and behavioral assessments.

Background

The hypothetical bias is an overestimation of willingness to pay in hypothetical or contingent markets, when compared to actual payments in otherwise identical real cash markets (Ajzen, Brown, and Carvajal 2004). This suggests that hypothetical and real contexts are construed in very different ways, that they are qualitatively different, and that questions posed in such contexts can elicit very different responses (Ajzen, Brown, and Carvajal 2004). Moreover, according to Ajzen, Brown and Carvajal (2004), statements of willingness to pay in a hypothetical situation can be equated to behavioral intentions and the hypothetical bias to a discrepancy between intentions and behavior. We thus hypothesize that people express stronger attitudes and behavioral intentions in a hypothetical context than in a real one (H1).

Moreover, it seems that for contingent valuation survey to elicit useful information about willingness-to-pay, respondents must understand exactly what they are being asked to value (Johnston 2006). Hence, familiarity may lead to closer correspondence between intentions and behavior, and thus reduce or even eliminate the hypothetical bias (Johnston 2006). We thus hypothesize that people express similar attitudes and behavioral intentions in both concrete and hypothetical conditions when surveyed about familiar behaviors (H2).

Furthermore, when people are asked to report an attitude, they often infer this attitude from the implications of a past behavior that happens to be salient to them at the time of the reporting (Albarracín and Wyer 2000). In addition, construal level theory states that people represent hypothetical tasks in a more abstract, high-level terms, and real tasks in a more concrete, low-level terms (Armor and Sackett 2006; Trope, Liberman, and Wakslak 2007). Consequently, we hypothesize that behavioral intentions are used as more abstract information in a hypothetical context and as more concrete information in a real context in further assessments (H3).

Study

Respondents (114 undergraduate students) pledged to perform environmentally conscious behaviors from statements (Roberts 1996) that were formulated either in a hypothetical or a concrete way. Results from the study provided support for our hypotheses.

When asked to pledge to perform hypothetical behaviors (e.g., I pledge that I would buy), participants expressed greater behavioral intentions than when asked to pledge to perform actual behaviors (e.g., I pledge to buy; 4.26 vs. 3.31, $p < 0.001$), which supports H1. Moreover, familiarity seems to moderate this effect, since there is no significant difference between the hypothetical and the concrete conditions (4.15 vs. 3.98, $p > 0.1$) for what appears to be more familiar behaviors (i.e., behaviors that are performed inside the home, – e.g., recycle, save energy and

water), while there is a significant effect (4.03 vs. 3.54, $p < 0.05$) on less familiar, and maybe less concrete behaviors (i.e., behaviors that are performed outside the home or related to social activities in support of the cause – e.g., buying fair-trade or organic products, convincing friends to be more eco-friendly), thus supporting H2. Furthermore, when in a hypothetical condition, participants expressed stronger attitudinal self-relevance with the environment than in the concrete condition (3.97 vs. 3.76). On the other hand, when in a concrete condition, participants stated that they perform more actual behaviors than in the hypothetical condition (3.48 vs. 3.81). The interaction effect is significant ($p = 0.05$). People thus seem to be inferring their attitudes from the actions that they are willing to do and their level of hypotheticality,

since there is a match between “would-behavior” and self-relevance and between “do-behavior” and reported behaviors, providing support for H3.

Discussion

Our study shows that there is a hypothetical bias in the pro-environmental domain, that this bias affects how people assess their attitudes and behaviors, and that it is moderated by familiarity. Moreover, making people think more abstractly or more concretely about their behaviors affects their self-relevance perception or their retrieval memory of past behaviors, respectively. References are available upon request.

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UNDERSTANDING GLOBAL SERVICE DELIVERY MODELS: BAD CUSTOMER BEHAVIOR AND ITS IMPACT ON CSR WELL BEING AND CSR RETALIATION

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SUMMARY

In the last couple of decades there has been a tremendous increase in the service economy. It is estimated that the service economy contributes around 80 percent to the entire economic output of the U.S. (Olivari 2009). Recently with advancements in technology and telecommunications this increase in the size of the service economy has been accompanied by a substantial increase in the global trade in services. While previously only goods could move across borders, globalization and an increased focus on efficiency has led to an explosion in offshoring, which is the technical term for global trade in services.

Offshoring however has not been without challenges. Offshoring or outsourcing has generated tremendous angst amongst employees in U.S. who have been laid off as a result. It has also led to an increase in anger amongst consumers in U.S. who have not taken to service imports in the same manner as they have taken to product imports. The reason for this dichotomy is that service imports require personal interactions with customer service representatives (CSRs), while product imports don't. Also, most often these CSR's are based in countries like India, Philippines, Mexico, etc. and come from different cultures and speak different languages. Because of these personal interactions, the cultural biases and needs of both the consumers and the CSRs play a very important role in this global trade. Anecdotal evidence from interviewing CSRs suggests that due to deep held biases, especially against foreigners, consumers sometimes look at CSRs as adversaries. The evidence also suggests that sometimes customer abuse and bad behavior increases, especially when customers perceive that the service is being provided from a foreign country. In this paper we document and study this issue of customer abuse and its impact on CSRs. We also study how CSRs deal with customer abuse. We specifically test the hypothesis that CSRs might be retaliating against abusive customers. To our knowledge this is the first paper to look at the issue of CSR retaliations and its antecedents.

Preliminary Findings

We collected survey data from over four hundred customer service representatives dealing with international customers in India. Preliminary analysis suggests that while customer demands don't lead to an increased emotional exhaustion, customer abuse does lead to higher emotional exhaustion. The significant finding of the paper is that customer abuse is quite prevalent in international service encounters and leads to an adverse impact on the CSR's emotional well being. We also find that increased emotional exhaustion of a CSR leads to more negative emotional reactions and this leads to higher CSR retaliatory actions. We also tested the ability of emotional intelligence to act as a moderator between emotional stress and emotional reaction and found no support.

Public Policy Implications

Before global trade in services became possible due to improved and cheap global telecommunication services, the world's introduction to the United States of America was mainly through Hollywood and the American media. This sanitized image of the U.S. contributed a lot to the development and dominance of American soft power (Nye 2005) and it ended up helping make American brands and companies some of the most admired in the world. The average global customer/citizen almost never came in contact with an average American citizen. This is no more true as the global trade in services means that millions of American citizens are interacting with global citizens on a daily basis. This has lots of implications for public policy.

While the issue of customer abuse has been looked at by some researchers in the domestic context hardly anyone has investigated the issue in an international scenario. Research has only recently started to document the downright abusive/racist behavior of some customers toward international customer service representatives. Some commentators suggest that this kind of hatred can lead to a

reverse hatred toward the U.S. in the long run. CSR's who deal with rude Americans could develop an image of Americans that is detrimental to the long term interest of the country. It could impact the carefully cultivated soft power of America. This in turn could have a long term impact on businesses who want to become global players. American Brands can suffer as foreigners can look at the

brands as coming from a racist society. In the short run we can find that customers in foreign countries could start boycotts or even shun American brands completely. Therefore it becomes imperative that we study the service interactions across borders and the implications for societies and businesses. References are available upon request.

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SPECIAL SESSION

RESEARCH AND PUBLIC POLICY PERSPECTIVES ON RISKY CONSUMPTION BEHAVIOR AMONG ADOLESCENTS

Session Participants:

Kevin D. Bradford, University of Notre Dame
Deanne E. Brocato, Iowa State University, Ames
Les Carlson, University of Nebraska, Lincoln
Brennan Davis, Baylor University, Waco
Debra M. Desrochers, Tulane University, New Orleans
Debra J. Holt, Federal Trade Commission, Washington, D.C.
Russell Laczniak, Iowa State University, Ames
Elizabeth S. Moore, University of Notre Dame

SUMMARY

Adolescent risky consumption behavior is a serious problem in the United States. Adolescents and children are exposed to a number of influences both positive and negative that affect their propensity to engage in risky consumption behaviors. Risky consumption behaviors are those behaviors that have the potential to cause personal harm either directly or cumulatively over time and/or are against the law or in opposition to social policy. Adolescents, in the main, are generally aware of the legal, physical, social, and psychological risks associated with many of the products they consume yet they may engage in the behaviors anyway. This session provides insights on the strong effects of socializing agents on adolescent risky consumption behavior and provides understanding of the problem which can be used as guidance toward policy solutions.

Perspectives on Risky Consumption among Adolescents

Risky consumption behaviors include those behaviors that have the potential to cause personal harm either

directly or cumulatively over time and/or are against the law or in opposition to social policy. Representative products include alcohol, cigarettes, and illicit drugs but increasingly we recognize that excessive consumption of other products such as unhealthy foods and violent video games may also put adolescents at risk. Our intention is to identify and examine opportunities for research in this area using current research findings and conclusions. Our central aim is to educate and also to motivate potential researchers interested in this area to embrace this topic as a marketing and public policy opportunity.

There are warning labels, laws, organizational policies, family rules, education curricula, and other prominent messages that inform adolescents about the risks associated with the consumption of products such as unhealthy foods, alcohol, illicit drugs, cigarette smoking, and violent video games nevertheless adolescents are drawn to these behaviors. This special session will explore how specific agents of socialization affect a subset of risky consumption behaviors in adolescents. Another key issue to be addressed is the relationship between risky consumption behaviors in one domain and deviance in others.

**AN INVESTIGATION INTO ANTECEDENTS AND CONSEQUENCES
OF DEVIANT CONSUMPTION BEHAVIOR OF ADOLESCENT:
A SOCIALIZATION PERSPECTIVE**

*Kevin D. Bradford, University of Notre Dame
Brennan Davis, Baylor University, Waco*

SUMMARY

Adolescent deviant consumption is a major issue in the United States. Adolescent deviant consumption is the consumption of alcohol, illicit drugs and cigarette smoking and is considered risky because it is associated with numerous well-documented personal and societal problems and it is against the law. This study investigates factors that influence adolescents to engage in these risky behaviors. Using socialization to guide our framework, we identify antecedents as well as consequences of adolescent deviant consumption. Our findings suggest strong relationships between socializing agents (peers, family, and their school) and adolescent deviant consumption and that there are interrelationships among specific aspects of the socializing agents which can be used to attenuate these risky behaviors. Additionally, we investigate whether

adolescent deviant consumption may be related to further deviant behaviors that may have broader personal and societal implications, firearm possession by adolescents. When contemplating firearms policy, one of the few arguments that is met with little or no debate is that adolescents should not carry firearms in public. A positive relationship between ADC and adolescent possession of firearms should prompt more interest in addressing ADC as a serious social problem. Also of interest, if the positive relationship holds, are the factors that affect this relationship. Not all adolescents that engage in ADC are prone to possess firearms. Thus, the relationship between adolescent deviant consumption and firearm possession is hypothesized to be moderated by the extent to which the adolescent set goals for the future, has empathy, and the extent to which they are bullied. This research has implications for public and organizational policy.

ADOLESCENTS' EXPOSURE TO TV FOOD ADVERTISING: ARE THEY AT RISK?

Elizabeth S. Moore, University of Notre Dame
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SUMMARY

Obesity among children and youth has become an increasingly serious health problem in the United States, and around the world. In the U.S., obesity rates have tripled over the last three decades. The most recent national data from the National Health and Nutrition Examination Survey (NHANES) indicates that just over 30 percent of youth ages 6–19 are either overweight or obese (Ogden, Carroll, and Flegal 2008). Adverse health effects including elevated risks of hypertension, atherosclerosis, obstructive sleep apnea, chronic inflammation and metabolic disorders such as diabetes have been associated with obesity in youth (Daniels et al. 2005; Ebbeling, Pawlak, and Ludwig 2002).

This is a public health issue that has captured the attention of a broad set of citizens and institutions, with calls for action becoming increasingly powerful. Among the many contributors to obesity, particular attention is being focused on the impacts of food marketing. In its comprehensive study of the issue, the Institute of Medicine (2006) concluded that “food and beverage marketing practices geared to children and youth are out of balance with healthful diets and contribute to an environment that puts their health at risk” (p. 10). Of particular concern, in this debate is the promotion of unhealthy foods to children on television. TV is both the primary advertising medium used to reach children and youth (IOM 2006), and also the medium receiving the highest proportion of food and beverage ad expenditures, among measured media (Brown et al. 2005).

To date, research and policy discussions have centered almost exclusively on television advertising aimed at children under 12. This leaves the teen population relatively understudied in this domain. Adolescents are a unique group however. Though they are not entirely responsible for all their eating and activity choices, they do have considerable freedoms and responsibility in these

areas of their lives. Further, research shows that they are more likely to engage in risky consumption behavior than adults but without a full understanding of the long term consequences of their decisions (see, e.g., Pechmann et al. 2005). The Federal Trade Commission (FTC 2008) issued a report that shows marketers engage in differential spending, promotional activities, and media placements targeted at teens versus younger children. However, there is very little evidence detailing adolescents' actual exposure levels or the nutritional profile of the ads they see.

Self-regulation has become an important policy option in the U.S., with new initiatives having been undertaken to protect children ages 2–11. Chief among these is the Children's Food and Beverage Advertising Initiative in which major food marketers have pledged to reduce or eliminate advertising targeted at children that does not meet specific nutritional standards.¹ Even so, proposals have been advanced by consumer advocates and others to impose regulations that would eliminate all food advertising in children's programs, and to extend restrictions to adolescents ages 12–17. However, the assumption that the foods children and teens are exposed to in television advertisements are of poor nutritional quality has not been fully supported by empirical data. A potential challenge to such proposals is that the existing evidence does not show how restrictions would alter the *overall* nutritional profile that children and adolescents are exposed to through television advertising.

To inform the policy debate, additional insights are needed in several areas. First, empirical analysis of teen ad exposure levels is needed. How these compare to ads seen by younger children for whom the self-regulatory programs have been designed is also necessary. Further, most published studies have focused exclusively on children's programs despite the fact that almost 50 percent of the food ads children see appear in general audience programs, such as *American Idol* and *Survivor* (Holt et al. 2007). Therefore, to get an accurate picture of advertising

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Behavior Among Adolescents**

exposure, it is important to review all the programming children and youth see. Finally, many studies focus exclusively on the attributes of fat, sugar, salt, and calories, and do not reflect the entire nutritional profile that also includes protein and other vitamins.

The primary objective of the research reported in this paper is to examine the complete nutritional profile of the foods that children and teens see advertised. The data for this study were provided by Nielsen Media Research/Nielsen Monitor-Plus Service and reflects the national advertising embedded in all programs viewed by children (ages 2–11) and teens (12–17) during four sweeps weeks in the 2003–2004 season, on broadcast and cable networks. This provides a more accurate assessment of the nutritional environment than previous studies because it includes advertised foods that are not necessarily targeted at youth. It also provides a baseline for examining the potential impacts of existing and proposed self-regulatory programs. Our analysis examines the beneficial components of foods as well as the negative attributes typically studied and compares these food profiles to standards established by the USDA and FDA.

The findings of this study have implications for decision makers who are trying to determine the likely impact of

different policy options and whether protections should be extended to adolescents.

Obesity among children and youth is a serious public health problem. The most recent national data indicates that just over 30 percent of youth ages 6–19 are either overweight or obese. Adverse health effects such as elevated risks of hypertension, atherosclerosis, and diabetes have been linked to obesity in youth. Among the many contributors to obesity, particular attention is being focused on the impacts of food marketing. Of specific concern is the promotion of unhealthy foods to children on television. The goal of this research is to examine the complete nutritional profile of the foods that children and teens see advertised on television. Data was provided by Nielsen Media Research/Nielsen Monitor-Plus Service including national advertising in all programs viewed by children (ages 2–11) and teens (ages 12–17) on broadcast and cable. Our analysis examines the beneficial components of foods as well as the negative attributes typically studied, and compares these to American Dietetic Association and FDA standards. Findings have implications for decision makers trying to assess the likely impact of various policy options and whether protections should be extended to adolescents.



UNDERSTANDING PARENTS' AND CHILDREN'S PERCEPTIONS OF VIOLENT VIDEO GAMES

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Deanne E. Brocato, Iowa State University, Ames
Les Carlson, University of Nebraska, Lincoln

SUMMARY

This study is predicated on a study published in 2003 by Shanahan, Hermans, and Hyman who concluded that a significant number of television ads targeted at children aged twelve and younger contains violent content. In fact, on Saturday mornings, commercials contain more violence than programs do. Thus, we seek to investigate whether violent ads have negative effects on children and youth. Theory and recent research suggests that this is a distinct possibility. Given the tendencies and trends with respect to violent media, we examine parents' and children's views of media violence in video games in this study. In doing so, we hope to obtain a better idea of what constitutes media violence and the extent to which it

constitutes a problem for families and society. In addition, we explore the actions that parents take to circumvent effects of violent video games on children and whether these interventions differ by parental style. We also study children's aggressive reactions to violent video games and whether these reactions differ according to their mothers' and fathers' parenting styles. Finally, we explore parents' views and understanding of video game rating systems.

ENDNOTE

- 1 Fifteen food manufacturers representing over 80 percent of ad expenditures to children have joined the Initiative. These include....

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SPECIAL SESSION

THE ELUSIVE “HOME SWEET HOME”: PERSPECTIVES ON SEEKING, OBTAINING, AND LIVING IN A HOME

Session Chair:

Carol M. Motley, Florida A&M University

SESSION SUMMARY

“Oh, a storm is threat’ning, my very life today; If I don’t get some shelter, Oh yeah, I’m gonna fade away (Rolling Stones 1969).”

Visit the villas and castles in Europe, the “McMansions” in the United States and the Caribbean, the favelas in Rio de Janeiro, and the lean-tos in South African townships. While the edifices, neighborhoods, and locations might significantly differ the underlying concept of home does not vary. Home sweet home is a combination of a physical place in which individuals reside and a space associated with affection. Many long to own a “home sweet home,” however home ownership is becoming an end state increasingly more difficult to achieve and sustain. We explore some of the issues facing consumers as they search for a home, maintain hope when the family home is lost, and the social stigma associated with living in subsidized housing.

The recent housing market instability in the United States has forced many former homeowners into foreclosure and homelessness. At the same time prospective homeowners are faced with stringent lending requirements and high mortgage rates placing home ownership beyond the reach of many U.S. consumers. Those who elect to purchase a residence face multiple decisions when searching for a house that will become their home. According to Lee and Perry, these shopping and selection processes can tax the consumers’ cognitive resources and leave the consumer is mentally and physically exhausted when it is time to find a mortgage product. The authors suggest shoppers may encounter “ego depletion” after searching for and making a decision on a particular property, and therefore make less than optimal mortgage choices. Lee and Perry use a series of experiments to examine the effects of ego depletion during the home purchase decision.

Financial concerns are not the only impediments to sustained home ownership. Foreclosures, natural disasters

and other circumstances can result in consumers losing not only their homes, but also the security and sense of belonging associated with having a home. Rosa and Baker suggest that these events can result in a sense of loss and despair, that is, vulnerability. People actively work to reduce the lack of control associated with this vulnerability and restore hope. Housing-induced vulnerability will lead to activities to generate hope, and these activities can be either detrimental to or have positive outcomes for the actor. Rosa and Baker use in-depth interviews of consumers that have experienced or are currently experiencing housing-induced vulnerability to explore the activities used to restore and have hope.

What would happen if consumers that experienced loss of a home were to move into subsidized housing? The United States subsidizes home ownership (in the form of income tax benefits) for the upper-and middle-classes and these efforts are generally applauded. In addition, the governments of the U.S. and other countries subsidize housing for middle- and lower income consumers. These subsidies include maintaining and renting residences (public housing development) at below market rates and providing vouchers to help consumers rent private dwelling. Unfortunately, receiving the latter forms of housing subsidies is stigmatized. Motley and Motley use an experiment to examine the associations held for and the attitudes toward individuals living in public housing.

The objectives of this session are to explore various facets of home ownership and seek to understand what happens before, during and after that quest for home sweet home. The authors explore areas that have not received a lot of attention in the marketing literature and focus on understanding the consumer and consumer well-being. In addition, implications for the marketplace and public policy are discussed. References are available upon request from contact authors.

WHERE WILL I LIVE? EGO DEPLETION AND MORTGAGE CHOICE

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Vanessa Gail Perry, George Washington University, Washington, D.C.

SUMMARY

The home typically becomes the family’s most valuable financial asset. The housing literature suggests that housing has important social effects, and encompasses not only a physical structure but also less tangible elements such as safety, security, longevity, community, access to resources, and environmental connections (Foley 1980). As such, this product category has significant impact on individuals, families, communities, and entire economies. Despite the importance of this decision and the significance of the purchase object, there is limited consumer research that has focused on home buying behavior.

In this study we examine the effects of context on financial decision-making. In particular, we suggest that the process of shopping for a home and choosing between alternative property features depletes individuals’ cognitive resources, which in turn results in sub-optimal home financing decisions. Thus, in the span of time that follows the shopping experience, consumers will devote less attention to subsequent financial decisions, e.g., choosing a mortgage, and will choose riskier financing terms.

According to Baumeister et al. (1998) and Muraven et al. (1999), willpower is a kind of limited resource that can be used up or depleted. In other words, willpower or self-regulation is stronger in the morning because the “tank is full” but gets weaker at night because the “tank is empty” (Baumeister et al. 1998). In addition, this principle, known as “ego depletion,” suggests that other acts of requiring cognitive effort may deplete the same resource. For example, making deliberate decisions, such as those needed for high-risk, high-involvement purchases, might also result in ego depletion (Baumeister et al. 1998; Baumeister et al. 2002). The home buying process involves a particularly complex set of decisions, which require attribute tradeoffs (e.g., design features or price) and brand comparisons (e.g., particular houses or neighborhoods). The real estate literature is replete with studies of factors that are valued by homebuyers (for a review, see Sirmans et al. 2005).

In most cases, after these choices have been made, the homebuyer is then faced with the selection of a mortgage loan. This choice is often made in consultation with one or more intermediaries, including a real estate or builders’ sales agent, a mortgage broker, and/or through direct contact with a lending institution, such as a bank or mortgage company. Many accounts in the scholarly, policy, and popular media suggest that these options are far too complex for even sophisticated consumers (Green 2008). Although there are a host of explanations for poor mortgage choices, we propose that ego depletion could explain why some people make poor decisions. In particular, we suggest that shopping for a house results in ego depletion, and as a result, consumers have limited cognitive resources available to make informed decisions about mortgage options.

We examine the effects of ego depletion in the home buying context using data collected in a series of controlled experiments. The mortgage choice tasks consisted of five distinct mortgage options. Each included a monthly payment, an interest rate offer, duration, and a link to follow for further details. Similar to ‘real world’ mortgage offers, the lowest monthly payments were associated with adjustable-rate products that have the highest uncertainty and risk of default. Our dependent variables included: the time spent on the mortgage task, the choice of a high-risk mortgage (i.e., adjustable rate), and the tendency to select the first option presented.

Our analysis indicates that participants in the house shopping simulation spent significantly less time in the mortgage choice process. Participants in the house shopping simulation are more likely to choose the first mortgage options presented rather than subsequent options that required more consideration. Also, participants in the house shopping simulation were more likely to choose a higher-risk (adjustable rate) mortgage. This study extends ego depletion theory beyond self-control to a broader context of cognitive effort. Future research should examine how to offset the negative effects of ego depletion.

**Special Session: The Elusive “Home Sweet Home”: Perspectives on Seeking,
Obtaining, and Living in a Home**

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HOUSING-INDUCED VULNERABILITY AND THE COUNTER EFFECTS OF HOPE-DRIVEN INNOVATIVENESS

José Antonio Rosa, University of Wyoming, Laramie
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SUMMARY

The importance of home as a place of refuge and comfort has interested social science researchers for decades, and in consumption-based societies seeing the home as sanctuary has spawned academic and practice oriented research into how consumers enact a sense of place and being within the walls of their dwelling place, be it a house, an apartment, a roughly built shack or lean to, or space in city tunnels and under highway overpasses. Walls are purchased, rented, and constructed, and within those walls consumers assemble environments from which they draw identity, comfort, and a sense of belonging. Moreover, when home is destroyed, violated, or otherwise taken away, the sense of loss is profound, and despair often arises (Hill and Stamey 1990). The vulnerability induced by such events is not a permanent state accepted by consumers, but a dynamic one where the sensing of powerlessness and dependence triggers adaptation fueled by human resilience (Baker et al. 2005). Vulnerability in such instances is not regarded as a property the environment, but as a socially-constructed outcome of personal, social, economic, and ecological conditions that can and must be addressed for hope to be restored along with a sense of sanctuary (Baker et al. 2005; Hill and Stamey 1990; Wisner 2004).

People do not passively accept the lack of control that vulnerability entails, but instead work to reduce vulnerability (Baker et al. 2005). Restoring hope is highly desired. As a positive emotion, hope is energizing and sustaining, and can be a desired outcome (de Mello and MacInnis 2005), separate in its utility from products or services. As it pertains to housing, this means that the hope that must be restored when housing-induced vulnerability arises is not solely about added physical safety and comfort, but also about hope against other life challenges that stems from having a home. The home is sanctuary for body, mind, and the hope that keeps us moving forward, enacting positive realities, and striving for good in the worst of

circumstances. Vulnerability in external environments is debilitating, and housing-induced vulnerability can be paralyzing, or even overwhelming.

It must be considered that to hope and to have hope is two different concepts (deMello and MacInnis 2005). To hope is a positive and energizing emotion that varies in response to the level of yearning for a possible goal-congruent outcome. If an outcome is deemed possible and yearning is strong, hope rises. A consumer moving into new subsidized housing and yearning for a safe environment will see her hope rise after reading the housing regulations and seeing the gated complex entrance and reinforced windows and doors in her unit. Likewise, a subsistence consumer living at the edge of the city dump will lose hope when bulldozers wipe out the dwellings on the other side of the dump compound, as the desired outcome of safe housing becomes less likely. Having hope is the positive emotion that arises when a desired outcome is deemed possible. It is a pleasurable state that accompanies the idea of a better future being possible, and is most likely the source of pleasure and nurturance associated with hope. Having hope does not always rely on objective information. Sometimes it depends on nothing more than the desired outcome appearing possible, even if for just a moment. To have hope even in the face of diminishing hope, therefore, the subsistence consumer may assemble a small fence consisting of a row of blocks laid end to end. Objectively the fence offers no protection, but the act of building the fence makes the desired outcome of a secure home seem possible.

The pursuit of hope and having hope can be powerful motivators, and perhaps greater in the context of housing-induced vulnerability. Under extreme conditions, however, innovative pursuits to restore hope by reducing housing-induced vulnerability can be detrimental, because doing something right away becomes more important than doing the right thing. Facing the possibility of her house being bulldozed, a sensible consumer may look for housing elsewhere or enter a government-

**Special Session: The Elusive “Home Sweet Home”: Perspectives on Seeking,
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sponsored shelter. Such solutions take time and effort that the despairing consumer finds hard to sustain, however, and she will instead focus on reinforcing the walls with a second layer of cardboard and hiding the family inside the house to make them imperceptible when bulldozing crews check for inhabitants. Such innovative pursuits may cause her to have hope, but the actions place her and the family in danger. That housing-induced vulnerability will trigger hope-generating activities is clear, but the direction that those activities will take and whether or not they will enhance the welfare of those feeling vulnerable demands further study. Individual and environmental factors are likely to serve as antecedents to beneficial or self-defeating activities in pursuit of hope, and identifying them is the purpose of our study.

Relying on in-depth interviews of consumers who have experienced (or are currently experiencing) housing-induced vulnerability, we delve into the activities and

stories by which they seek to restore hope and having hope, and assess their effectiveness in objectively reducing vulnerability or simply creating a temporary positive emotional state while leaving themselves vulnerable. The data are narratives from subsistence consumers in Bogotá, Colombia because of the high incidence and extreme levels of housing-induced vulnerability that persist in that environment. In the same way that the importance of housing, vulnerability, and the pursuit of hope are humanly universal, we expect that at least some of the factors that help direct the pursuit of hope into constructive or detrimental activities will be replicable in situations where the physical stability and permanence of the home may not be threatened but the ability of the dwelling to become a home is nevertheless compromised. There may be little difference in the hope-restoring innovative activities of consumers who hear the bulldozers down the street and those who face corruption and crime that threaten their sanctuary.

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YOU LIVE WHERE? SOCIAL STIGMA AND PUBLIC HOUSING RESIDENTS

Mildred A. Motley, Evansville Public Housing Authority
Carol M. Motley, Florida A&M University, Tallahassee

SUMMARY

While there is much discussion on the meaning of home, scholars generally that the home serves both utilitarian and symbolic functions. The utilitarian function of a home or housing is a structure that provides protection from physical elements. The importance of the home as a dwelling is underscored by governmental subsidies provided individuals and families who buy houses in advanced capitalistic countries such as Britain, Canada and the United States. Cultural differences in housing purchase rates and motivations exist, but a home is generally the family's most valuable asset. In addition, a home serves symbolic functions and provides social and psychological benefits and serves as a potential source of self-identity, security and social status. An individual's home, whether it is a house, an apartment, a trailer or an institution is his/her “castle,” with communicative value. The castle contains various meanings to the owner and outsiders. That is, the home embodies feelings of comfort, love and belonging (Papastergiadis 1998) and provides a source of identify for the homeowner. The home is reflective of the residents (Marcus 1995), and others judge the occupants of the home based upon physical and visual elements, e.g., geographic location, physical appearance. We explore the perceptions of that castle when the occupant is a renter and the landlord is a governmental entity. There are literatures in multiple disciplines on the meaning of “home” and public housing, however, there is scant research in marketing devoted to the perceptions public housing residents and how these perceptions might differ between public housing dwellers and others. We address this gap in the literature.

Foley (1980) suggests that much of the post-World War II academic house research seemed in response to the construction of public housing projects and the development of planned communities. Public housing is commonly defined as residential properties owned and operated by a governmental agency and made available to low-income individuals and families for modest rental payments. In the U.S. there are approximately 1.2 million individuals

residing in public housing dwellings and another 1.9 million residents receiving government subsidies for housing (<https://pic.hud.gov/pic/RCRPublic/rcrmain.asp>). This represents a relatively small percent of the U.S. population. Similarly, in Canada, 7 percent of the residential housing is deemed social housing (Prince 1995).

Generally negative perceptions about public housing residents appear to be country invariant (Tunstall 2007). In Canada, Prince (1995) quoting Rose (1980) indicates a significant stigma was attached to the residents of the first public housing projects and states “Attitudes toward those who require assistance have not changed much in more than four decades. Those families who are the prime applicants for socially-assisted housing accommodations are the focus of disrepute, resentment and a whole set of negative attitudes which set them apart from other Canadian families (Prince 1995, p. 732).” In the United States it is generally presumed that public housing residents are predominately ethnic peoples (mainly African-American), unemployed, and single mothers with numerous children (Stoloff 2004). In reality, in the U.S., approximately 51 percent of public housing residents are Anglo and 45 percent are African-American. Additionally public housing is generally perceived to be crime ridden with high rates of victimization; however the data are mixed (Farley 1994; Roncek, Bell, and Francik 1998).

We employ an experimental design to examine the perceptions of public housing and the individuals who reside in subsidized housing in the United States. We provide scenarios in which the individual in the story resides in an apartment in either a public housing development or the suburbs. Study participants responded to questions about the resident depicted in the experimental manipulation, public housing and suburban residents, and their familiarity with and attitudes toward public housing and suburban residents.

Our research has implications for consumers, the marketplace and public policy makers.

**Special Session: The Elusive “Home Sweet Home”: Perspectives on Seeking,
Obtaining, and Living in a Home**

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COMPARATIVE CONSUMER UNFAIRNESS IN THE 21ST CENTURY: IS U.S. GENERAL PREFERABLE TO E.U. SPECIFIC?

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SUMMARY

In 2005, the E.U. has adopted its Unfair Commercial Practices (UCPD) Directive (2005/29/EC) that prohibits marketing practices that are unfair to consumers through coercion, harassment or undue influence. Unlike the similar approach taken by the E.U. and U.S. to address deception, this E.U. approach to unfairness is significantly different from the U.S. Federal Trade Commission (FTC) approach. The latter condemns any sort of practice that is likely to cause unavoidable net consumer injury (15 U.S.C. 45). The UCPD also differs from the E.U.'s 1993 Unfair Terms in Consumer Contracts Directive that prohibited contract terms that were contrary to good faith and caused a significant imbalance of rights to the detriment of consumers. While the UCPD offers clearer guidance to guidance, a perennial concern with the FTC approach, the UCPD lacks the flexibility of a more general approach.

This paper first examines whether the two approaches address the same sort of unfair practices. It then examines two issues that are currently debated as possibly unfair – behavioral advertising and privacy and consumer environmental concerns. It concludes that the FTC approach is better able to define unfair practices in these areas, but that the E.U. has a strong regulatory history of addressing such important issues such as consumer privacy by separate directives.

The UCPD defines commercial practices (applied to consumers) as unfair if (a) they are contrary to the requirements of professional diligence and (b) likely to materially distort the economic behavior of the average consumer targeted by the practice. Article 2 (h) further defines professional diligence as: “[T]he standard of special skill and care which a trader may reasonably be expected to exercise toward consumers, commensurate with honest market practice and/or the general principle of good faith in the trader’s field of activity.”

While initially this approach appears general (and vague) similar to early FTC approaches, the UCPD further defines aggressive practices (as opposed to deceptive unfair practices) as those that significantly impair or are likely to

significantly impair the average consumer’s freedom of choice or conduct with regard to the product. Such impairment must be caused by harassment, coercion or undue influence to be considered unfair (Art. 8). The UCPD does not define harassment or coercion, but does define influence as “exploiting a position of power in relation to the consumer so as to apply pressure, even without using or threatening to use physical force, in a way which significantly limits the consumer’s ability to make an informed decision.”

Consistent with the UCPD, the FTC readily challenges coercive tactics that are likely to impair consumer choice such as home heating companies that would offer free furnace inspections but refuse to reassemble the furnaces until duped consumers purchased service contracts. But the FTC also addresses coercion that likely does not involve purchase such as “mousetrapping” consumer computers to expose them to unwanted advertising. Perhaps the UCPD would condemn this as an impairment of conduct related to the product (although the FTC case involved ads for a variety of products). The FTC also pursues post purchase coercion including unexpected contract terms that are not revealed prior to the sale. The E.U. would address this latter practice under its Unfair Terms in Consumer Contracts Directive.

Similarly, it is not clear how much marketing “push” would constitute harassment under the UCPD, but if such harassment makes consumers stubbornly resist buying, the harassment would not be unfair. The FTC regulates telemarketing and requires that spam advertisers provide an opt-out option based on the costs to consumers rather than the likely impact on sales.

Both jurisdictions condemn bait and switch because it deceives consumers into situations where (undue) sales person influence is likely. However, the E.U. has traditionally attempted to condemn more types of psychological pressure to buy than are currently condemned by the FTC. FTC staff suggestions on behavioral advertising replicate privacy protections that already exist in the EU, but do not suggest regulation of undue influence such as targeting vulnerable consumers, such as those who visit

gambling websites then receiving ads for additional gambling opportunities.

Because the FTC approach focuses on net consumer costs rather than likely impairment of freedom of choice or conduct, the FTC has been able to pursue advertising that suggests unsafe behavior. It also has used its unfairness authority to require disclosure of information that should be material to consumers in situations where the non-disclosure is not deceptive such as care labeling for

clothing where care is not mentioned in advertising. This broad authority allows the FTC to respond more quickly to consumer concerns. For example, the FTC currently is reviewing its environmental advertising guidelines and it may decide that some negative environmental information about certain products should be disclosed based on consumer unfairness. The E.U. would likely address the same issues through a new directive that would have to go through its lengthy political review process.

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WHEN IT ALL COMES TO GRIEF: DOES MANDATORY ARBITRATION STRIP A CONSUMER'S RIGHTS?

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SUMMARY

Mandatory arbitration clauses in consumer contracts require that disputes between buyer and seller be resolved before a third-party arbitrator rather than in a court room: the arbitrator's decision is binding on both parties. It is a very common practice: in 2001 (the last date for which data are available), the American Arbitration Association administered close to one-quarter of a million cases.

Consumers sacrifice many protections by moving from the court to arbitration. Arbitrators are not required to have a legal education. Procedural rules may not apply. Discovery is limited, constricting the ability to build a case against the offending firm. The arbitrator's decision is subject to review only for "manifest disregard" of the law.

Basics of the Federal Arbitration Act [FAA]

Prior to passage of the FAA in 1925, arbitration clauses in the United States were deemed unenforceable on public policy grounds. The FAA reversed this and flatly states that written arbitration provisions within a commercial contract will be enforced.

Section 4 of the FAA leaves an important role to the courts. They alone determine if the agreement to arbitrate is valid, giving them a key gatekeeper authority. As we shall see, the Supreme Court's decisions greatly limit this role.

Two "Arbitration" Policy Questions Molded by Two Supreme Court Cases

Our Question One focuses on the relative bargaining power between the two parties: When a large corporate entity, such as a brokerage firm, and an individual consumer enter into an agreement, should the courts view this as an "ordinary" contract? Or does the power disparity call for distinct treatment of such a contract? Question Two centers on the procedural contrast between arbitration and the courts, as noted in the introductory paragraphs above.

Thus, the second issue becomes: Is the process of arbitration capable of administering justice?

In *Wilco v. Swan*, the Supreme Court concluded that when the power disparity between contracting parties is great enough, the weaker party needs protections (thus addressing our Question One). Specifically, the 1933 Securities Act provided safeguards for investors, such as the requirement that disputes between the parties be resolved in court, not in arbitration.

The Court went on to directly address our Question Two, finding that the procedural shortcomings of arbitration eviscerates the consumer protections built into the 1933 Securities Act, thus, purchasers of securities need the consumer protections of the courthouse.

In *Shearson/American Express v. McMahon*, the court revisited our Question One, concluding that arbitration clauses are contracts, no more and no less. Reversing the *Wilco* court, the *McMahon* Court states that when an ordinary consumer contracts with Shearson/AmEx, it finds the power disparity to be a non-issue.

The Court also addressed our Question Two, concluding that arbitration, despite all procedural shortcomings, provided adequate consumer protection. This decision largely discounted the investor protections of the 1933 Securities Act, and the investor protections provided by *Wilco*.

Issue Three: The Role of the Courts in Mandatory Arbitration

If a consumer is conned into signing a contract, should an included arbitration clause be enforced? Or should the contract be voided, arbitration clause and all? Current law requires that the clause be enforced, based upon the doctrine of "separability." "Separability" consists of the following legal fiction: when one signs a contract with a mandatory arbitration clause, the law thinks of it as signing two contracts. There is the first one, containing only the arbitration agreement; then there is the larger document containing everything else. Should there be a

legal dispute, the court must decide which contract it will consider first. So our Question Three is: Which should the court look at first? The arbitration clause or the entire contract?

The separability doctrine – reigning law in the U.S. since the 1967 Supreme Court decision in *Prima Paint v. Flood and Conklin Manufacturing* – dictates that the arbitration clause be considered first. Therefore, a null-and-void contract containing an arbitration provision is immune to the U.S. court system: such a contract must go directly to arbitration.

Conclusions on Three Policy Questions

Question One: The abuses leading to the Great Depression made clear that – in certain circumstances – consumers require some degree of protection when dealing with larger, better equipped/informed entities. Putting the cas-

es into the hands of arbitrators who are normally selected and hired by the larger entity may not be the best way to preserve the consumer’s rights.

Question Two: Certainly it may be argued that arbitration’s deviations from courtroom procedure streamline the process, at least for any single case. However, a system that, over time, consistently limits discovery and provides a very limited written record may not be the best pathway to preserving consumer’s rights.

Question Three: We argue that this issue may be rephrased as: Should arbitrators shape public policy? We will make no attempt to resolve that overarching issue here, except to offer a single conclusory statement: the field of arbitration is a rich and wide-open one for public policy scholars. As the use of mandatory arbitration grows, it will become a vehicle to deliver satisfaction to consumers, or, to withhold it. References and full article are available upon request.

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“TARGET”ING COLLEGE STUDENTS WITH CSR POLICIES AND INITIATIVES: DO GENDER AND AWARENESS MATTER?

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SUMMARY

Retailers across the globe recognize the importance of integrating corporate social responsibility (CSR) policies into day-to-day operations. Being a good corporate citizen is no longer the exception – it’s the norm for most companies and brands. CSR policies and initiatives not only have a significant impact on customer-related outcomes (Bhattacharya and Sen 2004) and financial outcomes of the firm (Luo and Bhattacharya 2006), but also enable companies to influence public policy directly and indirectly in a more proactive way (Nelson 2008).

According to the Alloy Media + Marketing’s 8th Annual College Explorer Study (2008), college students demonstrate tremendous consumer spending capabilities and strong propensities for brands positively impacting the world. Simultaneously, they consider themselves to have the most ability to change the world. In the Alloy study, college students showed a decisive commitment to CSR, with 41 percent preferring socially responsible brands (compared to 37 percent in 2007 and 24% in 2006). In addition, results showed that 49 percent of college students stated that marketers should incorporate social messages into advertisements to have an effect with CSR policies and initiatives. “93 percent say they are less likely to ignore an ad that promotes a brands partnership with a cause” (Alloy 2008, p. 2). Given the group’s strong commitment to socially responsible, ethical, and environmentally friendly brands and their potential grassroots power, marketers should note the importance of communicating positive policies to this diverse audience, through which gaining financial rewards, building a good citizenship, and contributing to public policy discourses are possible.

This study was designed to build upon the Alloy study that found Target to be the most socially responsible retail brand. We investigated college students’ attitudes, knowledge, and perceptions regarding CSR practices on macro and micro levels. The current study offers a comprehensive understanding of this important population’s CSR related behaviors as well as provides some managerial and policy implications for future promotional efforts.

Research Questions

- RQ1: In general, what is college students’ awareness of CSR?
- RQ2a: What is college students’ general perception of CSR?
- RQ2b: What is college students’ perception of Target’s CSR initiatives and policies?
- RQ3a: What is the effect of gender on college students’ general perception of CSR?
- RQ3b: What is the effect of gender on college students’ general perception of Target’s CSR initiatives and policies?
- RQ4a: What is the effect of CSR awareness on college students’ general perception of CSR?
- RQ4b: What is the effect of CSR awareness on college students’ perceptions of Target’s CSR initiatives and policies?

Method

Prior studies that investigated CSR practices have incorporated a variety of methodologies, with most imploring the use of surveys for data collection. This study implemented a web-based survey among a nonprobability sample of current U.S. college students (both full time and part time students) ages 18 years and older using SurveyMonkey.com in Fall 2008. An analysis sample size of 388 ($n = 388$) was derived representing 22 states and 84 different college majors.

College students addressed an assortment of issues dealing with CSR participation and personal CSR-related activities. Any self-reporting survey attempting to measure and assess CSR perceptions can be subjected to social desirability response bias (Burton and Hegarty 1999). In turn, social desirability was measured using the 13-item Crowne and Marlowe Social-Desirability Scale (1967) to

overcome any bias introduced. Question phrasing and content areas came from a variety of sources. Experian Simmons (2005) five-point Likert-scale measures of attitude toward CSR activities and behaviors and demographics were used. Influences on the awareness and perceptions of CSR were derived from several qualitative interviews with college students 18 years and older that preceded the survey design. Questions and statements specific to Target's CSR initiatives and policies were developed based on information provided on the Target corporate website and subsequent CSR reports available.

Results

Results found in this study provide implications useful in business, marketing, and public policy. Overall, measures dealing with the general perception of CSR are consistent with previous studies: college students tend to attach great importance to CSR. Findings showed a significant main effect for gender. Female college students are more involved in CSR issues and in general hold a positive attitude toward CSR, despite finding that awareness of CSR was higher for male college students (60.5%).

Descriptive statistics revealed that college students who were aware of CSR were more likely to acknowledge the importance of CSR than those who were not informed of CSR.

Conclusion

Companies influence public policy discourse through their CSR practices by making some social problems more salient or filling some gaps that are neglected by government. According to Maignan and Ferrell (2004), "businesses cannot hope to enjoy concrete benefits from CSR unless they intelligently communicate about their initiatives to relevant stakeholders" (p. 17). College students are tomorrow's business and political leaders. They are also an important grassroots power. Maignan and Ferrell (2004) provide suggestions for advertisements, public speeches, promotions, newsletters, etc. serving as tactical instruments for communicating a brand's good corporate citizen role and CSR stance to the public. As a result of this study, we propose tailoring these tactics to the college audience specifically. References are available upon request.

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NANOFOODS: CONSUMER ATTITUDES, FAITH IN GOVERNMENT, AND INTENTIONS TO BUY: A PILOT STUDY

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SUMMARY

This paper outlines and describes a pilot study to examine the relationships between consumer attitudes toward nanotechnology, toward foods derived through nanotechnology, toward government regulation, and intentions to buy nanofoods. At the present time, nanotechnology is relatively unregulated. Because of the unique physical and chemical properties of materials at the “nano” level, there is potential for unknown consequences from the consumption of these products. Results from the study suggest that intention to consume nanofoods was positively related to attitude toward nanofoods as well as general attitudes toward nanotechnology. Attitudes toward government regulation were also predictors of behavioral intentions.

Introduction

Nanotechnology applies to materials or devices that are approximately 100 nanometers (one one-billionth of a meter) or smaller on one dimension. Material at the nanoscale may have properties very different than the same material at the “bulk” (normal size) scale, making these nanomaterials attractive for use in many product categories from computer hard-drives to foods to cosmetics to medical technologies. Because of these unique characteristics, there has been considerable effort around the world to develop the technologies. At the present writing, at least 1000 nanotechnologically derived products have been introduced as consumer products (Project on Emerging Nanotechnologies 2009). The hope is that nanotechnology represents “The New Industrial Revolution,” changing many facets of everyday life for consumers.

However, the health and environmental implications of these materials are virtually unknown, and there are few consumer protection regulations that deal specifically with these issues. As with the introduction of other technologies, success of these new products will be dependent on consumer acceptance. The purpose of this pilot study is to examine whether consumer acceptance of foods that are derived from nanotechnology is influenced by con-

sumers’ faith in the regulations that might apply to those food products.

Study

A total of 185 people took part in the research; 56 percent of the respondents were male and 44 percent were female. A pre-tested, unbiased, written conversation was used to explain nanotechnologies to the respondents. Respondents then replied to items related to nanotechnology and nanofoods.

Measures of behavioral intention as well as measures of perceived government regulation were used. A scale intended to measure general attitudes toward regulation (GenReg) was developed by modifying a scale employed by Hossain and Prybutok (2008). An attitude toward government regulation scale (GovReg) was developed for this study by incorporating the mission statements of specific consumer protection entities. Attitudes toward nanofoods (Afood) as well as general attitudes toward nanotechnologies (Anano) were also measured. Behavioral intention (BITOT) was measured using modified items from the original theory of planned behavioral model (Ajzen 1991). Respondents were also asked gender and a direct “knowledge” question intended to assess whether the respondents had heard of nanotechnology prior to the current survey.

Analysis and Results

A regression model was used to assess the predictors of intentions to consume nanofoods. The model explains 45 percent of the variance (adjusted $R^2 = .451$). Attitudes toward nanofoods Afood ($\beta = .594$) and attitudes toward nanotechnology Anano ($\beta = .154$) were determined to be the significant predictors of intentions to buy nanofoods. Consumer’s attitudes toward general regulation (GenReg) had a negative and significant ($\beta = -.111$, $\alpha = .05$) role in predicting intentions to buy nanofoods.

Further analysis suggests that there are differences between genders with respect to attitudes toward general regulation. Additionally, results suggest that consumers

believe that each consumer protection entity assumes an important role; agreement with each of the five agency-related statements was at least 1.5 points above the mid-point response.

Overall, results suggest that the more favorable attitudes are toward nanofoods and nanotechnologies, the more likely consumers will be to purchase nanofoods. The

model also suggests that consumers want nanofoods to be safe, but that they do not want to have to rely on government regulations for that safety. We infer that general attitude toward regulation is negatively related to behavioral intention because consumers believe that a higher degree of necessary regulation increases the perceived risk of nanofoods.

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