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2013 MARKETING AND PUBLIC POLICY
CONFERENCE AWARDS

Best Paper in Conference
“How Effective Are Alternative Plain Pack Designs?”
Philip Gendall, University of Otago and Massey University
Janet Hoek, University of Otago
Damien Mather, University of Otago
Richard Edwards, University of Otago

Brenda Derby Memorial Award
“Be a Good Cookie: Cause-Related Marketing’s Influence on Health Halo Formation”
Elizabeth Minton, University of Oregon

The Brenda Derby Memorial Award is presented nationally to an outstanding doctoral student who demonstrates excellence as an emerging policy researcher. The award honors a strong advocate of the public policy and marketing subdiscipline and is supported through the generosity of the Center for Marketing and Public Policy Research at Villanova University.
PREFACE

The theme of this year’s Marketing and Public Policy Conference (MPPC) is “The Changing Role of Policy in Consumer Well-Being.” Relating marketing and public policy to consumer well-being has been an enduring focus of scholars and researchers, and currently, consumer well-being is at the heart of crucial global issues and initiatives. In the United States, for example, recent health care and financial regulation debates are highly relevant to consumer well-being and have key economic implications. Our goals for the 2013 conference are to feature critical issues at the nexus of consumer well-being and public policy and to provide scholars, policy makers, and other experts with interesting and applicable insights.

This is MPPC’s 24th year—an inspiring statement of the marketing and public policy research community’s commitment. We defined our conference theme broadly to include multiple dimensions of well-being. Health care policy and consumer wellness, financial stability and decision making, environmental sustainability and regulation, and societal safety and protection all represent focal areas where well-being and policy intersect. Exciting research advances have been made in these areas, and compelling opportunities remain.

As the conference program and proceedings indicate, MPPC 2013 encompasses a range of topics spanning areas that affect consumer well-being, including influencing prosocial behavior, environmental effects on food choices, tobacco marketing and smoking behavior, communicating risk and benefit information, pro-environmental marketing, recycling and repurposing, policy relating to consumer debt, Federal Trade Commission policy on advertising claims, diversity and policy research, financial decision making, maladaptive consumption, and front-of-package nutrition labeling.

The conference has a diverse representation of scholars, authors, and panelists from academe, the public sector, and the private sector. Increasingly, MPPC has gained a global orientation, with participants from institutions in Australia, Brazil, Canada, China, Colombia, Denmark, France, Germany, Hong Kong, Japan, New Zealand, Nigeria, Portugal, Turkey, and the United Kingdom. From the public sector, the program includes participants from the Consumer Financial Protection Bureau, the Federal Trade Commission, Centers for Disease Control and Prevention, and the U.S. Food and Drug Administration. Other organizations represented include the Ad Council, Center for Financial Services Innovation, GfK SE Health, Health Promotion Agency, Hudson Cook LLP, Prevention Research Center, Qintuit, Research Triangle Institute International, Tala Pasifika, and Whakauae Research Services.

We are indebted to Ron Hill, John Kozup, and the Villanova Center for Public Policy and Marketing Research for their sponsorship—including program planning and implementation—of the 2013 Marketing & Public Policy Workshop and Doctoral Seminar. This preconference event showcased leading scholars in the field and facilitated their interaction with doctoral students and junior faculty interested in the public policy and marketing area. The program covered methodological issues, research domains, publishing in the field, federal agency–based research, and discussions with journal editors. Villanova generously covered all costs for the attendees. This kind of support and dedication helps promote strong research standards and secure the future of our field.

This year’s conference and workshop would not have been possible without the support of many organizations and individuals. We thank the planning group for valuable early ideas. We thank the American Marketing Association (AMA) for its support in MPPC scheduling, planning, logistics, and overall management of the conference. We especially thank Matt Weingarden, AMA Program Manager, for his wonderful work on the conference, his professionalism and collegiality, and the consistently excellent service he provided to us throughout every stage of the process over the past year.

Most important, we are very grateful to the conference reviewers for their hard work and responsiveness in helping us process the 144 competitive paper and special session submissions we received. The MPPC reviewers truly are at the heart of the conference.

We acknowledge and thank the Marketing Science Institute, a loyal friend of MPPC, for its financial support. We also thank the AMA Academic Council and the Marketing and Society special interest group for ongoing contributions. Finally, we are most appreciative of our home institution, Boston College, Carroll School of Management, for significant financial support of the conference as well as for encouraging our service to the profession in this capacity.

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CHARITABLE GIVING TO CONTROLLABLE MISFORTUNES: THE ROLE OF DELIBERATION AND VICTIM IDENTIFIABILITY

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SUMMARY

Causal controllability is the degree to which an observer of another person’s misfortune perceives that misfortune to be the fault or responsibility of the person in need of help. When a person encounters another in need of help, that person spontaneously judges the causal controllability of the situation (Weiner 1985). When the need is caused by an uncontrollable circumstance (e.g., genetic illness), sympathy is elicited, and the perceiver is likely to help the victim; in contrast, when the need is caused by a controllable circumstance (e.g., drunkenness), anger and blame are evoked, and the perceiver is likely to withhold help giving (Weiner 1980). Based on this theory, a nonprofit organization’s donation request is likely to be more effective if it communicates uncontrollability of the need; that is, the victim’s plight is not caused by irresponsibility on the part of the victim. However, social causes that nonprofit organizations attempt to aid are not always uncontrollable. For example, causes having a mental-behavioral origin such as drug abuse and obesity are generally considered to be controllable, and accordingly it is difficult to solicit donations for those causes because they tend to elicit potential helpers’ anger and blame toward the victims (Weiner, Perry, and Magnusson 1988). How can we decrease blame toward the victim of a controllable misfortune and increase people’s willingness to help the victim? Drawing on the literature of the identifiable victim effect (Small and Loewenstein 2003) and the feeling- versus deliberation-based mode of processing (Hsee and Rottenstreich 2004), we propose that a charitable request that excludes the victim’s personal information and evokes a potential donor’s deliberation will increase donations when a cause is construed as controllable.

The identifiable victim effect refers to people’s greater helpfulness towards a personalized, single victim (i.e., the victim’s information such as a photo and name is available for perceivers), compared to an abstract, unidentified victim (Kogut and Ritov 2005; Small and Loewenstein 2003). Research has shown that a perceiver’s affective reaction, whether it is sympathy or anger, is stronger toward an identified victim than toward an unidentified victim (Small and Loewenstein 2005). Thus, in order to lessen a perceiver’s negative reaction toward the victim of a controllable misfortune, exclusion of the victim’s personal information will result in not only a less negative reaction, but also in an increased deliberation of the controllable misfortune. If a potential donor considers a misfortune within the context of a broader scope (Hsee and Rottenstreich 2004), that donor is likely to perceive the misfortune as stemming from a societal failure rather than from an individual failure (Piff et al. 2010), and feel more sympathy toward the victim, leading to more help giving. Our three studies support this prediction.

This research makes several theoretical and practical contributions. First, this is the first study that examines the identifiable victim effect from the perspective of the different levels of causal controllability of a misfortune. By doing so, we show that the conventional belief in the identifiable victim effect is only true when people perceive the misfortune to be uncontrollable. Second, this research identifies a condition in which deliberation increases philanthropic impulses, which is new to the literature of charitable giving. Third, this paper contributes on a practical level to nonprofit organizations that support controllable misfortunes by suggesting communication methods that reduce the negative evaluations from the perception of high controllability without losing the opportunity to communicate preventability of the misfortune.

H1: People are more likely to donate to help an unidentified victim of a controllable misfortune than an identified victim of the same misfortune when people’s deliberation is high. Victim identifiability will not affect people’s donation decisions when their deliberation is low.

H2: Sympathy will mediate the effect of victim identifiability and deliberation on donations to a controllable misfortune.
Three experiments examined and supported our hypotheses. Study 1 tested hypothesis 1 and found that an unidentified victim increases donations to a controllable misfortune when potential donors’ degree of deliberation high (vs. low). In addition, the same study replicated the previous finding of Small et al. (2007) and found that an identified victim increases donations to an uncontrollable misfortune when potential donors’ degree of deliberation is low (vs. high). Study 2 examined the mediating role of sympathy in the effect of identifiability and deliberation on donations for a controllable misfortune (hypothesis 2). Study 3 used a different method of manipulating the degree of deliberation and replicated the effects found in studies 1 and 2.

Presenting personalizing information of a victim of a misfortune and stimulating people to sympathize with the victim often increases their desire to help that victim. To this extent, persuasion techniques that directly increase sympathy have a positive effect. As our findings indicate, however, additional considerations arise when aid is solicited in the context of a charitable appeal that aims to help a victim of a misfortune that is perceived as controllable. Our studies demonstrate that the characteristics of an appeal that encourage people to feel sympathetic with the identified victim can be detrimental to its effectiveness. Instead, excluding the victim’s personal information and stimulating people’s deliberation can effectively increase donations to help victims of controllable misfortunes. References are available upon request.

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CONSUMING FUNCTIONAL INNOVATIONS: ARE UTILITARIAN BEHAVIORS ENHANCED OR UNDERMINED?

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SUMMARY
A frequent practice in marketing is the introduction of products with new functionality; that is, a product is modified with attributes that afford consumers with additional opportunities for action (Dourish 2001; Ziamou and Ratneshwar 2003). Such innovations in functionality make a novel set of benefits available that support one or more functional outcomes, even if the base product or functional components are not themselves new to the market (Alexander, Lynch, and Wang 2008; Hoeflfler 2003). Examples include functional foods (e.g., omega-3 ice cream) and green products (e.g., natural detergents) that provide benefits over their traditional counterparts, and which represent substantial portions of their respective consumer markets (Price Waterhouse Coopers 2009).

The present research examines how functional innovations may unexpectedly and ironically undermine the very outcomes their novel functionality is intended to support. Although prior research has deeply studied factors which influence preference for (Hirschman and Holbrook 1982; Naylor, Droms, and Haws 2009) and categorization of (Moreau, Markman, and Lehmann 2001; Moreau, Lehmann, and Markman 2001) functional innovations, research is sparse examining the downstream consequences of consuming these products. Extant research has demonstrated that evaluative processing of novel innovations results in a heightened focus upon incremental benefits versus traditional products (Alexander, Lynch, and Wang 2008; Meyers-Levy and Tybout 1989). We propose that this “functional focus” may influence subsequent consumption patterns. Prior research has demonstrated that explicit self-perceptions of utilitarian behavior have the tendency to subsequently increase hedonic behaviors through a variety of mechanisms, including reducing perceived risk (Bolton, Cohen, and Bloom 2006), guilt reduction, (Wansink and Chandon 2006), executive resource depletion (Vohs and Heatherton 2000), and utilitarian goal-release (Laran, Janiszewski, and Cunha 2008).

Our research indicates that consumption of functional innovations subsequently increases hedonic-seeking behaviors which undermine utilitarian outcomes. Our results are consistent with a process of passive goal-guidance (Laran and Janiszewski 2009), in which consumption of a functional innovation releases relevant utilitarian goals, followed by involuntary emergence of conflicting hedonic desires (Carlson, Meloy, and Miller 2013) that subsequently guide perception and behavior. For example, consumption of functional foods (eco-products) releases health (environmental) goals, thereby instigating a hedonic state that increases engagement in less healthy (environmentally responsible) consumption. The result is a so-called hedonic “boomerang” that undermines overall utilitarian outcomes and the functional benefits of the innovation. Furthermore, we propose a method to interrupt this process and thereby mitigate the “boomerang” by priming a utilitarian goal beforehand—which shields (Chartrand et al. 2008) against the release of the functional goal.

A series of real behavior and scenario studies supports the proposed model and intervention, while ruling out alternative explanations. Study 1 examined the impact of consuming a functional innovation upon subsequent hedonic-utilitarian behavior. An environmental innovation in the technology domain (smartphones) was employed. Following purchase of a functionally innovative (“with Eco-Safe battery technology”) or non-innovative smartphone, participants indicated choice likelihoods for multiple phone application pairs containing one hedonically oriented and one utilitarian oriented option. As predicted, participants purchasing the functional innovation indicated increased intentions to purchase hedonic apps.

Studies 2A-B were conducted to (i) provide direct process evidence for a heightened hedonic and suppressed utilitarian state following consumption of a functional innovation distinct from conscious choice, and (ii) demonstrate that a similar “hedonic boomerang” effect does not occur for traditional, non-innovative products that
provide comparable utilitarian benefits, thereby (iii) ruling out conscious “justification” process explanations such as guilt reduction (Wansink and Chandon 2006), or conscious licensing due to inferences of goal progress (Fishbach and Dhar 2005). Study 2A directly measured involuntary activation of a heightened hedonic state due to functionality without soliciting conscious choice. In study 2A, participants first imagined purchasing either an environmentally responsible (washable cotton towel) or irresponsible (disposable paper towels) product that was either functional (“with Eco-Nurture additives”) or non-functional. To measure activation of a hedonic state, participants were next exposed to a 15x18 letter matrix containing an equal number of utilitarian (e.g., “responsible”) and hedonic (e.g., “exciting”) words. As predicted, functionality significantly increased (decreased) the number of hedonic (utilitarian) words found in the puzzle, regardless of the base product type. These results are consistent with activation of a hedonic state that guides attention outside of conscious awareness. Furthermore, these results preclude explanations for behavioral shifts due to conscious guilt-reduction or “balancing” mechanisms, which propose that conscious justification of prior behavior is used as a “license” to engage in hedonic behaviors. Study 2B employed the same design and initial stimulus, but measured behavioral intentions through choice likelihood ratings of environmentally responsible and irresponsible options. Consistent with the process findings of 2A, functional innovations (regardless of base type) subsequently decreased preference for environmentally responsible options.

Study 3 explored in a real-behavior context whether consumption of a functional innovation undermines utilitarian behavior. As part of a taste test, participants first consumed a real pre-packaged cookie labeled as functional (“with antioxidants”) or non-functional, then spent fifteen minutes viewing movie trailers and eating actual M&Ms. Consistent with our predictions, individuals consuming a functional innovation subsequently ate more grams of the candy. Study 4 replicated this effect with (non-) functional innovation versions of a “healthy” base product, yogurt. Finally, Study 5 provided further evidence for the proposed process by demonstrating that prior activation of a utilitarian (vs. hedonic) goal mitigates the effect of functionality upon subsequent consumption. Thus prior utilitarian goal activation inoculates consumers and introduces a method for “undoing” the functional boomerang.

In summary, this research is, to our knowledge, the first effort to understand the downstream consequences of consuming functional innovations. Consumption of a functional innovation intended to support utilitarian outcomes is demonstrated to subsequently undermine these outcomes. This unintended consequence occurs because the functional innovation instigates a hedonic state resulting from the release of functionally-related goals. Beyond theoretical contributions to the innovation and motivation literatures, this work has substantive implications for managers and consumer welfare, particularly given the focus of multiple industries (e.g., mobile technology, health food) upon product hybridization as a source of growth. References are available upon request.

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MISFORECASTING POSITIVE AFFECTIVE RESPONSES TO PROSOCIAL BEHAVIOR

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SUMMARY

Consumer giving represents 75% of all charitable contributions (Giving USA 2010), and while these numbers indicate that consumer giving is a major industry, consumer giving has steadily declined over the last few years (Giving USA 2010; Department of Labor 2011). Also, when consumers do give, approximately half are motivated to only give once and not give again (Nonprofit Times 2003). In order to continue to serve those in need, charities must effectively request help from target donors. One way in which charities can be effective in their requests is to understand consumers’ feelings before and after they engage in prosocial behavior. More importantly, charities need to understand whether any differences arise between consumers’ predicted and experienced emotions and how this impacts future help toward the charity.

There is an implied assumption that consumers are aware of the rewards, or positive affect, they will feel when helping others (Sprecher et al. 2007). However, research has not addressed the extent to which consumers are accurate in their forecasts or the factors that influence their emotional estimations. This is important to understand, because as shown in this research, inaccurate forecasts impact consumers’ likelihood to engage in prosocial behavior. More importantly, charities need to understand whether any differences arise between consumers’ predicted and experienced emotions and how this impacts future help toward the charity.

Since consumers overestimate their positive affect when they forecast helping (i.e., experienced affect is less than anticipated affect), they are likely to be disappointed when their experienced affect does not match their anticipated affect. When consumers do not forecast their affective responses, they do not have a comparison point to use against their experienced affect and therefore do not have an opportunity to be let down. Thus, consumers’ experienced affect is expected to be higher when consumers do not forecast their emotions (vs. forecast their emotions). If consumers have a positive experience helping others, they may be inclined to help again in the future (Jenner 1982). Therefore, not forecasting (vs. forecasting) one’s positive affect will increase consumers’ willingness to engage in future helping behavior (Study 3).

The next question we ask is whether consumers are ever accurate in predicting their positive affect? While in everyday helping behaviors, donors are not required to put in much effort or costs, there are instances when consumers do engage in more costly helping behaviors, such as building homes for Habitat for Humanity, giving blood, and donating organs. All helping requires some costs on the part of the giver (Bartlett et al. 2002), for example, one’s time, money, and/or effort (Dovidio et al. 1991). With costly helping behavior, the help itself is more intense (Piliavin et al. 1981) and therefore the process of helping others, i.e., the cost involved to the self, is apparent both when thinking about and engaging in prosocial behavior. Therefore, consumers are less likely to misforecast their emotions when the cost of helping is high. We show that high cost helping provides a boundary condition to the misforecasting effect associated with prosocial behavior (studies 4 and 5).
Across five studies, results provide evidence that consumers misforecast their positive affective responses in regard to prosocial behavior. With general everyday helping behavior, consumers overestimate their positive affective responses. This overestimation is due to consumers’ perception of greater benefit to others when they think about versus engage in the behavior. Furthermore, overestimating positive affect decreases consumers’ likelihood to help the charity again in the future. A boundary condition for this effect shows that, with costly helping, misforecasting diminishes.

While Mother Teresa said, “Nothings makes you happier than when you reach out in mercy to someone who is badly hurt” (Myers 1992, p. 194), evidence is provided here to show that sometimes the anticipation of helping others will make you happier (than the act of helping itself). Understanding whether misforecasting of positive affect occurs in regard to prosocial behavior, why it is happening, and how to fix misforecasting errors can provide benefits to consumers and prosocial causes, and in the end, society as a whole. References are available upon request.

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PREDICTING PREVENTIVE HEALTH BEHAVIOR: THE EFFECTS OF SELF-PROPHECY AND SELF-EFFICACY

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SUMMARY

One main objective of marketing research in the field of health care is to develop mechanisms to promote behaviors and lifestyles of people that maximize their long-term health. In this regard, the main task is to increase people’s adherence to different prevention- and treatment-related regimens (Kazarian and Evans 2001). Different approaches have been developed to help to influence health behaviors such as the theory of planned behavior (Ajzen 1991; Fishbein and Ajzen 1975), the health belief model (Becker 1974; Janz and Becker 1974), and the protection motivation theory (Maddux and Rogers 1983; Rogers 1983), to name only a few. However, when health care professionals try to implement these frameworks in practice, they face the challenge that these frameworks are rather complex and not easily applicable. In addition, these frameworks often fail to provide practitioners with specific procedures on how to alter health behaviors (Sprott et al. 2006).

Self-prophecy, however, can be regarded as a simple way to influence health-related behaviors and can easily be transferred to practice (Sprott et al. 2006). The self-prophecy effect suggests that asking people to predict whether they will perform a socially normative behavior leads to the increased likelihood of them performing that behavior.

While self-prophecy research demonstrated its theoretical explanation to be based on the theory of cognitive dissonance (Spangenberg et al. 2003) and found some moderators of the self-prediction effect, it still requires identification of further conditions under which self-prediction is most effective (Sprott et al. 2006).

Since self-efficacy has generally been shown to influence health behaviors (e.g., Jayanti and Burns 1998; Keller 2006), self-efficacy is such a potential factor. Except for one study (Longstreet et al. 2011) which tested the self-prediction effect on computer-related task performance, the question of interaction between self-prophecy and self-efficacy has not yet been empirically studied in prior research.

The current research investigates self-prophecy in the health behavior context to accomplish three objectives: (1) to provide evidence that self-prophecy has a significant effect on performance of a preventive health behavior, (2) to show that self-efficacy positively affects preventive health behavior, and (3) to test whether self-efficacy moderates the self-prophecy effect on the focal behavior.

The results of an experiment (n = 267) in the context of sports behavior indicate that self-prophecy has an effect on preventive health behavior, thus providing further evidence that making a self-prediction changes people’s behavior. Moreover, we are able to show that this effect is moderated by a person’s level of self-efficacy. In particular, people low in self-efficacy are more likely to respond to the effect of self-prediction than are people high in self-efficacy. This outcome suggests that the self-prophecy question can be particularly helpful for people with lower self-efficacy beliefs in bringing their level of exercising, for example, to the same level as people with higher self-efficacy beliefs who actually do not need a self-prediction question. References are available upon request.
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THAT’S NOT HOW I REMEMBER IT: WILLFULLY IGNORANT MEMORY FOR ETHICAL PRODUCT ATTRIBUTE INFORMATION

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SUMMARY

Consumers often encounter products in the marketplace that have implications for larger ethical issues, such as products that have negative environmental consequences or products that are manufactured in a way that is unfair to workers. When they encounter this type of information, consumers may be motivated to use coping strategies to avoid the emotional costs of incorporating knowledge about poor performance on these types of ethical attributes into their decisions (e.g., Eckhardt, Belk, and Devinney 2010; Luce 1998). An especially direct way to avoid ethical issues in purchase situations is simply to not gather ethically-relevant product information. As Ehrich and Irwin (2005) have shown, consumers sometimes actively avoid searching for information about ethical attributes. This “willful ignorance” is especially common among consumers who care about the underlying ethical issue. This avoidance is particularly notable because the consumers who avoid the information will actually use this information in their decision making if it is given to them.

Given that even consumers who avoid ethical attribute information often use it when it is available, a market researcher or brand manager might conclude from this prior research that the solution to willful ignorance (i.e., the key to getting consumers to incorporate ethical information into their purchase decisions) is simply to provide ethical attribute information to the consumer. However, many psychological processes need to occur between attribute exposure and purchase and post-purchase evaluations. Like many judgments and decisions, consumer decisions can be made “online,” with all of the relevant information present in the decision environment while the decision is being made, or they can be memory-based, with some or all of the relevant information retrieved from memory at the time the decision is made (Hastie and Park 1986).

The present research explores the idea that simply providing ethical attribute information to consumers is not enough to ensure that this information is used because any role that memory plays in subsequent processing of the information could affect the mental representation of the product. Even if consumers are presented with ethical attribute information, they may still not incorporate information about poor (vs. good) performance on an ethical attribute into their decisions. Instead, they are motivated to systematically forget this information as a coping strategy to avoid the emotional costs of this information. Thus, their memories for the information will be inaccurate, in a predictably biased direction.

Drawing on the literature on the malleability of memory (e.g., Braun 1999; Braun, Ellis, and Loftus 2002; Cowley 2008; Cowley and Janus 2004; Loftus 1979) and motivated reasoning (e.g., Kunda 1990; Santioso, Kunda, and Fong 1990), we predict (and demonstrate across three studies) that consumers exhibit a particular type of willfully ignorant memory that is unique to ethical attributes. This willfully ignorant memory leads consumers to fail to recall poor performance on an ethical attribute (e.g., that a desk is made from non-sustainable rainforest wood) at a higher rate than they do good performance on the same attribute (e.g., that a desk is made from sustainable tree farm wood). The malleability of memory, we suggest, therefore protects consumers from having to process unsettling ethical attribute information because they simply forget that the product is unethical. Thus, in the service of protecting themselves, consumers develop inaccurate memories about the ethicality of the products they encounter.

We call this motivated forgetting willfully ignorant memory and hypothesize that consumers engage in it as a coping strategy. If consumers can disregard poor performance on the ethical attribute, either by forgetting it entirely (i.e., not being able to recall any information about that attribute) or by remembering it incorrectly (i.e., incorrectly recalling performance on the ethical attribute as good when it is actually poor), then a sense of helplessness about solving the ethical issue in question can be avoided. We predict and demonstrate that this type of memory distortion does not take place for good perfor-
mance on an ethical attribute because good performance does not lead to as strong a sense of helplessness about the underlying ethical issue. Our proposed effect is in direct conflict with the negativity bias (Baumeister et al. 2001; Rozin and Royzman 2001). According to this bias, people tend to pay more attention to negative than to positive information. If differences in memory were driven solely by the negativity bias, we would expect to find that consumers would remember poor performance on an ethical attribute better than good performance. Instead, we find that consumers’ motivation to forget poor ethical attribute performance trumps any effects of the negativity bias for these attributes.

Consistent with Ehrich and Irwin’s (2005) work on willful ignorance in search, we also find that the willfully ignorant memory effect is particularly strong for consumers for whom the ethical issue is especially important. It is these consumers who are most likely to feel helpless about solving the ethical issue in question when they encounter products with poor performance on the ethical attribute in the marketplace.

Finally, we propose that motivated forgetting is a coping mechanism (Luce 1998) used by consumers to avoid the feelings of helplessness that thinking about solving large, intractable ethical problems can generate. Thus, if a consumer is already feeling helpless about ethical issues when he or she encounters information that a product performs poorly on an ethical attribute, then there is no need to engage in motivated forgetting to stop the activation of all of the negative memory nodes linked to the attribute value. By demonstrating that consumers do not misremember poor values on the ethical attribute when they are primed to feel helpless, we therefore provide evidence that the pattern of forgetting we demonstrate in our studies is driven by a desire to cope/avoid feeling helpless. References are available upon request.

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WHEN MIGHT CONSUMERS CHOOSE SUPERIOR SUSTAINABILITY DESPITE A TRADE-OFF WITH OTHER PRODUCT ATTRIBUTES?

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SUMMARY

Building on prior research that suggests consumers often infer a trade-off between sustainability and other product attributes (Luchs et al. 2010), the objective of the current research is to contribute to our understanding of when and why consumers will choose a product that is more sustainable, despite an explicit trade-off with other valued attributes. Specifically, we investigate the different emotional and behavioral consequences of scenarios in which consumers face a trade-off between either product sustainability and utilitarian value, or between product sustainability and hedonic value.

Prior research has demonstrated that different types of product attribute trade-offs can have very different emotional and behavioral consequences (Chitturi, Raghunathan, and Mahajan 2007, 2008). Choices involving utilitarian attributes have been shown to be a consequence of prevention oriented emotions, such as confidence (Chitturi, Raghunathan, and Mahajan 2007; Higgins 2001; Luchs, Brower, and Chitturi 2012). On the other hand, choices involving hedonic attributes have been shown to be a consequence of promotion oriented emotions, such as excitement (Chitturi, Raghunathan, and Mahajan 2007; Higgins 2001). With respect to trade-offs with sustainability, we suggest that the orientation of the goals fulfilled (or unfulfilled) depends on what specifically is being traded off with sustainability, as do the consequent emotions and choice. Specifically, we propose that it is especially difficult to justify the choice of hedonic value (vs. utilitarian value) over sustainability; doing so is especially likely to increase guilt (and reduce pride) relative to the morally superior sustainable option. In addition, consistent with the precedence principle (Berry 1994), it is also plausible that consumers are more likely to choose utilitarian value (vs. hedonic value) over sustainability due to the greater confidence (and lower distress) experienced when choosing a relatively more utilitarian product. Thus, we predicted that consumers are more likely to choose a product with superior utilitarian value over a more sustainable product than to choose a product with superior hedonic value over a more sustainable product, and we expected this effect to be mediated by greater pride (less guilt) and by greater confidence (less distress). Further, we expected this effect of trade-off type on choice likelihood to be moderated by consumers’ attitude toward sustainability such that consumers are more likely to choose sustainability in the context of a trade-off with hedonic value (vs. utilitarian value) as their attitude toward sustainability becomes more positive.

In Study 1, participants were presented with a choice between two kitchen blenders that were described as differing along two dimensions. In the first condition, one option was superior (inferior) with respect to its product performance (sustainability) whereas the other was superior (inferior) with respect to its sustainability (product performance). In the second condition, participants were presented instead with a trade-off between sustainability and aesthetic design. Within the product performance trade-off condition, more participants chose product performance over sustainability (68:7), $\chi^2 = 32.81, p < .0001$. However, there was no difference in choice likelihood when the choice was between superior aesthetics and superior sustainability (42:32), $\chi^2 = 1.34, p > .10$. This effect of Trade-off Type on Choice was significant, $\chi^2 = 18.84, p < .0001$, confirming that choice likelihood – given a trade-off with sustainability – depends on the type of trade-off: specifically, a sustainable product is more likely to be chosen in the context of a trade-off with hedonics than in a trade-off with utilitarian value.

For our mediation analyses, we created a series of three emotion dimension pair measures (confidence-distress, excitement-disappointment and pride-guilt) after confirming that all emotion pairs were related as expected (all pairs inversely related, $p < .0001$). A bootstrapped parallel mediation analysis, per Hayes (2012), suggested that only greater confidence (less distress) mediated the effect of Trade-off Type on Choice at the 95% confidence level. However, a bootstrapped serial mediation analysis, per Hayes (2012) suggested that greater pride (less guilt) may have indirectly played a significant role on Choice through its effect on confidence (distress) and excitement (disappointment). In addition, this effect of Trade-off...
Type on Choice was moderated by consumers’ Attitude toward Sustainability (AtS), $\chi^2 = 5.41, p = .02$, such that choice of the sustainable option increased amongst participants with relatively higher AtS scores, but only within the superior aesthetic design trade-off condition.

The design of Study 2 was similar to the design used in Study 1 except that participants were also able to “opt out” of the choice. In addition, Study 2 employed two different product category contexts: calculators and MP3 players. The pattern of results was the same as the pattern found in Study 1. Within the performance trade-off condition, more participants chose product performance over sustainability (108:8), $\chi^2 = 50.45, p < .0001$. Once again, there was no difference in choice likelihood when the choice was between aesthetic design and sustainability (60:49), $\chi^2 = 1.11, p > .10$. Similarly, while a bootstrapped parallel mediation analysis, per Hayes (2012), suggested that only greater confidence (less distress) mediated the effect of Trade-off Type on Choice, a follow up analysis suggested that pride (guilt) had an indirect effect on Choice by attenuating – or blunting – the erstwhile greater confidence (lower distress) felt toward the higher performing (yet less sustainable) product.

Our results extend prior demonstrations of the principle of precedence (Berry 1994), which suggests that utilitarian value is often chosen over hedonic value (Chitturi, Raghunathan, and Mahajan 2007), by showing that it is more likely for utilitarian value (vs. hedonic value) to be chosen over sustainability. Further, we show that a possible disadvantage faced by a more sustainable product can be attenuated in the context of a trade-off with hedonic value as consumers’ attitudes toward sustainability become increasingly positive. Finally, we found that the effect of some of the emotions in our context – such as pride (guilt) – may be indirect. This finding, conceptually consistent with the Appraisal Tendency Framework (Han, Lerner, and Keltner 2007), is novel given the demonstration of a blunting effect with different emotions as well as demonstration of the blunting effect within a given choice context (i.e., as opposed to a series of tasks). Beyond the theoretical and public policy implications of our research, we believe that our findings also present very promising opportunities for future research on sustainable consumption which is needed given the inherent complexity and conflicting emotions experienced within this unique context (Phipps et al. 2012). References are available upon request.

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BE A GOOD COOKIE: CAUSE-RELATED MARKETING’S INFLUENCE ON HEALTH HALO FORMATION

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SUMMARY

This research investigates how health-oriented cause related marketing initiatives can cause a consumer to perceive a packaged good as healthier than it actually is (i.e., formation of a health halo). In a series of three studies, findings reveal that products with a health cause on a package (e.g., “a portion of proceeds are donated to this cause”) lead consumers to form a health halo surrounding the package. Addition of a disclaimer significantly reduces health halo effects but not purchase intentions. These effects are moderated by health interest, ad skepticism, and BMI. Public policy implications are discussed.

Conceptual Overview

A growing body of research has investigated the development of health halos and related policy implications to encourage consumer healthy decisions. Wansink and Chandon (2006) describe a health halo as when a consumer overgeneralizes one healthy trait of a product (e.g., low fat) to represent the totality of the product (e.g., also low sugar, high fiber, low sodium, etc.). This recent research on health halos has spawned off the Food and Drug Administration’s (FDA) Nutrition Labeling and Education Act of 1990 to determine the influence of package labeling on food purchase decisions (Silverglade 1996).

One area where further research is needed lies in the field of corporate social responsibility (CSR) initiatives. When Keebler recently introduced cookie packaging with the American Red Cross logo, it is possible that this logo created a health halo causing the cookies to appear healthier than they actually are. The American Red Cross logo will be placed on approximately 175 million cookie packages each year while the campaign runs (Cause Marketing Forum, 2012). Keebler is receiving positive results from the cause-related marketing initiative with increased sales and improved brand perception. However, what effect does this cause-related marketing initiative have on perceptions of healthiness of the cookies? Also, how could more knowledge in this area help to encourage consumer healthy decision making?

Although much research has investigated attributes of cause-related marketing, no research to date has examined the relationship between health halo creation and cause-related marketing. Previous research has shown that cause-related marketing initiatives can result in consumer misperceptions. For example, Bower and Grau (2009) found that when a corporation and nonprofit partner in a cause-related marketing initiative, consumers can misperceive that the nonprofit is giving a “seal of approval” for the corporation. The greater the fit between the corporation and the nonprofit, the more likely the consumer is to perceive the nonprofit approves of the corporation. Thus, companies involved in cause-related marketing initiatives should be cautious to ensure that consumer perceptions of the initiative do not result in negative consequences for either the corporation or nonprofit. Just as consumers misperceive seals of approval, consumers could also misperceive a nonprofit endorsing a product as healthy and something that should be consumed in greater frequency.

Therefore, the purpose of this research is to answer two general research questions: (1) how do cause-related marketing initiatives on food packages result in creation of health halos, and (2) what role does public policy have in reducing health halo formation? To answer these questions, a variety of literature bases are brought together including priming, health, CSR, and cause-related marketing literatures to best understand under what circumstances health halos are created within cause-related marketing initiatives.

Methods

Three studies were conducted to investigate this problem using undergraduate business students. Participants were shown a mock package (Study 1: cookies, Studies 2 & 3: crackers) and asked to evaluate the overall healthiness, purchase intentions, and taste perceptions along with several moderating variables. Each study utilized three conditions: (1) package with no cause, (2) package with...
Results and Discussion

Study 1 (N=109) reveals that products with a health cause on a package (e.g., a portion of proceeds are donated to the American Heart Association) lead consumers to perceive the product is significantly healthier than a package with no health cause or a non-health cause. Qualitative responses suggest that consumers perceive the cause as endorsing the packaged good. Also, health interest moderates the relationship between health package design and health perceptions with high health interest consumers perceiving a package as less healthy (i.e., health halo reduction) than low health interest consumers.

Study 2 (N=101) replicates the findings from Study 1 that a health cause on a package (in this study, the World Health Organization) significantly increases health perceptions resulting in health halo formation. Also, consumers classified as overweight (BMI > 25) were significantly more likely to see a health halo around packages with a health cause in comparison to normal weight consumers. Results from Study 2 also provide public policy implications by showing that adding a disclaimer to a package with a health cause (“This is not an endorsement by the World Health Organization”), significantly reduces health halo effects but does not reduce purchase intentions.

Study 3 (N=99) again replicates the findings from Studies 1 and 2 by showing that a health cause on a package significantly increases health perceptions (i.e., a health halo is formed), and addition of a disclaimer reduces health halo effects. Also, consumers high in ad skepticism had significantly lower health perceptions with a package containing a health cause and disclaimer than a package with no cause.

Conclusions

In summary, this research shows that health-oriented cause-related marketing initiatives significantly increase health perceptions and result in the formation of a health halo. Disclaimers are one way for public policy to get involved and reduce formation of health halos. With over 35 percent of the US classified as obese and an obesity epidemic facing both the nation and the world, this research has the potential to positively influence consumer choice and aid in reducing consumer obesity for a better world ahead. References are available upon request.

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TRANSLATED ATTRIBUTES AS A CHOICE ARCHITECTURE TOOL: TRICK AND TREAT

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SUMMARY

Choices are never presented in a vacuum: rather, alternative choice options are always presented within a context. Importantly, in many cases the context — the “choice architecture” — reflects the meta-decisions made by the designer of the context — the “choice architect” (Johnson et al. 2012; Thaler and Sunstein 2008). A key principle associated with the choice architecture metaphor is that there is no neutral choice context and therefore those responsible for framing decisions will influence choices in all cases. Motivated by this belief, scientists and policy-makers have become increasingly interested in learning how to best arrange the choice architecture in order to help mitigate the threat of various social dilemmas, most recently the threat of climate change (Newell and Pitman 2010; Weber and Stern 2011).

Energy labels, and in many cases the standards that accompany the labels, are often considered to be the best available tools for governments to manage energy-efficiency policies and climate-change-mitigation programs (Gillingham, Newell, and Palmer 2009; Stern et al. 1987; Wiel and McMahon 2003). Given that the consumption of fossil fuels is a major contributor of greenhouse gas emissions, one natural target of choice architecture intervention are vehicle choices via fuel economy label design.

One important feature of the fuel economy label is the choice of metric or metrics to include. A common feature of many consumer labels, including fuel economy labels, has been the presentation of highly related metrics. For example, the US fuel economy label, redesigned by the U.S. Environmental Protection Agency (EPA) in 2012, includes three metrics that are all different expressions of fuel economy: gallons per 100 miles, estimated annual fuel cost, and greenhouse gas rating expressed on a scale of one to ten. Interestingly, these three metrics are perfectly correlated — they are different translations of fuel economy. We investigated how the presentation of multiple translated attributes could change consumer’s preferences.

The consumers’ choice literature has converged on the conclusion that choices are inherently constructive, that consumers often do not have well-defined existing preferences, and that consumers construct their preferences using a variety of strategies contingent on task demands (Payne, Bettman, and Johnson 1988). One non-compensatory strategy that boundedly rational consumers may adopt is a simple counting heuristic in which the decision-maker simply counts up the number of attributes on which one alternative outperforms the others and selects the option with the highest score. Counting heuristics favor the option that is better on more attributes. We therefore hypothesized that the presentation of multiple translations of a global dimension (e.g., fuel economy) would shift consumers’ preferences toward the option that was better on the majority of the presented attributes (i.e., the translated attributes effect).

Another key feature of translated attributes is the fact that they may highlight different characteristics of a global dimension. Adding a specific translation might therefore increase the accessibility of the dimension they describe in memory as well as its perceived importance (Shah and Oppenheimer 2009). Similarly, translated attributes can remind individuals of additional goals they may have overlooked but nonetheless care about. We hypothesized that the translated attributes effect would be moderated by the translated attribute’s congruence with the consumer’s goals: specifically, those with pro-environmental values to more often select the efficient option but only when one translation was environmental (i.e., greenhouse gas rating).

We observed that the presentation of multiple translated attributes did indeed shift preferences. Specifically, we found that the weight placed on a global dimension (e.g., fuel efficiency) tended to increase when it was translated.
into multiple attributes (e.g., annual fuel cost, GPM, GHG, rating). Put simply, more fuel-efficient vehicles were selected when more translated fuel efficiency attributes were presented, whereas cheaper vehicles were selected when more translated price attributes were presented. We also found that participants’ likelihood of selecting the fuel-efficient option was affected by their pro-environmental attitudes but only when the translated fuel-efficiency attributes included the greenhouse gas rating.

These results are best captured by two concurrent choice mechanisms: counting and goal activation. One the one hand, the basic translated attribute effect can be explained by the application of a counting strategy according to which people simply choose the option that is preferred on most of the available metrics (the “trick”). On the other hand, the moderating role of personal environmental values is in line with a goal activation account, according to which different translations highlight different aspects of fuel-efficiency and choices can be further influenced when there is a match between the translation and individual goals (the “treat”). Thus, in comparison with the counting heuristic, goal activation has much higher specificity.

In summary, we have proposed the novel concept of translated attributes – related attributes derived from a global dimension by simple mathematical transformation – as another pillar of the choice architecture framework. This tool will be useful for policy-makers and marketing managers alike as they strive to effectively communicate with consumers to guide informed consumer choices. References are available upon request.

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THE UNINTENDED CONSEQUENCES OF CALORIE INFORMATION ON MENUS: THE USE OF ATTRACTION AND COMPROMISE EFFECT

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SUMMARY

For those of us who live in cities where calorie information has become mandated, it is not a shock that calorie information on menus is being used by consumers to make their consumption choices. That was, in essence, the whole point of mandate in the first place. But the question that remains is: are there any unintended consequences of this new calorie information? No longer are you just choosing an item off the menu, but instead you are choosing an item of a menu, in the context of and in comparison to other items and their calorie information. Is this a good thing or bad thing? In most cases this is probably a good thing. Prior research has shown that the providing calorie information on menus can lead to changes in consumer’s choice (e.g., Howlett et al. 2009). As a result people are hopefully making healthier or at least more knowledgeable decisions. The goal of this research, however, is to present examples when unintended negative consequences occur as a result of this information. This research contributes to the literature by exploring whether the attraction effect and compromise effect, two of the most robust findings in consumer behavior, are likely to occur when consumers are presented with calorie information using this unique source of nutritional information.

When viewed together, our three studies show that a food items’ calorie information is not used in isolation, but is rather used comparatively against other food items’ calorie information. This use of information can result in less optimal choices for the consumer and can even alter the perception of the food. In study 1 we replicated past compromise effect research (Simonson 1989; Sharpe et al. 2008) with the use of calorie information as an attribute. Participants’ chose food items within the context of other options and in both cases the target item saw an over ten percent increase in share choice when the item was presented in a choice set as the compromised choice.

Additionally, in studies 1 and 2 we showed the strength of the attraction effect and how the addition of a decoy item can result in an over a ten percent increase in selection of the targeted food item. In four out of the five attraction effect conditions, the targeted item was the higher calorie option, meaning that in each attraction effect condition, over ten percent of participants would have chosen a lower calorie item had a third decoy item not been offered.

Lastly, in studies 1 and 3 we show the strength of the “higher calories equal taste” heuristic. In study 1, we show the power of the heuristic by showing its strength in the dessert category over the robust compromise effect. The compromise effect did not work in the ice cream condition, despite having worked in the frozen dinner condition. In study 3, we show the heuristic can even effect people’s perception of taste, quality, and satisfaction. Participants tasted the exact same cookie and when told that one cookie had a higher calorie count, the perception was altered despite there being no difference in the cookie whatsoever.

In this research, we have shown the unintended consequence of having calorie information on a menu. Past research has looked at how nutritional panel information (e.g., Keller 1997) is processed and how this can be used in presentation to the consumer to be most effective. In the same vein, future research may need to focus on how information is processed when reading a menu in order to present the information in the most beneficial and effective manner. References are available upon request.
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ENVIRONMENTAL CUES AND FOOD CONSUMPTION AMONG DIETERS AND NON-DIETERS

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SUMMARY

Dieters often start with the best of intentions, planning to truly commit to their diet goal “on Monday,” or perhaps “once the holidays are over.” Unable (or perhaps unwilling) to face the food temptations they face on weekends and special occasions, individuals are more likely to overindulge once they have engaged in even just a small temptation (i.e., the “what the hell” effect; Polivy and Herman 1985) and plan to reengage in their diet goal on a new day in which their prior diet inhibiting activities do not threaten their goal. While extant research has explored special occasion consumption with a focus on the typical American holiday season (i.e., Thanksgiving through New Year’s Day), this research seeks to explore more generally how dieters and non-dieters differ in their attempts to bolster dietary defenses in the face of external cues related to what we term eating occasions—events that serve as a cue to consume tempting food options.

To date, research examining the effects of weak versus strong food-related cues on consumption has focused specifically on tempting food stimuli. We extend this body of literature by examining the effects of cues associated with eating occasions on dieting defenses. Given that special occasions and holidays are used as markers for indulgence (Kivetz and Zheng 2006; Mukhopadhyay and Johar 2009), we posit that they also serve as strong food-related cues for individuals. This is supported by anecdotal evidence from diet-focused publications that bombard readers with advice regarding ways in which to avoid indulgence as the holidays approach; for instance, 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). For dieters, who are attempting to control their consumption, we argue that such cues will bolster individuals’ dieting defenses relative to when these individuals are faced with weaker cues that are not related to an eating occasion (i.e., an ordinary day). We do not predict differences in bolstering dieting defenses for non-dieters as, in the absence of dietary goals, these individuals are not likely to perceive eating occasions as threats.

We explore these predictions in three empirical studies that assess consumption behavior during times of eating occasions traditionally associated with indulging in food.

In our first study, participants were given a scenario in which they were asked to imagine that they were out to dinner celebrating either their own birthday or their friend’s birthday. All participants were then asked to choose the specific dessert they would order at the dinner, ranging from extremely unindulgent (i.e., a healthy fruit salad), too extremely indulgent (chocolate cake à la mode). After the dessert choice task, we assessed dieting behavior with the following item: (“I am currently dieting.”). Supporting our predictions, those scoring relatively higher on the dieting measure (i.e., dieters) selected the cake à la mode to a greater extent when the occasion was their friend’s birthday relative to their own birthday; those low on the dieting scale (i.e., non-dieters) did not differ in selecting the cake à la mode based on the different birthday occasions. In addition, we also find that when participants were told it was their own birthday, dieters were less likely to select the cake à la mode than non-dieters, but when it was their friend’s birthday, they were just as likely to select the cake à la mode as those who were considered non-dieters.

In the next study, we examined these effects using actual consumption. We varied the eating occasion cue by running the study on two different days using different sections of the same course: one on Halloween day and the other on a random, non-holiday weekday several weeks afterward. Participants were given a bag filled with 50 M&M candies in a Ziploc bag that they could enjoy the candy as they filled out a questionnaire assessing their dieting behavior and BMI. At the end of the class period, participants were asked to count how many M&M candies remained in their bags. We find support for our hypotheses, such that individuals scoring relatively higher on the dieting measure and BMI (i.e., dieters who are overweight) consumed more M&M candies on an ordinary day relative to Halloween; those low on the dieting scale (i.e., non-dieters) with a similar BMI did not differ in the amount of M&M candies consumed on an ordinary day relative to Halloween. Furthermore, results
also demonstrate a directional effect on Halloween, such that dieters with a higher BMI ate less candy than those with a lower BMI.

Finally, in our third study, we explored whether dieters bolster their defenses more than non-dieters in the presence of eating occasion cues. Similar to Study 2, we ran the study a few days before Thanksgiving and also several weeks afterward. Individuals answered four items aimed at assessing the extent to which participants tend to bolster their dietary restraint, which we combined in order to obtain an index measure (Bolstering), as well as a measure of their dieting behavior. Supporting our predictions, those scoring relatively higher on the dieting scale (i.e., dieters) bolstered dieting goals to a greater extent when Thanksgiving was salient relative to an ordinary day; those low on the dieting scale (i.e., non-dieters) did not differ in bolstering based on the presence of weak versus strong food-related cues. Additionally, we find that around Thanksgiving, dieters bolstered goals more than non-dieters. Importantly, we do not see a difference in the bolstering of dieting goals when it was an ordinary day.

In conclusion, the findings from this research contribute to the existing literature on environmental cues and food consumption. Much research has documented the important role of external cues in the form of tempting food items, and has found that dieters guard against temptations that are not in line with their long-term dieting goals. Similarly, the current research shows that dieters react defensively in response to holiday cues that represent eating occasions. On the other hand, we also show that in the absence of holiday cues, self-control breaks down and dieters do not have the defenses to guard against indulgence. The results presented in the current research can have numerous implications for individuals with regard to holiday cues representing eating occasions. References are available upon request.

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THE IMPACT OF FOOD GROUPS, DIETARY VARIETY AND QUALITY, AND DEMOGRAPHICS ON DAILY CALORIC INTAKE

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SUMMARY

We examine the influence of multiple food consumption related behavioral measures and demographics on individuals’ daily caloric intake. Given the high frequency of food consumption behavior and its implications for personal, household, social, and national outcomes, such behavior has received significant research attention. We propose that variables influencing daily caloric intake can be grouped into three hierarchical levels – day, individual, and household – with days nested within individuals in turn nested within households. Based on a food diary panel dataset provided by the NPD Group, a leading market research company, we test the effects of a range of variables from the three levels on individuals’ daily caloric intake.

We use data from NPD’s annual Eating Trends Survey from 2010 and 2011. During the survey, the head of each participating household keeps a daily diary to report the foods eaten by all household members. The survey is conducted for two consecutive weeks. The sampling is done in a rolling fashion such that every week some households start their two-week participation. Our final sample consists of 8,415 individuals from 3,752 households. For every individual, for every participating day, information for up to twelve at-home versus away-from-home meals is reported. For every meal, all items consumed are reported. NPD classifies the multitude of reported food names in two ways, one finer and one broader; there are 4,245 finer NLINK codes and these are grouped further in to the 184 broader codes. We further grouped the NLINK2 codes into eight food group codes of which, five are the food groups as defined in the 2010 Dietary Guidelines for Americans (DGA) – milk and milk products, fruits, grains, protein foods, and vegetables – and the remaining three groups are snacks, beverages, and fats/oils. Thus, for each item reported, we have a NLINK, NLINK2, and DGA (plus 3) code. The latter two are crucial for the behavioral measures we created. For each item, information about serving size, special label (e.g., light), and item type (e.g., main dish) is also reported. Using the NLINK codes and other information about individuals (e.g., age, gender), NPD computes each individual’s caloric and nutrient intake based on an average calculated serving size for each food item in grams. Such intake information is calculated by matching each food item with food items listed in the USDA Food and Nutrient Database for Dietary Studies (v. 4.1, 2010).

Dependent Variable. We aggregated the caloric, nutrient, and grams consumed for each individual per reported day. The daily caloric totals (one for each day an individual participated in the survey) calculated after such aggregation serve as the dependent variable in our analysis.

Day-Level Independent Variables. We calculated per individual per day the grams of food consumed in the five DGA groups and the three additional groups we created. The coefficients on these food group variables indicate a large range, for example, a gram of snack items provides 2.66 calories but a gram of fruit items provides only 0.46 calories. Another day-level variable we included is a dummy variable for weekend (Fridays, Saturdays, and Sundays) versus week days and it shows that weekend intake is higher than week day intake by about 49 calories.

Individual-Level Independent Variables. We analyze the impact of various measures of dietary variety and quality and also of other behavioral and demographic measures. Our first measure of variety, NumUniqVariety, is a count of the total number of unique NLINK2s reported by an individual per day. The higher this count of unique items, the more an individual is consuming overall and so we expect NumUniqVariety to have a positive effect on daily caloric intake (supported). Our second measure of variety, PerUniqVariety, is calculated as the percentage of the count of the unique NLINK2s from among the total number reported. The higher this percentage, the more
the individual spreads his or her intake across distinct food types. Since a higher spread means a higher chance that foods of varying levels of healthiness are being consumed, we expect PerUniqVariety to have a negative effect on daily caloric intake (supported). Our third measure of variety, HerfindahlVariety, assesses the extent of the spread in intake (using the formula of the Herfindahl Index) over the five DGA food groups. A higher spread for this index means a higher chance that foods of varying levels of healthiness are being consumed, and so we expect HerfindahlVariety to have a negative effect (supported).

Our first measure of dietary quality, DrewnowskiQuality (Drewnowski et al. 1997) is a 5-point scale based on individuals’ conformity with key U.S. dietary recommendations for fat, saturated fat, carbohydrate, cholesterol, and sodium. Since a higher score means a healthier diet, we expect DrewnowskiQuality to have a negative effect on daily caloric intake (supported). Our second measure of quality, GoodBadDiffQuality, is based on the popular perception that fruits and vegetables are generally healthier compared to snacks and beverages (excluding alcoholic beverages) and was calculated as the difference in the percentage of calories from fruits and vegetables versus snacks and beverages. Since a higher difference would mean a relatively healthier diet, we expect GoodBadDiffQuality to have a negative effect on daily caloric intake (supported). Our third measure of quality, AtHomeVsAwayQuality, is based on the popular perception that foods consumed at home are healthier than foods consumed away from home and was calculated as the difference in the percentage of calories from at-home versus away-from-home intake. If the perception is true, a higher difference would mean a relatively healthier diet and so we expect AtHomeVsAwayQuality to have a negative effect (supported).

We also modeled the number of diets (surprising null effect), number of weight-related medical conditions (negative effect), number of exercises (positive effect), the number of special labels on the items consumed (surprising positive effect), and individuals’ age (positive effect), gender (men consume 375 more calories per day), and BMI (positive effect) information as well.

Household-level Independent Variables. Except for gender, the household counterparts of all individual-level variables were calculated as the average of all individual-level variables for all individuals in each household. A majority of the household-level variables calculated in this fashion had an effect of the same sign as their corresponding variable at the individual level. We modeled household head’s race (individuals from households with White head persons consume the least), Hispanic status (no effect), household size (no effect), and income (no effect) also.

Our results indicate measures of dietary variety and quality have a dual effect, via patterns in individuals’ own consumption behaviors and via patterns in household members’ consumption behaviors. Such facilitative effects of family on consumption have been discussed by others, but a systematic, “hierarchical” examination like ours has not been possible so far due to data limitations. Our results for dieting and use of special labels suggest that consuming healthy foods may ironically increase the consumption of less healthy foods. The dual, individual- and household-level, effects we observe for the various measures indicate that for their caloric intake outcomes consumers must better understand not only their own consumption behaviors but also those of household members. Thus, it would be useful to craft variety and quality guidelines at both the individual and household levels. More broadly, consumers must be better educated about the various, multi-level influences on their consumption so that they are better able to manage it. Our results suggest that both dietary variety and quality can be cultivated in many ways and that their benefits can be additive. Consumers must be mindful of the possibility that dieting and consuming special label foods can stimulate rather than contain consumption. References are available upon request.

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CONJOINT ANALYSIS OF THE CONSUMER TRADE-OFF DECISIONS ASSOCIATED WITH A BEVERAGE TAX

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SUMMARY

In response to dangerous and increasing obesity rates (CDCP 2010), public policy leaders and researchers are working to resolve this trend by understanding the relationship between over consumption of calorically-dense foods and marketing activities. Empirical understanding of this relationship has never been more concerning because calorically-dense food is relatively inexpensive (Montopoli 2009) and often the target of recent snack taxes (Fletcher, Frisvold, and Thefft 2010). At the same time, Congressional Budgetary Office meetings indicate that a national beverage tax could be in the offing (Adamy 2009; Fried 2010).

While news reports (Adamy 2009; Fried 2010) provide estimates for potential revenue from a sweetened beverage tax, less prevalent are indications of the possibility this tax might have for reducing soda consumption and obesity. It is important to think of an optimal tax in terms of switching behaviors, i.e., how a tax might influence consumers to actually change their consumption behavior, because soda is linked to over consumption of solid snack foods as well as significant weight gain (e.g., Mattes 1996; Raben et al. 2002). In addition, research also often finds a tax that raises the price of soda products leads to increased consumption of either beverages with more calories or beverages with fewer nutrients than soda (Fletcher, Frisvold, and Thefft 2010). Finally, drafting tax codes that include regular soda but exclude diet soda runs the risk of producing unintended consequences such as increased consumption of other foods (e.g., Blundell and Hill 1986; Fowler et al. 2008; Lavin, French, and Read 1977; Mattes 1990).

Prior legislative attempts at controlling marketing activities thought to impact obesity, such as package claims or product innovations, have yet to prove efficacious in encouraging nutritious habits (e.g., Moorman 1998; Moorman, Du, and Mela 2005). In addition, obesity-linked soda products are lower in price relative to healthier alternatives such as fresh meats, vegetables, and fruits. Consequently, there is a need to investigate further how consumers make tradeoffs regarding beverage attributes. The following research questions are posed:

RQ1: Of the tax rates proposed so far, which will decrease consumption of unhealthy beverages?

RQ2: What beverage types should be taxed to increase consumption of healthy beverages?

RQ3: What additional beverage product attributes beyond price and type impacts consumption enough such that they should be considered an element of tax legislation?

RQ4: Which proposed beverage tax rates will impact consumer BMI levels?

As with other studies of consumer attitudes, college undergraduate students represent an appropriate sample for the research questions posed (e.g., Petty and Cacioppo 1996; Petty and Krosnick 1995). Moreover, those between the ages of 12 and 19 years consume soda more frequently than any other age group in the US (Wang, Bleich, and Gortmaker 2008), and the proportion of college students (about one third) reported to be obese is similar to that of adults (USDA 2005; CDCP 2010). As such, the responses of 82 undergraduate students were analyzed in order to address the research questions posed. Sawtooth’s ACA software was used for data collection because its adaptive nature allows accurate part-worth estimation even though the respondent does not make trade-off decisions for multiple product scenarios. Perhaps of most importance, conjoint analysis is an efficient tool for tapping into consumer product preferences without facilitating potential bias arising from asking for such preferences directly. The four design attributes, developed through the results of multiple pre-tests, included (1) five levels of price per 6-pack of 20-ounce bottles ($0, $4.00, $5.44, $6.88, $8.32), (2) seven types of beverages (tap water, pure fruit juice, soft drinks, sports drinks, bottled water, coffee, tea), (3) two levels of caffeine...
(caffeinated and not caffeinated), and (4) three levels of sweeteners (sugar, artificial sweeteners, no sweeteners). Respondents rated beverage preference on a seven-point scale in 24 trade-off scenarios, described by three attributes at a time, and randomly displayed.

The findings suggest a sweetened beverage tax could significantly decrease soda consumption if the tax excluded artificially sweetened beverages, but only if the tax made the price of sugar-sweetened beverages considerably more expensive. For example, a 1 cent increase per ounce tax on soda did not appear to be a particularly aversive consideration for our respondents. It was only when this tax moved to the 3 cent per ounce increase level that the price of a six pack of soda became something to avoid.

More importantly, optimal legislation should not assume consumers behave through bounded rationality, but should instead attempt to predict product substitution decisions. For example, strong preference for beverage type overrides an increase in price in some scenarios. Only when soda price increases from $4 to $6.88 does consumption of various sweetened beverages begin to decrease. Second, findings reveal no relationship between attribute preferences for various beverages and BMI, despite high rates of soda consumption among college age students (Wang, Bleich, and Gortmaker 2008). And a third sampled are obese. While the simulated market does reveal that some consumers are likely to reduce consumption of calorically-dense beverages when the prices of these products become expensive, it does show that consumers cease consumption of these beverages or that they increase consumption of healthier alternatives. Thus, while preference for sweeteners does not appear to be related to BMI, the larger concern may be switching obese, or potentially obese, consumers away from high calorie beverages and toward water. Third, no tax scenario appears likely to encourage switches toward healthy drinks, such as tap water, pure fruit juice, bottled water, and unsweetened tea. It appears consumers will look for sweet substitutes given a beverage tax, including artificial substitutes.

If the ultimate goal of beverage tax legislation is to reduce consumption of soda, our results may complicate the presumed efficacy of such policy. For example, it is only at the higher levels of tax increases where consumers may actually switch away from soda, though, switching from soda to more “healthy” alternatives appears to unlikely across soda tax possibilities. Taxing sugared alternatives exclusively could result in consumers switching to diet soda but, as noted earlier, consumption of diet soda is not without its own set of unhealthy consequences. If, on the other hand, the ultimate goal of beverage tax legislation is to generate revenue for resources and education aimed at curbing obesity, our results may be in line with policy objectives. References are available upon request.

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RESTORATIVE SENIOR CENTER SERVICESCAPES AND SENIOR HEALTH

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SUMMARY

Elderly people are susceptible to non-communicable diseases, such as cancer, diabetes, and chronic respiratory disease (Bloom et al. 2011). In addition, the elderly typically experience negative life events that diminish or curtail their social networks and the support they once received (Rosenbaum 2006). Consequently, older adults are prone to experiencing social and emotional loneliness, stress, and depression (Mayo Clinic 2012; Rosenbaum et al. 2007). Fatigue, or exhaustion, is one of the most common complaints among the elderly; estimates reveal that up to 50 percent of the elderly suffer from mild fatigue (Wick and LaFleur 2007). A solution is required to help individuals and societies affordably and effectively help older-aged adults and the elderly remedy symptoms associated with loneliness, most notably, fatigue. This research finds that senior day centers represent a solution that often transforms the well-being of their elder patrons by fashioning a therapeutic, or a restorative servicescape (Rosenbaum 2009). Thus, senior day centers, which are non-residential facilities operating 10–12 hours per day and offering affordably priced or complimentary meals; social, educational, and practical assistance; and entertainment classes/activities (Calsyn and Winter 2000), emerge as solutions to help the elderly deal with fatigue and improve their well-being.

This research empirically shows that senior day centers play therapeutic roles in their patrons’ lives. To date, researchers have explored the extent to which the elderly often patronize for-profit, commercial service establishments, such as diners (Rosenbaum 2006), fitness clubs (Rosenbaum 2009), shopping malls (Kim et al. 2005), and beauty shops (Garzaniti et al. 2011), to escape loneliness and maintain commercial friendships (Price and Arnould 1999). However, this research adds to this paradigm by showing the practical and evocative roles of senior centers in enhancing their patrons’ well-being. Service establishments housed in the public realm may play significant roles in their patrons’ lives by serving as therapeutic landscapes that transform their well-being by encouraging human restoration.

We obtained the data through a self-administered questionnaire that was randomly distributed to 85 patrons of a senior center located in a major Australian city. No personal information was asked of the respondent, and one of the study’s authors was present during data collection to provide assistance. Of the respondents, 62 (73 percent) were women and 23 (27 percent) were men. In addition, 32 percent were age 60–69 years, 26 percent were age 70–79 years, 20 percent were age 80–89 years, 11 percent were age 50–59 years, 6 percent were age 90 years or older, and 5 percent were age 49 years or below.

The data reveal that some senior center patrons respond to three restorative dimensions found within a service design—being-away, fascination, and compatibility – in a manner that promotes health benefits, including lower levels of fatigue, improved quality of life, and better emotional and physical health. Thus, researchers who question whether there is a place for commercial establishments in public health (Frumkin 2003) now have empirical and descriptive evidence that links public places to human health.

This research expands Bitner’s (1992) seminal work on servicescapes and shows the transformative role of senior centers in elder care by acting as therapeutic environments. Along these lines, we encourage service researchers to consider employing Attention Restoration Theory (Kaplan 1995; Kaplan and Kaplan 1989; Rosenbaum 2009) to investigate whether younger-aged consumers also seek out and patronize retail establishments (e.g., an Apple store) to achieve restoration. Perhaps, servicescapes that are not traditionally perceived as restorative (e.g., penitentiaries, youth detention centers) often fail because their patrons suffer from directed attention fatigue. This work reveals that even these settings could be modified in an innovative manner that promotes human restoration and healing.
From a practical perspective, the National Council on Aging (2012) reported that senior centers are one of the most widely used services among older adults, with more than one million patronizing senior centers every day. The literature is replete with articles that reveal that older adults who participate in senior center programs learn to manage and delay the onset of chronic disease and experience measurable improvements in their physical, social, spiritual, emotional, mental, and economic well-being. However, to date, little is known about the impact of senior center design on patrons’ attitudes and behavior. The current article fills this void by offering managers a practical understanding of how some patrons undergo restorative, transformational changes in senior centers. However, we encourage future researchers to employ qualitative, descriptive research to better understand why and how some senior center patrons perceive a restorative servicescape. Although this research is one of the first in marketing to explore the role of senior centers in consumer health, it is not without limitations. Most notably, the study employs a smaller-sized, Australian-based sample. Thus, it might be speculated whether the research findings generalize beyond Western, industrialized societies. However, because we offer support for the essential tenets of ART, we are confident of the study’s practical implications to senior center management and theoretical opportunities to service researchers. We also organize several substantive literature streams under the burgeoning transformative service research paradigm. Given the global aging trend and the problems that seniors often experience as they age, we believe that senior centers are innovative, relatively inexpensive, non-medical places that have the potential to improve individual and societal well-being. References are available upon request.

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TRANSPORTATION STUDIES REVEAL BARRIERS FOR PERSONS WITH DISABILITIES: USING THE CONCEPT OF CONTINUOUS SEQUENCE

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SUMMARY

A major concern for persons with disabilities is transportation access to the marketplace. Throughout the years since the ADA was adopted, in-store access has improved as ramps, automated doors, and widened aisles have become customary parts of retail atmospheres. However, traveling to and from a “trip to the store” may provide additional unique challenges. While recent studies have examined issues that are in the store environment, none have explicitly considered that a major factor in marketplace access is transportation, its ease of use, and the accommodations that it provides to persons with disabilities.

This paper will do the following: (1) discuss the findings of four national studies of persons with disabilities related to transportation; (2) outline the specific ADA jurisdictions of public and private transportation systems; (3) suggest a theoretical framework that integrates the role of transportation in marketplace accessibility; and (4) utilize the Bureau of Transportation’s 2002 National Transportation Availability and Use Survey to draw public policy and marketing implications. This specific database was developed in order to examine whether the nation’s transportation system is currently meeting the needs of persons with disabilities throughout the United States. Data collection included the identification of various modes of transportation used by persons with and without disabilities, including automobiles, air travel, and public transit.

In 1974, Mehrabian and Russell introduced environmental psychology to urban planners. They proposed that people are likely to approach or avoid various environments based on their reactions to the characteristics of those environments. Among other questions, they asked: “How does the physical environment . . . influence the frequency and the quality of social interactions?” (p. 4). Three specific emotional reactions were the likely consequences: these included pleasure-displeasure, arousal (stimulated-relaxed), and dominance-submissiveness. As a result of their reactions, consumers are thought to determine whether they wanted to stay or not, whether they wanted to avoid or explore the environment, and so forth.

In reality, environmental factors such as limited mass transit “create” a disabling environment for consumers who are unable to drive, while similar consumers with ample mass transit can function independently and may not feel disabled at all (Kaufman-Scarborough and Baker 2005). While most researchers have studied the experiences of persons with disabilities actually within specific shopping environments, the “extended environment” leading from their homes should be considered as well. The importance of transportation in the sequence of stages needed to enter a shopping environment is an extended part of the concept of “continuous sequence” within a store environment itself. In a more traditional sense, a continuous sequence can trace the path of a shopper from store entrance, through displays, to restrooms, back to merchandise, and finally to checkout, also emphasizing the transitions, such as changes in flooring, that the individual must traverse.

Persons with disabilities may depend on: (1) specific private transportation to travel to store access, such as a local taxi service; (2) a retailer who provides transportation to and from the store facility, such as a hotel shuttle at an airport; (3) public transportation, such as trains and buses, to get to shopping areas; and (4) finally, their own abilities to walk, wheel, or drive themselves to destinations where purchases can be made. Such considerations are important to public policymakers since they can significantly affect the likelihood of a person with disabilities being able to establish feelings of independence, rather than dependency.

The Bureau of Transportation Statistics developed and executed the 2002 Transportation Availability and Use Study to provide a comprehensive database for analysis by government bodies and public policy researchers. The data represent a unique opportunity to examine the mass
transportation perceptions of persons with disabilities in comparison to those without disabilities. These data enable us to examine the travel behaviors, availability of travel accommodations, the travel methods used, and their perceptions of that travel arrayed by disability types. The study collected interviews from 5,019 persons, including 2,321 persons with disabilities. Several measures of disabilities are included in the data set, providing a rich opportunity for analysis.

In order to add some detail to the “story” of the travel experiences of persons with disabilities, the manuscript focuses on the responses related to airline travel in order to narrow the frame for analysis. In contrast to the stereotypical reports that argue that persons with disabilities do not travel regularly, over half of those who reported disabilities, a total of 1362 respondents, took a long-distance trip during the past year. When taking the long trip, 45% traveled by car, either as a driver or passenger. The next most frequent mode of travel was commercial airline, reported by 239 respondents (10.6%). Moreover, in 2002, 428 (19.1%) of the respondents took at least one round trip on a commercial airline, with their total number of trips ranging from 1 to 35 trips.

As anticipated, responses included problems with curb cuts and stairs, broken elevators and escalators, obstacles, passing space, problems with moving sidewalks and trams, the lack of available wheelchairs, and inadequate parking. Other problems ranging from “too much walking” to the inability of a person’s assistant to be allowed to offer customary assistance. Public policy researchers are called to examine the larger environment experienced by persons with disabilities when transportation availability, quality, and convenience are considered. References are available upon request.

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THE TORTOISE AND THE HARE EFFECT: AGED “MARATHONERS” BEST YOUNGSTER “SPRINTERS” WHEN LEARNING EXPERIENTIALLY

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SUMMARY

It is common knowledge that developed nations are “graying,” meaning that there will soon be more elderly people as a proportion of the population than ever before in history. The U.S. Census Bureau projects that by the year 2030, the number of Americans over the age of 65 will more than double to over 72 million people – 25 percent of the population (U.S. Census Bureau 2008), and the percentages in other developed nations are similar (United Nations Department of Economic and Social Affairs 2009). Moreover, seniors will control an increasing share of both total wealth and discretionary income, trends which will accelerate as current “boomers” age (AARP 2007). Despite the growing importance of senior markets both in size and proportion of discretionary income, this consumer segment is relatively understudied.

In many market scenarios, consumers both young and old would benefit if they could learn how some unobservable outcome of interest is related to observable attributes. For example, one could consider how antique shop- ers appraise items in a wide array of product categories, or how used car buyers learn the complex relationships between car attributes and a fair price. Efficient learning of attribute-outcome relationships is an important skill for all consumers. However, increases in the number of products available to consumers in any given category, expansion of the number of consumer-relevant categories, the growing use of auction purchasing formats, and the increasing complexity of everyday products have magnified the need for consumers to learn how attributes relate to price, quality, and other outcomes of interest. Research has found that repeatedly practicing in the presence of veridical feedback will develop expertise, although both the rate and the asymptote of learning depend on specific characteristics of the task (Alba and Hutchinson 1987; Eisenstein and Hutchinson 2006, 2008; Mellers 1980; Shanteau 1992). In this paper, we compare aged and young consumers as they learn from experience in a simulated market, and we examine the psychological underpinnings of their performance.

Our results revealed a surprising “tortoise and hare” effect. Specifically, we found that, as expected, youngsters outperformed the elderly “out of the blocks.” However, aged subjects demonstrated a long-run advantage in learning. With greater experience, older subjects continued to improve, even with an unanticipated change in environment, while youngsters “burned out” and suffered degraded performance. Thus, youngsters “sprint”; the aged “marathon,” and the triumph of age over youth is not merely due to worsening performance of youngsters, but also to the surprising continued improvement of the older subjects.

Our findings have implications for our understanding of learning in general and consumer learning in particular. Our results suggest that age-related degradation of foundational cognitive capabilities, such as information processing speed and memory, does not carry over in an expected fashion to more “real world” tasks in which learning is more experiential. In addition, the fact that older consumers continue to learn through extended practice contrasts sharply with observations made in studies involving young consumers, in which subjects typically show little performance improvement from extended training. These contrasting findings suggest that younger adults may approach learning situations differently than the aged. New insights can also be drawn from the superior performance of elderly consumers on prediction tasks under conditions of market change. This result is both interesting and counterintuitive given the vast literature that demonstrates reductions in processing speed and working memory capacity associated with aging – two components that are highly involved in updating one’s prior knowledge about the world (Hedden and Yoon 2006). References are available upon request.
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ADOLESCENT BULLYING BIAS AND NEGATIVE CONSUMPTION: THE MODERATING ROLES OF SOCIAL ACTIVITY, TEACHER SUPPORT, AND LONG-TERM GOALS

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SUMMARY

Bullying is increasing among several adolescent segments. For some adolescent victims, bullying biases such as race represent a threat from an out-group, and accompanying negative behavior is more externally focused. For others, bullying biases such as sexual orientation represent rejection of the self as unacceptable to peers, and accompanying negative behavior is more internally focused. This paper offers meaningful ways to reduce negative behavior associated with bully victimization. Specifically, social activity helps mitigate internally focused behavior, while teacher support helps lower externally focused behavior. Finally, long terms goals are successful at reducing most negative behavior associated with bully victimization. References are available upon request.

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PRIVATE INFORMATION IN A SOCIAL WORLD: A POLICY PERSPECTIVE OF CONSUMER PRIVACY ON SOCIAL NETWORKING SITES

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SUMMARY

While the Internet offers consumers access to a vast quantity of information at minimal effort and cost to enable better, more efficient decision-making (Alba et al. 1997), consumers are vulnerable when it comes to their online information. In fact, many people are uncertain about (Sheehan and Hoy 1999) how information is collected and shared by public entities, beyond the original purpose for information collection (Milne and Culnan 2004). Despite the rapid growth of social media in recent years, little academic research has explored consumers’ concern for privacy when agreeing to participate in social networking sites. Consumers disclose personal information to social networking sites in exchange for the opportunity to connect with other members. Because a major concern of many consumers is that the Internet is likely to violate their privacy (Benassi 1999), it is unclear whether consumers truly understand how their personal information is being used by social networking sites and if they are concerned about this usage.

This paper discusses consumers’ concern with their privacy on social networking sites and how this concern affects consumer acceptance of such sites. Specifically, we discuss how the presentational mode of a social networking site’s privacy policy may affect consumers’ awareness of the subsequent effects of sharing their personal information with that site, how this awareness influences understanding and perceived risk of sharing their information with that site, and if that perceived risk affects their perceived usefulness of the site.

Privacy and Perceived Risk

Often, marketers include privacy notices on websites to help the consumer decide whether or not to engage with the website at any level (Culnan and Milberg 1998). Furthermore, consumers use a simple risk calculation in deciding whether to disclose their personal information. If consumers perceive that the estimated benefits of information disclosure outweigh the costs, they will trade their personal information, even if it puts that information at risk (Laufer and Wolfe 1977). However, privacy notices are often written so the companies that create them will be covered in case of a legal dispute; they are not developed for consumers to understand them. This may lead consumers to improperly assess what really happens to the information they share with social networking sites.

Propositions

The readability and explicitness of warnings influence consumers’ information processing of such warnings (Lethlo and Miller 1986), and privacy notices can be viewed as analogous to warnings because of their similar function (Milne and Culnan 2004). Therefore, the following proposition is offered:

P1: When privacy policies on social networking sites are directly stated, users will be more aware of what happens to their information when it is shared on a social networking site.

Consumers are only able to control and protect their online privacy if they possess the information necessary to make relevant choices (Nairn and Monkgol 2007) such as an understanding of online privacy risks (Miyazaki and Fernandez 2001) and what is happening to their data (Milne, Labrecque and Cromer 2009). Therefore, we posit the following:

P2: Users with more awareness of what happens to their shared information on a social networking site have a better opportunity to understand what happens to that information.

Individual traits, such as a higher need for privacy, may affect consumers’ likelihood to provide accurate information (Sheehan and Hoy 1999). It is yet to be determined how such traits affect consumer behavior in the context of social networks. Thus, the authors propose:
P3: Users who understand what happens to their shared information on a social networking site will perceive risk in sharing such information, particularly those who are (a) older, (b) more educated, (c) more affluent, (d) female, and (e) have more online experience.

Most social networking sites require that a consumer exchange his or her personal information for membership on the site. If consumers perceive risk in sharing their personal information with a social networking site, they are less likely to find value in the site. Thus, we propose the following:

P4: If users perceive that sharing their information with social networking sites is a risky behavior, they will find the social networking site to be less useful overall.

Discussion and Implications

If privacy policies on social networking sites are unreasonably long or difficult to read, consumers may be unaware of what happens to their shared information, unknowingly putting that information at risk. Some states have enacted statutes that deal with websites’ privacy policies, with the California Online Privacy Protection Act (OPPA) being the most comprehensive. States are encouraged to follow California’s example and enact their own online consumer protection laws because not all websites or social networking sites will attract users from California. Furthermore, OPPA does not specify requirements for the modality and lexical choice used in online privacy policies. If privacy policies are written for legal, not consumer, protection, it may be time for OPPA to be reformed or for an amendment to be made that covers social networking sites. Moreover, the law should prohibit the use of modality markers, which are often used to downplay the frequency of how often the website shares users’ personal information (Bodle 2011). Finally, the FTC might consider creating various standardized privacy formats for social networking sites to adopt based on the information to be collected as well as how the information will be used.

In today’s society, personal information is requested in many of our everyday activities. This paper begins to shed light on whether or not social networking sites are protecting their users – and not just themselves – with regard to personal information disclosure policies. Future research stemming from the propositions offered here can begin to understand how consumers respond to different types of presentation modes and their perceptions about how their information is used. As social networking sites continue to gain popularity in the lives of consumers, we must ensure that consumers are aware of and able to understand what is happening to the personal information they share on social networking sites, so they can protect their identities and ensure they can make the best choices possible to safeguard their personal information.

References are available upon request.

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THE ROLE OF ONLINE TALKING IN ACHIEVING HEALTH BEHAVIOR CHANGE

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SUMMARY

Online health communication provides consumers with instant information (e.g., dynamic resource guides for improving health) and support (e.g., stress relief strategies) (e.g., Donelle and Hoffman-Goetz 2008; Eichhorn 2008). Research on the impact of participation in health-related social networking sites (SNS) by consumers is limited, especially with respect to the dynamics of interactions among participants.

Participation in SNSs can be described in terms of the messages posted - initial and response posts, and in terms of the message senders – discussion thread initiators and followers. Users can initiate a thread by making an initial post (initiators), and others may extend the thread by posting their responses (followers). After making an initial post, initiators may respond to followers’ responses by making subsequent posts in which they reveal further thoughts or actions. Previous research has shown that the types of social support and the content of messages transmitted via health-related forums are tailored to thread initiators’ expressed needs (Liang and Scammon 2011).

According to the transtheoretical model of behavior change (TTM), as people progress through stages of behavior change, their thoughts, feelings and actions change (Prochaska, Redding, and Evers 2008). In this study, we aim to examine whether health communication via SNSs facilitates changes in thread initiators’ thoughts, feelings, and actions as reflected in their online discourses. Specifically, we address the following two questions:

RQ1: Are there differences between the first and subsequent posts by discussion thread initiators in terms of initiators’ thoughts, feelings, and actions?

RQ2: Are differences between the first and subsequent posts by discussion thread initiators related to characteristics of threads (e.g., sources, the number of posts by initiators)?

We selected advance care planning (ACP)/advance directive (AD) as the focus for the study. ADs are an important means by which individuals can communicate their wishes for end-of-life treatment, yet for a variety of reasons many people do not have ADs. Encouragement of ACP is an important public health initiative. Using the TTM, our study aims to investigate the extent to which online communication facilitates individual changes regarding AD and ACP.

We used Google’s search engine “discussion” filtering option, which shows search results from discussion groups and forums. We collected threaded data for two keywords: advance directive and living will. We collected threads in which initiators posted comments related to ADs or living wills and make at least one subsequent post in response to followers’ posts. In all, we downloaded 20 threads with 197 posts during the period from October 5 to October 9, 2011. In this study, the unit of analysis is a discussion thread.

For each thread, we manually coded the type of source into two categories: health and non-health sites. For the textual content of each thread, we have two files, one file containing the initiator’s first post, and the other file containing the initiator’s subsequent posts. We use General Inquirer (GI), a text analysis software available for academic research purposes, to code the textual content of each thread. GI codes textual data into 182 categories and calculates the occurrence of concepts in each message. Based on the process of change in TTM, we selected 33 categories indicating affect/emotion (e.g., emotion), cognition (e.g., thinking), and action (e.g., attempt). Change in valence is one important indicator for decision balance (Prochaska and Velicer 2009). We included categories for valence such as Positivity and Negativity. We also use categories indicating certainty to represent change in self-efficacy.

For purposes of our analysis, we considered the social support from thread followers as an intervention. Thus, we grouped posts into the pre-intervention group (initial posts) the post-prevention group (subsequent posts by the thread initiator). In our analyses we compared threads...
from pre- and post- intervention groups, threads from health and non-health sites, and threads in which initiators made two posts and more than two posts. Overall, on both health and non-health sites, thread initiators who made two posts showed a decrease in emotion and means for attaining goals, whereas, thread initiators who made more than two posts showed an increase in gains in enlightenment through thoughts and education. On health sites, thread initiators who made more than two posts showed an increase in action as reflected in their online communication with others.

We also used z tests to compare the proportions of the total word count for each variable for initial and subsequent posts within each thread. Results suggest that people who use health sites are more likely than people who use non-health sites to demonstrate changes in their thoughts, feelings, actions, or valence states in their online messages; thread initiators had more positive attitudes or feelings, and fewer negative attitudes or feelings in their subsequent posts.

Our study provides important implications for public health policy makers, health care professionals (e.g., physicians, health educators) and marketers. Our study shows that thread initiators or help seekers progressed through stages as they made posts over time in online forums. However, the changes thread initiators experienced were significantly associated with the types of online forums and the number of posts they made. This suggests that for a health issue, policy makers and health care professionals should tailor promotional or educational contents to different types of online forums. For example, individuals who post on health sites may need more educational guidance to progress through the stages of change; whereas, individuals who post on non-health sites may need more promotional support to elevate their awareness of the urgency of the behavior change. Additionally, since thread initiators who made more posts showed more changes through the stages of change, educational campaigns encouraging individuals to actively participate in computer-mediated communication, especially by initiating discussions of topics important to them, may help encourage behavior change. Policy makers and health care professionals may use discussion thread moderators to encourage thread initiators to make more posts in their initiated threads. References are available upon request.

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SUMMARY

On November 22, 2012 during end of school year celebrations in Queensland, Australia, yet another young person (aged 17 years) died as the result of misadventure where alcohol was involved. This tragedy highlights the public and health policy issues surrounding alcohol particularly relating to consumption by the young and vulnerable and binge drinking. In 2011 the World Health Organization found that alcohol related consumption results in approximately 4% of all global deaths annually. In Australia where this research took place, approximately 4,000 alcohol related deaths occur each year (Chikritzhs et al. 2003). Today, there are renewed calls for social marketers and policy makers to identify factors that influence high levels of alcohol consumption (Grant and Dawson 1997). The Australian legal drinking is 18, alcohol consumption becomes a legitimate activity and behavioral norms commence. Those aged from 18 to 24 years, or Gen Y have very different alcohol consumption traits, they communicate differently, they are “Digital Natives.” Further, smart-phones and new “data” plans have facilitated the rise social media platforms especially Facebook’s popularity from about 100 million users three years ago to over 750 million users in 2011. Social media not only provides a platform for sharing of content but also for discussion of social issues (Madhur Raj, Palak et al., 2010). This suggests Facebook is a strong driver of contemporary culture in young adults. Bandura (2001) and Miller, Mizon, and Howell, (2012) found that vicarious cultivation is evident and plays a significant role in influencing behavior as participants of online communities seek a degree of incentives (Larose, Mastro et al. 2001). This study explored the real world significance from young adults’ online Facebook communication in terms of influence and behavior, drawing on Miller, Mizon and Howell’s 2011 study. To meet University ethics requirements, research subjects were required to opt-in to the study, of the 661 invited 115 opted-in to take part of the study, 19 declined to participate. The study explored that all referenced alcohol consumption in the past, present or future in Facebook communications during August and September 2012. The researchers employed the coding system devised in the development of the Social Lubrication Model (Miller, Mizon and Howell, 2012). The data collected was analyzed through axial coding (Strauss and Corbin, 1990), message-based coding (Strijbos et al. 2006) and noting (Kozinets 2010), and was cross-coded by three different researchers to make sure no intended messages from the research subjects were left out and to ensure the validity of the analysis (Kolbe and Burnett 1991; Milne and Adler 1999). The cross coding was over 97% in agreement.

Findings

Implicit within the Lubrication Model and specifically social media and word of mouth, participants send and receive communications. The most common message was that they provided a reason to drink excessive amounts of alcohol in the near future. The most common reasons used by young adults on Facebook to get intoxicated were birthdays, weekends, days off work, exams finishing, catching up with old friends, etc. But even trivial excuses were acceptable to justify planning to consume large amounts of alcohol (e.g. being a Friday, or not having to work on a Sunday whilst hung over). Many young adults (22%) made clear reference they were either drinking or intoxicated. These young adults’ desire to portray themselves as someone who stays out drinking very late at night and is thus firmly situated within the social system of young adult drinkers. Further, they relived the event, posting hang over comments; (18%). Many young adults (94% of the participants) use Facebook to communicate themselves consuming alcohol or to demonstrate that they aspire to get intoxicated. There is pride in ignoring public health warning on binge drinking and announcing that consuming anymore than 4 standard drinks in one sitting is considered binge drinking (Ravens 2008). This demonstrates a lack of effectiveness of previous social cause-related marketing, it also indicates respondents were aware of the public health warning, but ignored the ‘call to action’ message. Facebook is used as a tool to organise meetings and events where alcohol consumption will take place (10.5%). Quite often intoxicated
experiences are re-lived over Facebook (23%). This style of communications can be used to piece together the occurrences of what happened whilst the young adults where intoxicated. However, often these types of alcohol related Facebook communications are used to prolong the hedonic experience of getting intoxicated with friends, and, as a tool for young adults’ to portray themselves as drinkers, and thus enable them to be further established within the social system. Alco-bullying as indentified and described by Miller, Mizen, and Howell (2012) occurred between peers in regard to how much someone can drink (18). Further, as the interactive nature of Facebook promotes third party judgments, these postings are now ranked as of more value than the initial posting.

This research confirms Miller, Mizen, and Howell (2012) Social Lubrication Model provides considerable insight into the communications undertaken to legitimize a culture of binge drinking using Facebook. This reflects that culture and online communications are key drivers in binge drinking. Bandura’s (1986) conclusion that most human behavior is learned by observation through modeling is largely still correct, although social media now facilitates, accelerates and amplifies peer pressure. This research has found that young adults drink excessively, glorify the consumption of alcohol, and drink for public appraisal by their peers. These respondents illustrate that young adults strive to belong to be same social system as their peers and fear being the outcast if they do not conform. Today, entry into social systems for the young adults is either through social learning or accessing it through vicarious capability (Bandura, 2001). From a policy perspective the alcohol culture on Facebook is influenced by early adopters, the majority of which are male. Males needed to prove their prowess in terms of alcohol consumption more than females, suggesting that in conveying oneself as a heavy drinker emphasized their masculinity and reflected on their leadership status. Health professionals would gain a far greater understanding how young adults consume alcohol and how sites such as Facebook contribute in legitimizing the act of drinking to undertake further research into social media use. Additionally, the research indicates peer influence over Facebook is a relevant factor contributing to the contemporary young adult drinking culture. The limitations of this study is a small convenience sample of 115 participants, and many of the participants were University students; a consumer group that has been shown to consistently consume high levels of alcohol. References are available upon request.

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IDENTIFYING THE LATENT EFFECTS OF SELECTING SAMPLES USING EXTREME RESPONSES: LESSER

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SUMMARY

There is a potentially serious problem with the method of selecting only respondents who choose extreme responses from a range of responses to filter questions. For example, when selecting for non-susceptible non-smoking respondents who report no intention to smoke cigarettes, respondents are required to answer with the extreme responses of “no” and “definitely not” for all sample selection questions about intentions toward smoking (cf., Pierce et al. 1998). Research into consumers prone to use alcohol also this sample selection method (Henriksen et al. 2008). This method for choosing research cohorts and samples is becoming increasingly popular because it is argued to measure the truly committed (Gilpin, Pierce, and Rosbrook 1997). However, this method of selection becomes a problem when the responses required to the filter questions are related to response-style biases. In the two examples, the pattern of only extreme negative responses at one extreme end of the scales appears to match ‘nay-saying’ and extreme-response bias. A sample selection that requires this extreme response pattern is more likely to increase the recruitment of respondents with response-style biases (Baumgartner and Steenkamp 2001).

Selecting samples of respondents in this manner will not only increase the levels of response bias in a study, but may also increase the chance of omitting valid respondents from a sample (truncation bias) (Heckman 1979). For example, respondents who are exposed to family and peer smokers may provide more moderate answers to questions about their intentions to smoke cigarettes. If the study tries to identify peers and family as one of the influencers of future smoking, then using a sample selection instrument that requires extreme answers to all of the selection questions about future smoking is likely to bias against these possible effects in the population. In this case, the potential effects to responses from exposure to family and peer smoking will be under-represented in the sample. This group appears to be influenced by peers and family to drop out of a study because it is about a potentially contentious issue of adolescent cigarette smoking. They are also more likely to start smoking and drop out of the study. In both cases, this leads to systematic attrition which further reduces numbers of respondents with exposure to this the peer and smoker variable. If extreme response bias, truncation bias and attrition bias share the same predictor variables, and are the same as an independent variable of interest to the study, then these biases are likely to aggregate to skew the study’s results (Heckman 2007).

Until now, there has been no easily accessible procedure to identify and track the effects of selecting samples using extreme response patterns on research results. This article reports on a method called LESSER (Latent Effects Selecting Samples of Extreme Responses) for tracking these effects.

We tested LESSER on the Teen Longitudinal dataset from the California Tobacco Studies, using samples from this original data using the methods described in the article, “Tobacco Industry Promotion of Cigarettes and Adolescent Smoking” (Pierce et al. 1998). This article describes a sample selection procedure that requires extreme responses to assemble a longitudinal adolescent cohort of ‘non-susceptible never-smokers’. Respondents in this study answered questions about the way informative and normative sources of influence affected their intentions to smoke. That article reported informative influence (possess a tobacco premium) to be the only significant predictor of increases in intentions to smoke cigarettes in that sample.

Using test samples from this original data drawn using Pierce et al.’s methods; we managed to identify the response style bias in the data. Respondents who were selected for study using the extreme-response selection instrument gave answers with significantly higher standard deviations than those who were truncated. We then compared profiles of selected and truncated respondents.
Truncated respondents reported more exposure to family and peer smokers (normative influence), very few extreme response selected respondents had friends or family that smoked. Both groups reported similar levels of exposure to cigarette advertising and promotions.

In the third step of our test, we tracked the effects of attrition on the sample of respondents who were selected due to their extreme responses to the selection questions. In this group, attrition can be predicted by reported exposure to peer and family smokers. Those with normative exposure are more likely to leave the research cohort for the second survey in the longitudinal study. These findings show that by selecting respondents through a sample selection instrument that requires an extreme response pattern increases response style bias in the data. The researchers inadvertently omitted a key portion of research candidates with higher levels of exposure to one of the key variables being studied (normative influence to smoke cigarettes). The numbers of this key group of normatively influenced respondents in the sample is further reduced through attrition. This aggregation of biases greatly reduced the presence of respondents with exposure to normative influence, leaving proportionately more respondents with informative influence in the cohort. It is likely that the study finding of informative influence as the sole predictive factor for increases in adolescent intention to smoke cigarettes actually stems from the series of research biases described.

It is important for researchers to carefully vet all sources of bias in their research, especially when making claims of causality that are used to formulate public policy. Because this method of selecting samples has become the accepted method for selecting samples to research smoking, drinking alcohol, drinking sugary carbonated beverages and consuming fast food is worrying. The biases that lead to incorrect research findings appear to be systemic. When not vetted, these findings may lead to policy makers becoming misinformed. At the very least, this could lead to flawed and ineffective consumer protection policies. References are available upon request.
THE EFFECT OF POLITICAL IDEOLOGY ON REACTIONS TO WARNING LABELS

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SUMMARY

The escalating health problems stemming from unhealthy consumer behaviors (e.g., overeating, smoking) prompt government officials to use a variety of public policy tools. For instance, in order to deter smoking, the Food and Drug Administration (FDA) is attempting to require graphic health warnings on all packages of cigarettes (Mears 2012). However, labels can have unintended effects (Wansink and Chandon 2006), such as inducing psychological reactance (Brehm 1966), a motivational state focused on restoring a restricted freedom, which can often have a boomerang effect where the restricted activities become more attractive (Fitzsimons and Lehmann 2004).

Research on reactance has shown that warning labels lead to high reactance especially when the label source is deemed as authoritative (Bushman and Stack 1996). For example, college students were less likely to agree with a message advocating teaching machines when the message came from a prominent professor versus a high school student (Brehm 1966). While the negative effect of authoritative sources in warning labels has been shown before, the process through which it occurs has not been adequately examined. To do so, we focus on an important consumer characteristic—political ideology—to investigate how and why warning labels used in public policy initiatives often become a burden rather than a boon. Political ideology is especially relevant to studying reactance to authoritative sources because two key components of political ideology are an individual’s beliefs regarding authority (Graham et al. 2009) and understanding of freedom (Durrheim 1997).

Specifically, in two studies we illustrate that when authoritative figures (such as the FDA) act as the source of the warning label (vs. no source information is provided), conservatives (but not liberals) are less likely to quit smoking (Study 1) and more likely to purchase unhealthy foods (Study 2). These results are important as the FDA may ironically lessen the impact of its own initiatives if people know that it is the FDA that is behind the warning labels.

In Study 1, 525 smokers viewed a series of graphic health warnings. The source of the graphic warning label (FDA vs. no-source control) was varied between subjects. In the FDA condition the health warning stated, “FDA warning: Cigarettes are addictive” whereas in the control condition the health warning simply stated, “Warning: Cigarettes are addictive.” Political ideology was measured by using a modified version of the political attitudes scale (Nail et al. 2009). The results showed a significant two-way interaction between label condition and political ideology \( (p < .05) \) such that in the FDA (vs. control) condition conservatives were significantly less likely to quit smoking \( (p < .05) \) whereas the label source did not have an effect on liberals’ quitting intentions \( (p > .70) \).

In Study 2, 116 participants imagined themselves purchasing a pizza in a grocery store. Label (FDA vs. no-source control) was varied between subjects. The pizza had a front-of-package nutritional label that indicated an unhealthy amount of fat, saturated fat, and salt. In addition to political ideology, we measured participants’ trait reactance (Hong and Faedda 1996). Replicating Study 1, the results showed a significant two-way interaction between label condition and political ideology \( (p < .05) \). Further, in line with our theorizing, a significant three-way interaction between political ideology, reactance, and label condition \( (p < .05) \) showed that the effect was driven by conservatives who are high in reactance.

Study 3, which is currently being conducted, investigates the underlying mechanism of the effect by measuring different aspects of reactance. Specifically, we test an explanation based on the implication principle (Brehm 1989) such that conservatives associate food-warning labels with increased government regulation in the food industry.

These findings contribute to a growing body of literature on reactance (Brehm 1966), health communication (Rains and Turner 2007), and source influence (Kang and Herr 2006) by outlining how reactance is affected by differences in consumer groups and source definiteness. Two studies illustrate across two distinct consumption behaviors (smoking and eating) and two different intention...
measures (quitting intentions and purchase likelihood) that when the FDA is the source of the warning label, conservatives are less likely to engage in the behavior encouraged by the warning label. Further, the interaction between source and political ideology is moderated by reactance such that the effect is observed only for conservatives who are high in trait reactance. Thus, we add to the reactance literature that has demonstrated the negative effect of authoritative sources in warning labels by examining the process through which such effects occur. In addition, the findings of this research are significant for public policy makers who strive to improve the effectiveness of warning labels on regulated products. Understanding that simple changes in warning labels, such as explicitly stating the authoritative source, can significantly reduce their effect among certain populations and possibly encourage individuals to engage in the warned behavior encourages caution in the way warning labels are presented to the community. References are available upon request.
HOW EFFECTIVE ARE ALTERNATIVE PLAIN PACK DESIGNS?

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SUMMARY

Smoking’s status as the leading cause of preventable premature death has led many governments to try and minimize smoking uptake, promote cessation, and thus reduce overall smoking prevalence. Initiatives include restricting advertising, which has consistently linked smoking to aspirational attributes, and regulating point-of-sale marketing, which positions smoking as pervasive and normal.

However, these restrictions have prompted the tobacco industry to focus on branding, which imbues its products with attractive personalities that hold particular appeal to young people. While pictorial warning labels (PWLs) challenge these alluring brand associations, the industry has responded by altering their brand designs to minimize the disruptive visual impact of warnings. Evidence that brand imagery detracts from PWLs’ impact and salience has led to renewed calls for so-called ‘plain’ packaging, where tobacco packages would feature dissuasive colors and larger warning images instead of brand logos.

Studies documenting the potential effects of plain packaging have included qualitative work that exposed how removal of branding strips smoking of its social cachet. Experimental studies have confirmed that plain packaging would diminish brand perceptions, devalue the perceived experience of smoking, and reduce misconceptions about the relative harmfulness of different cigarette variants. Choice studies have found that plain packaging makes cigarettes much less attractive and increases the likelihood of smokers calling a quit line or making a quit attempt. This evidence formed the basis of Australia’s decision to introduce plain packaging in 2012 and has stimulated international interest in the policy. However, tobacco companies have strongly opposed plain packaging on the grounds it lacks proportionality, and that other, less ‘radical’, measures could achieve the same outcomes while imposing fewer costs.

Marketers have long used colors’ intrinsic meanings to attract consumers’ attention, differentiate their brands from those of competitors, and cue brand perceptions. Theoretically, colors contribute to a brand’s personality as consumers associate specific colors with particular attributes that, over time, form distinctive heuristics. Changing such associations by substituting the brand’s imagery with an aversive color creates dissonance among existing consumers and deters future users. This is the reason for tobacco companies’ hostility to plain packaging proposals. Evidence that color may have an even stronger aversive effect than PWLs has raised further questions about how plain packaging works and whether all components are proportional in their effect.

We tested the relative effects of brand imagery, dissuasive colors and PWL size and theme, and estimated the effects on smokers’ and non-smokers’ choice behaviors when aversive pack elements were combined with brand attributes. Our sample comprised 1044 young adults aged between 18 and 30; the sample was stratified by ethnicity, gender and smoking status (daily, occasional, former and never smokers). We used a fractional factorial design involving two blocks of six choice sets, each set containing three cigarette pack images with different attributes. Respondents were randomly presented with one block of images and within each block the choice sets were also randomly presented. Smokers were asked to identify the packs they would be most and least likely to buy for themselves, while non-smokers were asked to identify the packs they thought would be most and least likely to prompt a friend who smoked to quit. The data were weighted to ensure respondents’ age, gender, ethnicity and smoking status matched the New Zealand population according to the latest census. Multinomial logit model parameters unique to smokers and non-smokers were estimated for each classification level of each design factor (message, warning, pack branding and brand) using SAS PHREG.

Pack color and branding level were the most important attributes. A fully plain pack was significantly less
appealing to smokers than a partly plain pack (featuring a brand logo), and both were significantly less attractive than a fully branded pack (p<.0001). Non-smokers wanted their friend to give up smoking, thus the reverse was the case for them; a fully plain pack was significantly more appealing than a partly plain pack and both were significantly more appealing than a fully branded pack. In both cases the conclusion is the same: replacing brand imagery with a dissuasive color and standardized font significantly increases the aversiveness of a cigarette pack. Warning size was the second most important attribute: the larger the pictorial warning, the more aversive it was. The 75% warning was significantly more aversive than the 50% warning, which was only marginally more effective than the 30% warning (p<.001 for smokers and p < .05 for non-smokers).

Although aversive colors have been used in tobacco warning labels to caution users, the use of color to dissuade cigarette purchases is a novel and potentially powerful policy measure. Our results showed that a dissuasive color had a stronger effect on both smokers’ and non-smokers’ choice behaviors than PWLs, even though the warnings used were novel, and thus likely to have a strong impact. However, residual brand echoes, such as a logo, significantly enhanced the appeal of a cigarette pack, provided smokers with on-going utility, and mitigated the overall effect of the dissuasive color. For policy makers, the findings highlight the proportionality of fully plain packs, since these, in combination with very large PWLs, will most effectively reducing smoking’s attractiveness. References are available upon request.

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DO DISSONANT AD VISUALS CAUSE CONSUMERS TO DISCOUNT PRESCRIPTION DRUG SIDE EFFECTS?

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SUMMARY

In most video-based advertising, redundant visuals reinforce the ads’ verbal messages. In television commercials for prescription drugs, however, narration of the drugs’ negative side effects is often paired with dissonant visuals, or pleasant images, which seem inconsistent with the drugs’ sometimes very serious risks. Through an empirical analysis, this study found that consumers attribute significantly more positive affect and lower risk to prescription drug ads that employ dissonant visuals (images that did not represent an ad’s verbal content) during narration of side effects than to those with redundant side-effect visuals (images that accurately reflected an ad’s verbal content).

Various studies have investigated the effects of positive and negative ad content (Bolls, Lang, and Potter 2001; Lang, Dhillon, and Dong 1995; Shadel, Niaura, and Abrams 2002) as well as consumers’ perceptions of associated risk (Cox, Cox, and Zimet 2006; Lee and Shin 2011). Likewise, certain research has explored ad messaging and risk communication in direct-to-consumer (DTC) ads for prescription drugs (Cline and Young 2005; Macias, Lewis, and Tae Hyun 2010; Norris, Bailey, Bolls, and Wise 2012; Macias, Pashupati, and Lewis 2007; Cox, Cox, and Mantel 2010; Grenard, Uy, Pagan, and Frosch 2011). More specifically, Glinert (2005) identified several DTC advertising practices that presented potential challenges for consumers, including narration about drug risks that contradicted the ads’ positive images. These results were consistent with Fox’s (2004) finding that greater comprehension was associated with redundant visuals than with dissonant visuals. In addition, the main organization responsible for overseeing prescription drug advertising in the United States, the U.S. Food and Drug Administration (FDA), has sponsored a variety of studies on DTC drug ads through its Office of Prescription Drug Promotion (OPDP). However, none of its studies have found evidence that inconsistency between risk narration and visuals influenced people’s feelings toward prescription drugs or their understanding of risk information (U.S. FDA 2011a, 2011b, 2011c).

In light of the extant research, the current study set out to empirically investigate whether consumers would exhibit more positive affect toward prescription drug ads and rate their side effects as less serious when the ads employed dissonant visuals (pleasant images) than when the ads used redundant visuals (negative images). To test consumers’ reactions, the researchers created a series of original audiovisual ads that featured three hypothetical prescription drugs. The ads were shown to two different sample groups: a control group and a treatment group. Each sample’s ads were identical except for the pictures shown during narration of the drugs’ negative side effects. In keeping with many real prescription drug commercials, the control group saw ads that contained pleasant images (dissonant visuals) during narration of the drugs’ side effects. In contrast, the ads shown to the treatment group contained negative images (redundant visuals) during the side effects. The two sample groups, which were of very similar size and composition, together totaled 583 participants and consisted of faculty, staff, and students from a private college of the liberal arts and applied sciences located in the northeast United States.

The results of the study affirmed its two main hypotheses: Individuals who saw the ads with the select dissonant visuals (pleasant images) exhibited significantly more positive affect toward the ads and rated the drug risks as significantly less serious than did those who saw the ads with redundant visuals (negative images). These results suggest that the pharmaceutical industry’s practice of pairing narration of negative side effects with pleasant images may be misleading consumers and violating the FDA’s fair balance standard, which provides good reason for public policy change. References are available upon request.
THE PRESENTATION OF QUANTITATIVE BENEFIT INFORMATION IN DIRECT-TO-CONSUMER TELEVISION AND PRINT ADVERTISEMENTS FOR PRESCRIPTION DRUGS

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SUMMARY

Understanding of risk and benefit information is crucial to the safe and effective use of prescription drugs. This study evaluated the effect of including quantitative benefit information in various statistical and visual formats (e.g., relative or absolute frequency, bar graphs, tables) in direct-to-consumer (DTC) print and television advertisements (ads) on immediate recall, attitude toward the drug, and perceived benefit and risk. The study was guided by the following research questions: (1) Does presenting quantitative benefit information in a statistical format in DTC ads help people recall quantitative benefit information in DTC ads? If so, which statistical formats are most helpful? and (2) Do visual aids help people recall quantitative benefit information in DTC ads? If so, which types of visuals are most helpful?

To answer these questions, we designed and implemented a randomized, controlled study exposing participants to a DTC prescription drug ad for a mock drug containing quantitative benefit information. Participants saw either a print DTC ad or a television DTC ad. The ad contained information about either a high-efficacy or a low-efficacy cholesterol drug. This benefit information about the drug was presented either in a statistical format or a visual format. The statistical formats tested were absolute frequency (for example, 65 out of 100), percent (for example, 65%), relative frequency (for example, 33 times more likely), a combination of absolute frequency and percent, and a combination of relative frequency and percent. The visual formats tested were pie charts, bar charts, tables, and pictographs. Participants in a control condition saw an ad without quantitative benefit information. Approximately 4,800 participants who had been diagnosed with high cholesterol responded to the study via the Internet.

Findings

Statistical Format

• Participants who did not see any quantitative benefit information about the drug were the likely to accurately report how well the drug worked.

• There was a match between the kind of quantitative information participants viewed and the kind of quantitative information participants were able to accurately report. For instance, participants who viewed the benefit information as an absolute frequency (for example, 65 out of 100), compared with those who did not see any quantitative benefit information, were better able to report how well the drug worked as an absolute frequency and a percent but not as a relative frequency (for example, 33 times better).

• In general, participants who saw the benefit information presented in two formats (for example, 65 out of 100 and 65%) were the most likely to accurately report how well the drug worked.

• The statistical format that participants saw did not affect their ability to recall the drug’s risks, their attitude toward the drug, their perceptions of how well the drug works and how risky it is, or their intentions to get more information about the drug or to take the drug.
Visual Format

- When viewing print ads, participants who saw a bar chart or table, compared with those who saw no visual display, were more likely to accurately recall how well the drug worked. The bar chart was also better than the pictograph, and the table was better than the pie chart at helping participants accurately recall how well the drug worked.

- When viewing television ads, participants who saw any visual display, compared with those who saw no visual display, were more likely to accurately recall how well the drug worked. The bar chart was also better at helping participants accurately recall how well the drug worked than the pictograph and the table.

- The type of visual display that participants saw did not affect their ability to recall the drug’s risks, their attitude toward the drug, their perceptions of how well the drug works and how risky it is, or their intentions to get more information about the drug or to take the drug.

Conclusions

Our findings demonstrate that participants can accurately recall quantitative benefit information in DTC prescription drug print and television ads, and that providing this information does not adversely influence their recall or perceptions of the product’s risk. Overall, presenting information using absolute frequency and percent formats may be best at helping participants accurately recall how well a drug works. Presenting a visual aid also appears to help participants accurately recall how well a drug works, with bar charts and tables demonstrating advantages over other visual formats. In general, providing quantitative benefit information to participants enables them to see the information and answer questions about it correctly, although it does not necessarily change their attitude toward the drug, their perception of how well the drug works and how risky it is, or their intentions to get more information about the drug or to take the drug. At the same time, including quantitative benefit information did not have a detrimental effect on the recall of risk information. Thus, the inclusion of quantitative benefit information in DTC print and television ads may have the potential to help people make informed decisions about speaking with their health care professional about prescription drugs.

A major contribution of this research is that it is the first study to systematically examine the addition of quantitative information in television DTC ads, a modality that has not previously been explored in the risk communication literature. References are available upon request.

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NO GOOD DEED GOES UNPUNISHED: CITING SOURCES IN PRINT ADVERTISING CLAIMS

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ABSTRACT

The research investigates whether source citation of print advertisement claims benefits consumers by aiding in deception detection in different risk domains. Three studies test whether source citations have the intended effect of increased consumer trust and reduced deception perceptions. Additionally, the potential moderators risk level and processing style are explored.

INTRODUCTION

Consumers are frequently exposed to advertisements that make claims about product performance. When an advertisement claims that a product has a “77% improvement over the competition,” for example, does knowing where that number came from help consumers form opinions about the advertiser’s deceptive intent? If an advertiser fails to explicitly state the evidence for a product claim, would you consider the advertisement to be at least somewhat deceptive? Although print advertisement claims are regulated by the Federal Trade Commission and are required to “have evidence to back up their claims,” according to the Bureau of Consumer Protection, this information is not required by federal law to be explicitly stated within the advertisement (www.business.ftc.gov). The “reasonable basis” requirement states that advertisers must have objective evidence in the form of consumer surveys, sales data, clinical testing or scientific evidence using methods deemed acceptable by experts in the field to support the claim. In an effort to increase consumer protections, many print media publishers are proactively and voluntarily going further than the current legal requirements. The publishers’ self-regulation practice now requires advertisers to include supporting information for the claim within the body of the advertisement. It is important to explore whether this well-intentioned action may have undeserved and detrimental effects for marketers.

Source citation is additional text that acts as further explanation of an advertising claim. The absence (or presence) of a source citation may activate consumers’ deception-protection processes. One possibility is that when provided with legitimate support information regarding a claim within an advertisement, consumers will rightfully feel more confidence in the credibility of the claim. However, it is also possible that consumers faced with source information may become more sensitized and instead trust the claim less when it is supported within the advertisement. Extra information may act as a flag to consumers, reminding them the advertisement is a persuasive attempt and should be evaluated as such. A final possibility is that the additional information does not affect the way the claim is perceived and interpreted. We argue herein that the relationship between source citation of advertisement claims and consumer deception perceptions is complex. The answer to whether the presence of a source citation causes an advertisement to be judged as more credible and less deceptive is in fact both yes and no and is moderated by processing style. Considering work in marketplace deception, persuasion knowledge and protection, risk perceptions and dual processing, we begin to disentangle the effects of source citation of print advertising claims on deceptive perceptions.

LITERATURE REVIEW

Dimensions of Risk

The concept of perceived risk is an important antecedent to many marketing decisions, not only in deception detection, but also in product judgments, new product adoption, brand/store loyalty and purchase choice (for reviews see Mitchell 1999; Ross 1975). People determine risk level by thinking a priori about the potential outcomes of a decision combined with the probabilities of each outcome’s occurrence (Dowling 1986). Risk in a consumer behavior context can be more narrowly defined as the uncertainty or ignorance surrounding the product, ad or stimuli in question and the related consequences (Campbell and Goodstein 2001).

Risk is considered a multifaceted construct and can be deconstructed into many distinct domains, such as performance, social, physical, financial, psychological, time,
etc. (e.g., Bettman 1973; Kaplan, Szybillo, and Jacoby 1974). Consumer behavior research uses risk as a defining factor in attitude development and subsequent judgments about the deceptive intent of advertisers, as well as considering the risk directly related to acquisition of a target product. Two risk domains especially important to consumer behavior are financial and physical risk. Because products vary in price from very expensive to inexpensive and others can protect from or cause physical harm, these two domains may be the most influential in product judgments. Research in consumer behavior and risk tends to assume that high involvement products (expensive or potentially physically harmful) are inherently perceived to contain risk (Dowling 1986), but to our knowledge there is no research investigating the link between risk level, risk domain and deception perceptions.

Financial risk is the most naturally related to marketing contexts, as price is one of the most important dimensions considered by consumers (risk, quality, etc.) (Monroe 1979). We expect that advertisements representing higher financial risk cause individuals to automatically engage in more involved mental processing and those representing lower financial risk will encourage more superficial processing. Physical risk is an also an important domain for consumer behavior research. Physical risk in a consumer behavior context is often investigated in relation to prescription drug advertisements (for a recent example, see Cox, Cox and Mantel 2010). Results from other physical risk studies have been decidedly mixed for the effect of risk information on product liking and/or purchase intent, which may partially stem from trust in the advertising claim and perceptions of deceptive intent. The current research considers whether higher risk engages more effortful processing and results in less perceived deception of an advertising claim that is supported by a source citation.

**Dual Processing**

Risk level is one critical dimension which causes people to process stimuli differently. People are “cognitive misers” (Hastie and Dawes 2010) who exert the minimal amount of effort needed to make a “good” decision, conserving mental energy for more important decisions. Dual processing helps people achieve good decisions with minimal amount of effort; people naturally use a mental energy conservation process and limit the amount of processing needed for minor decisions. People make decisions about how much cognitive energy to exert in any given situation. System 1 processing is quick, instinctual, and implicit and System 2 is effortful, cognitive and deliberative and “rule based” (Evans 2003, Evans 2008). System 1 typically guides behavior the majority of the time, with System 2 used only when decisions are more complex, difficult and important to the individual (Bargh and Chartrand 1999).

The concept of System 1 vs. 2 processing can be applied to the context of source citation within print advertisements. When using System 1, omission of the citation of the claim is acceptable, as people want to make quick and easy decisions and are not looking to incorporate extra information. However, when System 2 processing is engaged the additional information provided by the source citation is incorporated in reaching a judgment about the acceptability of the claim.

Advertisements for medications with serious side effects (high risk) are commonly seen next to advertisements for inexpensive personal hygiene products and fast moving consumer goods assumed to have minimal risk, leading people to shift between using System 1 and 2 processing based on the level of perceived risk (Baumeister 2008). When perceived risk is high, a consumer viewing an advertisement should naturally engage in System 2 processing, with source citations adding credibility to the claim and resulting in lower deception perceptions. However, in a low risk context, a consumer often uses System 1 (processing at a more superficial level) and may interpret the same additional information differently. Mental energy is another factor relevant to print advertisement contexts, in that even when the product advertised represents a high risk, the viewer is most likely not giving the ad full attention and is processing it in a superficial manner (System 1). Engaging in System 2 processing is one tactic that consumers can use to protect themselves from deceptive messages (Freistad and Wright 1994).

**Deception in the Marketplace**

Protecting consumers from marketplace deception is becoming increasingly important in the marketing field. One way to protect consumers is to prevent deceptive advertisements. An advertisement should be considered deceptive if it contains inaccurate information or omits relevant information, causing a consumer to make a different decision or judgment than he or she would otherwise (Boush, Friestad and Wright 2009). When advertisers create content, they are subject not only to the consumer protection laws of the government, but also those guidelines set forth by the channel, publisher, etc., where the advertisement will appear. When compared to other advertising mediums, print advertising has remained relatively under-policed until recently. A com-
pany must have a “reasonable basis,” such as a survey, test, study or experiment that results in “competent and reliable scientific evidence” before running an advertisement that makes a claim. Although the FTC requires that advertisers must have done the research to back up their claims, it does not require them to actually print or otherwise disclose that data within the advertisement (stricter laws regarding certain products, such as prescription drugs, are exceptions).

There are currently no federal laws regarding citing of sources in print advertisement claims (for example: “Brand X’s skin moisturizer is 50% more effective than the leading competitor”). However, two of the world’s largest publishing companies, Hearst Publications and Time Inc., have enacted standards requiring advertisers to cite the source of such comparative claims within the advertisement in order to assure readers of the accuracy of the claims. One can expect smaller media companies to follow suit and these guidelines could realistically be extended to all verifiable claims (not only comparative) and possibly become federal law. Additionally, many companies concerned with consumers’ perceptions voluntarily include source citation information within the advertisement to verify the legitimacy of claims. Obviously, these rules and actions are established to protect consumers from bogus claims. Although the intention behind the publishing companies’ new requirement is quite honorable, we suggest that the inclusion of source information within print advertisements may have unintended negative effects for both consumers and advertisers.

Research exists regarding the way that consumers process and react to marketing messages and, more specifically, deceptive marketing messages (e.g., Darke and Ritchie 2007). Marketing communications are considered and rightly viewed by consumers as persuasion attempts. Consumers develop and use different tactics in order to understand a persuasion attempt. According to the persuasion knowledge model (PKM), consumers have perceptions of their own self-knowledge of the topic (product being marketed), their own knowledge about persuasion in general and their beliefs about the actual agent behind the message (Friestad and Wright 1994). Each individual uses these different types of knowledge to determine the legitimacy of a message. The importance of consumers’ thoughts about their own abilities to detect deceptions may also lead them to form opinions about whether a particular persuasion attempt is acceptable or deceptive (Friestad and Wright 1994).

Ad Credibility

Ad credibility is defined as “the consumer’s evaluation of the truth and believability of the advertisement” and is related to visuals as well as textual information (Cotte, Coulter, and Moore 2005). Perceived credibility of an advertisement is an important antecedent of a consumer’s overall judgment. When ads are perceived as more credible, overall attitude toward the ad is more favorable (Petty and Cacioppo 1986) and the ad is more effective (Goldberg and Hartwick 1990). We propose that:

H1: Individuals will perceive an advertisement with a source citation present (vs. not present) as more credible.

Cotte et al. (2005) find that consumers’ evaluations of credibility covary negatively with manipulative intent. Manipulative intent is defined as consumers’ perception that an advertiser is attempting to persuade through inappropriate, unfair or manipulative means (Campbell 1995). Because perceived manipulative intent should influence judgments about the deceptiveness of an advertisement, ad credibility is related to whether the ad is deemed to be deceptive or not.

Advertisements that make claims without providing the source of the information are deceptive according to many definitions (Boush et al. 2009; Kardes, Posavac, and Cronley 2004; Shimp 1979). They are classified as a case of omission, the act of leaving out information that could be considered crucial to correct deception identification - an attempt to hide the true reality (Boush et al. 2009). In a print advertisement, marketers may legally omit the information a reader would need to evaluate the credibility of a study, such as the context, sample size or where and when data was collected and by whom. Consumers may interpret claims where no source information is provided as more deceptive, relative to those advertisements explicitly identifying the source (whether fine print or normal text). Because the presence of a source citation provides the consumer with more information and enhances credibility, we expect:

H2: Individuals will perceive an advertisement with a source citation present (vs. not present) as less deceptive.

Consumers who devote more cognitive effort to a marketing message may make a better decision (i.e., more accurately determine whether an ad claim is acceptable or
The only difference between the two stimuli was one (77% improvement in sound quality over competition). An advertisement for headphones containing a numeric claim participants viewed one of two versions of a print advertisement presented greater financial risk (price = $199.99). Next, presented low financial risk (price = $34.99) and one represented stereo headphones, which were identical except one represented low financial risk (price = $34.99) and one represented greater financial risk (price = $199.99). Next, participants viewed one of two versions of a print advertisement for headphones containing a numeric claim (77% improvement in sound quality over competition). The only difference between the two stimuli was one version contained an asterisk and fine print source citation at the bottom of the advertisement, explaining the basis for the sound improvement claim (Research is based on proven scientific laboratory testing methods conducted by independently certified Listen Inc. and comprised of Sound Check electroacoustic test and system and a Bruel & Kjaer head and torso simulator vs. the top 5 national brands), and the other version contained no source citation. For copies of stimuli used in all studies, see appendix.

Participants then reported perceived cost of the headphones and the likelihood of purchase in the product category and for the specific product advertised. Next, attitudes towards the product and the advertisement were reported on 3 item, 7 point bipolar scales (bad/good, negative/positive and unfavorable/favorable). Ad credibility was measured on a 4-item (realistic, truthful, credible and believable) 5 point Likert scale. Participants also rated the ad on a 7-point Likert scale from “not deceptive at all” to “extremely deceptive” and provided open-ended responses regarding how they determined whether the ad was deceptive or not. Finally, demographic information as well as an attention check item (source citation presence) was collected for all participants. Participants who were unable to correctly recall the price of the headphones or whether a source was present or absent for the advertising claim were removed from further analysis.

Results and Discussion

Analysis indicates a significant main effect of price point on perceived financial risk, confirming the manipulation of risk was successful. Participants who viewed the advertisement for the less expensive headphones, $M_{\text{low risk}} = 9.96$, felt that the product was less financially risky than those who viewed the more expensive version, $M_{\text{high risk}} = 15.16$, $F(1,108) = 87.154, p < 0.001$. An analysis of variance found support for H1. Participants who viewed an advertisement with a source citation present viewed it as more credible, $F(1,106) = 15.009, p < 0.001$.

An ANOVA indicates partial support for H2 as there is a significant interaction, $F(1,106) = 4.019, p = 0.048$. In the high risk condition, if the citation is present, participants use the information correctly by perceiving it as less deceptive. However, when it is low risk, participants do not perceive differences in deception based on source presence or absence.

The results show consumers use the presence or absence of source citation information correctly when determining credibility; however, this judgment does not always
influence deception perceptions. The presence of a citation is likely a heuristic signaling that the claim is backed up and credible. However, consumers use the presence or absence of a source citation differently in judging perceived deception depending on the perceived level of financial risk. Participants in high risk conditions may be engaging in System 2 processing, expecting and needing more information to make a better judgment of deceptive intent. The additional information enables them to correctly evaluate the advertisement as less deceptive when the source citation is present. Analysis of the qualitative responses supports this interpretation. A participant in the high risk, source present condition who found the advertisement not deceptive reported: “They explained how they compiled the data on the bottom of the ad. I have no reason not to believe what they say.” Meanwhile, a participant in the high risk, source absent condition stated: “It gave a percent for how well it works. But we don’t (sic) know where that number is coming from or if it is accurate.” However, it appears that in low financial risk situations the additional information provided by a source citation is not used to determine deception perceptions, as no significant difference exists when the source citation is present versus absent. It appears participants are using System 1 processing when the product is low risk and did not need or desire extra information to process and judge the deceptive intent advertisement.

### TABLE 1
Ad Credibility (Studies 1, 2, and 3)

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s α</th>
<th>Citation Present (Mean)</th>
<th>Citation Absent (Mean)</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>.863</td>
<td>13.96</td>
<td>11.89</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Study 2</td>
<td>.889</td>
<td>12.66</td>
<td>10.81</td>
<td>p = 0.005</td>
</tr>
<tr>
<td>Study 3</td>
<td>.877</td>
<td>14.14</td>
<td>12.89</td>
<td>p = 0.013</td>
</tr>
</tbody>
</table>

### TABLE 2
Means and Standard Deviations for Deception, Study 1– Financial Risk

<table>
<thead>
<tr>
<th></th>
<th>Source Absent</th>
<th>Source Present</th>
<th>Change</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Risk ($34.99)</td>
<td>2.93 (1.538)</td>
<td>3.33 (1.569)</td>
<td>Δ = 0.40</td>
<td>-0.933</td>
<td>p = .338</td>
</tr>
<tr>
<td>High Risk ($199.99)</td>
<td>3.61 (1.499)</td>
<td>2.85 (1.460)</td>
<td>Δ = -0.76</td>
<td>3.580</td>
<td>p = .064</td>
</tr>
</tbody>
</table>

### STUDY 2: PHYSICAL RISK

To ensure the findings were not limited to a financial risk context, Study 2 sought to replicate findings from Study 1 in the physical risk domain. The methodology and measures were the same as described in Study 1.

### Method

In exchange for partial course credit, 124 undergraduate business students (69.3% male, mean age = 21.27 years; SD = 2.83) at the same university participated in a lab study conducted in spring and summer quarters of 2011. The study used a 2 (physical risk: high, low) by 2 (source citation: present, absent) factor between subjects experimental design with randomly assigned conditions. Participants saw one of two print advertisements for a new vaccine strip, both of which contained a numeric claim (77% of people prefer over injections). The only difference between versions was that one contained no source citation and the other contained an asterisk and fine print source citation (Based on a survey reporting actual patient levels of pain, anxiety and efficacy when compared to traditional vaccine injections. Research conducted by the Food & Drug Administration in October 2010 with 1,016 respondents). For the risk manipulation, the participants read a brief description of the product,
either representing low physical risk (safe alternative to injections) or one representing greater physical risk (number of potential risks when compared to injections).

**Results and Discussion**

Participants who viewed the advertisement for the vaccine with no side effects felt the product was more safe, $M_{low\ risk} = 4.04$ compared to those who viewed the product with adverse side effects, $M_{high\ risk} = 2.56$, $F(1,124) = 33.573, p < 0.001$. Replicating Study 1 findings, there was a main effect of source citation presence. Participants perceived ads with citations as more credible compared to those without, $F(1,121) = 8.221, p = .005$, providing further support for H1. Analysis of variance finds the same pattern of effects from Study 1 partially supporting H2. When risk was high, participants perceived more deception when an ad lacks source citation although only marginally significant $F(1,120) = 2.755, p = .100$.

These results further support that people use presence or absence of source citation information differently depending on the level of physical risk. Citation presence makes the ad more credible in both low and high risk contexts, but only in high risk contexts does lack of citation translate into increased perceptions of deception. Overall, source citation presence significantly influences the deception perceptions in high physical risk contexts, as expected with System 2 processing. A source citation provides reassurance that the advertisement is not deceptive and its absence indicates some form of deception, as illustrated by participants’ qualitative comments. A participant in the high risk, source absent condition said: “Where are the statistics from? Who are the 77% of people that want these strips. I’ve never heard of them. It just sounds like b.s. There is no proof or evidence.” A high risk, source citation present participant stated: “There was very little room for deception- the ad stated a fact and followed it up with its source (FDA).” However, low physical risk participants do not seem to use the additional information provided by a source citation in forming deception perceptions. When using System 1 processing, additional information is not expected nor desired.

**STUDY 3: PROCESSING STYLES**

Study 3 looks at the effects of cognitive processing styles used by a viewer in the presence or absence of a source citation. We explore whether the effects found in Studies 1 and 2 were indeed due to processing style by manipulating cognitive load to induce half the participants to use System 1 processing, even in a high risk context. The methodology and measures are identical to those in the previous two studies.

**Method**

One hundred fifty-two undergraduate business students participated in a lab study conducted in spring and summer quarters of 2011 in exchange for partial course credit. The study used a 2 (cognitive load: high, low) by 2 (source citation: present, absent) between subjects experimental design with conditions randomly assigned. Participants were first presented with a seemingly separate task designed to compare the memory skills of students at their university to other students. Participants were asked to remember a number (39 or 8382154) and told they would report it after completing other tasks but they should do their best to remember the number. Next, participants viewed one of two versions of a print advertisement for headphones containing a numeric claim (77% improvement in sound quality over competition).

**TABLE 3**

<table>
<thead>
<tr>
<th></th>
<th>Source Absent</th>
<th>Source Present</th>
<th>Change</th>
<th>$F$</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(No side effects)</td>
<td>4.46 (1.630)</td>
<td>5.00 (2.075)</td>
<td>$\Delta = 0.54$</td>
<td>1.097</td>
<td>.300</td>
</tr>
<tr>
<td><strong>High Risk</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Significant side effects)</td>
<td>5.54 (2.301)</td>
<td>4.77 (2.349)</td>
<td>$\Delta = -0.77$</td>
<td>1.843</td>
<td>.179</td>
</tr>
</tbody>
</table>

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The two stimuli are the same as used in Study 1 and high financial risk level was held constant (price = $199.99).

Results and Discussion

Participants under a high cognitive load (longer number) took significantly less time to view the advertisement ($M_{\text{High load}} = 12.68$ seconds) compared to those under a low cognitive load (shorter number) ($M_{\text{Low load}} = 16.13$ seconds), $F(1,146) = 8.031, p = .005$. Because high load participants were cognitively busy, they had to resort to System 1 processing, even though the high risk level would normally encourage System 2 processing. We would expect those under a high load to process citation information and form judgments in the same pattern as those in the low risk groups in previous studies due to processing style. Again, we find support for H1 where ads with source citations are perceived to be more credible, $F(1,149) = 6.270, p = .013$. However, the previously supported pattern of results in risk level findings does not emerge in this study. We expected those using System 2 processing (low load group) would find ads with source citation absent more deceptive than those which contained citations, whereas those using System 1 would perceive no differences in deception. We find no main effect of processing style or citation presence, and the interaction was not significant $F(1, 149) = .111$, n.s., failing to support H3. Although there were no differences in perceived deception magnitude for either cognitive load conditions, the reaction time data does suggest that participants are using different processing styles to evaluate the advertisements. Future research should focus on untangling the impact of these different processing styles on perceived deceptive intent.

GENERAL DISCUSSION

The findings from these studies are meaningful for consumers, regulators, practitioners and print media publishers. In real contexts, advertisements are often sandwiched between articles and other advertisements and the act of viewing them rarely requires or achieves the consumer’s full attention. The research extends theoretical understanding of consumer deception perception by demonstrating presence or absence of a source citation is a cue consumers use differently depending on perceived risk level. The findings provide optimism regarding consumers’ abilities to protect themselves from deception and lead to interesting future research questions.

As these studies demonstrate, the manner in which consumers process the presence or absence of a source citation in a print advertisement is not straightforward. In financial and physical risk domains, participants’ deception perceptions are moderated by perceived risk. The presence of the source citation adds credibility to the claim but only reduces perceived deceptive intent in high risk contexts. This is good news for consumers because when it matters most (high risk), they tend to make better judgments about the ads. However, when people perceive low levels of financial and physical risk, they seem unable to correctly identify deceptive intent. The presence of a source citation in a low risk context is additional information that does not influence deception perceptions, indicating consumers are not willing to exert the extra mental energy required to make the best possible decisions in low risk situations. Additionally, the fact that consumers under low cognitive load are unable to correctly identify deceptive ads better than those who are distracted is concerning, especially given that print advertisements are 1) often for “low risk” products and 2) viewed in a superficial way. These findings suggest that providing consumers with source citation information is not helpful in certain contexts.

The implications of these studies are also important for consumer advocates, magazine publishers and advertisers. All advertising claims require substantiation, but presently advertisers are not legally required to print source citation within the body of the advertisement. Some publishers are beginning to mandate the practice, which requires extra work, changes to formatting, influences the type of claims advertisers use in print advertisements and may cause inconsistencies across advertising campaigns. These well-intentioned publishing house policies aim to help consumers distinguish between deceptive and non-deceptive claims. However, as these studies show, how consumers use source citations to make judgments of a print advertisement claim is not as straightforward as may have been assumed and that the information does not always lead to more accurate judgments.

For consumers, different processing systems lead to differential assessments of deception perceptions. Even though all advertisers in these magazines are required to comply with the new regulations, advertisers of high risk products differentially benefit. For practitioners, in some cases, such as print advertisements for high risk products, citing the source for a claim is beneficial and aids consumers in making a better judgment. However, for low risk products consumers are not using the information to influence decisions regarding deceptive intent. Publishers should search for alternative methods to aid consumers in better judgments about deceptive intent in print advertisements for all products, not just those perceived as high risk. Magazine publishers should take these
findings of differential impacts into account when creating and reviewing internal policies.

This subject is also relevant to policy makers. It is commendable that print advertising publishers are attempting to self-regulate advertisements in order to aid consumers in making better decisions. However, given the differential benefits dependent on risk, this policy is not uniformly beneficial and deserves more attention and research. Policy makers should seek to find a way to communicate information in advertisements that truly aids consumers in making the best decision possible, regardless of the level of perceived financial or physical risk.

LIMITATIONS AND FUTURE DIRECTIONS

There are limitations to these studies, some of which are addressed in planned future studies.

One important avenue to explore is whether the source citations are used as a simple heuristic. In our studies, all citation information simply provided support for the credibility of the claim. However, often the fine print in ads contains warning information or qualifies the claim. Other ads use fine print with information that is seemingly neutral such as “when used as directed.” It is important to see if the observed relationship extends to all fine print information or if the content of the fine print (positive, negative or neutral) will have differential effects.

The placement and structure of the source citations could also be viewed as a limitation. Although many advertisements use an asterisk following the claim with the source information in fine print at the bottom, the possibility exists that the fine print itself is what is perceived as deceptive, rather than the actual citation information. Advertisers are able to (and often do) cite source information within the text of the claim. It would be interesting to determine whether the font and placement or the actual information is what is driving perceptions. We intend to conduct future research exploring how different presentation styles and type of information presented affects an individual’s deception perception.

Although the research agenda is still in progress, it does extend the current theoretical understanding of consumer deception perception. It is not a simple story where the presence or absence of a source citation is what consumers use to guide deception perceptions. If it were that simple, magazine publishers would be absolutely correct in requiring advertisers to put the support information behind a claim statistic in an advertisement. However, given that consumers use that information differently based on the perceived risk level indicates the publishers’ requirement could be detrimental to marketers and does not always aid consumers in making an optimal decision. Our studies indicate more research is needed to fully understand the mechanisms consumers use to process and judge product claims in print advertisements and also how those mechanisms differ across different risk domains.

REFERENCES


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**APPENDIX**

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THE EFFECT OF HEALTH RISK PRESENTATION FORMAT ON
CONSUMER PERCEPTIONS AND CHOICE

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SUMMARY

Individuals are increasingly being asked to take a larger, more proactive role in their own healthcare (Laine and Davidoff 1996). However, there are numerous barriers that consumers face when navigating this change, including the processing and understanding of complex risk information (Scammon et al. 2011). For example, an individual may need to decide between two drug regimens that offer different likelihoods of success and different probabilities of experiencing side effects. To make these decisions effectively, consumers must be able to understand and appropriately use risk information. However, communicating complex numeric information is not an easy task on its own, not to mention the fact that many consumers have low numeracy skills and/or are uncomfortable with numeric expressions of risk (Ancker et al. 2006). Thus, there is a pressing need to identify effective ways to communicate risk information.

However, while a large literature examining the presentation of risk information exists, there is little consensus regarding which formats are most effective. Risk can be conveyed in a number of ways that provide incidence and/or base rate information. As such, numerically, numbers can be expressed as frequencies (e.g., 1 in 5 or 2 in 10) or percentages (e.g., 20%). Risk information is also frequently displayed graphically. Graphical formats include icon arrays (which depict risk using individual icons, such as dots or stick figures), bar graphs, stacked bar graphs (which use two bars on top of each other to depict both the risk incidence and non-incidence), pie charts, and line graphs, among others. Numerous studies examining the influence of various presentation formats exist, but results are often mixed and it remains difficult to determine which formats are most effective (e.g., see Lipkus 2007). Further complicating this assessment is that researchers have studied numerous dependent variables and results often differ depending on metric (e.g., verbatim knowledge, behavioral change, appeal).

To help synthesize these findings and provide a clearer set of recommendations for health communication, we propose and test a more generalized theoretical framework for organizing and understanding prior results within the literature. In doing so, we focus on three critical goals relevant for consumers participating in their own healthcare: increasing factual knowledge accuracy, increasing understanding, and influencing behavior. The construct of factual knowledge can be connected to previous literature referring to “verbatim knowledge,” or the ability to specifically report the exact numeric information presented. Understanding can be related to a separate construct, “gist knowledge,” which refers to the overall impression or meaning taken away by the individual based on the information presented (cf., Hawley et al. 2008).

To test this framework, we conducted a 2 (base rate format: graphical, numeric) x 2 (risk incidence format: graphical, numeric) between-subjects experiment to systematically examine how variations in graphical vs. numeric representations of incidence and base rate information will impact outcomes related to accuracy and comprehension, gist knowledge, and behavioral intention. Given task consistency theories, we expect that numeric information will lead to increased verbatim knowledge. Based on findings related to information salience, we expect that graphical formats which make comparisons more salient will increase gist knowledge. Additionally, we propose that, as the first step in processing risk information, verbatim knowledge will drive the higher level gist knowledge, while gist knowledge will exert more influence on behavioral intentions.

Consistent with these hypotheses, we find that numeric formats resulted in greater accuracy than graphical formats as measured by verbatim knowledge (i.e., the ability to directly report numbers from the provided information). Contrary to expectations, we also find that numeric formats outperformed graphical formats with respect to gist knowledge. Finally, we find that gist knowledge
drives treatment choices, but that verbatim knowledge mediates the effect of format on gist knowledge. As a whole, these findings suggest that risk incidence information should be provided numerically to increase accuracy. However, our findings also provide evidence that graphical elements can increase salience of certain information. Presenting risk incidence information graphically and base rate information numerically led to the lowest accuracy when the accuracy question required participants to access base rate information in addition to risk incidence information. This result could have occurred if the more salient graphical information increased the likelihood participants would overlook the base rate information. Conversely, providing both types of information numerically, so that they were equally salient, led to increased accuracy in some conditions. Surprisingly, we did not find that graphical formats led to improved gist knowledge over numeric formats. This conclusion requires further investigation, however, as the gist questions followed the verbatim questions in our survey. Consequently, gist knowledge may have been improved for all participants because they had to first consider the actual numbers. However, this procedure also suggests that one way to improve gist knowledge (comprehension) is to ensure that participants are able to read and understand the actual numbers presented. Moreover, although display format affected verbatim knowledge, it did not have a direct effect on choice. The lack of direct effect should be investigated further. Finally, our findings suggest that choice is driven by gist knowledge, which is influenced by verbatim knowledge. References are available upon request.

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ECO-LABELING: APPROACH OR AVOIDANCE?

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SUMMARY

Literature

Researchers studying conservation-oriented labeling have generally framed eco-labels in a positive light. As a result, it is predicted that these labels will evoke approach behaviors by consumers. Consumers are said to approach, or move toward, products and services that facilitate the positive achievement of their goals and to move away from, or avoid, those that inhibit goals and, thus, result in punishment. The underlying rationale of applying eco-labels to products is that they can “guide consumers towards a more environmentally friendly purchasing behavior,” (Heinzle and Wustenhagen 2011, p. 60). Eco-labels, therefore, are designed to create approach behavior, indeed the dominant theoretical framing of eco-labels is that such labels encourage consumers to pay a premium for products carrying a credible label (Gulbrandsen 2006). In this paper, we explore the possibility that, for at least some consumers and some eco-labels, the eco-label may “stigmatize” a product. Work by Teisle, Rubin and Noblet (2007), alludes to the possibility that some labels have the ability to engender avoidance behavior. They theorize that aspects of the label, such as the credibility of its source, as well as aspects of the consumer, including his/her perceptions regarding the product quality compromises required for positive environmental effects, affect consumer approach/avoidance behavior. They theorize that aspects of the label, such as the credibility of its source, as well as aspects of the consumer, including his/her perceptions regarding the product quality compromises required for positive environmental effects, affect consumer approach/avoidance behavior.

Model/Results

We present our model using a relatively new eco-label, the US EPA WaterSense label, as the focal point of our discussion. EPA partners (plumbing manufacturers and retailers) offer the WaterSense label on plumbing fixtures that are third-party certified to be at least 20 percent more water efficient than the average product in the category and to “perform as well as or better than their counterparts” (EPA 2012). We study two constructs hypothesized to create approach behaviors: value on the environment and consumer’s belief that she/he works hard to conserve water. These constructs reveal goals consistent with conserving natural resources and, therefore, are likely increase intentions to use the WaterSense eco-label. However, skepticism, negative product attributes, perceptions that the source is untrustworthy, and ambiguity in label meaning should, based on stigma theory, result in avoidance behaviors. Data from 567 homeowners living in one of four water-stressed U.S. cities (Atlanta, GA, Austin, TX, Baltimore, MD, and Minneapolis, MN) was used. Respondents viewed one of two different WaterSense labels – one of which is the currently-used version and a second, re-designed version which replaced the words, “Meets EPA Criteria” with “Quality Performance • Conserves Water.” Then consumers completed an open-ended question, “If you saw the label shown above on a plumbing fixture (toilet, faucet or showerhead), what would it mean to you?” Respondents also provided their intentions to look for the label the next time they shop for plumbing fixtures. Respondents provided information about their environmental values, water conservation effort, skepticism, product attitudes, and source untrustworthiness. Regression was used to test the hypotheses.

Importantly, our results show that consumers tend to avoid eco-labels when they have negative attitudes toward the environmentally-oriented models of the product, when they do not trust the source, and when the label is ambiguous. Our results suggest at least some individual and label factors have the ability to reverse this relationship. In conclusion, although prior research tends to use the underlying assumption that eco-labeling results in approach behaviors, we find that eco-labels can also lead to avoidance. References are available upon request.
NOTE

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SCALE AND METRIC DESIGN AS CHOICE ARCHITECTURE TOOLS

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SUMMARY

Choices are never presented in a vacuum: rather, alternative choice options are always presented within a context. Importantly, in many cases the context—the “choice architecture”—reflects the meta-decisions made by the designer of the context—the “choice architect” (Johnson et al. 2012; Thaler and Sunstein 2008). A key principle associated with the choice architecture metaphor is that there is no neutral choice context and therefore those responsible for framing decisions will influence choices in all cases. Motivated by this belief, scientists and policy-makers have become increasingly interested in learning how to best arrange the choice architecture in order to help mitigate the threat of various social dilemmas, most recently the threat of climate change (Newell and Pitman 2010; Weber and Stern 2011).

Energy labels, and in many cases the standards that accompany the labels, are often considered to be the best available tools for governments to manage energy-efficiency policies and climate-change-mitigation programs (Gillingham, Newell, and Palmer 2009; Stern et al. 1987; Wiel and McMahon 2003). Given that the consumption of fossil fuels is a major contributor of greenhouse gas emissions, one natural target of choice architecture intervention are vehicle choices via fuel economy label design.

One important feature of the fuel economy label is the choice of metric or metrics to include. Most existing labels report some metric associated with fuel efficiency or consumption; however, there is also an option of providing a cost estimate. There is reason to expect that providing estimated fuel costs will influence consumer preferences more than fuel consumption information even though these two metrics are simple translations of one another. Payne (1982), for example, has argued strongly for the case that decision-makers often form preferences through task-contingent strategies that are tied to the representation of a problem (Payne, Bettman, and Johnson 1992). Similarly, a number of researchers have proposed that task, strategy, and information systematically interact to produce “compatibility” effects (Fischer and Hawkins 1993). Given the assumption that consumers have a primary motivation to minimize the total costs of purchasing and running their vehicle, and tend to underweight the latter, we hypothesized that those presented with a gas cost metric would make a greater proportion of fuel-efficient choices than those presented with a gas consumption metric.

A second important feature of the fuel economy label is the scale to express metrics upon. Most existing labels report fuel economy metrics upon a “per 100” distance scale. Interestingly, there is a growing body of research in cognitive psychology and marketing showing that rescaling otherwise identical information can systematically change preferences (Burson, Larrick, and Lynch 2009; Gourville 1998; Pandelaere, Briers, and Lembregts 2011). The consistent finding in this literature is that decision-makers tend to perceive differences as larger when they are expressed on an expanded scale (such as per year) than when they are expressed on a contracted scale (such as per week). Larger differences in turn prompt greater reliance on that dimension in choice, thereby increasing preference for the option favored on that dimension. Utilizing typical driving behavior information gathered during pilot work, we hypothesized that a greater proportion of fuel efficient choices would be made by decision-makers presented with a lifetime “per 100,000 miles” scale than those presented with either an annual “per 15,000 miles” scale or the routine “per 100 miles” scale.

In order to test these two hypotheses, we conducted an online experiment where we presented participants with a number of hypothetical binary choices between two vehicles that traded off on price and fuel economy. We also measured individual difference variables relevant to car purchase decisions: environmental attitude, discount rate, and cognitive reflection. Stronger preferences for the more fuel-efficient vehicle were expected for those who expected to drive more, who held pro-environment attitudes, and exhibited lower discount rates (in this case, of the later savings associated with the fuel efficient option).
With regards to metric, we observed that decision-makers tended to select the more fuel-efficient vehicles when fuel economy was expressed in terms of the estimated cost of gas rather than the amount of gas consumed. This metric effect is compatible with contingency explanations of information processing, such as the theory of cognitive fit (Vessey 1991; 2006) and the scale-compatibility hypothesis (Tversky et al. 1988). In general, metrics that match the problem-solving processes required to form a preference have the greatest influence on choice.

With respect to scale, we observed that decision-maker’s tended to select the more fuel-efficient vehicles when the fuel economy metric was expressed on an expanded, lifetime scale. Interestingly, we observed a “U” shaped function in which the proportion of fuel efficient options was smallest at 15,000 miles and largest at 100,000 miles; 100 miles was somewhere in between. This result partially replicates past research on scale-induced preference reversals changes (Burson et al. 2009; Gourville 1998; Pandelaere et al. 2011). The “U” shaped function was partially mediated by a similar U-shaped function for expected driving behavior: those who were presented with the 15,000 label during the experiment subsequently expected to drive less in the future than those presented with either the 100 or 100,000 scale.

As expected, those who held pro-environmental attitudes were more likely to select more fuel-efficient vehicle options. However, in contrast to our expectations, implied discount rate did not appear to moderate choices.

The important message from our work is that policymakers should provide consumers with meaningful metrics that help consumers assess their goal progression. Many consumers would appear to do better in this regard if provided with estimate fuel cost information expressed upon an expanded, lifetime scale. References are available upon request.

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THE ROLE OF CENTRALITY OF GREEN ATTRIBUTES IN GREEN PRODUCT EVALUATION

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SUMMARY

Concern about the limited natural resources of the planet and an interest in careful stewardship of those resources continue to influence the decisions of both firms and consumers. Firms are building environmentally friendly supply chains, including recycled material in their products, and developing manufacturing methods that avoid polluting their surrounding environments.

Consumers’ reactions to firms’ investments have been mixed. While some consumers espouse enthusiasm for more environmentally-friendly offerings, a recent Gallup poll suggests that many stop short of actually purchasing such products (Dunlap 2010). Customers have been found to suffer from “green fatigue” (Platt and Retallack 2009), to be suspicious of “green washing” (www.greenwashingindex.com), and to be unwilling to pay extra for environmentally-conscious products (Bhattacharya and Sen 2004).

However, a more fundamental question underlies these reactions: What makes a consumer perceive a product as green or not green to start with? Before a product’s environmental friendliness can have any influence on a consumer’s purchase decision, the consumer must see the product as green – or not.

Consider a consumer looking at two brands of paper towels in a supermarket. The information provided indicates that the environmental savings achieved by including recycled material in both brands is exactly the same, but one brand includes recycled materials in the packaging of the towels, while one includes recycled materials in the towels themselves. Do consumers perceive these two products as equally green? Or consider two laptop computers, one with an environmentally friendly motherboard and the other with an environmental friendly power cord. The use of recycled materials in the two products saves the same amount of plastic material from entering landfills, but do consumers perceive a green peripheral element (the power cord) as contributing as much “greenness” to a product as a green component that is more essential to the product (the motherboard)?

In this research, we look at factors that influence a consumer’s perception of the environmental friendliness or greenness of a product. We explore this from the perspective of centrality theory (Sloman, Love, and Ahn 1998) which states that certain features of a product are more central – more essential, more integral – to defining what a product (or natural object) is and to what category it belongs. One facet of centrality involves high- versus low-level construals (Trope, Liberman and Wakslak 2007) and so we examine the role construal plays in the consumer’s evaluation process and the consumer’s categorization of a product as green or not green. We also look at how different elements of a product are presented to the consumer (holistically or separately) and also examine where in the supply chain the “greenness” of a product occurs. We test the effect of these variables across multiple experiments that span four different product categories – mattresses, paper towels, laptop computers, and washing machines. The results of our four studies suggest that products with identical reductions in their environmental impact may have their environmental friendliness evaluated very differently by consumers depending on the centrality or non-centrality of the product features that are green. We find that differences in green perceptions between products with central or peripheral green attributes are attenuated when a high-level or distant construal is triggered.

The implications of this for public policy makers and firms are potentially significant. From a public policy perspective, our results suggest that consumers’ evaluation process of green claims may be influenced by factors which are not related to green outcomes. In our study, the green claims were very specific and clearly identical, yet the “peripheralness” or centrality of the green feature had a significant effect on the consumers’ assessment of greenness. This suggests that consumers’ ability to assess environmental impact is influenced by factors not related to environment outcomes. From the perspective of firms,
they may wish to consider carefully their green investments and their communication of these efforts. If the same environmental impact can be achieved through both a central feature and a non-central feature, our findings suggest that for positive consumer evaluations, the investment is best made in the central feature. If that is not possible, then encouraging a more abstract construal may alter the consumer’s processing and achieve positive results from an investment in a peripheral feature. References are available upon request.

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AN EXPLORATORY STUDY OF BEHAVIOR PLACEMENTS IN TELEVISION SITCOMS

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SUMMARY

Drive a hybrid vehicle. Recycle plastic beverage bottles in the workplace. Change light bulbs to CFLs. These environmental behaviors have been featured on NBC television programs via a new concept called a behavior placement, which was developed “to sway viewers to adopt actions they see modeled in their favorite shows” (Chozick 2010). The subtle messaging brings mainstream concerns, like environmental issues, to the public. NBC has realized the value in this messaging since 75 percent of consumers consider themselves to be “environmentalists” (Saad 2006). However, 2009 estimates showed 160 million consumers have yet to purchase a green product (Stengel 2009). A general concern for the environment does not translate into green purchases (Kaiser et al 1999), thus indicating an attitude-behavior gap in consumers’ green behaviors. This study attempts to address this gap by evaluating whether a behavioral message embedded in the storyline of a TV show can influence consumers’ behavior intentions.

Product placements (PPL), “the practice of placing branded products in the content of mass media programming” (Russell 2002), have shown to influence behavior. The concept of PPLs has evolved into behavior placements, designed to influence viewers to adopt specific actions they see in their favorite shows (Chozick 2010). While NBC tends to focus on non-offensive or non-controversial messages in its behavior placements, the question remains how viewers respond to these types of messages in their programs. Viewers watch television to be entertained, or escape from reality. Putting “lessons” into a program may have the opposite effect and alienate viewers from the program or network, but they may provide a unique communication opportunity for public policymakers to influence pro-social behaviors. Thus, the following hypotheses are advanced:

H1: Attitudes toward the environmental behavior placement are positively related to environmental behavior intentions.

H2: Perceived realism of the environmental behavior placement in the television show has a positive relationship with (a) attitudes toward the environmental behavior placement and (b) environmental behavior intentions.

H3: Skepticism of the environment behavior placement has a direct but negative relationship with attitudes toward the environment behavior placement.

H4: Environmental consciousness has a direct relationship with (a) attitudes toward the environmental behavior placement and (b) environmental behavior intentions.

To test these hypotheses, an environmental behavior placement was identified from the 2009-2010 season of NBC’s The Office. In the episode, one of the main characters dressed up as a caped superhero who is obsessed with recycling and related different ways to recycle in the context of the show’s storyline. The TV segment containing the behavior placement was edited to a reasonable length for research purposes. Respondents were recruited through an online panel service with a final sample of 248 usable responses. The questionnaire included a series of measures to assess perceptions of environmental consciousness, perceived realism, skepticism, attitudes toward the behavior placements and behavior intentions. Reliability and validity of the scale measures adequately fit the measurement model in M-Plus. The structural model found full support for the first three proposed hypotheses and only partial support for hypothesis four.

To our knowledge, this study is first of its kind to understand the growing use of environmental behavior placements in TV programs. The study found attitudes toward the environmental behavior placement had a positive effect on behavioral intentions. If positive feelings toward an environmental behavior featured in a TV program can be garnered from the exposure to just the behavior, maybe more consumers will be inspired to participate in pro-environmental activities like recycling, taking public transportation and buying locally grown. These messages may be more influential than public service announcements from the government or advocacy groups.
In addition, perceived realism of the environmental behavior placement in *The Office* had a positive effect on attitudes toward the specific environmental behavior placement segment and environmental behavior intentions, suggesting that perceived realism may be a critical element in strengthening attitudes and intentions for the behavior placement in a scripted TV show. While the environmental behavior does not feature a product or brand, this study supports similar relationships in the PPL literature which state that products in movies and television add a realistic element and produce positive attitudes and intentions. It appears consumers may have been skeptical about the environmental behavior placement, which resulted in weakened attitudes toward the placement, supporting the literature on skepticism and advertising. Finally, it appears that individuals’ feelings about the environment do not translate to positive attitudes toward an environmental behavior in their TV program; however, their feelings about the environment do influence their behavioral intentions toward the environment.

As PPLs become more prevalent in TV shows, their effectiveness may be questioned by consumers and public policymakers. Building a message (i.e., encouraging recycling) into a storyline through a behavior placement, however, is less obtrusive and may have a greater influence on behaviors. This exploratory study sought to better understand attitudes and perceptions toward a behavior placement in a specific TV program, an area that has received little attention in the academic literature. Also, the study expanded the concept of PPL to include behavior placements, a unique form of PPL now featured on NBC. This study is one of the first to examine this new approach and provide theoretical and managerial implications.

Featuring “good” messages is not a new concept, but NBC has taken an active role in packaging and marketing the concept not only to its viewers but also potential advertisers. As PPLs become more pervasive and jarring in TV programming with potential regulations by the Federal Communications Commission, behavior placements provide a unique opportunity for persuasive environmental and pro-social messages to be embedded into TV shows. This will allow marketers, advertisers and even public policymakers to better target their pro-social communication messages. References are available upon request.

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AN EMPIRICAL STUDY OF THE DETERMINANTS OF GREEN SHOPPING BEHAVIOR IN BRAZIL

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SUMMARY

Introduction

As explained by Firat (2009), pressures from environmental organizations, competition between firms and academic discussions are factors that have contributed to the emergence of environmental awareness from 1980, especially due to climate change, droughts and other events resulting from global warming. It is from this perspective that this study investigates the influence of Ecological Knowledge (EK), Ecological Concern (EC) and Ecological Affection (EA) on Ecological Cosmetics Shopping Behavior (ECSB) in Brazil.

Understanding the consumers of green products (and their characteristics) has been the keynote of marketing studies (Gonçalves-Dias et al. 2009). Further, research studies that seek to investigate the relationship between environmental factors and consumer behaviors are still embryonic in Brazil. Therefore, this study provides a unique opportunity to broaden the discussion related to the shopping behavior of consumers with regard to environmental issues. Thus, the aim of this research was to investigate the influence between Ecological Knowledge (EK), Ecological Concern (EC) and Ecological Affection (EA) on the consumer’s shopping behavior.

Methodological Design of the Empirical Research

In order to empirically investigate the proposed model, research was conducted with consumers in Brazil. Women were defined as potential respondents of the study, because they represent the major consumer group in terms of cosmetics (ABHPPC 2012). Thus, female consumers were surveyed, aged 18 and over, living in the urban area of Ribeirão Preto-SP. The choice of this age group was because accurate data on the female population of other age groups could not be found. Altogether 800 questionnaires were distributed. Of this total, 500 questionnaires were considered in the research, which corresponds to a rate of 62.5 percent. In the data analysis, we used Cronbach’s alpha coefficients and the multivariate technique of exploratory factor analysis for data cleansing. The dimensions observed in the theory on the researched subject demonstrate theoretical support for the empirical results found in this study, showing similarities with the theoretical input, given the correlation between the independent variables and dependent variable.

Discussion of the Results and Closing Remarks

By the end of this research, it was possible to note that the proposed scope had been achieved. As to the relationship between EK and ECSB, although Tanner and Kast (2003) and Kollmuss and Agyeman (2002) suggest that empirical tests have not agreed on the direct relationship between environmental knowledge and pro-environmental behavior, the results found in this research contradict such premises, as they show the existence of a one-way correlation. It is believed that this correlation is associated with respondents’ high levels of knowledge about environmental issues: 7.39 (Factor 1) and 8.20 (Factor 2). By analyzing the results concerning the correlation between EC and ECSB, it was noted that they do not eliminate the ambiguity of the dimensionality of EC remarked by Xiao and Dunlap (2007). If analyzed from the perspective of the arithmetic means of EC (7.20 and 8.77 for EC1 and EC2, respectively), it can be said that such results are very positive, because, on average, the ECSB of the searched sample is not as much (6.70).

The results of the correlation between EA and ECSB were in line with the premises of Dispoto (1977) and Maloney and Ward (1973), as explained in the theoretical references. According to these authors, even with little knowledge about the environment, people have a strong emotional connection with it. The congruencies herein are also extended to the premises of Schouten (1991), which conceives emotional factors as one of the most interesting components of consumer behavior. Compared with the other independent variables, EC1 presented the strongest correlation with the dependent variable \( r = 0.540 \), followed by EK1 \( r = 0.301 \) and EA \( r = 0.276 \). It should be noted, however, that
although there is an association between ECSB and EK, it is a tenuous relationship, meaning that people are aware of environmental problems, but present an ecological behavior that does not match their levels of knowledge in this respect.

An important contribution glimpsed in this study refers to the references that can serve as an inspiration for future research studies in the marketing area, more specifically, strategic planning, consumer behavior and marketing compound management, among others. However, there were some limitations that may be overcome in future studies. First, although the indicators used were based on the literature and duly adapted to the specific object of this study, the 11-point scales used, which ranged from 0 to 10, were grounds for complaints by some respondents who felt they were too extensive. Thus, some assumptions may be proposed in future studies in order to broaden academic knowledge and obtain different results. Second, future studies could establish an analysis that also considers men as consumers, since that literature indicates that the male audience is a potential cosmetics consumption group. References are available upon request.

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BRINGING IT BACK TO LIFE: REPURPOSING PRODUCTS TO MAKE THEM NEW AGAIN

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SUMMARY

A new consumption market is emerging in the U.S., one that is generally labeled repurposing or upcycling. Although definitions vary, repurposing involves taking something that is no longer useful or needed and converting it so that it is once again valuable to a consumer. The emergence of this new market could hold significant benefits for the environment. When something is recycled, it becomes something of lesser quality and consumes energy in the process (Wang 2011). In comparison, repurposing is a closed-loop system where materials are continuously kept in the production-consumption cycle and maintain their status as resources instead of being down-graded through recycling. Repurposing is also more sustainable than purchasing environmentally friendly new products because all new products, whether sustainably manufactured or not, require additional natural resources and energy production in the manufacturing process.

Despite the potential importance of the repurposing market, very little research has investigated consumer and business behavior in this industry. The current research explores the motivations of business owners in the industry and the barriers and opportunities they face. A total of eight in-depth interviews were conducted with businesses that included industrial products, jewelry, art objects, reclaimed lumber and repurposed furniture. Business owners were located nation-wide, including states such as California, Colorado, Minnesota and New York.

Results

The business owners interviewed revealed interesting insights about the emerging repurposing industry, their motivations, and the motivations of their consumers. Three themes emerged. First, the repurposing market is far from an established, well-defined industry. Rather, it is still emerging and fragmented, with diverse and contested definitions and many types of producers. Among the words and phrases used to describe their industry include: craft, recycled, repurposed, restyled, reused, reclaimed, recreated, rescued, used materials, and land-fill divergence. These accounts indicate that the definition of the market is still being contested and it appears at this point to be a fragmented aggregation of narrowly-focused specialty markets.

The second theme to emerge was that both producers and consumers in the market for repurposed items have a mixture of self-interested and altruistic motives for participating in this market. In spite of the environmental benefits of repurposing, most informants did not report idealistic motivations for starting their businesses. Rather, their work in the market for repurposed goods was primarily a way to earn a living and to achieve personal well-being. At the same time, however, their motives were not purely selfish. Informants also reported motivations to help others or to sustain the natural environment.

The final theme in this study concerns institutional barriers and facilitators of the emerging market for repurposed items. According to informant accounts, several barriers and challenges are endemic to the repurposing market. First, when used or discarded goods serve as the inputs to the business process, finding a reliable source of these goods can be challenging. Another challenge faced by businesses in this market is the lack of a successful, replicable business model in the industry. A third barrier faced by businesses in the repurposing market is uncertainty over the market value of what they sell. Because there aren’t well-established markets for repurposed goods, there often isn’t an accepted market price or competitor price to use as a reference. The final challenge reported by informants concerns the operational difficulties presented by reprocessing used or discarded materials.

In spite of the disadvantages of operating a repurposing business, the informants remained optimistic about the future of the industry as a result of three key opportunities in the market environment. First, repurposing businesses can capitalize on inputs (i.e., goods or materials to be repurposed) that are frequently cheap or even free. Second, the market takes advantage of current shifts in consumer attitudes toward going green. A final facilitator for repurposing businesses is that the act of repurposing
and purchasing repurposed goods creates an experiential value for customers that new goods do not.

Discussion

The results of this study provide a number of important insights about repurposing and the market for repurposed goods. One important, over-arching theme in the data is that the repurposing industry is still emerging and uncertain. This early stage of development in the market is consistent with research on institutional theory (Humphreys 2010; Navis and Glynn 2010; Scott 1995) and collective action frames (Snow and Benford 2005). This research suggests that new markets and industries seek legitimation via establishment in the cultural-cognitive vernacular of a society, consistency with societal norms, and adherence to public regulations (Scott 1995). The informants for this study placed the repurposing market early in all three forms of legitimation. In terms of cultural-cognitive legitimacy, informants expressed a lack of agreement about the definition of repurposing and how it differs from similar concepts like recycling and upcycling. Congruence with societal norms offers a second avenue for legitimation (Scott 1995), and the repurposing industry has favorable prospects because it is already in-line with several consumer and industry trends. The final legitimating factor is regulation; businesses and markets gain legitimacy by adhering to laws and regulations governing commerce. Currently there is no regulation or legislation specific to the repurposing industry, which presents a significant possible role for public policy in promoting and facilitating markets for repurposed goods.

The repurposing industry is an emerging consumer market with important potential benefits for consumers and society. Public policy could play an instrumental role in legitimizing the industry and promoting the production and consumption of repurposed goods. The establishment of robust repurposing markets would not only provide economic and experiential value to producers and consumers, it would also promote a more environmentally-friendly form of consumption. References are available upon request.

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CROSSING THE RECYCLING BIN BOUNDARY: THE EFFECT OF PRODUCT DISTORTION AND SIZE IN CONSUMER DISPOSAL DECISIONS

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SUMMARY

Two billion tons of trash is thrown away each year, with the United States throwing away more trash than any other country (Wilcox 2008). Given the substantive effect recycling has on our environment, a better understanding of the consumer behavior behind recycling is an important endeavor. Unfortunately, research in this area is scant at best with the majority of the working focusing on the implications of consumer-related characteristics (e.g., attitudes and personality) and promotional-related variables (e.g., message framing) on recycling tendencies without considering the role of the product’s attributes themselves. In the present research we seek to provide initial insight into the implications of various product attributes on the likelihood that the product will be recycled as compared to trashed. Our basic thesis is that if the consumption process distorts the product sufficiently from its original form and function then it will be deemed as less useful and in turn more likely to be thrown in the garbage (as opposed to recycled). To test our thesis, we explore two product attributes that are often affected during the consumption process – size and aesthetics – to determine their implications for recycling decisions.

To make sense of the numerous products that exist, consumers assign products to different classes or categories. While research on categorization assumes that a product does not change its category once it has been produced (Malt, Ross, and Murphey 1995; Moreau, Markman, and Lehmann 2001), in reality products often go through a number of physical changes during and after consumption that “distort” the product from its original form and function and may influence categorization. We believe that product distortion during the consumption process does change consumers’ categorization of a product pre and post consumption. When product distortion alters a product’s characteristics substantially and distances the changed product from the original, the new product form is assigned to the disposal category with similar prototype attributes (Smith and Minda 1998).

In the present research we examine product distortion and the implications of changes in two attributes on the likelihood a product will be garbaged (vs. recycled): size and aesthetics. As mentioned above, if a product is distorted during consumption, distance is created between the original product and its new form and function. If the changes are in attributes that define a disposal category, then the product will be assigned to the disposal category with the most similar prototype attributes. We believe that size and aesthetics have a significant impact on perceived usefulness of a product and that usefulness is a category defining attribute for recyclables and trash. If the consumption process leads to an end product that is too small and/or in a product that is unwhole, damaged, or broken, it will no longer be perceived as typical to its category, which will decrease its perceived usefulness. Because the product will be assigned to the disposal category with the most similar prototype attributes, we propose that products with low perceived usefulness will be assigned to the garbage category and subsequently trashed (as opposed to recycled).

Employing a field and five experimental studies we set out to investigate the implications of product distortion on the likelihood a product will be recycled. In all of our studies, actual recycling behavior is our dependent variable.

Our initial field study involved searching through the recycling and garbage bins of twenty-two faculty assistant offices from a large northeastern US university. The field study found that the size of the product matters: participants were more likely to recycle a piece of paper that was large than one that was small. Using a controlled laboratory environment, in study 2 we found that distorting a product by making it smaller substantially decreased recycling behaviors. Participants recy-
cled an undistorted product more often even when its mass was exceeded by the mass of a distorted product’s smaller parts. We also found that product distortion influenced categorization of the product and made it more typical of garbage. In Study 3, we set out to generalize the results found in the first studies by extending our investigation to another product – aluminum cans. Consistent with what we found with paper, participants recycled the can more often when it was large versus small, and even more so when it was not damaged. The results from Study 2 and 3 also show that it doesn’t seem to matter whether the product is distorted by the consumer (Study 2) or by someone else (Study 3). Studies 4–6 demonstrated the graded nature of the garbage category and found support for the role of usefulness in disposal decisions. Study 4 provided additional support that it is not the act of distorting the product alone that makes it more like garbage, rather the newly distorted product’s final form and function. As a demonstration of the garbage category’s graded structure, participants only trashed the paper when it was sufficiently small enough in the end. We found that even after it had been distorted, if the end product was large enough, it continued to be classified as recyclable and disposed of accordingly. Studies 5 and 6 found direct evidence for the role of usefulness allowing us to conclude that size and aesthetics have a significant impact on recycling behaviors due to changes in the perceived usefulness of the product. In particular, when product distortion leads to a large product that is damaged, the decrease in the perceived usefulness of the product leads to it being perceived as more typical of garbage (vs. a recyclable) and subsequently trashed. Finally, increasing the salience of the usefulness of a product can reverse consumers’ tendencies to trash a small object.

It us our hope that our research stimulates a discussion of post-consumption and recycling decision making that has largely been ignored. Given the significant amount of waste that is generated in society, and the detrimental effect it has on the environment it is critical to understand consumers’ recycling behaviors. This research seeks to provide some insight into how certain product characteristics – size and aesthetics – influence the likelihood that consumers will or will not categorize a product as garbage and subsequently their decision to do their part for the planet and recycle. References are available upon request.

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WHEN ENVIRONMENTAL MESSAGES SHOULD BE ASSERTIVE:  
THE MODERATING EFFECT OF EFFORT INVESTMENT ON CONSUMERS’ RECYCLING INTENTIONS

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SUMMARY

Considerable effort has gone into developing and implementing green campaigns to persuade people to act in an environmentally responsible manner. In particular, environmental campaigners routinely utilize assertive language that is characterized by increased use of imperatives (i.e., commands and orders) rather than propositions or indirect suggestions (Miller et al. 2007). While past research has shown that assertive language yields lower compliance with the advocated behavior with some boundary conditions such as language intensity and expectations (Bensley and Wu 1991; Dillard and Shen 2005; Quick and Considine 2008; Quick and Stephenson 2007; Wilson and Kunkel 2000), we propose that the effort invested in receiving the request can moderate the persuasiveness of message assertiveness, altering communication expectations for assertive language. The current work builds on prior findings that the effort invested in attaining the desirable outcome is associated with its expectations (e.g., Kim and Labroo 2011; van Dijk, van der Pligt, and Zeelenberg 1999). Thus, the main purpose of this study is to explore whether the effect of message assertiveness varies as a function of the effort invested in complying with environmentally-friendly requests.

In addition, this study highlights perceived issue importance and self-efficacy as underlying explanatory factors for the interactive effects of message assertiveness and effort investment on recycling intentions. Prior work has suggested that perceived issue importance plays a mediating role in the process of compliance with assertive green messages (Kronrod, Grinstein, and Wathieu 2012). It is clear that self-efficacy, defined as “belief in one’s capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet given situational demands” (Wood and Bandura 1989, p. 408), involves cognitive judgments of personal ability to comply with the advocated behavior (Bandura 1993). The extent to which people alter their perceptions of self-efficacy will vary as a function of how much effort they put forth in given endeavors and the outcomes they expect their efforts to produce (Bandura, 1984). Self-efficacy has also been shown to translate into pro-environmental behaviors (e.g., Axelrod and Lehman 1993; Lindsay and Strathman 1997). It is expected that combining message assertiveness with effort investment leads to greater perceived issue importance, which translates into greater self-efficacy. Such a sequential pathway will result in more positive recycling compliance.

We tested our hypotheses using a 2 (effort investment: high versus low) X 2 (message assertiveness: assertive versus non-assertive) between-subjects design. A total of 249 college students at a northeastern U.S. university participated in exchange for extra credits. Following the induction procedure used by Zhang et al. (2011, experiment 2), we manipulated the degree of effort investment using the content of the recycle pledge. On the other hand, the assertive message contained imperatives and controlling terms (e.g., “Recycle what you can: You have to recycle plastic containers, paper, cardboard, aluminum and steel cans”), whereas the non-assertive message included terms that emphasize the autonomy of actions (e.g., “It’s worth recycling what you can: You could recycle plastic containers, paper, cardboard, aluminum and steel cans”). Except for the message assertiveness manipulations, all other aspects of the ad stimuli were invariant with respect to size, layout, and background.

The findings show that individuals with high-effort investment show higher recycling intentions when exposed to an assertive message versus a non-assertive message. In contrast, a non-assertive message is more effective than an assertive message for those with low-effort investment. Accordingly, our results suggest that environmental advertising persuasion is enhanced when more assertive message is in line with the extent to which people put in more effort to comply with green requests. Furthermore, the interaction between message assertiveness and effort investment is partially mediated by perceived issue importance to predict self-efficacy, which in
turn leads to behavioral intentions to recycle. From a theoretical standpoint, the current research takes the important conceptual step of untangling the underlying mechanism through which the interaction between message assertiveness and effort investment influences compliance with green requests. From a practical standpoint, understanding the combined impact of message assertiveness and effort investment helps green marketers fine-tune their environmental message strategies. References are available upon request.

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ETHICS AUDIT REVEALS “LITTLE DUTCH BOY” POLICY LEAKS: CREDIT CARD ACT (2009) FAILS COLLEGE STUDENTS

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SUMMARY
Regulation debates surround the efficacy of Title III of the 2009 Credit Card Accountability and Reporting Disclosure (CARD) Act which is intended to protect the well-being of young adult consumers from predatory credit card marketing practices on campus. The Credit CARD Act was put into effect in response to concerns by Congress and the President that certain practices in the credit card industry were neither fair, nor transparent or accountable to consumers. Protection areas include extension of credit, increases in credit lines, reporting requirements, pre-screened credit offers, privacy protection, and free gifts. Under the Act, college students (under the age of 21) are considered a protected class because not only may they lack financial literacy, but due to their environment and decision making processes, may be ill-equipped to manage credit. Current marketplace effects indicate the Credit CARD Act’s restrictions may not have proven as successful as hoped for (e.g., easy credit; unmanageable debt loads; suffered grades; forced dropouts; privacy threats; a similar number of agreements between bank issuers and colleges; creative post-Act credit terms and strategies that protect corporate financial returns). Calls have been made for researchers and policymakers to find ways to inform future amendments to the Act.

Ethics Audit
We assert that key ethical principles (Sirgy, 2008) give valuable insight into policy leak risks and provide a foundation for ethically informed amendments concerning key stakeholder groups. These principles are the foundation of an ethics audit conducted on the current requirements of the Credit CARD Act.

Consumer Sovereignty Ethical Concerns
Applying Consumer Sovereignty to Title III SEC 301 (Truth in Lending Act): Extension of Credit to College Students reveals ethical concerns relating to dishonest reporting of financial information (irrational consumer) and lack of self-education (financial illiteracy). Applying Consumer Sovereignty to Title III SEC 302 (Fair Credit Reporting Act): Protection of College Students from Prescreened Credit Offers reveals ethical concerns relating to student ignorance regarding the relationships between opting in to credit offers, multiple credit report pulls, credit scores, and the long-term ramifications of poor credit scores. It also reveals concerns about lack of self-education on the consumption process as it relates to properly reacting to pre-screened credit offers such as how to discern whether a need for credit exists, search for unbiased and accurate information about credit (in general) and credit card offers, and compare and contrast pre-screened credit offers; and understand what the relationship between credit report ‘pulls’ and credit score is, and how credit scores work and why they are important for the student’s future.

Social Justice Ethical Concerns
Applying Social Justice to Title III SEC 302 (Fair Credit Reporting Act): Protection of College Students from Prescreened Credit Offers reveals ethical concerns relating to social injustice for the segment of college students who are financially literate, self-educated and sovereign, and financially qualified to receive credit, but not offered credit because although they opt in to the offers, their date of birth is not provided on the credit report, therefore the credit card issuer may not follow-through with validation of age, causing an injustice to sovereign consumers under the age of 21.

Non-Malfeasance Ethical Concerns
Applying Non-Malfeasance to Title III SEC 303 (Truth in Lending Act): Issuance of Credit Cards to Certain College Students (those with financially qualified co-signers) reveals ethical concerns relating to a co-signer whom may request an increase in the card’s limit without the cardholder’s knowledge and subsequently, the co-signer may make charges on the account, again without the cardholder’s knowledge and
harming the student. Applying Non-Malfeasance to Title III SEC 304 (Truth in Lending Act): Privacy Protection for College Students reveals an inducement-related concern relating to misplaced brand perception halo effects resulting from free gifts received from the credit card issuer; thus potentially harming the consumer psychologically by facilitating a perception of the card brand that is based more on the “feel good” gift and based less on an intellectual analysis of the card and its terms. Another inducement-related concern exists relating to confusion regarding the loosely interpreted definition of campus ‘borders’, which may allow credit card marketing to occur in high traffic routes of students. Title III SEC 304 also reveals disclosure-related concerns relating to limited and obscure student access to the credit card agreements made between their college and credit card issuers.

**Stakeholder Ethical Concerns**

Applying Stakeholder Theory to Title III SEC 305 (Truth in Lending Act): College Credit Card Agreements reveals ethical concerns relating to the lack of priority put on college students as a key stakeholder group needing full disclosure. Colleges should provide easily accessible and visible access (via a high traffic area on their website) to students regarding (1) the college’s credit card agreements and affiliate program contracts; (2) filed complaint reports for credit card issuers, such as provided by the Consumer Financial Protection Bureau; (3) all credit card marketing practices involving their campus or student body; and (4) all financial literacy programs and resources made available by or through the college.

**Quality of Life / Human Development Ethical Concerns**

Applying Quality of Life to Title III SEC 305 (Truth in Lending Act): College Credit Card Agreements reveals ethical concerns relating to the government, as a whole, falling short of the desired quality of life / human development “end goals” for underage college students and their relationship with credit cards and debt. Specifically, concerns relating to the credit card / debt consumption cycle and its effects on perceived quality of life, life satisfaction, overall happiness or subjective well-being, economic or financial health, social health, and perception of a positive consumptive environment.

The ethics audit reveals that policy leaks still exist regarding the Credit CARD Act, continue to threaten young adult consumer wellbeing, and may fuel a watershed of predatory practices. To mitigate policy leak risks, policymakers are encouraged to use ethics audits to inform amendments and help establish a moral floor for the Act’s marketplace effects. The authors make specific recommendations for ethically informed amendments to the Credit CARD Act. References are available upon request.

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MOTIVATING CONSUMERS TO GET OUT OF DEBT FASTER

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SUMMARY

Imagine a consumer, Dave: like many consumers with problematic levels of revolving debt, Dave carries balances on five credit cards. Let’s suppose that the balance on each credit card is $3000, and that Dave has just earned an extra $1000 that he wishes to use to pay down his credit card debt. How should he allocate those repayment dollars? One possibility for Dave is to allocate an equal amount of money ($200) to each debt account and pay down the accounts simultaneously. Another possibility for Dave is to allocate the entire amount ($1000) to a single account, and thus focus on paying down the accounts one at a time. Is it possible that paying down one account rather than five accounts would influence Dave’s subsequent motivation to repay his debt?

We assume that most indebted consumers have the long-term goal of paying off their debt and accumulating wealth. Achieving such a goal requires persistent self-control (Hoch and Lowenstein 1991; Vohs and Baumeister 2004), which can be enhanced by the perception of greater progress toward goal attainment (Baumeister 2002; Fishbach, Dhar and Zhang 2006). We propose that paying down debt accounts sequentially (versus simultaneously) enhances perceived progress towards subordinate goals. That is, Dave will feel as though he has made more progress by paying $1000 into a single account rather than $200 into each of five accounts.

Prior work on the dynamics of self-regulation suggests that the perception of greater progress towards subordinate goals can lead to reinforcement and increased motivation to achieve a superordinate goal by signaling goal commitment (Fishbach and Dhar 2005; Fishbach et al. 2006; Huang and Zhang 2011). Making greater progress toward successfully paying down smaller individual accounts – thereby enhancing perceived progress toward achieving more proximal subordinate goals – provides consumers the opportunity to evaluate whether the goal of becoming debt free is attainable and worth pursuing further, and to infer higher commitment on the basis of greater perceived progress. For Dave, this suggests that perception of greater progress (from allocating $1000 into a single account rather than $200 across five accounts) will motivate greater subsequent effort toward his focal goal – getting out of debt.

We test our proposition with a unique consumer debt dataset and three experiments. Using credit card transaction data from indebted consumers and three experiments, we show that paying down accounts sequentially (versus simultaneously) leads consumers to infer greater progress toward their debt repayment goal, and thus increases their motivation to repay their debt.

We obtained a large dataset from an online financial guidance company. The data span a 36-month period, and aggregate monthly credit card information including payments made and outstanding account balances. Based on this, we used a dataset with a total of 68858 rows representing a member/year-month/account for a total of 2522 members, with an average of four open credit card accounts (mean = 3.98, median = 3.00) per member and nearly $10,000 in total credit card debt (mean = $9858.03, median = $5433.96).

We measured each consumers’ tendency to engage in sequential debt repayment, and examined whether that tendency has an impact on subsequent debt and subsequent debt repayments. As hypothesized, we find that consumers who use a more sequentially oriented repayment strategy have less debt in the following period, and we find that the use of a more sequentially oriented repayment strategy in the previous month has a positive influence on one’s debt repayment in the subsequent month. These effects are robust to varying levels of indebtedness, credit card spending, and repayment amounts.

Experiment 1 was designed to examine the effect of different debt repayment strategies on individuals’ perceptions of progress and motivation to repay debt. We told participants that they had five credit card accounts, each with a starting balance of $1200, and that their goal was to repay all of their credit cards in a year. We then randomly assigned participants to a scenario in which they were told that, in the past month, they had managed to repay a certain amount of debt: we independently
manipulated the total amount of debt repaid (either $500 or $1000) and that amount was allocated across their five debt accounts. In support of our theoretical account, individuals who had been assigned to a more sequential debt repayment strategy indicated that they had made greater progress toward repaying their debt, indicated greater subsequent motivation to get out of debt, and perceived progress mediated the effect the debt repayment strategy on motivation.

Experiment 2 was designed to examine the effect of different debt repayment strategies on individuals’ motivation to repaying debt using a new measure of motivation – work output. Participants began the experiment in debt (divided into five accounts of equal value) which they had to pay off before they were able to keep any earnings. Participants could repay their debt faster by increasing the amount of work they put in. Half of the participants were randomly assigned to either a simultaneous repayment (their earnings were allocated equally across accounts) or sequential repayment (their earnings were allocated to accounts one at a time). The other half of the participants were permitted to choose one of the two strategies. The results indicate that low self-control consumers worked harder to pay down their debt when they paid into their debt accounts one at a time rather than simultaneously, and that this effect persisted whether they were randomly assigned to debt repayment strategy or chose it themselves.

In experiment 3, we examined how goal attainability affects the interplay between self-control and debt repayment strategy by manipulating the amount that participants could earn for their work. In support of our theoretical account, when the magnitude of these rewards was so low that it was nearly impossible for them to pay off their debt, low self-control individuals were not be motivated by paying down their accounts one at a time; by contrast, when the rewards were sufficiently large for them to repay their debt, low self-control individuals produced significantly greater work output when paying down their debts sequentially rather than simultaneously, as in experiment 2.

Consumer debt is a self-control issue of great importance. Using a unique consumer debt dataset and three experiments, our research suggests that indebted consumers can be motivated to repay their debt more quickly by having them pay down their debt accounts sequentially (versus simultaneously). This research has important practical implications for indebted consumers and public policy. References are available upon request.

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In today’s vogue toward a cashless society, using credit cards as “plastic” money is now for most people the dominant payment form to replace cash money (Feinberg 1986; Soman 2003). Credit cards are regarded as a spending stimulus that allows greater ease of spending than cash. Indeed, it has been extensively documented that some consumers display greater willingness to spend and make greater value purchases (a phenomenon called “credit card premium”), have weaker recollections of past credit expenses, and overvalue their available funds when using credit cards than cash in an otherwise identical purchase situation (Chatterjee and Rose 2012; Raghubir and Srivastava 2008; Soman 2001, 2003). We refer to these inclinations as the credit card effect. We conjecture that individuals become susceptible to the credit card effect when their cognitive capabilities, psychological traits and financial sophistication come short to comprehend complex credit card terms and foresee post-payment negative effects. A review of the extant literature reveals that there is lack of a concept to capture credit card users’ exposure to such susceptibility to the credit card effect. This paper contributes to the literature by introducing a new concept of susceptibility to the credit card effect (SCCE) and its measurement scale, which can be employed for better understanding of this vulnerable behavioral inclination and wider issues in credit card misuse.

**Susceptibility to Credit Card Effect**

An individual’s susceptibility to the credit card effect reflects one’s incapacity to make rational, deliberative valuation concerning their credit card usage. Such incapacity may be manifested in an individual’s partiality toward cognitive biases, psychological aptitude toward immediate or future consequences, and the lack of financial sophistication.

A rational and strategic use of credit card requires a consumer’s full awareness of available income and conscious planning to make credit card repayment (including how much to repay and when to make repayments) in order to achieve maximum utility and minimum financial charges. However, consumers tend to make computational or planning errors since some credit card cues exhibit heuristic properties capable of influencing cognitive bias. Stewart (2009) showed that the presence of minimum payment option led people to “anchor” their decision frame and make smaller repayments. In addition, people’s capability of rational and strategic use of credit card may be undermined by their psychological aptitude toward immediate or future consequences. According to Wiener et al. (2007), psychological factors affect consumers’ ability to make rational credit card usage deliberation in three ways. First, consumers might be able to accurately anticipate the high costs of overusing credit card, but still perceive the immediate payoff more favorably than any long-term effects. Second, consumers might “choose” to ignore the long-term costs of credit card since the act of parting with actual money is a distant outcome. Third, consumers might inaccurately predict the emotional consequences of their actions, which mislead them to emotionally downplay the potential high costs of repayment at the time of purchase (Wiener et al. 2007). Moreover, we argue that a consumer’s financial sophistication acquired from credit card knowledge and usage experiences help consumers to shape their cognitive ability to comprehend complex information inherent in credit card terms and aggressive solicitations. For example, Lee and Hogarth (1999) contend that consumer knowledge and experience influence their ability to evaluate and distinguish between APR and CIR (contract interest rate).

**Methodology**

Our study focuses on young credit card users in Singapore, Malaysia, and the U.K. These countries represent different degrees of credit card issuance and consumer protection regulations, which systematically influence the way people use their credit cards (Navarro-Martinez et al. 2011; Stewart 2009). We followed Castro, Kellison, Boyd, and Kopak’s (2010) recommendation for integrative mixed methods (IMM) to establish a multi-item measurement scale of SCCE. IMM helps to establish a measurement scale that offers rich, “deep structure” embodying individual as well as structural differences in credit card use. We began by conducting exploratory
interviews followed by surveys to young credit card users (18–25 years old) in Singapore (n = 6), Malaysia (n = 6) and the U.K. (n = 6). Based on the results of thematic analyses, we developed 10 initial item pool. We further purified the scale through further pilot test and EFA. CFA and multigroup invariance tests were subsequently conducted in a new set of samples in Singapore (n = 6), Malaysia (n = 6) and U.K. (n = 6) and we established discriminant, construct, and convergent validity. Further, we established that SCCE positively relates to the tendency to develop revolving credit card debt, which provide additional validity of the measure. The results indicate a 6-item measure of SCCE that is valid and reliable across the three countries.

**Discussion**

The concept and measure of SCCE provide an effective device for credit card providers and regulators in their market research and business auditory to identify the most vulnerable credit card users without obstructing financial freedom for young consumers. Subsequently, this approach can be utilised as a socially responsible marketing programme that empower consumers to be more considerate in their credit card purchases. An example from the UK is the provision of text messages via mobile phone to remind people of their credit balances whenever they have reached a self-imposed limit. The SCCE instrument may provide an integral part of SCCE diagnostic facilities supported by other educational programmes, such as provision of financial management classes and financial socialisation efforts to inform and empower young consumers to more effectively use credit cards. By understanding their own susceptibility, young consumers can improve their immunity to the credit card effect and improve knowledge and skills to make better credit card purchase and budgeting decisions.

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TEMPTATION AND PREVENTION PROVIDED BY THE GAMBLING INDUSTRY: MAIN AND INTERACTIVE EFFECTS ON GAMBLERS

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SUMMARY

For industry officials and gambling defenders, gambling is an effective way to create jobs and to raise revenue without raising taxes. However, these benefits come with a hefty social and economic price tag. The growing of legalized gambling brings an increase in the number of addicted gamblers with what it all means: higher indebtedness and bankruptcy rates as well as increased divorces, suicides, and gambling-related crimes (Blaszczynski and Nower 2002). Statistics estimate that 816,000 Canadian adults currently experience moderate to serious gambling behavior problems (Wood and Williams 2009). The reasons why gamblers become addicted are complex. However, non-profit organizations, public agencies, and researchers are focusing their attention on a possible cause of problem gambling development, that is, gambling advertising (Binde 2007; Griffiths 2005; McMullan and Miller 2009; Sklar and Derevensky 2011).

In response to these accusations, some gambling companies have developed their own prevention program designed to educate people, especially gamblers, about the harmful effects of gambling. In Quebec, current gambling advertising comes from a monopolistic state-owned gambling corporation. This corporation supports financially a non-profit organization which intends to prevent problems related to excessive gambling behavior. In December 2010, this non-profit organization broadcasted its annual awareness campaign. Obviously, gambling advertising did not stop during this campaign. This situation has been criticized by anti-gambling activists as potential conflict of interests and some questions have emerged: what are the effects of these two types of advertisements? Are current industry-funded anti-gambling campaigns able to counteract the effects of gambling advertising and to develop a more responsible attitude and behavior toward gambling? Our goal was to address these issues.

We tested two opposing theses regarding the effects of pro- and anti-gambling ads both funded by the gambling industry: the tainted fruit theory (Christenson 1992; Bushman and Stack 1996) versus the two-sided persuasion paradigm. The tainted fruit theory posits that anti-gambling ads will offset the effect of commercial advertising and decrease positive gambling attitude and intention. On the contrary, the two-sided persuasion paradigm posits that anti-gambling ads messages will make commercial gambling ads even more efficient and increase positive gambling attitude and intention.

Turning to method, we first conduct a pilot study to choose the gambling ads for the main study. First, a content analysis of one hundred forty-seven gambling ads broadcasted on TV during the last five years was performed. Then, the set of message characteristic items was reduced through a factor analysis and the ads were classified in several homogeneous groups through a cluster analysis. Five clusters or group of ads emerged: escape, feelings, thrill of winning, socialization and gambling skills. For the main study, we chose to focus on two clusters: the Escape and the Gambling Skills clusters. The reason for this choice is twofold. First, reference to gambling expertise, control or gambling ability has been criticized by the literature as a way to enhance gambling-related problems (Blaszczynski and Nower 2002). Second, the use of gambling as a way to escape daily problems has been presented as a risk to develop gambling-related problems (Blaszczynski and Nower 2002). The three ads closest to the center in each of these two clusters were preselected. In a pre-test, we asked 32 undergraduate students to evaluate these six ads in terms of reference to expertise and/or to escapism and we retained. The ad which scored the most on expertise and the ad which scored the most on escapism were retained for the main study.

In Study 1, we tested the first hypothesis regarding the impact of gambling advertising on gamblers’ attitudes and intent. The design was a 2 X 1 randomized factorial design. The manipulated factor was the presence versus absence of gambling ads. We used the two gambling ads selected during the pilot study. The main dependent measures were attitude toward the gambling industry,
attitude toward gambling, and gambling intent. Ninety-three adult gamblers from Quebec, randomly recruited through a major online marketing research service, filled the questionnaire. After completing a brief questionnaire about their gambling behavior (gambling frequency, average money spent on gambling each year), the subjects were randomly assigned to one of the two conditions. The stimulus advertisements were shown at the beginning of the well-known TV show and filler ads were included in two other separate commercial breaks in order to enhance realism. After viewing the television show, the subjects completed the main questionnaire with the dependent measures (i.e., attitude toward gambling, attitudes toward the gambling industry, gambling intent).

The results of this first study showed that exposure to gambling ads enhances both gamblers’ attitude toward gambling and their gambling intent through the activation of positive attitudes toward the gambling industry. Subjects exposed to a gambling ad tend to have more positive attitudes toward the activity of gambling and toward the gambling industry which led to higher gambling intent.

Study 2 tested our two latest hypotheses regarding the impact of industry anti-gambling messages on gamblers attitudes and intention. We hypothesized significant interactions of pro-gambling ads and anti-gambling ads. The tainted fruit theory predicts that anti-gambling ads significantly reduce the effects of pro-gambling ads. The two-sided paradigm predicts that industry-funded and sponsored anti-gambling ads enhance positive attitudes toward the gambling industry, attitude toward gambling, and gambling intention.

We used the 93 subjects from Study 1 and recruited an additional 97 adult gamblers through the same major online marketing research service for a total of 190 adult gamblers. Subjects in the anti-gambling ad condition were exposed to one of the two anti-gambling ads. Subjects in the mixed condition were exposed to one of the two anti-gambling ads followed by one of the gambling ads (randomly selected). The procedure and measures were similar to Study 1, except for the inclusion of anti-gambling advertisements.

The results supported the tainted fruit theory in the presence of gambling ads whereas in the absence of gambling ads, the results supported the two-sided persuasion paradigm. It is reasoned that, in the presence of gambling ads, the anti-gambling message primes a negative image of gambling behavior, which cancels the impact of gambling ads on gambling intent. In the absence of gambling ads, anti-gambling messages funded and sponsored by the gambling industry have an opposite effect: they act as a gambling ad. They paradoxically enhance the gambling industry’s image and gamblers’ gambling intent, which confirms the two-sided paradigm.

Study 1 suggests a two-step effect of gambling advertising. In the first step, the gambling ads enhance gamblers’ positive attitude toward gambling activities and improve the gambling industry image. In the second step, positive beliefs toward the gambling industry increase people intent to gamble.

Study 2 shows that anti-gambling ads cancel the effect of pro-gambling ads on gambling intent if gamblers are exposed to them prior to gambling ads. However, it should be noted that this effect appears only when the anti-gambling message competes directly with the commercial message and that the anti-gambling message impacts only on gambling intent. In contrast, in the absence of gambling ads, the industry-funded anti-gambling message impacts positively on attitude toward the gambling industry and on intent to gamble. This finding is of utmost importance. It shows that such anti-gambling messages can serve the gambling industry’s interests under the apparent purpose of protecting gamblers from increasing their gambling behavior.

One limitation of the present research is that we did not measure the link between exposure to gambling ads and actual gambling behavior. Another limitation concerns the manipulation itself. It is interesting to note that industry-funded anti-gambling messages may offset the impact of gambling ads on gambling intent. In Study 2, the presence of an industry-funded anti-gambling message presented just before the gambling ad decreased gambling intent. However, this situation is, in reality, quite unusual. Gambling ads and anti-gambling messages have seldom to compete directly. Future research could strive to replicate these results in more realistic settings to examine whether these results were influenced by the experiment setting itself. References are available upon request.
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THE RELATIONSHIP BETWEEN SOCIAL MARKETING POLICIES ON PUBLIC HEALTH AND EPIDEMIOLOGICAL SITUATIONS: AN EXPLORATORY RESEARCH BASED ON TELEVISION ADVERTISEMENTS PREVENTING HIV/AIDS IN FRANCE, GERMANY, PORTUGAL, AND ITALY

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SUMMARY

Social Marketing has been growing importance in the 21st century and it has being increasingly adopted all over the world (Andreasen 2003; Andreasen 2002). It consists of adapting commercial marketing tools to the promotion of social change (Dann 2010). Social marketing has been effective in the encouragement of behavior changes, especially those that are related to public health (Evans and McCormack 2008; Keller and Lehmann 2008; Stead et al. 2007). Though effective, the question is how social marketing is done to promote healthier behaviors alongside the epidemiological dynamics (Vega and Roland 2005).

HIV/AIDS has been an important cause of death and its transmission is caused by unsafe behaviors (Merson et al. 2008). It is an important topic for social marketing (Lefebvre 2011).

Prevention efforts are negative correlated with HIV prevalence and incidence rates (Merson et al. 2008). The AIDS Program Effort Index (Merson et al.) is based on an analysis of 54 countries and reveals that the nations with the highest prevalence rates have on average lower API scores than the ones with relatively low prevalence rates (USAID et al. 2003). This reveals the importance of prevention efforts in epidemic dynamics.

One of the most important and effective tools of social marketing in Public Health is television advertising (Abroms and Maibach 2008; Block and Keller 1995; Della et al. 2008; Hastings et al. 1998). The efforts focusing on HIV prevention constitute extensive archives of media campaigns, generally considered effective (Mattson and Basu 2010; Noar et al. 2009).

As the control of infection is strategically linked to strong prevention plans, that should include social marketing actions (EU 2009; UN 2001), this paper analyzes the relationship between HIV prevention advertising broadcasted on TV in France, Germany, Portugal, and Italy and the epidemic characteristics in these four European Union countries. The paper identifies the targets and messages of those advertisements and discusses the relationship between the management choices and the description of HIV epidemics in each country. The objective of the research is to discuss the use of this tool of prevention, the relationship between the social marketing choices and the epidemiological situations and evaluate the social marketing policies and investments that have been done, improving also future social marketing strategies.

Considering that the majority of advertisements broadcast on Television, even the oldest ones, are digitalized and shared online (Paek et al. 2010; Spigel 2009), data collection was done in the internet. The internet is the most accessible and convenient tool to collect this kind of data, because of the rising routine of sharing videos in different websites and social media and the increasing need to digitize old media archives in the web as a backup of analogical data (Paek et al. 2010; Spigel 2009).

The database was built by in-depth research into the national virtual media archives of the countries belonging to the European Union (EU) since the 1st of January until the 30th of June 2012, when the researchers found saturation in the searching process. We searched for data in: (a) institutional websites and Facebook profiles of the governmental institutions coordinating HIV/AIDS prevention; (b) institutional websites and Facebook profiles of NGOs members of “Aids Action Europe” in each EU country; (c) online media archive INA.fr; (d) online media archive culturepub.fr; (e) video-sharing websites Youtube, Vimeo, dailymotion and Google videos. The searching expressions in video sharing websites were “HIV AIDS Prevention advertisement” in English followed by the name of each EU country also in English because of the fact it is the most important international
After the collection of 539 television advertisements developed in 21 EU countries between 1986 and 2011, we selected 375 (69.6%) that belonged to only four countries: 146 are from France (38.9%), 115 from Germany (30.7%), 76 from Portugal (20.2%) and 38 from Italy (10.1%). We coded and classified the 375 data according to the country and year of broadcast, the source – Governmental, NGO or a partnership of both -, the changing behavior message identifies and the main target. We classified and analyzed data through Nvivo software. The classification allowed a cross analysis of those variables, showing the trends of social marketing choices.

The results show that the relationship between social marketing policies regarding the production of HIV prevention television advertisements and the epidemiological situation in each country is not consistent. Moreover, when there is a relationship between marketers’ choices and epidemics, the advertisements are in general part of a reactive prevention policy.

Television advertisements target especially general people and young people, suggesting an avoidance of targeting the most vulnerable populations to HIV. It may suggest a concerning to reduce the stigma attached to them, but contradicts what is known about marketing segmentation, even in social marketing (Fine 1980).

We may conclude that social marketers need to adapt better advertisement messages to the specificities of each epidemic in order to use this tool to build an active prevention public policy instead of a reactive policy. This research also concluded that the internet tool to collect advertisements is suitable for some countries, but not to others.

The discussion may be useful for management in public sector and non-profit organizations, concerning the evaluation of the social marketing policies and the analysis of investments to improve future social marketing strategies. The results are connected with the analyzed data, whose process of collection was described. Future research may analyze communication appeals in order to understand possible relationships with the epidemiological dynamics. References are available upon request.

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POSITIVE MARKETING TO PROMOTE HEALTHY FOODS AND ADVANCE FOOD WELL-BEING

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SUMMARY

What differentiates marketing for an unhealthy snack food from those efforts designed to promote a healthy alternative? Advertising efforts that promote food to children often use appeals that are “hedonistic, including taste, humor, action-adventure, and fun” (Hastings et al. 2003). Food marketing to adults frequently uses emotion to emphasize pleasurable food experiences (Geuens et al. 2011). While marketing communications for healthy products tend to focus on informing consumers of the nutrition and health benefits of consuming the product, advertising efforts for hedonic foods and beverages often focus on the sensory experience of consuming a product (Hastings et al. 2003). While the marketing practices used to promote healthy versus hedonic products differ, research implies that when low-involvement, utilitarian products (e.g., healthy foods) employ humor or sex appeal, these unexpected advertising strategies may improve brand attitudes. Yet, producers and marketers of healthy foods often focus on cognitive information, such as nutrition information and other dimensions of healthfulness, and neglect affective appeals when they promote their products to consumers.

In this paper we present an organizing framework for marketing communications with a focus on how to translate positive marketing insights into an opportunity to promote healthy foods and beverages. For example, creative ad campaigns like those used to promote California Raisins in the 1980’s or those that use celebrity endorsements as part of the long running “Got Milk!” ad campaign adopt industry best practices to promote a healthy food or beverage in a positive manner. In this paper, we examine how positioning strategies, emotional appeals, advertising schedules, and alternate media may be used by the producers, growers and marketers of healthy foods to advance food well-being.

Combining pleasurable taste cues with a specific health claim may help promote healthy foods by adopting a dual message strategy to position a product as both tasty and healthy. For example, apple producers could use visual techniques to promote their product not only as a “crisp, refreshing snack” but also as one that is a “good source of fiber” echoing the advertising approach of many packaged snack foods. Targeting health conscious consumers with messages designed to satisfy their desires for hedonic indulgences while simultaneously helping them pursue their health goals, producers may use positive marketing to change the expectations and appeal of healthy products.

While we typically think of hedonic taste appeals in relation to less healthy products, it would also be quite possible to use the same approach to describe a healthy food. For example, Stoneyfield Organic employed both sexual innuendo and humor in their 2012 Super Bowl advertisement to introduce Oikos, a new brand of Greek yogurt. Using descriptors such as “incredible creaminess” and “made from fresh, delicious, organic milk” the company creates indulgent taste expectations for their product (www.stoneyfield.com). Creative ads like the Oikos commercial work in two ways. First, they capture consumers’ attention (Smith et al. 2007) by creating a desire to postpone closure, motivating consumers to process the ad (Yang and Smith 2009). In addition, creative ads trigger “positive emotions that transfer to intention, Eugenes … even when consumer involvement is low” (Yang and Smith 2009, p. 945). When consumers are in a positive affective state, research indicates they attend more to visual information as well as the benefits of a product (King and Janiszewski 2011). Emotional responses and enhanced taste perceptions may also be achieved by using product descriptions that explicitly describe the sensory experience consumers can expect when they consume a healthy product (e.g., Elder and Krishna 2010; Lwin et al. 2010). Producers of healthy food products should use these creative techniques to attract attention, transfer positive feelings, and enhance advertising effectiveness.

When making food choices, consumers use information that is most easily accessible within their own memory to form attitudes about a product or brand (Menon et al. 2003). One way to make the affective attributes of healthy
foods more accessible in the minds of consumers is to engage in higher levels of ad repetition and repetition across media vehicles. Repetition creates familiarity and positive affect through incidental exposure (Ewing et al. 1999) and increases demand for the product. As advertisers explore media alternatives and new technologies, executing repetition across different media types such as television and the web create synergy that enhances the effectiveness of ads (Chang and Thorson 2004). The power of repetition achieved via alternative media including social media and mobile advertising may also help place the cost of repetition within reach for the marketers of healthy foods.

By examining the marketing practices for hedonic foods and beverages, entities trying to promote healthy food choices may discover opportunities to entice consumers toward healthier options. Beyond educating and informing consumers, efforts to promote healthy eating should integrate a positive approach to emphasize taste as well as other sensory properties likely to trigger an affective response and increase the desirability of healthy products. Using mainstream appeals that draw upon emotions and emphasize the sensory dimensions of a food together with its health benefits may attract the attention of consumers and impact food choices. Many health advocates criticize the marketing and advertising efforts of food manufacturers and the restaurant industry for contributing to the obesity epidemic by increasing demand for less healthy foods. However, by examining the successful advertising practices used by these commercial entities, marketers of healthy alternatives together with health advocates and policymakers may learn from their commercial practices and identify new pathways to positively promote healthy food choices and advance food well-being. References are available upon request.

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CHOICE, CONTROL, AND THE PARADOX OF SMOKING
DURING PREGNANCY

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SUMMARY
Numerous studies have documented the health risks of smoking during pregnancy; these include increased risk of miscarriage, low birth weight babies, stillbirth, and sudden infant death (SIDS). This well-established evidence has led public health researchers and health promoters to encourage pregnant women who smoke to quit. However, despite these efforts, many women continue to smoke during and after pregnancy, putting themselves and their children at risk.

Pregnant women who smoke typically come from communities where smoking is commonplace and their behavior more accepted; this perceived normalcy reduces the urgency that commonly prompts and motivates quitting. Some pregnant women may also see quitting as segregating them from their social network at a time when they require greater support. Further, they may see other women smoking while pregnant, and may themselves have been born to smokers; comparisons between their own experience of living among smokers and the lack of perceived harm may support beliefs that smoking poses few, if any, risks to unborn children. Thus, despite the wider social disapproval many pregnant women report experiencing, acceptance of smoking within their immediate social network reassures them may reduce their motivation to quit.

Cessation interventions must recognize the ambivalence many pregnant women feel about smoking, which is simultaneously stigmatized, commonplace, and seen as beneficial. Messages need to counter views of smoking as a reward, challenge the self-exempting beliefs pregnant smokers construct, and provide stimuli that prompt and support quit attempts while also avoiding reactance. Cognitive dissonance theory provides a framework for exploring this ambiguity as it recognizes the tension generated when people’s beliefs conflict with their behavior and the potential for behavior change. Women who are pregnant and smoking may experience acute tension following their frequent contact with health professionals, who will advise them to quit, and if they attract strong social disapproval. Some resolve this tension by quitting but others discount the risks of smoking and use the apparent health of other smokers’ babies as evidence that smoking is not inevitably harmful. These varied outcomes raise questions about how social marketers might use the tension created by denormalization, knowledge of smoking’s harms, and advice from health professionals, to promote cessation among pregnant women.

We addressed these questions by exploring how women rationalize smoking during pregnancy and their response to cessation messages designed to elicit varying levels of affect. The two phase study first involved in-depth interviews with 13 women who were pregnant and smoking, or who had recently given birth and smoked during their pregnancy. Participants discussed smoking’s role in their lives and their perceptions of images presented in a photosort task. Themes identified informed cessation advertisements that were tested in a second phase, comprising in-depth interviews with a further 21 women who were either pregnant or who had recently given birth and who had smoked while pregnant.

We identified two dominant metaphors in the Phase one data: choice and control. Participants tried to assert smoking as a choice over which they maintained control, even though none had made an active choice to become a smoker. They used choice metaphors to frame smoking and quitting as a “choice” only they could make and to distance themselves from stereotypes of addicted smokers. Depictions of smoking as a choice placed their behavior within a rational framework, which separated it from emotional consequences and enabled counter-arguments. However, for all their efforts to establish smoking as a choice, participants struggled to maintain this privileged position of control and autonomy; the resulting dissonance weighed heavily on many and, ironically, reflected the lack of power they felt.
The dominance of control and choice metaphors in participants’ discourse suggested three potential cessation message themes; the first two themes aimed to arouse negative affect by illustrating the effects of smoking on babies who had no choice in being exposed to toxins, and the consequences children face when their parents are harmed by smoking. The final theme recognized smokers’ autonomy, invited them to quit and called on them to recognize children’s right to a smokefree life. The first two themes allowed “choice” to be imbued with more affect-laden attributes that could challenge the reasoned positions smokers had constructed. The third approach avoided a didactic tone but attempted to engage with smokers’ reasoning, provided opportunities to adopt smokefree behaviors, and challenged smokers to consider others’ rights.

Phase Two participants reacted strongly to messages depicting the first two themes, which graphically depicted harms caused by smoking and showed the distress of children who could become tobacco orphans. Their emotionally-laden responses highlighted children’s lack of choice and few participants embarked on counter-arguments. However, while participants said they resented receiving quitting advice, which they thought impinged on their rights, messages that appealed to their autonomy were less effective and more likely to stimulate rationalizing.

In summary, messages depicting harm cut through rationalized defenses and elicited strong reactions that participants found hard to dismiss. Messages reframing choice from a child’s perspective were thought more likely to prompt cessation than rational themes, and were also more resistant to counter-argument. However, evidence of rationalization suggests that social marketing, while important, is not a panacea and should not pre-empt action in other domains. References are available upon request.

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IS THE PRICE RIGHT? POLICY IMPLICATIONS ASSOCIATED WITH SCANNER DATA INACCURACY

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SUMMARY

There was widespread publicity surrounding price scanning accuracy in the United States in the 1980s and 1990s. Since then, the U.S. Federal Trade Commission (FTC) has, for budgetary or other reasons, shifted its efforts to other issues leaving individual state regulating agencies to determine whether scanner accuracy will be monitored and enforced, all while other countries have begun more fervent investigations into price scanner accuracy and regulation (e.g., CCGD 2008; Government of South Australia 2008). Here, we evaluate the degree of scanner inaccuracies existing across different retailer types. Data from the most recently released inspection period conducted by officials from the U.S. Weights and Measures offices in thirty-six states and the U.S. Virgin Islands and a more recent data set garnered in a statewide study are used to establish the extent of inaccuracy. The empirical findings demonstrate that systematic errors still plague the data and vary across retailer types though their levels have declined compared to prior results. Next, survey results are summarized illustrating how scanner inaccuracies impact consumers’ reactions to stores. Specifically, buyers express negative attitudes, lower patronage intentions, and more negative word-of-mouth intentions when overrings are more prevalent than underrings. Finally, implications for public policy are discussed. References are available upon request.

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PRODUCT CONTENT RATINGS IN THE ENTERTAINMENT INDUSTRY

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SUMMARY

Currently in our society children, teenagers, and young adults have legal access to a plethora of different types of media on a daily basis. These potentially influential sources include television, movies, music, video games, computer games, the Internet, books, and much more. Due to the natural existence and subsequent artistic emulation of mature subject matters involving violence, harsh language, nudity, and drug use; the content available through these assorted forms of media varies greatly, ranging from perfectly acceptable to extremely inappropriate for younger audiences.

In response to societal concerns about undue exposure to youths, several ratings systems were voluntarily developed by various media organizations in order to ideally provide accessible, easy to understand information to adults (ESRB 2011a; MPAA 2011a; RIAA 2011). Such ratings are intended to assist parents in choosing what is appropriate for their children to consume without having to independently research every single entertainment product that is made available. However, even if some parents maintain high levels of discipline with their children, kids are still potentially able to have friends with a greater level of access to such products. The problem of keeping adult only forms of media out of young hands is one shared by parents, businesses, government, and society as a whole.

Due to concerns about exposure to youths, the regulation of various entertainment industries is becoming an increasingly important topic in American society (Anders 1999; Collier, Liddell Jr., and Liddell 2008; Federal Trade Commission 2000, 2001a, 2001b, 2002, 2004; Grier 2001; Hemphill 2003; Hoy and Andrews 2006). As concerns continue to grow about the potential effects of violent and adult-oriented entertainment on minors, it is possible that there will be additional calls for increased regulation. It is the public responsibility of each entertainment industry to stringently self-regulate their content in order to avoid government intervention (Gupta and Lad 1983). Specifically, inappropriate product content must be kept away from individuals that are deemed too young to safely consume the product. This includes regulation of content ratings, as well as advertisements and product placements within these forms of entertainment. Furthermore, such adult-oriented products should not be promoted through outlets that purposefully target underage consumers.

Several research questions are evaluated: (a) What is the status of product regulation in the entertainment industry? (b) What are the risks associated with adult-oriented material in the entertainment industry? (c) What types of ratings systems are preferred by consumers? (d) Which types of ratings systems are most effective? (e) Should all forms of entertainment media use a compatible ratings system?

Though some research has been completed in this area, this paper develops a broader analysis of the issues from marketing management and public policy perspectives. First a brief history of the motion picture, recorded music, and electronic game industries is provided along with a review of their current entertainment ratings systems. Then these three industries and their self-regulatory efforts are examined in terms of how they are affected by government regulation (e.g., Federal Trade Commission 2000, 2001a, 2001b, 2002, 2004), the potential negative effects resulting from consumption of violent media by youths (e.g., Anderson and Bushman 2001; Anderson and Dill 2000; Bushman and Anderson 2002), as well as past, present, and prospective legal actions (e.g., Anders 1999; Collier, Liddell Jr., and Liddell 2008; Liptak 2011). Lastly survey results that propose and test multiple standardized ratings systems are analyzed and discussed. References are available upon request.
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THE POLITICAL CEO: AN EVENT STUDY COMPARING CONSUMER ATTRIBUTIONS OF CEO BEHAVIOR

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SUMMARY

The treatment of top management in the existing literature has emphasized leadership style, personality, and the relationship between behavior and performance. The popular press and media, instead, provide coverage of the public image of the Chief Executive Officer (CEO) including CEO hobbies, political views, and other behaviors unrelated to their position in top management. The discrepancy in coverage leaves marketing researchers and consumers with differing perspectives on CEO behavior, which leaves us with a gap in the existing literature.

This study attempts to understand consumer attributions of CEO political behaviors and if consumers use personal, but publicized political beliefs of CEOs to evaluate the coupled firm and the firm’s products. The objectives of the study are to establish a relationship between negative political behavior of key members of the firm and consumer evaluations of the firm, to extend the use of attribution theory in marketing to include consumer explanations of events unrelated to firm strategy or operations, and to compare and contrast both the consumer attribution process and firm consequences of volitional and situational events. We define a volitional event as an instance when an organizational member publicly volunteers his/her personal wishes, preferences, or value and a situational event as an event that only once or on an irregular basis and informs the public about operational problems rather than firm values. Drawing from attribution theory, volitional events were expected to be attributed as stable and, thus, attributed internally, whereas situational events are expected to be attributed as unstable, and thus attributed externally. Further, negative affect among consumers with internal attributions was expected to be greater following a negative volitional event as compared to a negative situational event. Among these consumers, purchase intentions were expected to cease to a greater degree following a negative volitional event as compared to a negative situational event.

We sample and code approximately 1,500 social media impressions on the Twitter platform total surrounding two events in the fast food industry related to distinct areas in public policy: (1) Chick-fil-A CEO Dan Cathy’s public volunteering of political beliefs about the definition of marriage (volitional event) and (2) Taco Bell’s public response to a class-action lawsuit suggesting promotions about beef menu items are false (situational event). Both events are shown to be considered negative by consumers and the media. Social media was chosen as the data source for the study for a number of reasons including its viability as a source for measuring brand impressions, its accessibility and permanence in its role in electronic word-of-mouth, the prevalence of use among consumers, the ability to gain a nearly real-time glimpse into consumers’ experiences of marketplace events, which also avoids problems with respondent memory, and the ability to avoid validity threats such as response bias due to the naturally occurring data without researcher involvement. The social media data were gathered by the researchers in a time frame surrounding the events that accounted for both pre-event and post-event consumer responses. The data were coded by one research and one independent coder for affect, consumer attribution, and consumer response (future purchase intent). Interrater reliability Kappa coefficients range between .58 and 1.0, and all reflect at least acceptable agreement between raters.

The results of the study suggest that consumers utilize information about CEO behavior in their firm evaluations. We find consumers attribute CEO political behaviors, though unrelated to firm operations, toward the firm. In other words, spillover can occur from top management’s personal, political behavior to the firm itself. Our first objective involved establishing a relationship between political behaviors of key members of the firm and consumer evaluations. Our findings do not offer strong support for a relationship between event type and affect, suggesting negative affect is likely to follow both volitional and situational events similarly. Our second objective involved extending attribution theories to include consumer explanations of events unrelated to firm strat-
egy or operations. Based on analysis social media data, it appears that consumers are more likely to attribute disapproval of CEO political behavior internally (toward the firm) than externally (toward forces outside the firm). Our hypotheses suggesting attribution type (i.e., internal, external locus of cause) will influence affect toward the firm, however, involved mixed support. On the one hand, attribution type does not appear to influence affect toward the firm, but on the other hand, no Tweets of the situational event indicated decisions to no longer return to Taco Bell while all Tweets of the volitional event indicated decisions to no longer return to Chick-fil-A. Our final objective involved comparing and contrasting both the consumer attribution process and firm consequence of volitional and situational events. We found that a product lawsuit (situational) is more likely to involve internal attributions than a firm’s public response to CEO political behavior (volitional). Consumers may experience more negative affect because they trusted public policy to regulate product-related operations as in a product lawsuit, but have no such public policy expectations when it comes to CEO political behavior. Overall, this study confirms that media representations of the individual CEO are useful to the public in predicting and understanding the abstract firm. References are available upon request.

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