How Does Drug and Supplement Marketing Affect a Healthy Lifestyle?

Lisa E. Bolton, The Wharton School, University of Pennsylvania, USA
Americus Reed II, The Wharton School, University of Pennsylvania, USA
Kevin G. Volpp, Philadelphia Veterans Affair Medical Center and School of Medicine, University of Pennsylvania, USA
Katrina Armstrong, Leonard Davis Institute and Abramson Cancer Center, University of Pennsylvania, USA

This research investigates consumer reactions to the marketing of drugs and supplements and the consequences for a healthy lifestyle. A series of experiments provides evidence that drug marketing undermines healthy lifestyle intentions by reducing motivation and efficacy to engage in health-protective behaviors. Supplements “turn on” whereas drugs “tune out” complementary health-protective behaviors (such as healthy eating and physical activity) that contribute toward a healthy lifestyle.

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SESSION OVERVIEW
The objective of this special session is to address an important problem in health care—how to encourage consumers to engage in health-protective behaviors and to comply with medication or treatment regimes. Such research is part of a larger literature on how consumers respond to health communication messages and how to promote active coping strategies among consumers in the health domain.

Each project offers a unique yet complementary perspective on these issues. Specifically:

1) “How Does Drug And Supplement Marketing Affect A Healthy Lifestyle?” investigates the effects of remedy marketing on a healthy lifestyle. It finds that drugs (versus supplements) serve as get-out-of-jail-free cards that reduce healthy lifestyle intentions among consumers within the problem domain. The authors attribute their results to reduced motivation and efficacy to engage in health-protective behaviors that constitute a healthy lifestyle.

2) “Getting Emotional about Health” examines the effectiveness of health messages that present consequences for the self or family. Its premise is that emotions point to the stakes of a disease, and health consequences have two crucial types of stakes: for self and for family. It finds that, when individuals are primed with a positive (negative) emotion, the compatibility between the referent and the emotion fosters (hinders) message processing.

3) “Fact, Fear, or Regret: Getting People to Cope Actively” investigates how the negative emotions of fear and regret as compared to a factual appeal differentially affect coping processes and behaviors. Specifically, a regret appeal evokes a state of responsibility and triggers action-oriented coping (e.g., use of a remedy). In contrast, a fear appeal dampens feelings of responsibility and triggers denial coping. In factual appeals, coping is driven by individual trait coping styles.

Together, these projects examine consumer and message factors that influence the effectiveness of health marketing and, more specifically, adaptive coping (i.e., avoiding risky behavior and starting/maintaining health-protective behavior). In large part, prior research in health communications has been focused on cognitions (e.g., examining consumer response to risk-avoidance communications). Departing from this tradition, the present research emphasizes the roles of motivation and emotion and also extends its investigation to remedy messages (i.e., for products that promise to manage/reduce risk). On the one hand, each project offers a “new” perspective by introducing and examining factors in ways that have not previously been addressed in the literature (e.g., discrete emotions, referent appeals, remedy labeling). On the other hand, each project also points to the “age-old” challenge of designing effective health communications—the myriad ways that consumer characteristics influence message processing. For this reason, our discussant Joel B. Cohen from the University of Florida (who has been chosen for his unique breadth and depth of experience in this area) will focus specifically on the advantages and disadvantages of each perspective within a broader context. Doing so is fundamental to any effort to understand and integrate the diverse findings in the health marketing literature—and, ultimately, to improve our understanding of consumer health behavior and, in turn, consumer welfare.

EXTENDED ABSTRACTS

“How Does Drug And Supplement Marketing Affect A Healthy Lifestyle?”
Lisa E. Bolton, Americus Reed II, Kevin G. Volpp and Katrina Armstrong
A variety of health care products or remedies purport to aid consumers in adopting or maintaining a healthy lifestyle. Although the intended objective of remedies is to reduce health risks, recent research suggests that remedy marketing may have unintended consequences (i.e., boomerang effects) that undermine risk-avoidance by consumers (Bolton, Cohen, and Bloom 2006). Within the health domain, there are many risky behaviors (e.g., high-fat eating, a sedentary lifestyle, smoking, excessive drinking) that are attractive to consumers and yet increase disease risk (e.g., heart disease, stroke, cancer, liver disease). The present research investigates whether the boomerang effect on healthy lifestyle intentions extend to both drugs and supplements as remedies.

On the surface, there may seem little reason to expect differences. For consumers within the problem domain, both drugs and supplements may be perceived as remedies that reduce risk and thereby undermine risk avoidance via a healthy lifestyle. In contrast, however, we investigate whether consumer react differentially to drug versus supplement marketing. Specifically, we propose that drug marketing may be more likely to boomerang than supplement marketing for two reasons. First, by increasing the salience of thoughts about poor health, a drug may lead consumers to classify their problem as one of poor health. This low self-image may reduce self-efficacy about enacting complementary health-protective behaviors and living a healthy lifestyle (Bandura 1986). Inasmuch as a sick person feels less empowered to take responsibility for their own health outcomes and instead may look to external aid and treatment. Second, drugs—by reducing the salience and perceived importance of other complementary health-protective behaviors—may persuade consumers that drugs alone are sufficient to reduce risk. If so, then consumers will be less motivated to engage in complementary health-protective behaviors. With supplements, additional protective behaviors that contribute to a healthy lifestyle will still be seen as important to protect one’s health—indeed, the name itself serves as a reminder. Based on these two psychological mechanisms, we hypothesize that:

H1: Drugs (compared to supplements) will decrease intentions to engage in healthy lifestyle practices (i.e., a boomerang effect).
H2: Drugs (compared to supplements) will a) reduce perceptions of health and perceived efficacy; and, b) reduce perceived importance of, and motivation to engage in, complementary health-protective behaviors that constitute a healthy lifestyle.
H3: Motivation and efficacy will mediate the effects of drug and supplement marketing on healthy lifestyle intentions.
H4: A combined intervention (designed to increase motivation and efficacy to engage in health-protective behaviors) will increase healthy lifestyle intentions for a drug.
remedy (versus no intervention or a single-mechanism intervention).

In a set of laboratory and field experiments, we investigate the effects of drug and supplement remedies (e.g., fat-fighting pills, anti-cholesterol products) on intentions to live a healthy lifestyle. In experiment 1, a drug (versus supplement) undermined healthy lifestyle intentions. In experiment 2, healthy lifestyle intentions declined for a drug (versus supplement) as effectiveness increased. In experiment 3, drugs were associated with poorer health and reduced importance of healthy lifestyle practices than supplements; cognitive schema about drugs and supplements were shown to influence such judgments. In experiment 4, a consumer taking a drug (OTC or prescription) versus a supplement or no product was perceived as engaging to a lesser extent in healthy lifestyle practices. A drug also led to lower perceptions of health, efficacy, ability, and motivation to engage in healthy lifestyle behaviors. In experiment 5, a drug reduced efficacy and motivation to engage in health-protective behaviors and, in turn undermined healthy lifestyle intentions. When accompanied by a combined intervention that increased efficacy and motivation, the drug no longer boomeranged. Finally, in experiment 6, a combined intervention accompanying a drug remedy that targeted efficacy and motivation increased healthy lifestyle intentions; single-component interventions targeting motivation or efficacy alone did not.

These findings support our hypotheses and are significant for five reasons: 1) our research proposes a boundary condition in the health domain for the boomerang effect of remedies demonstrated in previous research, namely the type of product (supplement versus drug); 2) identifying products as supplements (or supplemental in nature) could serve as a corrective technique by reminding consumers that their use should accompany a healthy lifestyle; 3) from a health care perspective, corrective interventions that target motivation and efficacy as mediating psychological mechanisms can ‘undo’ the drug boomerang and promote healthy lifestyle practices; 4) from a consumer welfare perspective, the proliferation of supplement marketing may in fact be less harmful to a healthy lifestyle than similar drug marketing that undermines other health-protective behaviors; and 5) from a public policy perspective, the marketing activities of companies promoting drugs and supplements may merit attention to ensure that information is prominently displayed to reinforce healthy lifestyle practices. More generally, these findings add to the growing debate over the regulation of drug and supplement markets, the role of direct-to-consumer advertising, and de-marketing efforts to reduce risky consumption. Specifically, our research suggests that drugs boomerang on consumers by undermining their motivation and efficacy to engage in health-protective behaviors. Thus, consumers “tune out” other health-protective behaviors that contribute to a healthy lifestyle. In contrast, supplements remind consumers to “turn on” complementary protective behaviors as part of a healthy lifestyle package. Thus, drug marketing—and even supplement marketing—should be treated with caution—lest such products seduce consumers into treating them as get-out-of-jail-free cards.

“Getting Emotional About Health”
Nidhi Agrawal, Geeta Menon and Jennifer L. Aaker

It is well documented that people’s self-perceptions are often self-enhancing, even in the face of adverse reality. People tend to underestimate the likelihood of contracting a disease (i.e., “unrealistic optimism” or “self-positivity bias”), raising concerns regarding the effectiveness of health-related advertising. Extant research has focused largely on the role of moderating factors that increase self-risk perceptions, thereby heightening health awareness and disease prevention (e.g., Luce and Kahn 1999; Raghubir and Menon 1998). We build on this base of research but focus on a different set of phenomenon.

Our premise is that emotions point to the stakes of a disease, and health consequences have two crucial types of stakes: for self and for family. Therefore, to understand the effectiveness of health messages that present consequences for the self or family, one needs to take into consideration the role of emotions—both as a provider of resources and of information. Important research questions we address pertain to: (a) the role of discrete emotions in fostering the acceptance of vulnerability or leading to the rejection of vulnerability, (b) how discrete emotions and message characteristics interact to influence message effectiveness, and (c) delineating the process by which these effects occur. To address these gaps, we conducted four experiments that examine the role of four strategically-chosen discrete emotions (happiness, peacefulness, sadness, agitation) in influencing message effectiveness, with a particular focus on how the emotions interact with health messages focused on the consequences of an illness for self or family. We show that when primed with a discrete positive (negative) emotion, the compatibility between the message referent and the discrete emotion fosters (hinders) the processing of health information. Further, this effect occurs due to an increase in the negative emotional state in compatible situations while processing disease-related information.

We argue that discrete emotions, varying on the dimensions of valence and self/other-relatedness, can influence the processing of health messages featuring the two distinct referent groups. While the valence of the emotion (e.g., happy, in the case of happiness) becomes a source for the acceptance or rejection of a message that presents a relevant health threat, the self/other-relatedness dimension of the same emotion (e.g., self-relatedness of happiness) forms the basis of compatibility with the message referent (e.g., self). Thus, this research integrates recent work on moods as antecedent states influencing the resources to process the message (e.g., Keller, Lipkus, and Rimer 2003) with research suggesting that discrete emotions may be appraised on distinct dimensions (e.g., Lerner and Keltner 2000).

We prime happiness and peacefulness (experiment 1), sadness and agitation (experiment 2). The results show that under happy emotional states, self-referent health appeals are more effective than family-referent appeals, whereas the converse occurred for peaceful emotional states. And under negative emotional states like sadness (vs. agitation), the compatible self-referent health appeals were less effective than family-referent appeals. Together, these findings suggest that compatibility between message referent and self/other relatedness dimension of the emotion impacts message effectiveness—an effect that is critically dependent on valence of the emotion. In experiment 3, we expand the set of message effectiveness measures, and enhance external validity by embedding the message in a more realistic domain where a magazine primes the emotions that then foster or hinder the processing of health related information. Here too, we demonstrate that a compatible message referent leads to greater message effectiveness, but only for positive emotional states when there are resources to deal with such emotionally aversive messages. Negative emotions appear to encourage a mood repair motive, discouraging consumers from accepting the messages presented by a compatible appeal. We also demonstrated that the interactive effect of emotional valence and compatibility on message effectiveness is mediated through depth and quality of processing of information, thereby providing evidence for the process that we posit. Finally, experiment 4 demonstrates that emotional deterioration underlies the effects observed in experiments 1-3.
Our results have implications for the literature on emotions, compatibility effects, and health communications. Our findings speak to (a) examining compatibility effects between message characteristics and individual factors, and (b) positing specific cognitive-based mechanisms underlying the effects including elaboration likelihood, experienced fluency, or perceptions that a persuasive message “just feels right.” We add to this literature in three ways. First, we show that compatibility can occur not simply between a primed construct and message characteristics, but also between one dimension of an incidental discrete emotion and message characteristics. Second, we extend this emotion-based compatibility finding by demonstrating its dependence on the valence of the emotion such that positive emotions foster compatibility effects, but negative emotions make compatible appeals less persuasive. Extant research on compatibility effects has found only argument strength as a moderator of the persuasiveness of compatible messages (Petty and Wegener 1998). Our findings introduce valence of emotion as another such moderator.

“Fact, Fear, or Regret: Getting People to Cope Actively”
Kirsten Grasshof, Barbara Kahn and Mary Frances Luce

Negative emotions are commonly used in advertisements promoting everything from mammogram screening to cat food. Negative emotions vary in important ways, perhaps most notably in the action tendency or coping response they generate. For example, fearful people will tend to flee dangers while angry people approach them. Some negative emotions make people feel incapable of managing the situation themselves so they escape while others make people feel capable and responsible so they act.

Lazarus (1991) suggested that people cognitively appraise a situation on several different appraisal dimensions (e.g., valence) and that these cognitive appraisals give rise to different emotions. When negative emotions are experienced, people generally use coping strategies to mitigate them. Recent research has begun to investigate how specific emotions and or specific appraisals prompt various coping strategies. For example using a recall task, Folkman and Lazarus (1988) found that appraisals of responsibility lead to action-facilitative-coping (e.g. “I thought about what steps to take”). Conversely, feelings of threat and a lack of efficacy led to avoidance coping (Duhauchek 2005). These results support the hypothesis that links emotions that evoke strong (weak) feelings of responsibility, for example regret (fear), with active (avoidance) coping strategies. However, despite strong theoretical support and some recent experimental support, research that directly examines the link between emotions, coping, and behavior is still scant and riddled with prevalent inconsistencies and null effects (Skinner et al., 2003).

The present research investigates how the emotions of fear and regret as compared to a factual appeal differentially affect coping processes and the resulting impact on behaviors. In this research instead of asking participants to indicate how they cope with an emotional event we actually observe the coping process by watching how they navigate through various Internet sites, allowing us to measure coping patterns and times. This format of using internet links that are reflective of coping strategies is congruent with the way many consumers process emotionally charged decisions from deciding what brand of car to purchase to considering different types of medical treatments.

In study 1, participants were exposed to messages pretested to evoke fear or regret, each compared to a more factual control message regarding Chlamydia. They were then given the opportunity to explore several Internet links as much (or little) as they desired. The available links were designed to reflect active coping strategies (1. how to use condoms, a step by step guide to proper condom use, 2. purchasing condoms, a site that sold discounted condoms), information seeking strategies (3. advantages and disadvantages to condom use, 4. ask Alice, a peer generated site discussing condoms) or denial strategies (5. a joke site). The links that were explored and time spent per link and overall were recorded.

The results indicated no significant differences in the overall time spent coping. However, the relative mix of action oriented versus denial coping varied. Participants in the fear condition spent a significantly smaller portion of time actively coping than either those in the regret or factual condition. Furthermore, the fear participants spent a significantly larger portion of time exploring the denial (joke) link. The results support our hypothesis that participants exposed to a fear message are less likely to cope actively and more likely to engage in denial coping than regret or factual participants. We also found preliminary support for our hypothesis that participants in the regret condition would cope more actively than those in the factual condition. Finally, coping tendencies appeared to be moderated by individual coping styles in the factual condition, and thus in the absence of a specific emotional theme to direct coping strategies.

In a second study we find that the differences between regret and fear coping are exacerbated in an emotional versus a deliberative mind set. We also find that the actual decision to purchase condoms is predicted by the results in the emotional condition. This is consistent with our expectation that a condom serves as a visceral cue evoking emotional reactions and coping tendencies.

In summary, using real time measures of coping we find the theorized differences between the high responsibility emotion of regret and the low responsibility emotion of fear. This suggests that when a state of responsibility is evoked through an emotional appeal (specifically a regret appeal), action oriented coping can be triggered. However, when feelings of responsibility are dampened through a fear appeal, denial coping is triggered.

REFERENCES