TO HELP OR NOT TO HELP:
THE EFFECTS OF AFFECTIVE EXPECTANCIES ON
REACTIONS TO PROSOCIAL PERSUASIVE MESSAGES

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ABSTRACT

SHEETAL J. PATEL: To Help or not to Help:
The Effects of Affective Expectancies on Reactions to Prosocial Persuasive Messages
(Under the direction of Sriram Kalyanaraman)

Researchers examining the concept of compassion fatigue have suggested that negative affective expectancies (expectations about how a person will feel in the future) about the outcomes of prosocial acts resulting from the news can negatively influence prosocial behavior and decrease compassion within the population. Yet, there has been little empirical evidence on which to stake this claim.

The overarching purpose of this dissertation was to add to the theoretical nature of compassion fatigue by examining the effects of affective expectancies, social marketing messages, and cognitive load on feelings, attitudes, and behavior related to prosocial acts. In doing so, this dissertation used the theories of affective expectancies and attitude toward the ad to explain the possible influences of expectancies on responses to persuasive messages. The main experiment employed a 3 (valence of affective expectancy: positive, negative, no expectancy) x 2 (valence of social marketing messages: positive, negative) x 2 (cognitive load: high, low) between-subjects factorial experiment to examine the influence of affective expectancies on feelings, attitudes, and behaviors.

Overall, the findings from this research suggest some evidence that affective expectancies do in fact influence responses to social marketing messages in terms of feelings, attitudes, and behavior, though not necessarily in the predicted pattern. Affective expectancies directly influenced feelings and compassion while indirectly influencing

attitudes and behaviors. Affective expectancies also interacted with the valence of the social

marketing message and cognitive load to influence attitudes toward the prosocial behavior.

The implications of these effects on persuasive messages, through which prosocial behavior

can be influenced, are discussed.

To my parents, Kanak and Janak Patel, and my husband, Anup Suresh, who have shown faith

in me no matter the circumstance and never fail to amaze me with their unending support and

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CHAPTER ONE

INTRODUCTION AND LITERATURE REVIEW

John and Sarah are a married couple who both enjoy reading the news online in the morning. One day, John reads a news story that addresses the problem of hunger in the United States. It states that the number of people needing help is so high that people who wish to help by donating time or money are overwhelmed and experience a sense of disillusionment. John reflects on what he has just read, especially about how people feel bad even after helping out. He figures that if he were to donate his time or money, he too would end up feeling sad.

Sarah, on the other hand, reads a completely different news story regarding hunger, one that is more optimistic about the possibilities of solving the hunger problem. She reads quotes from people who specifically say that they feel great about donating despite the number of people needing help. Sarah surmises that she would also feel good if she donated something.

Later that day, John and Sarah both happen to see a webpage that solicits donations to relieve hunger as part of a nonprofit organization's social-marketing efforts. In contrast to the news story that John read, the webpage is very upbeat, similar to Sarah's news story. It discusses how wonderful people feel after donating or volunteering. In light of the expected feelings that John and Sarah developed after reading the two different stories in the morning, will the webpage persuade the couple to donate? Given that John figures he will feel bad and

Sarah thinks she will feel good, will they react differently to the positive advertisement? Furthermore, will John even notice that there are differences between the two messages he read, and if so, does it even matter in terms of his decision to donate?

As the above narrative illustrates, people often develop expectations about how they might feel at a future time (Wilson & Klaaren, 1992). These expectations—which are known as *affective expectancies*—have been the focus of considerable empirical attention (e.g., Geers & Lassiter, 1999) and have been shown to influence subsequent emotions and behavior in different domains (e.g., MacInnis, Patrick, & Park, 2005; Wilson, Lisle, Kraft, & Wetzel, 1989). Yet how these expectations might influence attitudinal and behavioral reactions to a persuasion attempt, as exemplified by the narrative above, is still unclear. Central to the current study is the premise that people's expectations about how they will feel can influence affective reactions to persuasion attempts, and subsequent attitudes and behavior.

One domain that appears to be especially ripe to examine affective expectancies is that of social marketing. Social marketing messages are crafted to persuade the public to behave in ways that benefit society by way of decreasing the suffering of other people (Kotler & Zaltman, 1971). Prior research examining media effects of social marketing messages has surmised that consumers who are exposed to these messages and are also exposed to news stories about social causes (e.g., disease, famine) can develop affective expectancies about prosocial acts (Moeller, 1999; Tester, 2001). These expectancies in turn are posited to influence actual prosocial behavior. Prosocial behavior, in this context, refers to a voluntary action that is intended to benefit others beyond simple sociability, such as donating time, items, or money (Smith et al., 2009).

Social marketing messages and news stories, for example, may focus solely on the social problem and may not provide a solution or positive outcomes of helping or may also focus on the negative feelings people in encounter when helping, as was the case in John's news story (negative frame); or they may focus on the solution to a social problem and the positive feelings of those people involved in efforts to relieve suffering (positive frame), as was the case in Sarah's news story (see Moeller, 1999). It is also possible that social marketing messages and news stories may not even address feelings of people trying to help (neutral frame). In this context, to frame is to make some aspects of a certain message more salient in a communicating text, in a way that may encourage a certain perspective on a particular problem (Entman, 1993).

Negatively and positively framed media messages, in particular, can result in consumers expecting to feel either bad (negative expectancy) or good (positive expectancy) respectively after acting prosocially (Moeller, 1999). In fact, it is negative expectancies resulting from news stories specifically that have been thought to lead to burnout toward social causes—an emotion described as *compassion fatigue* (CF) (Höijer, 2004; Moeller, 1999). Because news-induced negative expectations can lead to CF, they have been blamed for negative emotional reactions and attitudes toward acting prosocially and decreased prosocial behavior (Tester, 2001; Kinnick, Krugman, & Cameron, 1996). The news stories that induce negative expectations have, therefore, also been blamed for decreases in funding and the ability of nonprofits to sustain funding (e.g., *Economists*, 2008; Gose, 2010). Little empirical research exists to determine whether CF develops immediately or over time. Moeller (1999) suggests CF develops over time while other research suggests that it can develop in reaction to a particular event (Kinnick et al., 1996) or as the collapse of

compassion research suggests, it can occur immediately depending on the number of suffering people that need help (Cameron & Payne, 2011).

However, researchers have inferred that it may be possible for such news-induced expectations to influence intended outcomes of social-marketing messages that are juxtaposed with these new stories. This is because expectations can influence affect, attitudes, and behavior, which are typical outcomes of social marketing messages (see Kinnick et al., 1996; Moeller, 1999). This may occur perhaps because expectations could influence emotional reactions to social marketing messages through assimilation (matching) and contrast (mismatching) effects (Wilson & Klaaren, 1992). For example, John's news-induced negative expectations may negatively influence affective reactions to the webpage ad due to assimilation effects, despite the fact that the ad was positive. Thus, the valence of expectations could influence persuasive message outcomes regardless of the frame (positive/negative) of the marketing message. Should this be the case, negative affective expectations could adversely influence the intended positive affective outcomes from a social marketing message. Accordingly, positive or negative emotional reactions may then influence attitudes and prosocial behavior, as posited by research on CF. Despite the potential fallout from negative expected feelings, such as decreased funding, there is little empirical study of the joint media effects of news stories about social causes and social-marketing messages on emotions and resulting attitudes and behavior. In fact, more broadly speaking, little research exists to suggest how persuasion attempts might be influenced by affective expectancies.

When it comes to being compassionate, the evolutionary view of compassion suggests that people experience compassion and are motivated to help due to particular

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survival situations (Goetz, Keltner, & Simon-Thomas, 2010). In this stream of research, the emotion of compassion serves to help a person to survive by protecting the welfare of those that are vulnerable and are important to a person and enables cooperative relations with others. Other motivations for helping suggested from a functional perspective that are related to the emotion of compassion are one's own values, social goals, and self-protective and self-enhancement goals (Clary et al., 1998). Each of these motivations comes with the expectancy of feeling good after acting compassionately and affecting some kind of change in the suffering population. Even outside of being compassionate, motivations related to career and learning still come with the end goal of feeling good after helping. Therefore, these expectancies are important to motivating people to act compassionately.

The issue of studying the relationship between news-induced affective expectancies and social marketing messages is further compounded by the limited processing resources that consumers have. This is because processing resources can influence information processing of such media. While the media have increasingly bombarded consumers, people cannot devote all their attention to processing media messages. As social-marketing messages vie for consumers' limited attention in a tough competitive environment, availability of processing resources becomes an important factor in exploring the relationship between expectations and persuasive messages, especially when decreases in funding and sustaining long-term funding are at stake (Giving USA 2010, 2010). For example, previous scholarship on affective expectancies posits that whether or not affective reactions to social marketing messages match or mismatch expectations depends on the amount of processing resources available when viewing social marketing messages (Geers & Lassiter, 1999).

Given the potential influence of affective expectations in the persuasion process, this dissertation aimed to answer the following research question:

What is the relationship between valence of news-induced affective expectations (positive, negative, no expectancy), valence of a social-marketing message (positive, negative), and processing resources (high or low) *and* affective reactions to a social marketing message, attitudes, and prosocial behavior?

This study endeavors to extend the literature on affective expectancies, persuasion and advertising, and health communication by investigating the effects of affective expectancies on emotional reactions to health-related social marketing advertisements as well as consequent attitudinal and behavioral outcomes. The applied ramifications include informing more effective message designs and campaign strategies for nonprofit organizations seeking to increase prosocial behavior for the benefit of societal health, especially when audiences experience CF. Findings can also be more broadly applied to health communication efforts and product advertising.

The remainder of this chapter reviews the literature and theoretical frameworks of CF and affective expectancies. Chapter Two describes the methods and results of the experimental study conducted. Chapter Three concludes by discussing implications and limitations of this dissertation and suggests directions for future research.

Literature Review

The literature review begins by describing what affective expectancies are and how news media can influence affective expectations about acting prosocially. Next, the Affective Expectancy Model (AEM) provides a framework for how positive and negative news-

induced affective expectations can influence affective reactions to a positive or negative social marketing message, depending on the amount of processing resources available. Then, the rationale underlying how affective expectancies and affective reactions to an ad can influence attitudes and behavior is discussed. Finally, hypotheses for the experimental study are presented.

News-induced Affective Expectancies

Affective expectations are defined as "people's predictions about how they will feel in a particular situation or toward a specific stimulus" (Wilson & Klaaren, 1992, p. 3). The word "stimulus" refers to a certain future event or situation, such as seeing a movie, attending a friend's wedding, or donating to a charity.

People can have expectations about certain aspects of feelings. Prior research has defined four characteristics of feelings for which people may have expectations: (1) the valence of a future feeling (e.g., positive or negative), (2) specific emotions to be encountered (e.g., sadness, joy, happiness, fear, anger), (3) the intensity of an emotion, and (4) the duration of that future emotion or feeling (MacInnis et al., 2005; Wilson & Gilbert, 2003). For instance, audience members may feel that volunteering at a soup kitchen will make them feel good (valence of a feeling) for a short period of time (duration). Of relevance to prosocial behavior are the influences of expectations about the valence of feelings after acting prosocially on subsequent affective reactions to a marketing message, the later of which may include both valence of feelings and the specific emotion of compassion as related to CF.

Wilson et al. (1989) and Wilson and Klaaren (1992) describe the different bases on which affective expectancies might be created. These bases are important and relevant to the

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current study, as they relate directly to how affective expectancies about acting prosocially may be influenced by news stories. First, affective expectancies may be based on normative belief rules, which include norms that dictate how people should feel in different social settings (Wilson & Klaaren, 1992). An example of a common norm-based expectation is that an individual should feel good after helping another person because it is the right thing to do. Second, target-based affective expectancies are based on a person's own previous reactions to a certain stimulus. An example of a target-based expectancy might be that a person expects to enjoy volunteering, because they have enjoyed volunteering in the past. Category-based expectations are predicated on how other people have reacted to a stimulus, such as John's experience in the opening narrative. He expected to feel bad after donating, because people in the news story he read also felt bad. According to Moeller (1999), news stories may influence negative affective expectations about acting prosocially by presenting norm- and category-based rules. They may include norms about how one should feel bad after acting prosocially and the negative feelings of others who have acted prosocially.

In his analysis of the relationship between compassion, morality, and the media, Tester (2001, p. 13) describes the feelings of CF that can result from negative affective expectancies that can emanate from news media about social issues:

> Compassion fatigue means being left exhausted and tired by those [news] reports and ceasing to think that anything at all can be done to help . . . Compassion fatigue means a certain fatalism. It leads to the conclusion that this is just the way things are and nothing can be done that will make a difference. Compassion fatigue tells us that giving money to help famine relief in Ethiopia will do nothing to stop the starvation

next time and that to empathize with victims of ethnic cleansing will not stop them becoming the perpetrators of atrocity when they get the opportunity.

Kinnick et al. (1996), after conducting a survey of 316 people, found that CF does exist, and at its simplest, can be defined as a type of burnout towards social problems. The authors conclude that negative feelings about helping, similar to those described by Tester (2001), can result in CF and decreased feelings of compassion. These findings are consistent with similar studies by Höijer (2004) and Moeller (1999) who independently conclude that a person will not feel good after helping because the media provide the frame that there will be another person who needs to be helped or that there are too many people to help or, at the extremes, that a compassionate prosocial act will not alleviate any suffering.

Negative affective expectancies caused by news media are developed due to what Moeller (1999) deems is formulaic news reporting and also the use of negative frames within social issue news stories. Moeller uses the example that such negative phrases as "hellish," and "single worst crisis," are used to describe famine and convey the overwhelming larger numbers of suffering people affected. These frames influence whether people think they can help those suffering. Additionally, Kinnick et al. (1996) suggest that certain persuasive appeals use negative or guilt-ridden emotional appeals to persuade people to act, also creating negative affective expectations.

Repeated exposure to such negative media messages results in audiences becoming exhausted, tired, burned out, and presumably ceasing to think that any prosocial act will help (Höijer, 2004; Kinnick et al., 1996; Moeller, 1999). Audiences develop a feeling of boredom and helplessness in relation to human suffering. They are eventually left desensitized by dreadful events, misery, or suffering in the news and do not think that feeling or acting

compassionately will make them feel good (Höijer, 2004; Moeller, 1999). In other words, they develop feelings of CF. It is affective expectancies that are, thus, blamed for decreases in prosocial behavior in addition to impeding social marketing efforts to increase prosocial behavior.

While previous research has not focused directly on affective expectancies in the news media, studies do indicate its negative influence on emotions and expectancies in audience members. In a content analysis of 300 news articles covering pollution and other social problems, Kensicki (2004) found that news coverage rarely indicated a specific cause, effect, responsible party, or means to act to solve the problems. When media coverage does not discuss any likelihood that problems can be solved, public apathy may result due to a lack of connection between social problems, nonprofit or government organizations, and potential individual action (Kensicki, 2004).

Negative framing in news coverage coupled with an apparent lack of solutions can cause audiences to avoid social cause-related persuasive messages and news stories. For example, a survey of American Red Cross donors following the 2004 Tsunami in Southeast Asia showed that donors experienced feelings of dissonance following the tsunami, and that making a donation restored donors' mental balance (Waters, 2009). However, the study also found that donors avoided or reduced news consumption during that time to avoid additional negative feelings (Waters, 2009).

Other studies show findings that the news media increase negative feelings through content and images. For example one content analysis showed that news media use frames that cultivate fear and danger of the future (Altheide, 1997). Höijer's study (2004) examined the influence of news images of victims of war on audience members, and found that people

had either strong emotional reactions or were desensitized to the images. Of those that did have emotional reactions, some people experienced what she called guilt and shame-filled compassion, where people know they have the means to help, but refrain from doing so, as they do not think they can influence the outcome.

Additionally, the collapse of compassion literature suggests that as the number of victims in need increases, people may feel less compassion (Cameron & Payne, 2011). Varying reasons exist for this effect in this research. However, it has been suggested that this could be due to the cost associated or perceived in helping several others. Given that large numbers of people are typically reported in the news (Moeller, 1999), this research also suggests the potential for people to expect to feel bad when prosocially acting due to a news story.

The Influence of Affective Expectancies on Persuasive Messages

While affective expectations may influence persuasion outcomes (such as affective reactions to social marketing messages, attitudes, and behavior), it is unclear as to how this occurs. The AEM provides a theoretical framework in which to examine how affective expectations influence persuasion.

Affective Expectancy Model. The AEM posits that affective reactions to a stimulus are formed in reference to affective expectations. Specifically, Wilson et al. (1989) and Wilson and Klaaren (1992) suggest that a person may assimilate (match) or contrast (mismatch) actual affective feelings with affective expectations. In a persuasion attempt, the persuasive message would be the stimulus. However, there is an added component of the advertisement not only being the stimulus but a second influence on affective expectancy. A positive ad message would suggest that helping will make a person feel better by providing a

solution, e.g., donating, and letting people know this will actually help those in need. A negative message on the other hand would consist of an ad that lacked any solution or how any action would help a suffering other, but instead would only describe the problem. As described by previous research, it is this "no solutions" approach that can have a negative influence on expectations of helping and compassion by not providing any information on how prosocial behavior may improve a suffering other's wellbeing (see Höijer, 2004, Moeller, 1999).

Thus, as specified by the AEM, affective reactions to a persuasive message may match or mismatch affective expectations developed beforehand. Wilson et al. (1989) state four related possible situations that showcase when assimilation or contrast effects are found. Examples used for each case indicate the application of the framework to the persuasion process.

No Expectation. In this particular situation, a person has no affective expectation before participating in a certain experience. Such situations may include volunteering with a new organization or seeing an advertisement about donating to a new charity. In this case, affective reactions to the stimulus would take longer to develop, as there are no previous feelings from which to draw. However, the authors suggest that having no expectations is not common since new situations may be grouped with other similar experiences, resulting in the creation of expectations. For instance, people may enjoy volunteering in general. They may then group any future experience of volunteering with previous volunteering experiences. This results in transfer of positive expectations based on past experience to a future volunteering situation or reactions to a persuasive message about a new volunteering opportunity.

Matching. In this situation, an affective expectation is confirmed by (or matches) a stimulus, in which case people do not need as much time to determine actual affective reactions, because they use the expectation more than actual feelings in evaluating affective reactions. For example, if people expect donating food will make them feel good (positive expectancy) and they see an advertisement that states donating does feel good (stimulus confirms expectancy), they may assimilate or match feelings about the positive persuasive message and donating with the positive affective expectancy. In this case, it will take less time to actually develop affective reactions, as the expectation about donating is used more to inform reactions rather than actual reactions to the persuasion attempt. If both the expectancy and the message were negative, similar matching effects would occur, producing negative reactions to the message.

Unrecognized Mismatch. In this particular situation, an affective expectation is not confirmed by (or mismatches) the stimulus, and people do not recognize this difference. This will cause people to assimilate their affective reactions with the expectation despite the objective discrepancy. This occurs because, as in the *Matching* situation, people rely on their affective expectations more than the actual information to evaluate how they feel. After reading negative news stories, for example, a person may expect that building a house for one needy family will not make him or her feel good (negative affective expectancy). This person may then view a persuasive message that indicates, in contrast, building a house does generate good feelings (positive social marketing message). The AEM posits that if the person does not notice the discrepancy between expectations and the stimulus, he or she will match affective reactions to the positive message with the original negative expectancy. In this case, while the ad was positive, the person would still have negative reactions to it, due

to previous negative affective expectations. Therefore, the ad would have the unintended effect of increasing negative feelings about the ad and potentially negative attitudes as well as decreasing intentions to act prosocially. Similar matching effects would occur if the affective expectancy was positive and the message was negative, thus, producing positive reactions to the negative persuasive message.

Recognized Mismatch. In this situation, an affective expectation is not confirmed by (mismatches) the stimulus. This discrepancy, however, is recognized by people, in which case, people will contrast affective reactions with the original expectancy. In other words, if the person thinking about building a house in the example above had noticed the discrepancy between the news-induced negative affective expectations and the positive persuasive message, he or she would mismatch affective reactions to the positive message with the original negative expectancy. This would result in positive reactions to the persuasive message. In this case, evaluating affective reactions takes longer, as a person must resolve the discrepancies he or she finds between the expectation and the experience. Again similar effects would occur if the discrepancy between a positive affective expectancy and a negative marketing message was noticed, producing more negative reactions to the message.

Wilson et al. (1989) and Wilson and Klaaren (1992) conducted a series of experiments to test the predictions of the AEM. They were able to provide support for the four cases (*No Expectancy, Matching, Unrecognized Mismatch, Recognized Mismatch*) in addition to providing support for different operationalizations of the independent variables of affective expectancies and matching or mismatching stimuli. The dependent variable in these studies was the valence of feelings (positive/negative) in reaction to the stimulus. Two studies by Wilson et al. are discussed here.

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In a pilot study, the experimenters used the common belief or the norm (normative belief rule) that people should be in a good mood on their birthday. The authors hypothesized that people who were in fact in a good mood on their birthday would be characterized by the *Matching* situation, where expectations and the stimulus match, and a person should respond quickly to questions about their mood. On the other hand, if people were not in a good mood, their feelings would mismatch the affective expectancy. If people noticed the discrepancy (*Recognized Mismatch)*, the experimenters hypothesized it would take longer for a person to answer questions about their mood. The authors found the results they expected.

In a follow-up experimental study, the authors looked for specific evidence of the effects of a person recognizing discrepancies between affective expectancies and a stimulus (*Recognized Mismatch).* Participants were given a set of 20 cartoons to evaluate. In the positive and negative affective expectation conditions, depending on the participants' high or low rating (respectively) of funniness of the cartoon, they were told the cartoons came from a particular magazine called *Punch.* In the no expectation condition, none of the cartoons purportedly came from the *Punch* magazine. Participants were then asked to evaluate a new set of cartoons that were said to be from *Punch*. Those in the positive expectation condition then viewed cartoons that were not funny while those in the negative expectation condition viewed cartoons that were funny. This created the discrepancy between expectations and the cartoon stimulus.

More importantly, in this study, when asked to rate the new cartoons, participants were asked to rate either components of the cartoon or the whole cartoon. The authors posited that when evaluating pieces of the cartoon, a person would be scrutinizing the cartoon more, and thus, would be more likely to notice differences between affective expectations and the actual

cartoon (*Recognized Mismatch*). However, if a person rated the cartoon as a whole, they would be less likely to notice any difference (*Unrecognized Mismatch*). In other words, how closely one examines a stimulus may influence whether or not a person recognizes any differences between expectations and the actual stimulus. The more closely people examine a stimulus, the more information they may gain from that stimulus, which may allow them to notice discrepancies. The authors found evidence consistent with the *Unrecognized Mismatch* case, but failed to find evidence for the *Recognized Mismatch* case.

Stimulus scrutiny in the AEM. Geers and Lassiter (1999) suggest that the reason Wilson et al.'s (1989) experiment did not find evidence of the *Recognized Mismatch* case is that people need to scrutinize the cartoon while viewing it rather than while evaluating it. Geers and Lassiter (1999, p. 408) state that, "Manipulating the amount of information people gain from an expectation-discrepant stimulus can effectively alter affective evaluations." They conclude from a series of studies that creating differences in what data an individual can access from a stimulus may change affective expectancy effects on affective evaluations of the stimulus (Geers & Lassiter, 1999, 2002, 2003, 2005).

The authors thus used a different manipulation to influence the amount of scrutiny a participant used to examine a stimulus. In a 2 (instructions: fine-unit vs. global-unit) x 2 (positive expectation vs. no expectation) experimental study, participants were told to click a button either each time a small action occurred during a film clip (e.g., getting up from a chair) or each time a large action occurred (e.g., getting up from a chair to close the door). By making someone look at a not-so-funny film clip in pieces (small actions), as opposed to globally or as a whole (large actions), the researchers proposed that a person would scrutinize the film further and be more likely to notice discrepancies between positive expectations and

the discrepant film. Participants were either told, as in the previous Wilson et al. (1989) studies, that they should like the film or told nothing at all in relation to expectations. The authors found both the assimilation and contrast effects proposed in the AEM in the *Matching, Unrecognized Mismatching,* and *Recognized Mismatching* cases.

This study demonstrates that when people notice a discrepancy by scrutinizing the message, they will contrast affective reactions with the expectancy (*Recognized Mismatching)*. Additional studies indicate that there are different ways to influence the level of scrutiny a person uses to examine a stimulus (Geers & Lassiter, 2002, 2003, 2005). Geers and Lassiter (2003) hypothesized that people with high need-for-cognition would be more likely to contrast affective reactions with affective expectancies because high need-for-cognition participants would scrutinize the stimulus information, gain more information, and thus, notice the discrepancy. They found the expected contrast results under the *Recognized Mismatch* case, where those high in need-for-cognition were more likely to scrutinize the stimulus, and thus, contrast affective reactions with original predictions.

Additionally, prior stimulus exposure and optimism/pessimism traits were individual difference factors that affected assimilation and contrast effects in the AEM. The authors found that those who had prior stimulus exposure (had seen the movie clip previously) to the expectation-inconsistent stimulus (not-so-funny film clip) were more likely to contrast affective reactions with an affective expectancy because they were more likely to gain information from the film clip when seeing it again and notice discrepancies (Geers & Lassiter, 2005). In another study, participants who were pessimistic by trait were more sensitive to and attentive to contradictory information than optimists (Geers & Lassiter, 2002). Given that pessimists may gain more information from the stimulus, the authors found

support for their hypothesis that pessimists would contrast expectations and affective reactions to a stimulus while optimists would assimilate affective reactions.

Together, the AEM studies described above provide evidence for the predictions made by the AEM and support the claim that affective expectations about acting prosocially may influence actual feelings in reaction to a positive or negative social-marketing message in the form of assimilation and contrast effects. One of the key components in these studies, however, is how much a person scrutinizes a stimulus. The Geers and Lassiter studies (1999, 2002, 2003, 2005) show that there are different ways to influence the level of scrutiny used to examine a stimulus.

Scrutiny and processing resources. Similar to the AEM, other models suggest that changes in information can also influence assimilation and contrast effects (Geers & Lassiter, 1999). For example, Schwartz and Bless (2007), in the Inclusion/Exclusion model, also state the possibility that under conditions of low cognitive capacity, assimilation effects are more likely to occur, and that under conditions of high cognitive capacity, contrasts are more likely to occur. These outcomes may be due to people's differing abilities to notice discrepancies between different sets of information under varying levels of processing resources. In other words, their ability to gain more or less information can change the data gained from a stimulus, and thus, influence reactions to that stimulus (Schwartz & Bless, 2007).

Cognitive capacity is relevant to examining influences of affective expectancies on social-marketing messages, as people are unable to devote all processing resources to scrutinizing not only social-marketing persuasive messages, but also media in general, such as health communication messages or product advertisements. Processing resources for viewing a message may be limited if other tasks are being conducted that also produce

demand on the same processing resources needed for processing information in a message (Gilbert, Giesler, & Morris, 1995; Shiv & Fedorikhin, 1999; Trope & Alfieri, 1997). Thus, the amount of processing resources available, or cognitive load, can influence affective expectancy effects on affective reactions toward advertisements by influencing whether discrepancies are recognized between expectancies and a persuasive message.

When processing resources are restricted (high cognitive load), people may be less able to scrutinize the social-marketing message in order to gain more information. They may then be less able to recognize discrepancies between a social-marketing message and affective expectancies (*Unrecognized Mismatch),* producing corresponding assimilation (matching) effects.

On the other hand, if processing resources are available (low cognitive load), people may have the ability to scrutinize the information more closely in order to gain more information from the message. They may then be more likely to notice discrepancies between expectancies and the marketing message (*Recognized Mismatch),* producing the corresponding contrast (mismatching) effects. As such, positive or negative affective expectancies and high or low processing resources may influence assimilation or contrast in affective reactions to either a positive or negative social-marketing message.

In summary, affective expectancies may influence affective reactions to persuasive messages depending on the availability of processing resources. In fact, the above discussion suggests that affective expectancies can completely change responses to persuasive messages. If response to persuasive messages can be altered, this can in turn alter specific emotions in relation to the message as well as resulting attitudes and behavior. It is thus important to understand the role affective expectancies can play in the persuasion process.

The relationship between expectancies, specific emotions, attitudes, and behavior has yet to be investigated. The emotion of compassion is of interest in this particular study, given that feelings of CF may influence decreased compassion, and accordingly, prosocial attitudes and behavior. Previous scholarship on the emotion of compassion and advertising effects can shed light on how the AEM might work to influence compassion, attitudes, and behavior in relation to a social marketing message.

Affective Expectancy Influences on Compassion, Attitudes, and Behavior

Until now, studies of the AEM have generally assessed the effects of affective expectancies on the valence of feelings (positive or negative). However, the CF literature suggests that news-induced negative affective expectancies can influence not only positive or negative feelings toward social marketing messages, but also compassion, attitudes, and prosocial behavior (Moeller, 1999; Tester, 2001).

Compassion Fatigue. CF is related to the process a person goes through to feel the emotion of compassion. Compassion includes the emotional component of feeling concern for another person suffering *and* the desire to relieve that suffering (Fehr & Sprecher, 2009; Goetz, et al., 2010; Tudor, 2001). Additionally, media-influenced compassion is also defined as perceiving the suffering and the needs of distant others. Media images and reports influence a moral sensibility or concern for remote strangers (Höijer, 2003). Understanding the process that leads to the emotion of compassion can reveal how affective expectancies in the AEM might influence compassion levels in reaction to a social marketing message, and subsequently, attitudes and behavior.

Goetz et al. (2010) proposed that the process of feeling compassion includes antecedents, appraisals, experience, and resulting behavior. In the appraisal model of feeling compassion, several steps influence whether a person feels compassion, and accordingly, acts prosocially. First, a person must identify another person suffering. The media can make audiences aware of suffering through photographs and social issue stories, therefore allowing for the first appraisal step (Höijer, 2003). As long as the suffering victim may be seen as deserving of help (e.g., the suffering victim is not seen as deserving of their circumstances) and a person has the resources to help (e.g., money or time), a person may then feel compassion for the suffering victim and behave in a way that relieves suffering (Goetz et al., 2010; Isen, Clark, & Schwartz, 1976). However, if a person does not have the resources to help or if using resources to help would cost a person too much (e.g., money, time, positive mood), the person may feel fear, anxiety, empathic distress, or guilt/shame-filled compassion and will not behave to relieve suffering (Goetz et al., 2010; Höijer, 2004; Isen, Clark, & Schwartz, 1976; Isen & Simmonds, 1978).

Thus, when considering the costs of feeling and acting compassionately, people must feel that their resources for helping will not be exploited, feel that they would not be taking too many risks, and feel a sense of efficacy (Goetz et al., 2010). This sense of response-efficacy in aiding a suffering other is likely to increase compassion. The consequences of the appraisal process for the emotion of compassion include positive attitudes toward the prosocial behavior and actual prosocial behavior to relieve suffering (Goetz et al., 2010). Therefore, positive affective expectancies (expectations that feeling/acting compassionately will make a person feel good) that occur in the appraisal process should increase compassion levels, positive attitudes toward prosocial behavior, and prosocial behavior.

News-induced affective expectations can influence the cost–benefit analysis described in the appraisal process for the emotion of compassion (Goetz et al., 2010; Underwood, 2009; Tudor, 2001). According to Moeller (1999) and Tester (2001), negatively framed news stories can make costs seem too high and produce expectations that a person will not feel good if they feel compassionate and act accordingly. News-related CF may suggest that the costs of being compassionate could outweigh the benefits. Content in the news story, for example, may introduce norms as to how one should feel after being compassionate, or show how other people feel. Presumably, this may result in low response efficacy because consumers may perceive that regardless of the degree of help rendered, it would not alleviate suffering. Therefore, it is the news media that are sometimes blamed for potentially negatively influencing this cost–benefit analysis that leads to compassion (Höijer, 2004; Kinnick et al., 1996; Moeller, 1999; Tester, 2001).

Thus, news-induced affective expectations could negatively influence feelings of compassion in reaction to social marketing messages through assimilation and contrast effects, depending on the processing resources available when viewing the message. Levels of compassion then, according to the appraisal model for feeling compassion, could predict resulting attitudes and behaviors.

Persuasion. In terms of persuasive messages, further support is provided for the influences of affective reactions to an advertisement on attitudes and behavior in the persuasion literature. MacKenzie, Lutz, and Belch (1986) found evidence that affective reactions to an advertisement, which would influence attitude toward the ad (positive or negative), predict both attitudes about the brand in an advertisement as well as intentions to purchase a product (see also Homer, 1990; Mitchell & Olson, 1981). Similar to changing

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behavior in terms of purchase intentions, social marketing messages intend to change prosocial behavioral intentions (Kotler & Zaltman, 1971). The brand in this case would be the nonprofit organization (Kotler & Zaltman, 1971). However, given the suggested influence of CF, social marketing messages may also influence attitude toward the prosocial behavior. According to MacKenzie et al. (1986) and the CF literature, these emotional reactions to an ad may influence both attitudes toward the organization (brand), attitudes toward the prosocial behavior, as well as intentions to act prosocially (purchase intentions).

Several theories in health communication also suggest that emotional response to a persuasive message can influence attitudes and behavior, such as the Transtheoretical Model and Prospect theory, as applied to health communication (e.g., Dillard & Nabi, 2006; Prochaska, Redding, & Evers, 2008) as well as Peters, Lipkus, and Diefenbach's (2006) review of how emotion can influence health communication and behavior.

While the current study examines behavior for the benefit of another's health and wellbeing, the findings can also be applied to the influence of affective expectancies on self-health and wellbeing or caregiver behavior. For example, one health communication study found that parents of children with eating disorders expect to feel selfish (affective expectancy) if they were to engage in self-care behaviors (e.g., seeing a therapist, going for a walk to relieve stress). Parents reported that this sometimes negatively influenced their emotional response to messages that encouraged them to do self-care for the benefit of their child's recovery. In turn, this could increase negative attitudes toward self-care behaviors and decrease their actual behavioral intentions (Patel, Shafer, Zucker, Bulik, 2011).

Thus, the above referenced persuasion literature and the AEM suggest that affective expectancies can influence emotional response to a persuasive message, and as a result,

attitudes and behavior. Specifically, affective expectancies about acting prosocially have the

potential to influence affective reactions to a social marketing message in terms of

compassion and feelings. Additionally, these affective outcomes of the persuasive message

may then influence attitudes and prosocial behavior. Figure 1 shows the implied model of

these relationships.

Hypotheses and Research Questions

Based on the discussion thus far, formal hypotheses are presented. The hypotheses are

summarized in Table 1.

Valence of news-induced affective expectancies. CF may be preceded by the

affective expectation that neither compassion nor helping a suffering person will result in

positive feelings (Tester, 2001). These expectations result from negative news frames that

imply that the costs of being compassionate may be too high because any help given will not

alleviate the suffering of others (Goetz et al., 2010; Moeller, 1999). These negative

expectancies may influence lower levels of compassion, decreased positive attitudes, and

prosocial behavior. However, if the news story is positively framed, the opposite effects may

ensue. Thus, the following main effects of positive and negative news-induced affective

expectancies are presented:

H1: Positive affective expectancies will result in *increased*: (a) compassion, (b)

positive feelings toward the ad, (c) positive attitudes toward the ad, organization, and

prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.

H2: Negative affective expectancies will result in *decreased*: a) compassion, (b)

positive feelings toward the ad, (c) positive attitudes toward the ad, organization, and

prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.

Valence of social marketing messages. Social marketing messages may also be framed negatively or positively. The CF literature posits that negatively framed social marketing messages can also influence negative reactions to the advertisements (Kinnick et al., 1996). Positive messages would result in the opposite. Thus, the following main effects of a positive or negative social marketing message are presented:

H3: Positive social marketing messages will result in *increased*: (a) compassion, (b) positive feelings toward the ad, (c) positive attitudes toward the ad, organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.

H4: Negative social marketing messages will result in *decreased*: (a) compassion, (b) positive feelings toward the ad, (c) positive attitudes toward the ad, organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.

Affective expectancies, social marketing messages, and processing resources. Previous research on the AEM provides a theoretical foundation for how affective expectancies may influence affective reactions toward a social marketing message. The appraisal process in feeling compassion also describes how affective expectations may consequently influence attitudes and behavior. In light of the processing resources available (high or low cognitive load), affective expectancies (positive or negative or no expectancy) can have differing influences on affective reactions to positive or negative persuasive messages, and subsequent attitudes and behaviors. Accordingly, three interaction hypotheses are presented as follows:

H5: Under high cognitive load and a positive (negative) social marketing message that is discrepant with a negative (positive) affective expectancy, a person will assimilate affective reactions to the message with the expectancy (i.e., *Unrecognized*

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Mismatch case) resulting in (a) decreased (increased) compassion, (b) negative (positive) feeling response to the ad, (c) negative (positive) attitudes toward the ad, organization, and prosocial behavior, and (d) decreased (increased) prosocial behavioral intentions and behavior.

H6: Under low cognitive load and a presence of a positive (negative) social marketing message that is discrepant with a negative (positive) affective expectancy, a person will contrast affective reactions to the message with the expectancy (i.e., *Recognized Mismatch* case) resulting in (a) increased (decreased) compassion, (b) positive (negative) feeling response to the ad, (c) positive (negative) attitudes toward the ad, organization, and prosocial behavior, and (d) increased (decreased) prosocial behavioral intentions and behavior.

H7: Under either high or low cognitive load and presence of a positive (negative) social marketing message that matches a positive (negative) affective expectancy, a person will assimilate affective reactions to the stimulus with the expectancy (i.e., *Matching* case) resulting in (a) increased (decreased) compassion, (b) positive (negative) feeling response to the ad, (c) positive (negative) attitude toward the ad, organization, and behavior, and (d) increased (decreased) prosocial behavioral intentions and behavior.

No affective expectancies. It is posited in the AEM that not having an expectancy is possible (*No Expectancy* case*)*. Accordingly, in viewing a positive or negative social marketing message when no expectancy is present, the social marketing message would dictate affective reactions.

H8: Regardless of cognitive load, when no affective expectancy is present, (a) compassion, (b) feeling response to the ad, (c) attitude toward the ad, organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior will be influenced by the valence of the social marketing message.

Feelings and compassion. Finally, the CF and persuasion literature posit that affective reactions toward social marketing messages can influence later attitudes and behavior. In other words, it may be possible that affective expectancies may directly influence emotional responses to ads and compassion levels and may be indirectly related to attitudes toward the ad, organization, and prosocial behavior, as well as prosocial behavioral intentions and prosocial behavior (see Figure 1). Given the lack of previous research on affective expectancy effects on attitudes and behavior, the following research question is posed:

RQ1: What are the relationships between affective expectancies and the dependent variables of attitudes and behavior?

Negative Social Marketing Messages. The CF literature suggests that negative social marketing messages may decrease prosocial giving, as predicted above in conjunction with affective expectancies and cognitive load. However, there is conflicting evidence in the literature that negative advertisements may increase prosocial giving as well. For example, Hibbert, Smith, Davies, and Ireland (2007) found that negative feelings incurred from a social marketing message, specifically guilt, could increase donation intentions. They found that while a person's skepticism towards and perception of an advertiser's manipulative intent could decrease guilt, their affective evaluation and beliefs about the charity were positively related to negative feelings resulting from the ad. Small and Verrochi (2009) found

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that people who saw negative pictures containing sad faces may be more likely to donate than people who saw happy pictures due to emotional contagions. Other studies suggest that there are different circumstances in which negative ads may or may not work to increase positive feelings, attitudes, and prosocial behavior (e.g., Hung & Wyer, 2009; Robert, 1998; White & Peloza, 2009). Given the conflicting nature of the literature, a research question is posed:

RQ2: What are the relationships between negative advertisements and the dependent variables of feelings, attitudes, and behavior?

CHAPTER TWO

MAIN STUDY

Method

A 3 (valence of news-induced affective expectancy: positive vs. negative vs. no expectation) x 2 (valence of social marketing message: positive vs. negative) x 2 (cognitive load: high vs. low) fully-crossed factorial between-subjects experiment was designed to test the hypotheses (see Table 2). In each condition, participants ($N = 268$) read a news story containing the affective expectancy, received the cognitive load manipulation, and viewed a matching or mismatching advertisement. Participants then completed a post-exposure questionnaire after viewing each stimulus.

Participants

An a priori power analysis was conducted to determine the required sample size to ensure adequate power. Using Cohen's (1988) effect size estimates, the required sample size to detect moderate effect sizes (f = .25) with power of 0.95 and $p < .05$ for this between − subjects design was estimated to be 251 ($N = 251$, $\lambda = 15.69$, critical $F(2, 239) = 3.03$). This analysis was conducted according to the Faul, Erdfelder, Lang, and Buchner (2007) guidelines. In the actual experiment, 268 male and female students were randomly assigned to one of 12 conditions. Participants were recruited from the School of Journalism and Mass Communication at University of North Carolina at Chapel Hill. Participants received class

credit for their participation. Informed consent was obtained according to the University of

North Carolina's Institutional Review Board (IRB) stipulations (see Appendix A). The mean

participant age was 20.85 years (*SD* = 1.41), and all participants were between 18 and 32. Of

the 268 participants, 81.7% were female (*n* = 219) and 18.3% were male (*n* = 49).

Independent Variables

In this study, three independent variables were manipulated: valence of news-induced

affective expectancy, valence of social marketing message, and cognitive load. The valence

of the social marketing message (positive or negative) resulted in an ad that was either

consistent or discrepant with an affective expectancy. Three pretests were conducted to

determine the effectiveness of the manipulations for the independent variables of affective

expectancy and valence of the social marketing message.

Valence of news-induced affective expectancy. Previous studies which manipulated

expectancies did so through making certain normative or category-based rules salient.

Accordingly, the current study used a news story to manipulate the affective expectancy of

whether or not feeling and acting compassionately would make a person feel good. The three

conditions included 1) a positive expectancy condition, where the news story contained

certain quotes and rules about how one should expect to feel good after acting

compassionately, 2) a negative expectancy condition, where people should not expect to feel

good after acting compassionately according to the news story, or 3) a no expectancy

condition, where expectancies are not directly addressed in the content of the news story. A

pretest revealed that the manipulation was successful, $F(2, 31) = 3.41$, $p < .05$.

Valence of social marketing message. In previous AEM studies, the actual future

event or stimulus either matched or mismatched an affective expectancy. For example, in the

Wilson et al. (1989), cartoons that were not funny mismatched the manipulated affective expectancy. In the current study, a social marketing advertisement soliciting prosocial involvement to relieve hunger was the stimulus that either matched or mismatched the induced affective expectancy about acting prosocially. These two conditions included an ad that matched the positive affective expectancy and an ad that matched the negative affective expectancy. The advertising content therefore either confirmed the affective expectancy that feeling and acting compassionately will make the "self" and the suffering "other" feel good or disconfirmed this positive expectancy (confirming the negative expectancy) by only stating the problem. Two pretests were conducted for this manipulation. Argument strength of the claims about the hunger crisis in the U.S. was tested. Twenty-two arguments were tested, of which the top arguments with the highest means ($M > 5.25$ on a 9-point scale) were used in the advertisement. The second pretest revealed that the manipulation was successful, $F(3, 50) = 7.43, p < .01$), where the positive ad was perceived as more positive ($M = 6.57, SD = 1.43$) than the negative ad ($M = 4.49, SD = .79$).

Cognitive Load. In order to manipulate processing-resources available, Shiv and Fedorikhin (1999) and Trope & Alfiere (1997) requested participants to memorize a seven – or eight-digit number (high cognitive load) or a two-digit number (low cognitive load) (see also Gilbert et al., 1995). Similarly, before participants viewed the social marketing message, they were asked to memorize a number according to their randomly assigned condition. The number appeared on the computer screen before the ad was shown. The cognitive load manipulation was placed after the affective expectancy manipulation and before the advertisement was shown, as prior literature indicates it is how much information gained from the stimulus that influences affective expectancy effects (Geers & Lassiter, 1999;

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Wilson et al., 1989). This is because as more information is gained from the stimulus, there is more possibility for recognition of any existing discrepancy between the affective expectancy and ad stimulus.

Stimulus Materials

The stimuli created for each of the affective expectancy conditions in this study contained a news article about hunger in the United States (see Appendix B for stimulus materials). The news story was embedded in a fictitious *Washington Post* webpage. The participant read about the growing hunger crisis in the United States. Statistics were taken from "Feeding America," one of the largest hunger-relief charities in the U.S. Other content in the article was gathered from various news stories on hunger from the *New York Times*.

Embedded in the news articles were quotes and information about how other volunteers, aid workers, and donors felt when they attempted to help relieve hunger. For example, a negative expectancy news story stated norms about how people should feel when acting prosocially by reporting, "Recent attitude surveys have found that donors, aid workers, and volunteers report that other people helping should not expect to feel hopeful after trying to help." A category-based rule was used when a donor stated, "I couldn't feel good after I donated. I am deeply concerned because there are too many people that need help." The negative feelings portrayed in the negative expectancy news story were consistent with feelings of those people with CF, where volunteers and donors did not feel good because there were too many people to help. Either a positive, negative, or neutral picture was also included to match the affective expectancy valence.

The news stories cued the cost-benefit analysis needed for feeling compassion. For example, the positive news story claimed that a person can make a difference to solve the

problem, and accordingly, will feel good after helping. The story encouraged a person that their actions will positively influence the hunger crisis occurring in the U.S. The negative news story claimed that there were millions who needed help and provided no solution, making negative feelings the cost of being compassionate or acting prosocially due to the inability to help enough people.

The social marketing advertisement was a donation webpage for a fictitious nonprofit organization called the Hunger Relief Now Organization. The ad asked for donations to help relieve hunger. In the positive ad condition, the webpage stated how donors and volunteers should expect to feel good after helping relieve hunger. For instance, in the positive ad condition, readers were told they may feel good after helping. This ad would match a positive expectancy. In the negative expectancy condition, only the problem of the hunger crisis was discussed. No solution was offered and no reference to how a person would feel was mentioned. According to the CF literature this would mismatch a positive expectancy, given that no solution or positive feelings are mentioned. The negative ad did not include that a person would feel bad about giving. This is because it is unlikely that an advertisement would tell audience members they might feel bad about giving and the fact that argument strength (M: 2.83 to 5.13 on a 9-point scale) and message strength ($M = 4.39$ on a 9-point scale) were weaker for ads that included this type of statement.

The positive ads also went on to say that a person can be the solution for hunger and feel great about it. These statements about being part of the solution relate back to the cost-benefit analysis a person does before feeling compassionate, in that being part of the solution emphasizes benefits while a problem only approach alluded to costs involved. The

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advertisement, like the news stories, included positive or negative pictures to match the valence of the advertisement.

The cognitive load manipulation involved participants seeing a computer screen with instructions to memorize either an eight-digit number (high cognitive load) or a two-digit number (low cognitive load). They were asked to memorize the number, as they would be reporting it later in the study.

Manipulation Check Measures

Valence of news-induced affective expectancy. Participants were asked to evaluate the news story. Similar to Geers and Lassiter's AEM studies (1999, 2002, 2003, 2005), within several filler questions for evaluating the news stories, items were included to measure affective expectancy. Affective expectancy was measured using two scales: self-affective expectancy and other-affective expectancy. The first was an index made up of four semantic differential measures. The items addressed how the participant would expect to feel after helping (e.g., "good/bad," "satisfied/unsatisfied"). The second measure was an index made up of four semantic differential measures. These items addressed how the participant expected someone else to feel according to the news story (e.g., "happy/unhappy," "hopeful/hopeless"). These measures demonstrated a high level of internal consistency (α = .96, α = .97 respectively). All measures can be found in Appendix C.

Valence of social marketing message. Participants were asked to evaluate if the advertisement was positive or negative. A four-item index made up of semantic differential measures was used to measure how positive or negative the ad content appeared (e.g., "positive/negative," "focused on the benefits of helping/focused on the costs of not helping,"

"optimistic/pessimistic," "hopeful/hopeless"). This measure also demonstrated internal

consistency ($\alpha = .88$).

Cognitive Load. The same measure used by Shiv and Fedorikhin (1999) to check the

cognitive load manipulation was used for this study. First respondents were asked to recall

the number they had to memorize. Second, a thought-listing measure was used in order to

count the number of thoughts. A greater number of thoughts indicated higher available

processing resources, while a lower number of thoughts indicated lower processing

resources.

Dependent Variables

Valence of feelings toward the advertisement. Valence of feeling response toward

the advertisement was measured using 40 items that asked participants to rate how much they

felt certain emotions (e.g., "offensive," "bad," "warm," "peaceful," "happy") (1 = "not at all"

9 = "very strongly") in response to the advertisement. These items were adapted from the

Feelings Towards Ads scale developed by Edell and Burke (1987). The scale has three

subscales: negative feelings (e.g., "sad," "unhappy," 15 items) ($\alpha = .81$), positive warm

feelings (e.g., "touched," "moved," 13 items) ($\alpha = .86$), and positive upbeat feelings (e.g.,

"strong," "joyous," 12 items) ($\alpha = .91$). Confirmatory Factor Analysis was conducted

separately for each dependent variable. Results can be found in Appendix D. Descriptive

statistics of the dependent variables can be found in Table 3.

Compassion. Compassion levels were measured using an index of 17 items that

asked participants to rate how well a series of statements (e.g., "When I read about the

hungry people in the ad going through a difficult time, I feel a great deal of compassion for

them.") describes how they felt after viewing the ad (1 = "not at all true of me," 9 = "very

true of me"). These items were adapted from the Compassionate Love Scale for Strangers, which measures compassion levels toward strangers as opposed to close others (e.g., family or friends) (Hwang, Plante, & Lackey, 2008; Sprecher & Fehr, 2005). Higher scores indicated higher levels of compassion. The 17-item scale was assessed for unidimensionality ($\alpha = .95$).

Attitude toward the ad. Attitude toward the advertisement was measured using an index made up of five semantic differential measures (e.g., "appealing/unappealing," "pleasant/unpleasant" "favorable/unfavorable," "good/bad," "enjoyable/not enjoyable") anchored on a 9-point scale. These measures were adapted from Homer (1990), MacKenzie et al. (1986), and Geers and Lassiter (1999). This measure was internally consistent ($\alpha = .88$).

Attitude toward the organization. Attitude toward the nonprofit organization, Hunger Relief Now Organization, was measured using an index made up of five semantic differential measures (e.g., "Helpful/Unhelpful," "Not Useful/Useful") anchored on a 9-point scale. This measure was internally consistent ($\alpha = .95$).

Attitude toward prosocial behavior. Attitude toward donating food, time, or money was measured using an index made up of five semantic differential measures (e.g., "pleasant/unpleasant," "good/bad") anchored on a 9-point scale that was reliable ($\alpha = .93$).

Prosocial behavioral intentions. Three items on a 9-point scale were used to measure behavioral intentions. Participants were asked if they would be willing to donate food, time, or money for hunger relief (1 = "not at all willing," 9 = "very willing"). The three items were averaged to create a measure for prosocial behavioral intentions that was internally consistent ($\alpha = .72$).

Prosocial behavior. All participants were directed to a website to play a game to donate rice (www.freerice.com) to help relieve hunger. Freerice.com is a website where participants simply answer questions on different subjects (e.g., chemistry, English). For each correct answer, ten grains of rice are donated through the United Nations World Food Program. The website also provides more information on the issue of world hunger. Participants were tracked for the length of time spent on the website ($M = 134.67$ seconds or 2.25 minutes) and total number of grains of rice donated ($M = 208.92$). They were asked to self-report how many questions they answered correctly ($M = 19.12$) and the number of grains of rice they helped donate ($M = 202.41$).

Control Variables

Participants' pre-existing propensity to act prosocially, specifically, to volunteer was assessed using an index of five Likert-type items (e.g. "I can do something for a cause that is important to me") on a 9-point scale. The items were adapted from Clary et al. (1998). This measure was internally consistent ($\alpha = .93$). Participants were also asked to answer basic demographic questions, such as age and gender.

Procedure

The experiment was administered to groups of six to twelve students at a time in a campus computer laboratory. Upon arrival, participants were told they were participating in two different studies. One study was to evaluate different types of online news stories and the second study was to evaluate advertisements. Participants were then asked to sign the consent form for the first study. The experimenter then told participants to read three randomly selected news stories carefully, as they would be asked to evaluate the news stories. The second news story contained the hunger news article. The other two articles were filler

stories consistent with the cover story. The participants, after viewing the news stories, answered the first manipulation check questions and filler questions consistent with the cover story of evaluating news stories.

To avoid demand characteristics of the experiment, participants were then told to sign a second consent form that signaled the start of the second study, which participants were told was about the effects of memory on evaluations of an online advertisement. Participants were first given either a two- or eight-digit number to memorize. The instructions requested participants to view and memorize a number presented on the computer screen, as they would be reporting it later. Participants then viewed the hunger relief webpage for as long as they needed. They were then asked to answer a web-based questionnaire containing the second set of manipulation check questions, dependent variables, and control variables.

Participants were asked at the end of the study what they thought the study was about to make sure that they did not suspect the nature of the connection between the first study (evaluating news stories) and the second (evaluating advertisements). The reason for this is because conscious awareness that the news stories may influence reactions to ads may make people correct for these influences (Wilson & Gilbert, 2003). No participant suspected a connection, and, as a result, no cases were eliminated from the analysis in relation to this. After completing the questionnaire, participants were debriefed, thanked, and dismissed.

Results

Prior to tests of the hypotheses, the data were screened for univariate and multivariate outliers with regard to the dependent variables, and cases were removed accordingly. Composite variables were screened for univariate normality. Analysis of the scale standard deviations and distribution scores can be found in Table 3.

Manipulation Checks

  Valence of news-induced affective expectancy. To test the efficacy of the affective expectancy manipulation, two ANOVAs were run with valence of the news-induced affective expectancy, valence of the social marketing message, and cognitive load as independent factors, and the two indices for self- and other- affective expectancy as the dependent variables. The first ANOVA, with self-affective expectancy as the dependent variable revealed a statistically significant main effect for affective expectancy $F(2, 256) = 152.58$, $p < .001$, such that affective expectancies were more positive for the positive affective expectancy conditions ($M = 7.58$, $SE = .29$) than for the negative affective expectancy conditions ($M = 5.01$, $SE = .26$) and the no expectancy conditions ($M = 5.94$, $SE = .26$).The effects of the valence of the social marketing message and cognitive load were not statistically significant, nor were any of the interaction effects between valence of the affective expectancy, valence of the social marketing message, and cognitive load. Therefore, the ANOVA on self-affective expectancy indicated that the affective expectancy manipulation was successful. Results for manipulation check analyses are shown in Table 4.

  The second ANOVA, with other-affective expectancy as the dependent variable revealed a statistically significant main effect for affective expectancy $F(2, 256) = 210.34$, $p < .001$, such that affective expectancies were more positive for the positive affective expectancy conditions ($M = 8.27$, $SE = .19$) than for the negative affective expectancy condition ($M = 2.69$, $SE = .20$) or the no expectancy condition ($M = 5.88$, $SE = .33$).The effects of valence of social marketing message and cognitive load were not statistically significant, nor were any interaction effects between valence of the affective expectancy, valence of the social marketing message, and cognitive load. Therefore, the ANOVA on

other-affective expectancy indicated that the affective expectancy manipulation was successful.[1]

Valence of social marketing message. To test the efficacy of the valence of the social marketing message manipulation, an ANOVA was run with valence of news-induced affective expectancy, valence of social marketing message, and cognitive load as independent factors, and the valence of the social marketing message index as the dependent variable. The effect of valence of the social marketing message on the dependent variable was significant, $F(1, 256) = 244.81, p < .001$, such that ad content was perceived as more positive in the positive ad message conditions ($M = 7.44, SE = .14$) than the negative ad message conditions ($M = 4.42, SE = .14$). Neither the main effect of valence of affective expectancy or cognitive load, nor the interaction effects between valence of the affective expectancy, valence of the social marketing message, and cognitive load attained statistical significance. Therefore, the ANOVA on the valence of the social marketing message measure indicated that the valence of the social marketing message manipulation was successful.[2]

Cognitive Load. To test the efficacy of the cognitive load manipulation, an ANOVA was run with valence of the news-induced affective expectancy, valence of the social marketing message, and cognitive load as independent factors and the number of thoughts generated during the thought-listing portion of the study as the dependent variable. The ANOVA revealed a statistically significant main effect for cognitive load, $F(1, 256) = 17.46$, $p < .001$, with participants generating more thoughts in the low cognitive load conditions (M

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[1] The credibility of the news articles was measured using a six-item scale. Results indicated that the news articles were credible ($M = 6.81$).

[2] The credibility and strength of the ad messages were measured using a six-item scale and a seven-item scale respectively. Results indicated that the ads were credible ($M = 6.43$) and had strength ($M = 6.29$).

= 8.59, *SE* = .28) than in the high cognitive load conditions (*M* = 6.90, *SE* = .28). Neither

the main effect of valence of affective expectancy or social marketing message, nor the

interaction effects between valence of the affective expectancy, valence of the social

marketing message, and cognitive load attained statistical significance. Therefore, the

ANOVA on the number of thoughts generated indicated that the cognitive load manipulation

was successful.

Tests of Hypotheses

Compassion: H1a-H8a. Hypotheses 1a (positive affective expectancies) and 2a

(negative affective expectancies) predicted that there would be a main effect for affective

expectancies on compassion, such that positive affective expectancies would result in

increased compassion. Hypotheses 3a (positive social marketing message) and 4a (negative

social marketing message) predicted that there would be a main effect for the valence of the

social marketing message on compassion, such that a positive message would result in

increased compassion. The data were analyzed using a series of 3 x 2 x 2 between-subjects

ANOVAs. A summary of the analyses for the main effects is located in Table 5.

A between-subjects ANOVA with compassion as the dependent variable indicated no

significant main effect for affective expectancy, $F(2, 251) = 1.50$, $p = .23$. Therefore, H1a

and H2a were not supported. The results did indicate the means were in the predicted

direction with positive expectancies resulting in higher compassion (*M* = 6.24) than negative

expectancies (*M* = 6.00).

A significant main effect for valence of the social marketing message was found, $F(1,$

$251) = 6.52$, $p < .01$. The negative ad condition elicited more compassion (*M* = 6.38, *SE* =

.11) than the positive ad condition (*M* = 5.99, *SE* = .11). Given that the results of this

analysis indicated the means were in the opposite of the predicted direction, hypotheses 3a and 4a were not supported.

Hypotheses 5a, 6a, 7a, and 8a (H5a-H8a) predicted that there would be a three-way interaction effect between valence of the affective expectancy, valence of social marketing message, and cognitive load on compassion. A between-subjects ANOVA with compassion as the dependent variable indicated no significant interaction effect, $F(2, 251) = .64$, $p = .53$. The means, however, were partially in the direction hypothesized. A high cognitive load, negative affective expectancy, and a positive ad condition (unrecognized mismatch) produced lower compassion levels ($M = 5.94$) than the negative ad condition (matching) ($M = 6.34$) as predicted by H5a. Under low cognitive load and negative affective expectancy however, a positive ad (recognized mismatch) produced higher compassion levels ($M = 5.98$) than the negative ad (matching) ($M = 5.75$) as predicted by H6a (means are located in Table 6). Given that the interaction effects were not significant, H5a-H8a were not supported.

Valence of feeling: H1b-H8b. Hypotheses 1b (positive affective expectancies) and 2b (negative affective expectancies) predicted that there would be a main effect for affective expectancies on valence of feelings, such that positive expectancies would result in increased positive feelings toward the social marketing message. Hypotheses 3a (positive social marketing message) and 4a (negative social marketing message) predicted that there would be a main effect for the valence of the social marketing message on valence of feelings, such that positive ads would result in increased positive feelings. The data were analyzed using a series of 3 x 2 x 2 between-subjects ANOVAs. A summary of the analysis for the main effects is in Table 7. Three different scales were used to assess valence of feelings: negative feelings, positive warm feelings, and positive upbeat feelings.

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A between-subjects ANOVA with the negative feeling index as the dependent variable indicated a significant main effect for affective expectancy, $F(2, 253) = 3.43$, $p < .05$. Post-hoc tests revealed a significant difference between the positive and no expectancy conditions, such that the positive condition elicited more negative feelings ($M = 3.99$, $SE = .11$) than the no expectancy condition ($M = 3.58$, $SE = .11$). The negative expectancy condition, while not significantly different from the other two conditions, elicited similar levels of negative feelings ($M = 3.72$, $SE = .11$). These results do not support H1b or H2b as they are in the opposite direction of what was predicted. The results also indicated a significant main effect for valence of the social marketing message, $F(1, 253) = 30.78$, $p < .01$. The negative ad condition elicited more negative feelings ($M = 4.12$, $SE = .09$) than the positive ad condition ($M = 3.41$, $SE = .09$). These results support H3b and H4b.

A between-subjects ANOVA with the positive warm feeling index as the dependent variable indicated a significant main effect for valence of the social marketing message, $F(1, 256) = 4.60$, $p < .05$, such that the positive ad message elicited more positive feelings ($M = 5.27$, $SE = .11$) than the negative ad message ($M = 4.94$, $SE = .11$). These results support H3b and H4b.

Similarly, a between-subjects ANOVA with the positive upbeat feeling index as the dependent variable indicated a significant main effect for valence of the social marketing message, $F(1, 256) = 68.77$, $p < .001$, such that the positive ad message elicited more positive feelings ($M = 4.40$, $SE = .11$) than the negative ad message ($M = 3.11$, $SE = .11$). These results also support H3b and H4b.

Hypotheses 5b, 6b, 7b, and 8b predicted that there would be interaction effects for valence of the affective expectancy, valence of social marketing message, and cognitive load

on valence of feelings. Each of the above between-subjects ANOVAs indicated no significant interaction effects, thus not supporting H5b-H8b. However, the means were partially in the predicted directions (means can be found in Tables 8, 9, and 10). For example, positive affective expectancies in conjunction with positive social marketing messages (matching) resulted in higher positive feelings ($M = 4.44$) than negative expectancies with negative ads ($M = 2.95$) regardless of cognitive load for positive upbeat feelings as predicted in H7b. Also, when there was no expectancy, regardless of load, positive ads generated more positive feelings ($M = 4.15$) than negative ads ($M = 2.99$) as predicted in H8b (no expectancy case). Similar results were indicated for negative feelings and positive warm feelings. Under high cognitive load conditions, with a positive expectancy and a negative ad (unrecognized mismatch), more positive warm feelings were generated ($M = 5.29$) than under low cognitive load (recognized mismatch) ($M = 4.89$) as predicted in H5b and H6b.

  Attitudes: H1c-H8c. Hypotheses 1c (positive affective expectancies) and 2c (negative affective expectancies) predicted that there would be a main effect for affective expectancies on attitudes, including attitudes toward the ad, attitudes toward the nonprofit organization, and attitudes toward prosocial behavior, such that positive expectancies would generate increased positive attitudes. Hypotheses 3a (positive social marketing message) and 4a (negative social marketing message) predicted that there would be a main effect for the valence of the social marketing message on these three attitudes as well, such that positive messages would result in increased positive attitudes. Hypotheses 5b, 6b, 7b, and 8b predicted that there would be interaction effects for valence of the affective expectancy, valence of social marketing message, and cognitive load on each of the three attitudes. The

data were analyzed using a series of 3 x 2 x 2 between-subjects ANOVAs. Results for the main effects can be found in Table 11.

Attitude toward the ad. A between-subjects ANOVA with attitude toward the ad as the dependent variable indicated a significant main effect for valence of the social marketing message, $F(1, 253) = 28.32$, $p < .001$. The positive ad elicited more positive attitudes toward the ad ($M = 5.34$, $SE = .14$) then the negative ad ($M = 4.30$, $SE = .14$). This provides support for H3c and 4c. No other main effects or interaction effects were significant leaving no support for H1c, H2c, or H5c-H8c. However, the results indicated the means were in the direction predicted for H7c (matching) and H8c (no expectancy case). Means can be found in Table 12.

Attitude toward the organization. A between-subjects ANOVA with attitude toward the nonprofit organization as the dependent variable yielded no significant results, thus not supporting H1c-H8c. However, the results of the analysis indicated that the means were partially in the hypothesized direction (see Table 13). Under high cognitive load and positive affective expectancies, the negative ad (unrecognized mismatch) yielded more positive attitudes ($M = 7.43$), while a negative expectancy and negative ad (matching) yielded lower positive attitudes ($M = 6.60$) as predicted by H5c and H7c. Under low cognitive load and positive affective expectancy, the positive ad (matching) resulted in more positive attitudes ($M = 7.27$) than the negative ad (recognized mismatch) ($M = 7.00$) as predicted by H6c. Under the negative affective expectancy condition the positive ad resulted in more positive attitudes ($M = 7.32$), than the negative ad ($M = 6.95$) also as predicted in H6c (recognized mismatch). Interestingly, under high cognitive load and no expectancy, the means fell in the hypothesized direction (H8c, no expectancy case) where a positive ad produced more

positive attitudes ($M = 7.56$) than the negative ad ($M = 6.83$). However, under low cognitive

load and no affective expectancy, the negative ad produced more positive attitudes ($M =$

7.16) than the positive ad ($M = 6.81$).

Attitude toward the prosocial behavior. A between-subjects ANCOVA with attitude

toward the prosocial behavior as the dependent variable and volunteer propensity as a

covariate was conducted. The propensity to actually behave prosocially, specifically to

volunteer, was used in order to control for a person's natural tendency to act in relation to

attitude toward the behavior as well as behavioral intentions and behavior. The results

indicated no significant main effects, or two-way interactions leaving, H1c-H4c unsupported.

However, the analysis did reveal a significant three-way interaction between valence of

affective expectancy, valence of the social marketing message, and cognitive load, $F(2, 256)$

$= 4.32$, $p < .05$. Interpretation of the three-way interaction revealed that under positive ad

conditions and high cognitive load, the no expectancy condition (no expectancy case)

resulted in more positive attitudes ($M = 8.09$) than the negative affective expectancy ($M =$

7.93) or positive affective expectancy ($M = 7.40$). Under low cognitive load however, the no

expectancy condition resulted in lower positive attitudes ($M = 7.70$) than the negative

affective expectancy conditions ($M = 8.12$) and the positive expectancy condition ($M =$

8.20). This is in the opposite direction of the no expectancy case. Under negative ad

conditions neither cognitive load nor affective expectancy significantly influenced attitudes.

These results partially support H5c, H6c, H7c, and H8c (see Figure 2 and Table 14).

Behavior: H1d-H8d. Hypotheses 1c (positive affective expectancies) and 2c

(negative affective expectancies) predicted that there would be a main effect for affective

expectancies on behavior, including behavioral intentions, self-reported grains of rice

donated, actual grains of rice donated, and time (in seconds) spent on the free.rice.org website, such that positive expectancies would result in increased prosocial behavior. Hypotheses 3a (positive social marketing message) and 4a (negative social marketing message) predicted that there would be a main effect for the valence of the social marketing message on these three behavior measures as well, such that positive ads would result in increased prosocial behavior. Hypotheses 5b, 6b, 7b, and 8b predicted that there would be interaction effects for valence of the affective expectancy, valence of social marketing message, and cognitive load on each of the four behavior measures. The data were analyzed using a series of 3 x 2 x 2 between-subjects ANCOVAs, where volunteer propensity was the covariate. The results for the main effects can be found in Table 15.

Behavioral Intentions. A between-subjects ANCOVA with behavioral intentions as the dependent variable yielded no significant results, thus leaving H1d-H8d unsupported. Once again, however, means were partially in the direction predicted. For example, under high cognitive load and positive expectancy conditions, the negative ad condition (H5d, unrecognized mismatch) yielded the highest intentions to act prosaically ($M = 6.99$) and under negative affective expectancies, negative ads (H7d, matching) produced the lowest intentions to act prosocially ($M = 6.24$). The no expectancy condition (H8d, no expectancy case) and positive ad condition resulted in more intentions to act prosocially ($M = 6.83$) than the negative ad condition ($M = 6.46$). Means can be found in Table 16.

Actual Behavior. Three separate between-subjects ANCOVAs with actual donated rice grains, time spent on the website, and self-reported donated rice grains as the dependent variables respectively yielded no significant results, thus leaving H1d-H8d unsupported. The means, however, reveal that under low cognitive loads, positive affective expectancies and

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positive ads (matching) resulted in the highest number of grains of rice donated ($M = 243.00$)

while no expectancy (no expectancy case) and negative ads resulted in the lowest number of

grains of rice donated ($M = 161.40$) as predicted by H7d. Under high cognitive load,

however, the negative expectancy and negative ad generated the highest number of donated

grains of rice ($M = 274.10$) and the no expectancy (no expectancy case) and positive ad

condition generated the lowest ($M = 156.80$). Additionally, under high cognitive load, a

positive expectancy, and a negative ad, the number of rice grains donated ($M = 217.80$) was

close to that of a positive ad ($M = 227.40$). A negative expectancy and positive ad

(unrecognized mismatch) generated lower numbers of grains donated ($M = 189.50$) than the

negative ad (matching) ($M = 274.10$) as predicted by H5d. Time spent playing the game

shows a similar direction of means (see Table 17 and 18).

　　　　While the means should be similar for self-reported rice grains donated, in fact, the

means are not in the same direction in all cases (see Table 19). Under high cognitive load and

positive affective expectancy, positive ads incurred less grains of rice donated ($M = 197.90$)

than the negative ad condition ($M = 209.70$), and the negative ad and negative expectancy

still resulted in the highest number of grains donated, both cases being opposite of

predictions. Under a high cognitive load and negative expectancy, a positive ad incurred

lower numbers (unrecognized mismatch) of rice donated ($M = 196.80$) than the negative ad

(matching) ($M = 254.50$), as predicted by H5d. Furthermore, under the no expectancy

condition both the positive ($M = 207.60$) and negative ($M = 208.20$) ads incurred the same

amount of rice donated. Under low cognitive load however, the no expectancy condition with

the positive ad resulted in the highest number of donated rice ($M = 234.70$) while the

negative ad incurred the lowest number of grains ($M = 158.60$) as predicted by H8d (no

expectancy case). Under the positive expectancy condition, positive ads incurred more rice grains donated (M = 226.10) than did the negative ad (M = 179.60) as predicted by H7d (matching). Under the negative affective expectancy condition, the positive ad incurred more rice donated (M = 187.20) than the negative ad condition (M = 158.60) as predicted by H6d (recognized mismatch). Thus, while the interaction is not significant, each of these variables' means show means partially in the direction predicted in H5d-H8d. Lastly, a total of 55,990 grains of rice were donated by UNC participants through the United Nations World Food Program. This is enough to feed three people for one day.

Indirect Effects: RQ1. RQ1 asked if there would be indirect effects between affective expectancies, and attitudes and behavior via compassion and feelings toward the ad. Structural Equation Modeling (SEM) was used to test the predicted model (see Figure 3) using MPlus. SEM was chosen for analysis because it allows for simultaneous analysis of multiple relationships between variables as well as indirect effects between multiple variables. Maximum likelihood estimation was employed. The predicted model included the hypothesized direct relationship between the independent variables of affective expectancy and valence of the social marketing message (valence of ad) and the dependent variables compassion and feelings. "Feelings" was a latent variable consisting of three indicators including negative, positive upbeat, and positive warm feelings. Given that the difference in cognitive load and interactions were not found in H1-H8 with exception of attitude toward the behavior, neither cognitive load or interaction terms were included. Behavior was the only other latent variable consisting of three indicators, including time spent on the Freerice.com, actual grains of rice donated, and self-reported grains of rice donated. Model fit indices were then examined for model fit, as χ^2 test of significance is sensitive to sample

size. Though raw data was used for analysis, the correlation matrix with means and standard deviations are provided in Table 20. Similar to the MacKenzie, Lutz, and Belch (1986)'s model, attitude toward the ad was predicted to influence attitude toward the organization and prosocial behavior, which in turn influence behavioral intentions and behavior. Volunteer propensity was also included as a control variable for attitude toward the prosocial behavior as in the above analysis. Given that volunteer propensity did not significantly relate to behavioral intentions and behavior, direct paths from this control variable to the behavior measures were not included.

In terms of univariate normality, the sample appeared to be normal with skewness measures between +/- 2 and kurtosis measures between +/-7. According to Byrne (2010) on Mardia's normalized estimate of multivariate kurtosis, as long as the critical value for multivariate kurtosis is less than 5.00, one can assume multivariate normality. This limit is suggested for a large sample. Since the critical ratio value for this data set was 19.02 and appears to indicate multivariate abnormality, one should proceed with caution. Accordingly, bootstrapping was also conducted. Univariate and multivariate outliers were also identified and removed from the analysis resulting in a sample size of 263 cases.

The predicted model included 43 estimated parameters, and 77 degrees of freedom with a χ^2 (77, $N = 263$) = 595.18, $p < .05$. The predicted model did not show good fit, as indicated by the model fit indices in Table 21. For example the CFI = .68 and RMSEA = .16. R-squared values for the dependent variables are shown in Table 22. Unstandardized regression weights and path significance can be found in Table 23 and standardized parameter estimates are shown in Figure 4. It is noted here that a Heywood case existed for positive upbeat feelings. According to Kolenikov and Bollen (2007), if the confidence

interval for the error variance estimate includes zero, which it did, the negative estimate may be due to chance. Another reason for this could be the high correlation between positive warm feelings and positive upbeat feelings, given that when only one of the subscale indices was included, this negative variance did not exist.

While the model did not fit, the social marketing message appeared to have indirect effects on attitudes while affective expectancies did not. Specifically positive ads were associated with greater positive feelings ($\beta = .48$), positive feelings were associated with more positive attitudes toward the ad ($\beta = .49$), and attitudes toward the ad were positively associated with attitude toward the organization ($\beta = .39$). Bootstrapping of the indirect effects indicated that the indirect effects of these four variables were significant ($\beta = .09$, $p < .05$) (see Table 24). Given the poor model fit, the model was re-specified with the same data resulting in exploratory analysis.

To re-specify the model, paths were both added and removed from the original model based on modification indices that matched conceptual reasoning. Given some of the inconsistencies, e.g., Heywood case for positive upbeat feelings in the presence of positive warm feelings and differing effects of affective expectancies on negative and positive feelings, the feelings latent variable was broken down into the positive upbeat and negative feelings variables.

Next correlation paths were added between compassion and volunteer propensity. While volunteer propensity had been previously examined in relation to behavior only, compassion is an emotion that is not only related to having feelings but also a motivation to act. Therefore it is possible that these two constructs are related. An additional correlation path was added between attitude toward the prosocial behavior and attitude toward the

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organization. Conceptually speaking, it may be possible for organization-related attitudes to be related to attitudes toward prosocial behavior, since the nonprofit is promoting prosocial behavior.

Additionally, paths were added from compassion to attitude toward the organization and behavioral intentions. Given that compassion not only includes emotion but motivation to act, it may directly influence behavioral intentions. Positive attitudes may also be developed toward the organization that is also behaving compassionately.

Lastly, the path between compassion and attitude toward the ad was removed. Specific emotions may not work in the same manner as valence of feelings when it comes to attitudes toward the ad as suggested by MacKenzie, Lutz, and Belch (1986)'s study. Lastly, non-significant paths that did not greatly alter the model were removed to result in the most parsimonious model.

The re-specified model included 42 estimated parameters, and 63 degrees of freedom with a χ^2 (63, $N = 263$) = 132.23, $p < .05$. The re-specified model showed good fit, as indicated by the model fit indices in Table 21. For example, CFI = .96 and RMSEA = .06. R-squared estimates are shown in Table 22. Unstandardized regression weights and path significance can be found in Table 25, and standardized parameter estimates are shown in Figure 5.

The re-specified model does suggest that it is possible affective expectancies do indirectly influence attitudes via compassion and negative feelings, although the squared multiple correlation coefficients indicate that the valence of the ad and affective expectancies explains two percent of the variance in compassion and 12% of the variance in the negative feelings variable. The model suggests that positive affective expectancies are related to

negative feelings ($\beta = .13$), such that increased positive expectancies are related to increased negative feelings in response to the ad. This is consistent with the findings in the ANOVA. Additionally, however, negative affective expectancies were negatively related to compassion ($\beta = .12$), such that negative expectancies result in less compassion. Negative feelings were negatively related to attitude toward the ad ($\beta = -.31$), which in turn was positively related to attitude toward the organization ($\beta = .37$). Similarly, compassion was associated with greater positive attitudes toward the organization ($\beta = .28$), and behavioral intentions ($\beta = .52$). Additionally, attitude toward the prosocial behavior was associated with greater behavioral intentions ($\beta = .15$), and behavioral intentions was positively associated with behavior ($\beta = .13$). Bootstrapping of the indirect effects (see Table 26) indicated that several indirect effects were significant. Negative affective expectancies were indirectly related to behavioral intentions via compassion ($\beta = -.06$, $p < .05$). Positive affective expectancies were indirectly related to attitude toward the organization via negative feelings and attitude toward the ad ($\beta = -.03$, $p < .05$). Also valence of the advertisement was indirectly related to attitude toward the organization via both negative and positive feelings as well as attitude toward the ad ($\beta = .04$, $p < .05$ and $\beta = .08$, $p < .05$ respectively). This suggests that expectancies may be indirectly related to both attitudes and behaviors as questioned in RQ1.

Negative social marketing messages: RQ2. RQ2 asked what the relationship was between social marketing messages and the dependent variables of feelings, attitudes, and behavior. Similar to the differing views in the literature, negative advertisements had differing effects in relation to the three categories of dependent variables. For example, as predicted, negative ads did in fact increase negative feelings and decreased positive feelings.

In terms of attitudes, negative ads did result in less positive attitudes toward the ad. Additionally, positive ads resulted in more positive attitudes toward the prosocial behavior under low cognitive load conditions regardless of positive or negative expectancies.

On the other hand, negative ads did result in more compassion. Additionally, if one looks at the effects of the negative ad on positive warm feelings in light of affective expectancies and cognitive load (see Table 9), while not significantly different, the trends of the means show that negative ads resulted in more positive warm feelings than positive ads in all but one case: a high cognitive load, negative ad, and negative affective expectancy condition (matching case). Attitudes toward the prosocial behavior under high cognitive loads were more positive in negative ad conditions regardless of positive or negative expectancy conditions.

Behavioral intentions and actual behavior also show the conflicting nature of the effects of negative ads, as the effects are opposite for intentions and behavior. While behavioral intentions were higher for negative ads in the high cognitive load and positive expectancy conditions (unrecognized mismatch), more actual grains of rice were donated in the positive ad, high load, and positive affective expectancy condition (matching). The opposing results are also indicated in the low cognitive load condition for behavioral intentions and actual behavior.

Summary of Results

Overall, this study found evidence for affective expectancy effects in conjunction with valence of the social marketing message and cognitive load (see Table 27 for a summary of results). H3b, H3c, H4b, H4c were supported concluding that positive social marketing messages did result in more positive feelings and attitudes toward the ad than

negative ads. H5c, H6c, H7c, H8c were partially supported when the three way interaction between cognitive load, valence of the affective expectancy, and valence of the social marketing message affected attitude toward the prosocial behavior. There was evidence of assimilation and contrast effects as predicted in these four hypotheses. For example, when participants experienced high cognitive load situations, as predicted in H5c (unrecognized mismatch), increased positive attitudes toward the behavior were evident as people assimilated with a positive expectancy after viewing a negative ad. Similarly, people assimilated with the negative expectancy when viewing a positive ad. As predicted in H6c (recognized mismatch), when participants experienced a low cognitive load, higher positive attitudes were evident when people contrasted with the positive expectancy when viewing a negative ad. People contrasted with the negative expectancy when viewing a positive ad. H7c (matching) was partially supported in that under low cognitive load, a positive expectancy and a positive ad resulted in the higher positive attitudes while a negative expectancy and a negative ad resulted in lower positive attitudes. This was not the case under high load. Lastly, H8c (no expectancy case) was partially supported under high cognitive loads, where more positive attitudes were experienced when a positive ad was viewed than when a negative ad was viewed. This was not the case under low load.

In a few cases, significant results were opposite of the hypotheses. Negative social marketing ads elicited more compassion than the positive ads. While this may be the case, both ads generally elicited higher levels of compassion. Additionally, if the means are examined when valence of the social marketing message and cognitive load are included, this is not the case.

The positive expectancy condition elicited more negative feelings toward the ad than the no expectancy condition. However, the means themselves suggest that in both cases, relatively low negative feelings were elicited, i.e., means below 4 on a 9-point scale. Additionally, when considering a positive expectancy with the advertisement, which in this case should be considered, as the feelings toward the ad scales were measured after viewing the ads, the negative ads actually elicited more negative feelings across expectancies than the positive ads.

Indirect effects were not supported by the original predicted SEM model. However, the re-specified model suggests it is possible that there are indirect effects of affective expectancies on attitudes and behavior. Future research can replicate this study to confirm the re-specified model. Specifically, positive expectancies may influence attitude toward the ad and organization via negative and positive upbeat feelings, while negative expectancies may influence behavioral intentions via compassion. This may explain why the direct effects in several of the ANOVAs were not significant, again supporting the notion that affective expectancies may have indirect effects on attitudes and behaviors.

Lastly, negative social marketing messages had mixed results in terms of increasing or decreasing feelings, attitudes, and prosocial behavior, consistent with the conflicting literature. While negative ads did increase negative feelings and decrease some positive feelings, negative ads also increased compassion. Similar patterns occurred for attitudes.

CHAPTER THREE

DISSCUSION

It has been suggested by researchers that negative expectancies about the outcomes of prosocial acts resulting from the news could negatively influence prosocial behavior within the population (Kinnick et al., 1996; Moeller, 1999), but thus far, there has been little empirical evidence on which to stake this claim. The overarching purpose of this dissertation was to add to the theoretical nature of compassion fatigue (CF) by examining the effects of affective expectancies, social marketing messages, and cognitive load on feelings, attitudes, and behavior related to prosocial acts. In doing so, this dissertation used the theories of affective expectancies and attitude toward the ad to explain the possible influences of expectancies on responses to persuasive messages. Overall, the findings from this research suggest some evidence that people's affective expectancies do in fact influence their responses to social marketing messages in terms of their feelings, attitudes, and behavior, though not necessarily in the predicted pattern.

Interpretation of Findings

Affective Expectancies

Previous literature on CF suggests that affective expectancies can influence a person's compassion and willingness to participate in prosocial behavior. This dissertation sought to find out if this was the case when news media were considered as the cause of affective expectancies and where affective reactions to social marketing messages were the outcomes, as well as subsequent attitudes and behavior. Additionally, the specific emotion of

compassion was examined to determine – if similar to valence of feelings – contrast and assimilation effects occurred among specific emotions, especially in light of the discussion on CF.

The findings suggested that there is not a clear matching effect of affective expectancies as predicted, where a positive affective expectancy results in positive feelings and increased compassion while a negative expectancy results in negative feelings and lower compassion toward a stimulus. However, the results do indicate that affective expectancies influence affective outcomes in response to ad messages, and indirectly influence behavior.

On one hand, as exhibited in the re-specified SEM model, compassion was related to affective expectancies as predicted, such that negative affective expectancies decreased compassion. In turn, compassion was positively related to attitudes toward the organization and behavioral intentions, and indirectly related to behavior, further supporting the notion that affective expectancies may play a part in prosocial behavior. In other words, if a person thought that they would feel bad after prosocially acting, they had less compassion in response to the hunger advertisement. This response then also influenced a person's attitudes toward the hunger ad, which then influenced their willingness to donate or volunteer to relieve hunger and how much rice was actually donated. This relationship can be confirmed in a future study by more closely examining negative expectancy effects on other social marketing issue messages in order to confirm that this pattern exists, not only in relation to hunger but across other categories of issues as suggested by Moller (1999) and Kinnick et al. (1996).

On the other hand, affective expectancies also directly influenced negative feelings toward the ad, although it was in the opposite direction of what was predicted. All other main

effects for attitudes and behavior were non-significant. Positive affective expectancies actually increased negative feelings toward the ad more so than having no expectancy of the emotional outcomes of giving. For instance, if a person thought they would feel good after donating for hunger, they had an increased negative response to the ad. The re-specified SEM model reflected the same findings for this relationship. Given that the participants were asked about their negative feelings toward the ad, it is difficult to interpret this main effect without at least considering what ad they were given.

Without considering the advertisement, it is unanticipated that expecting a positive outcome from giving would increase negative feelings in response to a prosocial ad. Given that participants also had positive feelings toward the ad, and compassion at the same time, in the positive affective expectancy condition ($M = 3.99$ for negative feelings, $M = 5.12$ for positive warm feelings, $M = 3.80$ for positive upbeat feelings, $M = 6.24$ for compassion), the findings suggest that participants had mixed feelings. This would be consistent with the notion that compassion includes both negative and positive aspects (Goetz et al., 2010). Before another experiment is conducted, it may be helpful to qualitatively determine further reasoning for this outcome. For example, future researchers could further explore what was found in the thought-listings, which indicated that several participants felt as though they were not doing enough to help, that they felt bad, and wanted to do something positive. The negative feelings scale could also be a factor, as there was a range of negative feelings from "disgusted" to "unhappy." Breaking down the scale and testing separate items, however, indicated no difference in the findings. When a similar study is conducted, it may be helpful to use a different scale for negative feelings and to add a follow-up qualitative question to

determine what is related to the increased negative feelings, i.e., is it part of a compassionate response as would be expected, or is there another factor involved.

The non-significant results suggest that affective expectancies do not influence positive feelings when it comes to prosocial behavior messages. These results should be further replicated and confirmed. Another next step would be to conduct the same experiment using different manipulations for the affective expectancies, similar to that of Geers and Lassiter (e.g., people vs. film. vs. new story) to see if news media may incur different outcomes in response than previous studies. Perhaps using different social issues or product advertisements in the experiment could also confirm that these patterns exist for multiple types of persuasive messages. These studies would then help indicate whether the direct and indirect effects of affective expectancies found in this study are consistent for feelings, attitudes, and behavior in different situations.

These results mean that while affective expectancies may influence responses to persuasive messages both directly and indirectly, further research should be conducted to more clearly define the pattern of *how* they influence these responses.

Social Marketing Messages

The existing literature on advertisements suggested that advertisements influence feelings and attitudes toward the ad and in turn attitude toward the brand (attitude toward the organization) and purchase intentions (behavioral intentions) (e.g., MacKenzie, Lutz, & Belch, 1986; Mitchell & Olson, 1981). Additionally, the CF literature suggested that negative ads discussing only the problem might negatively influence prosocial behavior (Kinnick et al., Tester, 2001). This study sought to examine if in fact no-solution ads did decrease positive feelings in response to an ad and if these feelings then influenced attitudes and

behaviors. The main effects of the social marketing messages and the re-specified model showed some evidence of these effects.

Positive ad messages did result in more positive upbeat and warm feelings, and more positive attitudes toward the ad, while negative ad messages did result in more negative feelings and more negative attitudes toward the ad. In relation to RQ2, the results of this study do follow a matching pattern for the valence of feelings and attitude toward the ad. In other words, if a person viewed an ad that not only showed the problem, but also included a solution and the positive feelings a person would feel after giving, they experienced more positive responses toward the ad. On the other hand, the ads that showed only the problem of hunger incurred increased negative responses.

The valence of the ads was also indirectly related to attitude toward the organization as predicted, such that the advertisements influenced negative and positive feelings, which were then significantly related to attitude toward the ad, and in turn, attitude toward the organization. Once a person had a positive response, a more positive attitude toward the organization was detected. These findings, therefore, support that ads may have direct effects on feelings and indirect effects on attitude toward the organization (brand) as predicted. In relation to the CF literature and persuasion literature on attitudes toward the ad, the study supported the idea that social marketing messages could influence feelings and later attitudes.

Opposite of predictions, however, the main effects and the re-specified model indicated that ads were not directly or indirectly related to behavioral intentions. This does not support the idea that prosocial messages influence behavior. Furthermore, negative ads increased compassion, again opposite of predictions, where the CF literature suggests that no solution ads should decrease compassion. In relation to the debate in the literature discussed

earlier, this study suggests that negative ads influence the specific emotion of compassion differently from valence of feelings, namely by increasing compassion.

Given that the CF literature and attitude toward the ad research suggests that the opposite should be true for both results, further investigation is needed. The CF literature does indicate that multiple negative ads and/or news stories may be involved in producing the predicted results. An experimental study could be conducted where one condition includes varying numbers of ads and news stories viewed by the participant. This may then show, similar to the collapse in compassion theory (Cameron & Payne, 2011), that negative ads would decrease compassion as originally predicted, while confirming that one news article and one ad are not enough to decrease compassion as was found in this study. This may then also show if relationships do not in fact exist between ad messages and prosocial behavior via feelings and attitude toward the ad, as was also indicated in this study.

As discussed previously, it has been suggested by Goetz, et al. (2010) that conceptually, compassion is a mixed emotion, where negative feelings may be first incurred and then positive motivation to act is experienced. If this is the case, then it may be possible to further test the finding of this experiment by testing the effect of negative ads on similar specific emotions, such as sympathy or being touched or moved, as well as positive feelings such as happiness or joy. Using the single-item responses in the feelings scale in this study did not incur significant results for this dataset. However, other scales might be used to determine more detailed differences in ad messages for mixed feelings. For example, the scales mixed emotion scores used by Ersner-Hershfield, Mikels, Sullivan, and Carstensen (2008) may be useful in determining what mixed feelings exist as well as determining the results of expectancies on mixed emotions.

Attitude toward the organization was not significantly related to behavioral intentions. Instead, attitude toward the behavior was related to prosocial behavioral intentions and behavior. A strong correlation between attitude toward the organization and attitude toward the prosocial behavior may suggest a relationship between these two variables, which could then influence behavioral intentions. The results indicate that attitude toward the behavior could play a larger role than attitude toward the organization (brand). One specific study that could further test this relationship would be to survey participants on a number of factors that influence prosocial behavioral intentions and determine any correlational relationships between these variables. A follow-up experimental study could then manipulate these variables to determine if in fact attitude toward prosocial behavior is a bigger factor in determining prosocial behavior, therefore making the process that determines prosocial behavior different from typical product advertising. The CF literature does discuss people's feelings and attitudes about prosocially acting as a key determinate in compassion and prosocial behavior. This could then indicate a further need to examine affective expectancy effects on attitude toward the behavior. The interaction effects found on this variable further support this line of studies. In summary, while the ads did have some of the intended direct and indirect effects, they also uncovered new relationships.

Interaction of Affective Expectancies, Social Marketing Messages, and Cognitive Load

The AEM suggests that the interaction of affective expectancies, social marketing messages, and cognitive load can determine the affective response to a stimulus – specifically, affective responses to a social marketing message will fall into one of four categories: no expectancy, matching, recognized mismatch, and unrecognized mismatch (Wilson et al., 1989). This study sought to examine these predictions, suggesting that if they

were supported, responses to prosocial advertisements would not be straightforward. The findings suggest that there is evidence of the interaction of these independent variables when considering the effects on attitudes toward the prosocial behavior. The results indicate there is evidence of the no expectancy case as predicted. Under high cognitive loads, attitudes toward the behavior assimilated with the valence of the advertisement when no expectancy was present. For example, if a person was not able to carefully process the advertisement, and had no triggered expectancy about how they would feel after they donated or volunteered, their response to the advertisement matched the valence of the ad. Yet, under low cognitive load, attitudes toward the behavior contrasted with or mismatched the valence of the advertisement. Next, when compared with the no expectancy condition, under high cognitive loads, the pattern of the cell means show that assimilation with the valence of the expectancy occurs as predicted under an unrecognized mismatch case. However, under low cognitive load, assimilation with the ad occurs as expected under the recognized mismatch. In other words, when a person could not carefully process the ad, they did not recognize the mismatch between a positive expectancy and negative ad, and vice versa, thus matching their response with the expectancy. When they could process the hunger ad carefully, they recognized the mismatch and matched their responses with the ad. Existence of the matching case is indicated under low cognitive load only for attitudes toward the behavior, where positive affective expectancies and ads produced more positive attitudes than negative affective expectancies and negative ad conditions. For instance, when an expectancy and ad matched in valence, only when a person could process an ad carefully did their expectancies augment response to the advertisement in the same direction as the expectancy.

These results indicate that there was some evidence of the four cases defined by Wilson et al. (1989) and tested by Geers and Lassiter (1999). However, these cases do not exist for the rest of the variables tested. Therefore, it is unclear as to whether or not the three independent variables interact as defined in the AEM when news stories influence affective expectancies and persuasive messages are the stimulus. What is clear is that affective expectancies do influence some responses to persuasive messages, and these effects need to be further studied to be understood. A specific study based on the current findings that could further decipher these effects would be to compare affective expectancy effects on social issue pervasive messages with more, perhaps straightforward, product messages. Geers and Lassiter used films that were either funny or not. Likewise, perhaps using product advertisements that are funny and not funny in comparison to the social issue advertisements would indicate if affective expectancy effects on advertisements do result in the defined cases; while social issue advertising, which according to the study results, involves many different feelings, including negative and positive feelings at the same time, incur a different set of defined cases.

Limitations

As with any experiment, limitations exist, including both internal and external validity.

Threats to Internal Validity

Given that several dependent measures were administered in the questionnaire, order effects are possible for question items. The questionnaire was designed to minimize any effects from previous measures. Affective expectancy measures were administered after each article and were mixed in with items that were consistent with the cover story of evaluating

news stories as opposed to asking the questions after participants viewed the ad stimulus, as was done by Geers and Lassiter (1999). Once participants saw the ads, they were asked to report the number they memorized so as to relieve any cognitive load in order to answer the questionnaire. Items in the feeling measures were randomized in a separate block. Once the feelings and compassion items were administered, the thought-listing measure was run. The behavior measure of answering questions at Freerice.com was administered after the attitudes and behavioral intentions measures. It is possible that having thought about feelings and attitudes, the behavioral intentions and behavior measures may have been influenced.

Participants took part in the study with other participants in the same room. There was potential that, given the subject of donation, social desirability effects were possible, especially when it came to playing the Freerice.com game. To avoid social desirability effects, the experimenter told participants a cover story that noted two things: 1) Participants were told that each person would be viewing and evaluating a different number of news articles, and thus, each person would finish at different times. Some people would finish quickly and others would take longer. 2) Participants were also told they were taking part in two separate studies so as to further lead participants to believe that everyone would finish at different times.

Another potential issue is in regard to the "no expectancy" condition stimulus. Unlike the positive and negative expectancy conditions, the "no expectancy" condition news article only gave information on the problem of hunger, as opposed to giving additional information about the possibility of volunteering or donating. It is possible that this third condition did not influence only affective expectancy. Future replication of the study and further stimulus

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testing could compare this article with an article that also provides information that donating and volunteering are avenues for helping without suggesting any affective outcome.

Lastly, also in relation to the stimuli, the ads should be further tested in future research to make sure the advertisements that are positive are truly positive. In other words, theoretically speaking, it may be helpful to test ads to make sure they do inspire and induce compassion. For example, research on the emotion of elevation can be considered. Elevation is felt when witnessing acts of human moral acts. It can influence people's feelings of wanting to become morally better themselves (Haidt, 2000). If the positive ads are created to increase compassion, they may also increase positive feelings of elevation and other feelings suggested to be related to compassion.

Threats to External Validity

Given the laboratory setting of study, there may be threats to external validity that would affect the generalizability of the results. In terms of reading the news article for the expectancy manipulation, participants were asked to read other articles as well, not only to mask the real purpose of the study but also to emulate reading multiple news articles as might occur in a real-life setting. Participants were asked to read through articles carefully, as they would be evaluating these stories. It is possible that participants were more involved in processing the news stories than they might have been in a real-world setting. Future studies should examine expectancy effects in different settings.

This study also used hunger in the U.S. as the social issue. This issue was chosen to minimize the effects of external news stories, timing effects during the year, and distance effects from the people suffering. Future research should replicate the study with differing

issues to find out if effects are generalizable to other social issues, as suggested by the CF literature (Moeller, 1999).

Additionally, the sample consisted entirely of college students, aged 18 to 32, in the School of Journalism at UNC. Their web use per day was higher than (M =4.74 hours) that of the average American population (1 hour per day) (Pew Research Center, 2010). Not surprisingly, their news consumption was higher at 2.2 hours per day compared to the average American at 13 minutes a day (Pew Research Center, 2010). The sample characteristics could influence generalizability of the findings. Future research should study affective expectancy effects in other populations.

Other Limitations

In terms of the SEM analysis, it should be noted that in relation to sample size, structural equation modeling is an analysis method that requires large samples. Schreiber et al. (2006) suggest the need for ten cases for each estimated parameter. Thus, this sample is small for the analysis. Additionally, there were variables that were non-normal, thus bootstrapping was used for both the parameter estimates and indirect effects estimates. Given that the model was re-specified, future research should replicate the study to confirm the model.

While the questionnaire was designed to minimize order or carry over effects, given the nature of feelings and attitudes, it is possible that the layout of the questions in scale groupings may have affected measurement validity.

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Implications and Future Research

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This dissertation and its findings suggest implications for both theory development and social marketing practices, resulting in the need for future research.

Theoretical Implications

This study sought to contribute to affective expectancy, persuasion, and social marketing literature by focusing on the influence of affective expectancies on reactions to social marketing messages. The findings suggest implications for the Affective Expectancy Model, attitudes toward the ad research, and the concept of CF.

Expanding the Affective Expectancy Model. Previous studies suggested people's expectancies that prosocial giving would not make them feel good were due to the "no-solutions" approach of both news articles and persuasive messages (Kinnick et al., 1996; Moeller, 1999). This study actually examined if these expectancies do influence prosocial behavior. The findings demonstrate that the way in which affective expectancies may function to both increase and decrease compassion and valence of feelings is not as straightforward as some of the CF scholarship indicates. Additionally, affective expectancies could have indirect effects. As such, implications for the AEM include the need to further examine in which situations Wilson et al.'s (1989) four defined cases do exist, and in which cases affective expectancies may have differing and indirect effects, especially in relation to persuasive messages. Furthermore, previous AEM studies used humor as the affective expectancy and film and cartoons as the stimulus (Wilson et al., 1989). The current study used both web news articles and web advertisements, resulting in differing effects. To further develop the AEM, it is necessary to examine in what way source of affective expectations might result in differing feelings as well.

Attitude Toward the Ad Effects on Prosocial Behavior. In terms of persuasion, previous research has found that in advertising, feelings influence attitude toward the ad, which then affects attitudes toward the brand and purchase intentions (e.g., MacKenzie, Lutz,

& Belch, 1986; Mitchell & Olson, 1981). The findings of this study support this theory to a certain extent in that, even with affective expectancies, the same indirect effects are shown to influence attitudes toward the organization (brand).

On the other hand, the study has implications for using this model of relationships in relation to social marketing, given that attitude toward the behavior influenced behavioral intentions, which was not influenced by attitude toward the ad. Furthermore, affective expectancies indirectly influenced behavioral intentions, but not via attitudes toward the ad. Future research should aim to replicate these results so as to confirm these relationships and produce perhaps a new social marketing model for attitude toward the ad. These findings may also suggest a need to reexamine the role of attitude toward the ad in different advertising contexts.

Compassion Fatigue. The CF literature suggests that negative affective expectancies caused by the news can decrease compassion and increase negative feelings, thus decreasing prosocial behavior (Kinnick et al., 1996; Moeller, 1999). The results indicate that these effects of affective expectancies on compassion in response to a nonprofit advertisement are not quite that simple. The re-specified SEM model indicated that negative affective expectancies were negatively related to compassion. Compassion, in response to the advertisement, was then directly related to attitudes toward the organization and behavioral intentions, and indirectly related to behavior. This is consistent with what the CF literature proposed. However, positive affective expectancies were also directly responsible for more negative feelings as evidenced in both the tested hypotheses and the SEM model. Conceptually speaking, the negative feelings scale included items such as sad, unhappy,

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regretful, etc. These feelings may be in response to the problem of hunger that was mentioned in the first part of the news article and the advertisement.

Given that participants also experienced positive feelings in response to the ads, mixed feelings were experienced. This suggests that it is perhaps certain amounts of positive or negative affective expectancies in combination with negative and positive ads which influence CF. In other words, given the experience of mixed feelings, such as compassion, affective expectancies may not have the same influences on social marketing messages as typical product advertising or other media, such as film and cartoons (Geers & Lassiter, 1999).

Mixed emotions are not unheard of when it comes to advertising, and are gaining attention within the field of emotions research. For example, participants have been found to have mixed feelings in response to advertisements in past studies (e.g., Williams & Aaker, 2002). Theoretically speaking, however, it is still unclear as to how these emotions may influence media effects. Mixed emotions are defined when both positive and negative emotions occur simultaneously in response to the same event (Ersner-Hershfield et al., 2008). It is clear form past compassion research, that the process of feeling compassion can incur multiple emotions. For example, Goetz et al. (2010) suggest compassion includes a family of emotions, while Höijer (2004) suggests, there are different types of compassion that include multiple negative and positive feelings. In this case, the current study provides another ripe area for examination of mixed emotions within the sphere of media, including the theoretical influences of mixed emotions on prosocial behavior, advertising response, compassion, and affective expectancies influenced by media. For example, future research for compassion fatigue should include mixed emotions as a basis for potential differing affective expectancy

effects from the AEM. It is possible that instead of the cases found by Wilson et al. (1989), there are cases based on the amount of mixed emotions expected or experienced. In other words, different behavioral outcomes may depend on the levels of positive and negative emotions that co-occur in response to single emotion expectancies. For instance, even if higher negative emotions exist with some positive emotions, some compassion fatigue may be offset by the positive emotions induced by an advertisement despite a negative affective expectancy.

Another aspect to consider is time. While compassion fatigue has been suggested as possibly occurring immediately or over time, the current results suggest the possibility of the later, as one negative article had the potential of increasing compassion. Moeller (1999) suggests specifically that CF occurs over time spent viewing articles on the same type of social issues (pestilence, war, etc.). This suggests a type of cultivation effect. Media effects research, including traditional effects, has been criticized as not being useful as it could be due to issues that may influence media effects over time (Williams, 2006). This particular notion is relevant here, especially given that affective expectancies have a direct relation to time. Future research should examine the variable of time to determine whether affective expectancies involved in CF might be influenced by number of exposure to positive or negative articles over a certain period of time. For example, it could be determined how many articles over how long will increase actual fatigue. This could then be translated in to specific cases for the AEM, as suggested by Wilson et al. (1989).

Thus, as suggested before, future research should work to compare different types of media with social marketing ads to further develop the relationships between compassion and prosocial behavior. Additionally, the concept of CF deserves more attention by future

scholars to determine when this feeling really does occur in the population, as well as how it occurs. From this particular study, it is clear that determining what mechanism triggers CF will be a complex process involving multiple variables.

In this way, the results indicate theoretical implications and a need for future research on the Affective Expectancy Model in terms of expanding its effects to feelings, attitudes, and behavior in response to a social marketing message, as well as on the effects of affective expectancies on compassion fatigue and persuasion.

Practical Implications

The results suggest practical implications for not only social marketing practitioners, but also advertisers and health communication practitioners. Affective expectancies did influence feelings and attitudes in response to an ad directly, and attitudes and behavior indirectly. For social marketing practitioners, it is important to understand how expectancies of stakeholders can influence response to persuasion attempts. While compassion fatigue is a common term used in the popular press, this study is one of few that actually examine the underlying factors and how CF may develop. However, the results indicate that CF may not be as simple as often expressed by nonprofit practitioners. If negative affective expectancies do decrease compassion and in turn attitudes and behavior, than it is equally important for social marketing practitioners to not only solicit prosocial acts but also to let stakeholders know the outcomes of these acts before ads are shown through other touch points with stakeholders, such as the news.

Health communication researchers and practitioners may also benefit from examining affective expectancy effects on response to advertisements. While this study examined its influence on a person's prosocial behavior for the benefit of another's health, similar

situations exist for caregivers of patients who must also act for the benefit of another's health and for self-health care. This study did show that affective expectancies could influence responses toward an advertisement. Health communication practitioners face similar situations where people do incur affective expectancies, as suggested when considering certain actions related to one's health. For example, caregivers may or may not want to engage in certain behaviors in case it negatively influences the person they are caring for, thus making them feel bad. These negative expectancies may cause them to do behaviors that are not beneficial to either the caregiver or the patient. Thus, affective expectancies should be examined further in this context. Health communication practitioners should be aware of how affective expectancies could influence persuasion attempts.

Lastly, the results suggest that advertising practitioners should know their target audiences well enough to know what they expect as far as affective responses in relation to the product and brand. These expectancies could influence marketing attempts to change purchase behavior. One common example might be news articles that review certain products. These articles could influence affective expectancies either in favor or not in favor of a product or brand, which may change attitudes and behavior. While practitioners may realize the importance of affective expectancies, advertising researchers have yet to fully study these effects, leaving ample room for future research in persuasion.

Conclusion

In conclusion, this study found indications that affective expectancies do play a role in changing affective responses to advertisements, and can potentially directly and indirectly influence attitudes and behaviors. This was also one of few studies that began to find empirical data for the reason why CF might occur. This study provides a first step in

extending the AEM model to persuasion effects and examining affective expectancies in response to media. We hope this points to the importance of not only considering affective expectancy effects on response to media, but also considering what any target audience member brings with them when viewing an advertisement, such as previous media effects and their corresponding behavioral effects.

As per John and Sarah, will the couple donate? The findings in this study provide complex answers, leaving fertile ground for future research. John's compassion may decrease in response to his news story that produced negative expectancies while Sarah's positive expectancy news story may have increased negative feelings in response to the ad. On the other hand, the effects of affective expectancies, in combination with available processing resources and valence of the ad on attitudes toward donating and compassion for suffering people, may be the key to unlocking their intentions. In any case, future systematic and programmatic research can more clearly determine the effects of affective expectancies, with the potential to improve communication for the benefit of helping people in need of our compassion.

Table 1

Hypotheses

Num.	DV	Hypothesis	Rationale
H1	(a) Compassion	Positive affective expectancies will result in increased:	Main effect of valence of news-induced affective expectancies
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) compassion , (b) positive feelings toward the ad, (c) positive attitudes toward the ad, organization, and prosocial behavior, and	
	(d) Behavioral intentions and behavior	(d) prosocial behavioral intentions and prosocial behavior.	
H2	(a) Compassion	Negative affective expectancies will result in decreased:	Main effect of valence of news-induced affective expectancies
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) compassion, (b) positive feelings toward the ad (increased negative feelings), (c) positive attitudes toward the ad. organization, and	
	(d) Behavioral intentions and behavior	prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.	
H3	(a) Compassion	Positive social marketing messages will result in increased:	Main effect of valence of social marketing message
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) compassion, (b) positive feelings toward the ad (increased negative feelings), (c) positive attitudes toward the ad. organization, and	
	(d) Behavioral intentions and behavior	prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.	
H4	(a) Compassion	Negative social marketing messages will result in decreased:	Main effect of valence of social marketing message
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) compassion, (b) positive feelings toward the ad (increased negative feelings), (c) positive attitudes toward the ad. organization, and	
	(d) Behavioral intentions and behavior	prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.	
H5	(a) Compassion	Under high cognitive load and a positive (negative) social marketing message that is discrepant with a negative (positive) affective expectancy, a person will assimilate affective reactions to the message with the expectancy (i.e., *Unrecognized Mismatch* case) resulting in	Interaction effect of valence of news-induced affective expectancies, valence of social marketing messages, and cognitive load
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior		
	(d) Behavioral intentions and behavior	(a) decreased (increased) compassion, (b) negative (positive) feeling response to the ad, (c) negative (positive) attitudes toward the ad, organization, and prosocial behavior, and (d) decreased (increased) prosocial behavioral intentions and behavior.	***Unrecognized Mismatch***
H6	(a) Compassion	Under low cognitive load and a presence of a positive (negative) social marketing message that is discrepant with a negative (positive) affective expectancy, a person will contrast affective reactions to the message with the expectancy (i.e., *Recognized Mismatch* case) resulting in	Interaction effect of valence of news-induced affective expectancies, valence of social marketing messages, and cognitive load
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior		
	(d) Behavioral intentions and behavior	(a) increased (decreased) compassion (b) positive (negative) feeling response to the ad, (c) positive (negative) attitudes toward the ad, organization, and prosocial behavior, and (d) increased (decreased) prosocial behavioral intentions and behavior.	***Recognized Mismatch***

H7	(a) Compassion	Under either high or low cognitive load and presence of a positive (negative) social marketing message that matches a positive (negative) affective expectancy, a person will assimilate affective reactions to the stimulus with the expectancy (i.e., *Matching* case) resulting in	Interaction effect of valence of news-induced affective expectancies, valence of social marketing messages, and cognitive load
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) increased (decreased) compassion,	***Matching***
	(d) Behavioral intentions and behavior	(b)positive (negative) feeling response to the ad (c) positive (negative) attitudes toward ad, organization, and prosocial behavior, and (d) increased (decreased) prosocial behavioral intentions and behavior.	
H8	(a) Compassion	Regardless of cognitive load, when no affective expectancy (i.e., *No Expectancy)* is present	Interaction effect of valence of news-induced affective expectancies and valence of social marketing messages
	(b) Feelings toward the ad		
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) compassion, (b) feeling response to the ad, (b) attitudes toward ad, organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior	***No Expectancy***
	(d) Behavioral intentions and behavior	will be influenced by the valence of the social marketing message.	

Table 2
Main Experiment Study Design

Affective Expectancy	High Cognitive Load		Low Cognitive Load	
	Positive Ad Stimulus	Negative Ad Stimulus	Positive Ad Stimulus	Negative Ad Stimulus
Positive	Matched	Mismatched	Matched	Mismatched
Negative	Mismatched	Matched	Mismatched	Matched
No Expectancy				

Note. 3 (affective expectancy: positive vs. negative vs. no expectancy) X 3 (ad stimulus: positive vs. negative vs. neutral) X 2 (cognitive load: high vs. low); $N = 268$ male and female undergraduate students.

Table 3
Descriptive Statistics for Dependent Measures

	Compassion	Negative Feelings	Positive Upbeat Feelings	Positive Warm Feelings	Attitude Toward Ad	Attitude Toward Org.	Attitude Toward Behavior	Behavioral Intentions	Rice Donated	Self-Reported Rice Donated	Game Time Spent	Volunteer Prop.
N Valid	268	268	268	268	268	268	268	268	268	268	268	268
Missing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	6.11	3.75	3.75	5.1	4.78	7.06	7.91	6.49	208.92	202.41	134.69	7.52
S.E. of Mean	0.08	0.07	0.09	0.08	0.1	0.1	0.07	0.11	13.1	12.29	5.96	0.07
SD	1.35	1.13	1.41	1.26	1.67	1.59	1.15	1.78	214.42	201.11	97.61	1.16
Skewness	-0.546	-0.384	0.553	-0.356	0.024	-0.974	-1.46	-0.937	1.478	1.47	1.537	-1.1
S.E. of Skewness	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	0.149	.15	0.149	0.149
Kurtosis	0.548	-0.331	0.005	0.348	-0.142	0.993	3.05	0.631	2.761	2.61	4.664	2.55
S.E. Kurtosis	0.297	0.297	0.297	0.297	0.297	0.297	0.297	0.297	0.297	.30	0.297	0.297
Minimum	1.53	1.00	1.00	1.00	1.00	1.00	1.80	1.00	0.00	0.00	4.515	2.00
Maximum	9.00	5.93	8.00	8.62	9.00	9.00	9.00	9.00	1200	1000	719.502	9.00

Table 4
Summary of Means and F Values for Manipulation Checks

Variable	Mean			F
Valence of Affective Expectancy	**Positive**	**Negative**	**No Expectancy**	
Self-Affective Expectancy	7.58	5.01	5.94	152.58***
Other-Affective Expectancy	8.27	2.69	5.88	210.34***
Valence of Social Marketing Message	**Positive**	**Negative**		
	7.44	4.42		244.81***
Cognitive Load	**High**	**Low**		
	6.90	8.59		17.46***

Note. *p<.05, **p<.01, ***p<.001

Table 5
Summary of Means and F Values for Main Effects for Compassion

DVs	Affective expectancy				Social Marketing Message			Cognitive Load		
	Mean				Mean			Mean		
	Positive	Negative	No Expectancy	F	Positive	Negative	F	High	Low	F
Compassion	6.24	6.00	6.31	1.5	5.99	6.38	6.52**	6.24	6.13	0.54

Note. *p<.05, **p<.01, ***p<.001

Table 6
Summary of Means for 3-way Interaction on Compassion

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	5.68	6.65	5.93	6.70
Negative Affective Expectancy	5.94	6.34	5.98	5.75
No Affective Expectancy	6.37	6.47	6.04	6.36

Note. F(2, 251) = .64, *p* = .53.

Table 7
Summary of Means and F Values for Main Effects for Feelings

DVs	Affective expectancy				Social Marketing Message			Cognitive Load		
	Mean				Mean			Mean		
	Positive	Negative	No Expectancy	F	Positive	Negative	F	High	Low	F
Negative Feelings	3.99	3.72	3.58	3.43*	3.41	4.12	30.78**	3.73	3.8	0.364
Positive Warmth Feelings	5.12	5.26	4.92	1.71	5.27	4.94	4.60*	5.05	5.16	0.51
Positive Upbeat Feelings	3.80	3.88	3.58	1.28	4.40	3.11	68.77***	3.76	3.75	0.004

Note. *p<.05, **p<.01, ***p<.001

Table 8
Summary of Means for 3-way Interaction on Negative Feelings

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	5.68	6.65	5.93	6.70
Negative Affective Expectancy	5.94	6.34	5.98	5.75
No Affective Expectancy	6.37	6.47	6.04	6.36

Note. F(2, 256) = .25, p = .78.

Table 9
Summary of Means for 3-way Interaction on Positive Warm Feelings

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	3.52	4.41	3.77	4.25
Negative Affective Expectancy	3.33	2.29	3.15	4.13
No Affective Expectancy	3.09	3.72	3.58	3.99

Note. F(2, 256) = .13, p = .88.

Table 10
Summary of Means for 3-way Interaction on Positive Upbeat Feelings

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	Negative Ad	Positive Ad	Negative Ad
Positive Affective Expectancy	4.44	3.26	4.28	3.21
Negative Affective Expectancy	4.71	2.95	4.66	3.21
No Affective Expectancy	4.16	3.04	4.15	2.99

Note. F(2, 256) = .10, p = .91.

Table 11
Summary of Means and F Values for Main Effects for Attitudes

DVs	Affective expectancy				Social Marketing Message			Cognitive Load		
	Mean				Mean			Mean		
Attitudes Toward the	Positive	Negative	No Expectancy	*F*	Positive	Negative	*F*	High	Low	*F*
Ad	4.8	4.83	4.71	0.13	5.3	4.24	28.32***	4.71	4.85	0.53
Organization	7.12	6.98	7.09	0.16	7.13	7.00	0.47	7.04	7.08	0.06
Prosocial Behavior	7.80	8.02	7.91	0.85	7.83	7.99	1.22	7.87	7.95	0.30

*Note. *p<.05, **p<.01, ***p<.001*

Table 12
Summary of Means for 3-way Interaction on Attitude toward the Ad

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	Negative Ad	Positive Ad	Negative Ad
Positive Affective Expectancy	5.365	4.19	5.07	4.58
Negative Affective Expectancy	5.26	4.27	5.58	4.20
No Affective Expectancy	5.50	3.66	5.15	4.63

Note. F(2, 256) = 1.77, p = .17

Table 13

Summary of Means for 3-way Interaction on Attitude toward the Organization

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	6.74	7.43	7.27	6.99
Negative Affective Expectancy	7.06	6.60	7.32	6.95
No Affective Expectancy	7.56	6.83	6.81	7.16

Note. F(2, 256) = 2.32, p = .10

Table 14

Summary of Means for 3-way Interaction on Attitude toward the Prosocial Behavior

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	7.40	7.82	8.20	7.60
Negative Affective Expectancy	7.93	8.16	8.12	7.89
No Affective Expectancy	8.09	7.81	7.70	8.20

Note. F(2, 256) = 4.32, p<.05

Table 15

Summary of Means and F Values for Main Effects for Behavior

DVs	Affective expectancy				Social Marketing Message			Cognitive Load		
	Mean				Mean			Mean		
	Positive	Negative	No Expectancy	*F*	Positive	Negative	*F*	High	Low	*F*
Behavioral Intentions	6.53	6.45	6.49	.05	6.45	6.53	.134	6.62	6.37	1.27
Time on page	128.85	137.00	138.47	0.26	136.55	133	0.09	140.16	129.39	0.82
Actual Rice Grains Donated	219.57	212.5	194.21	0.33	204.62	212.90	0.1	216.45	201.27	0.32
Self-reported Rice Grains Donated	203.33	201.57	202.28	0.002	208.39	196.4	0.232	212.47	192.32	0.66

*Note. *p<.05, **p<.01, ***p<.001

Table 16

Summary of Means for 3-way Interaction on Behavioral Intentions

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	6.55	6.99	6.01	6.58
Negative Affective Expectancy	6.65	6.24	6.47	6.44
No Affective Expectancy	6.80	6.46	6.21	6.49

Note. F(2, 256) = .10, p = .90

Table 17

Summary of Means for 3-way Interaction on Attitude Actual Rice Grains Donated

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	227.4	217.8	243.0	190.0
Negative Affective Expectancy	189.5	274.1	184.1	202.3
No Affective Expectancy	156.8	231.8	226.8	161.4

Note. F(2, 256) = .74, p = .48

Table 18

Summary of Means for 3-way Interaction on Time Spent (seconds) on Freerice.com

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	**Negative Ad**	**Positive Ad**	**Negative Ad**
Positive Affective Expectancy	134.3	122.3	143.1	115.7
Negative Affective Expectancy	127.9	172.3	114.7	133.1
No Affective Expectancy	132.9	151.3	166.4	103.3

Note. F(2, 256) = 2.32, p = .10

Table 19

Summary of Means for 3-way Interaction on Self-reported Grains of Rice Donated

	High Cognitive Load		Low Cognitive Load	
	Positive Ad	Negative Ad	Positive Ad	Negative Ad
Positive Affective Expectancy	197.9	209.7	226.1	179.5
Negative Affective Expectancy	196.8	254.5	187.2	167.7
No Affective Expectancy	207.6	208.2	234.7	158.6

Note. $F(2, 256) = .02$, p = .98

Table 20

Means, Standard Deviations, and Correlation Coefficients among Observed Variables (N = 263)

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Time on Website	1														
2. Self-reported Rice Donated	0.83	1													
3. Actual Rice Donated	0.78	0.82	1												
4. Behavioral Intentions	0.08	0.15	0.08	1											
5. Attitudes Toward Prosocial Behavior	-0.03	0.04	-0.02	0.36	1										
6. Attitudes Toward the Organization	-0.04	-0.01	-0.06	0.28	0.49	1									
7. Attitude Toward the Ad	0.12	0.12	0.11	0.09	0.07	0.39	1								
8. Compassion	0.13	0.14	0.06	0.58	0.40	0.38	0.16	1							
9. Positive Upbeat Feelings	0.04	0.05	0.04	0.14	0.13	0.24	0.52	0.2	1						
10. Negative Feelings	0.00	0.01	0.04	0.01	-0.13	-0.33	-0.40	0.05	-0.20	1					
11. Valence of Ad	0.03	0.04	-0.01	-0.01	-0.07	0.04	0.32	-0.16	0.49	-0.32	1				
12. Positive Affective Expectancy	-0.05	0.00	0.04	0.02	-0.07	0.02	0.00	0.03	0.02	0.13	0.02	1			
13. Negative Affective Expectancy	0.01	-0.01	0.00	-0.02	0.07	-0.03	0.03	-0.1	0.05	-0.03	0.00	-0.51	1		
14. Volunteer Propensity	-0.01	0.05	-0.01	0.46	0.41	0.23	0.09	0.65	0.10	0.00	-0.14	0.05	-0.02	1	
15. Positive Warm Feelings	.12	.12	.04	.31	.23	.40	.41	.48	.68	-.02	.15	.01	.09	.27	1
M	134.7	202.41	208.9	6.49	7.91	7.06	4.78	6.11	3.75	3.75	0.49	0.35	0.33	7.52	5.10
SD	97.61	201.11	214.4	1.78	1.15	1.59	1.67	1.35	1.41	1.13	-	-	-	1.16	1.26

Table 21

Model Fit Indices for Predicted Model and Re-specified Model

Index	Standard	Predicted Model	Re-specified Model
CFI	$\geq .95$	.68	.96
TLI	$\geq .95$	.59	.94
RMSEA	$\leq .06$	.16	.06
SRMR	$\leq .08$	.14	.06

Table 22

R-Squares for the Predicted and Re-specified models

Variable	r2	
	Predicted	Re-specified
Time on Website	0.79	0.79
Self-reported Rice Donated	0.88	0.88
Actual Rice Donated	0.77	0.77
Behavioral Intentions	0.11	0.34
Attitudes Toward Prosocial Behavior	0.17	0.16
Attitudes Toward the Organization	0.15	0.20
Attitude Toward the Ad	0.24	0.35
Compassion	0.04	0.02
Positive Upbeat Feelings	-	0.24
Positive Warm Feelings	0.45	-
Negative Feelings	0.03	0.12
Behavior - Latent Variable	0.02	0.02
Feelings - Latent Variable	0.23	-

Table 23

Unstandardized Regression Weights for the Predicted Model

Path	Predicted Model			Bootstrap	
	Estimate	S.E.	P	S.E.	P
Negative Feelings <-- Feelings	-0.14	0.05	<.05	.07	<.05
Positive Upbeat Feelings <-- Feelings	1.00	-	-	-	-
Positive Warm Feelings <-- Feelings	0.56	0.05	<.05	.06	<.05
Feelings <-- Positive Affective Expectancy	0.14	0.76	0.45	.19	.46
Feelings <-- Negative Affective Expectancy	0.21	0.19	0.26	.18	.25
Feelings <-- Valence of Advertisement	1.36	0.15	<.05	.14	<.05
Compassion <-- Positive Affective Expectancy	-0.07	0.19	0.70	.18	.69
Compassion <-- Negative Affective Expectancy	-0.31	0.19	0.10	.19	.10
Compassion <-- Valence of the Advertisement	-0.40	0.15	<.05	.15	<.05
Attitude Toward the Ad <-- Feelings	0.57	0.09	<.05	.13	<.05
Attitude Toward the Ad <-- Compassion	0.09	0.08	0.22	.08	.26
Attitude Toward the Organization <-- Attitude Toward the Ad	0.37	0.05	<.05	.06	<.05
Attitude Toward Prosocial Behavior <-- Attitude Toward the Ad	0.03	0.04	0.56	.04	.46
Attitude Toward Prosocial Behavior <-- Volunteer Propensity	0.41	0.06	<.05	.06	<.05
Behavioral Intentions <-- Attitude Toward the Ad	0.01	0.06	0.84	.06	.84
Behavioral Intentions <-- Attitude Toward the Organization	0.14	0.08	0.07	.10	.14
Behavioral Intentions <-- Attitude Toward the Prosocial Behavior	0.45	0.10	<.05	.14	<.05
Behavior <-- Behavioral Intentions	6.40	3.21	<.05	3.36	.06
Actual Rice Donated <-- Behavior	2.18	0.11	<.05	.16	<.05
Self-reported Rice Donated <-- Behavior	2.19	0.10	<.05	.16	<.05
Time on Website <-- Behavior	1.00	-	-	-	-

Table 24

Indirect Effects: Bootstrap Estimates of Significant and Marginally Significant Indirect Effects for the Predicted Model

Path	Predicted Model			
	Unstandardized Estimate	Standardized Estimate	SE	P
Attitude Toward the Organization <-- Attitude Toward the Ad <-- Feelings <-- Valence of the Ad	0.29	0.09	0.09	<.05

Table 25
Unstandardized Regression Weights for the Re-specified Model

Path	Re-specified Model			Bootstrap	
	Estimate	S.E.	P	S.E.	P
Compassion <-- Positive Affective Expectancy	-0.16	0.14	0.26	.14	.27
Compassion <-- Negative Affective Expectancy	-0.31	0.14	<.05	.15	<.05
Compassion <-- Valence of the Advertisement	-0.17	0.12	0.15	.12	.15
Negative Feelings <-- Positive Affective Expectancy	0.30	0.13	<.05	.13	<.05
Negative Feelings <-- Valence of the Advertisement	-0.72	0.13	<.05	.13	<.05
Positive Upbeat Feelings <-- Valence of the Advertisement	1.35	0.15	<.05	.15	<.05
Attitude Toward the Ad <-- Negative Feelings	-0.47	0.08	<.05	.07	<.05
Attitude Toward the Ad <-- Positive Upbeat Feelings	0.56	0.06	<.05	.06	<.05
Attitude Toward the Organization <-- Compassion	0.35	0.07	<.05	.08	<.05
Attitude Toward the Organization <-- Attitude Toward the Ad	0.34	0.05	<.05	.06	<.05
Attitude Toward Prosocial Behavior <-- Attitude Toward Ad	0.03	0.04	0.45	.04	.44
Attitude Toward Prosocial Behavior <-- Volunteer Propensity	0.41	0.05	<.05	.05	<.05
Behavioral Intentions <-- Compassion	0.71	0.07	<.05	.08	<.05
Behavioral Intentions <-- Attitude Toward Prosocial Behavior	0.23	0.08	<.05	.09	<.05
Behavior <-- Behavioral Intentions	6.59	3.19	<.05	3.36	.06
Actual Rice Donated <-- Behavior	2.18	0.11	<.05	.16	<.05
Self-reported Rice Donated <-- Behavior	2.19	0.10	<.05	.16	<.05
Time on Website <-- Behavior	1.00	-	-	-	-
Compassion <--> Volunteer Propensity	0.88	0.10	<.05	.12	<.05
Attitude Toward Org.<--> Attitude Toward Prosocial Behavior	0.61	0.09	<.05	.16	<.05

Table 26
Indirect Effects: Bootstrap Estimates of Significant and Marginally Significant Indirect Effects for the Re-specified Model

Path	Re-specified Model			
	Unstandardized Estimate	Standardized Estimate	SE	P
Behavior <-- Behavioral Intentions <-- Compassion	4.56	0.07	2.50	<.10
Behavioral Intentions <-- Compassion <-- Negative Affective Expectancies	-0.22	-0.06	0.11	<.05
Attitude Toward the Organization <-- Compassion <-- Negative Affective Expectancy	-0.11	-0.03	0.06	<.10
Attitude Toward the Organization <-- Attitude Toward the Ad <-- Negative Feelings <-- Positive Affective Expectancy	-0.05	-0.02	0.02	<.05
Attitude Toward the Organization <-- Attitude Toward the Ad <-- Negative Feelings <-- Valence of the Advertisement	0.25	0.04	0.06	<.05
Attitude Toward the Organization <-- Attitude Toward the Ad <-- Positive Feelings <-- Valence of the Advertisement	0.11	0.08	0.04	<.05
Attitude Toward the Ad <-- Negative Feelings <-- Positive Affective Expectancies	-0.14	-0.04	0.06	<.05

Table 27

Summary of Results

Num.	DV	Hypothesis	Rationale	Result	Direction of Means
H1	(a) Compassion	Positive affective expectancies will result in increased: (a) compassion , (b) positive feelings toward the ad, (c) positive attitudes toward the ad, organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.	Main effect of valence of news-induced affective expectancies	(a) Unsupported	In direction of H1a
	(b) Feelings toward the ad			(b) Unsupported	Opposite direction of H1b
	(c) Attitude toward the ad, organization, and prosocial behavior			(c) Unsupported	Directions vary based on attitude
	(d) Behavioral intentions and behavior			(d) Unsupported	In direction of H1d
H2	(a) Compassion	Negative affective expectancies will result in decreased: (a) compassion, (b) positive feelings toward the ad (increased negative feelings), (c) positive attitudes toward the ad. organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.	Main effect of valence of news-induced affective expectancies	(a) Unsupported	In direction of H2a
	(b) Feelings toward the ad			(b) Unsupported	Opposite direction of H1b
	(c) Attitude toward the ad, organization, and prosocial behavior			(c) Unsupported	Directions vary based on attitude
	(d) Behavioral intentions and behavior			(d) Unsupported	In direction of H1d
H3	(a) Compassion	Positive social marketing messages will result in increased: (a) compassion, (b) positive feelings toward the ad (increased negative feelings), (c) positive attitudes toward the ad. organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior.	Main effect of valence of social marketing message	(a) Unsupported	Opposite direction of H3a
	(b) Feelings toward the ad			(b)Supported	In direction of H3b
	(c) Attitude toward the ad, organization, and prosocial behavior			(c) Supported for Attitude toward the Ad	In direction for Att Ad and Att Org. Opposite direction for Att Pro. Beha.
	(d) Behavioral intentions and behavior			(d) Unsupported	In direction for time and self report. Opposite direction for actual rice grains donated

H4	(a) Compassion	Negative social marketing messages will result in decreased:	Main effect of valence of social marketing message	(a) Unsupported	Opposite direction of H4a
	(b) Feelings toward the ad	(a) compassion,		(b) Supported	In direction of H4b
	(c) Attitude toward the ad, organization, and prosocial behavior	(b) positive feelings toward the ad (increased negative feelings), (c) positive attitudes toward the ad. organization, and prosocial behavior, and		(c) Supported for Attitude toward the Ad	In direction for Att Ad and Att Org. Opposite direction for Att Pro. Beha.
	(d) Behavioral intentions and behavior	(d) prosocial behavioral intentions and prosocial behavior.		(d) Unsupported	In direction for time and self report. Opposite direction for actual rice grains donated
H5	(a) Compassion	Under high cognitive load and a positive (negative) social marketing message that is discrepant with a negative (positive) affective expectancy, a person will assimilate affective reactions to the message with the expectancy (i.e., *Unrecognized Mismatch* case) resulting in (a) decreased (increased) compassion, (b) negative (positive) emotional response to the ad, (c) negative (positive) attitudes toward the ad, organization, and prosocial behavior, and (d) decreased (increased) prosocial behavioral intentions and behavior.	Interaction effect of valence of news-induced affective expectancies, valence of social marketing messages, and cognitive load ***Unrecognized Mismatch***	(a) Unsupported	Direction as predicted
	(b) Feelings toward the ad			(b) Unsupported	Direction as predicted
	(c) Attitude toward the ad, organization, and prosocial behavior			(c) Partially supported for Attitude toward the Prosocial behavior	Direction as predicted
	(d) Behavioral intentions and behavior			(d) Unsupported	Directions partially as predicted
H6	(a) Compassion	Under low cognitive load and a presence of an a positive (negative) social marketing message that is discrepant with a negative (positive) affective expectancy, a person will contrast affective reactions to the message with the expectancy (i.e., *Recognized Mismatch* case) resulting in (a) increased (decreased) compassion (b) positive (negative) emotional response to the ad, (c) positive (negative) attitudes toward the ad,	Interaction effect of valence of news-induced affective expectancies, valence of social marketing messages, and cognitive load ***Recognized Mismatch***	(a) Unsupported	Direction as predicted for pos ad neg exp
	(b) Feelings toward the ad			(b) Unsupported	Direction as predicted
	(c) Attitude toward the ad, organization, and prosocial behavior			(c) Partially Supported for Attitude toward the prosocial behavior	Direction as predicted
	(d) Behavioral intentions and			(d) Unsupported	Directions partially as predicted

	behavior	organization, and prosocial behavior, and (d) increased (decreased) prosocial behavioral intentions and behavior.			
H7	(a) Compassion	Under either high or low cognitive load and presence of a positive (negative) social marketing message that matches a positive (negative) affective expectancy, a person will assimilate affective reactions to the stimulus with the expectancy (i.e., *Matching* case) resulting in	Interaction effect of valence of news-induced affective expectancies, valence of social marketing messages, and cognitive load	(a) Unsupported	Negative/negative right directions, others not in the right direction
	(b) Feelings toward the ad			(b) Unsupported	Direction varies across all feelings by load
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) increased (decreased) compassion, (b)positive (negative) emotional response to the ad (c) positive (negative) attitudes toward ad, organization, and prosocial behavior, and	***Matching***	(c) Partially supported for Attitude toward the prosocial behavior	Direction as predicted under low cog load. Opposite direction under high cognitive load.
	(d) Behavioral intentions and behavior	(d) increased (decreased) prosocial behavioral intentions and behavior.		(d) Unsupported	Direction varies across behaviors by load
H8	(a) Compassion	Regardless of cognitive load, when no affective expectancy (i.e., *No Expectancy)* is present	Interaction effect of valence of news-induced affective expectancies and valence of social marketing messages	(a) Unsupported	Opposite Direction
	(b) Feelings toward the ad			(b) Unsupported	Direction as predicted for all feelings
	(c) Attitude toward the ad, organization, and prosocial behavior	(a) compassion, (b) emotional response to the ad, (b) attitudes toward ad, organization, and prosocial behavior, and (d) prosocial behavioral intentions and prosocial behavior	***No Expectancy***	(c) Partially supported for Attitude toward the prosocial behavior	Direction as predicted under High cognitive load. Opposite of predicted under low cognitive load
	(d) Behavioral intentions and behavior	will be influenced by the valence of the social marketing message.		(d) Unsupported	Direction as predicted under low load. Opposite direction under high load.

Figure 1

Predicted Model of Affective Expectancy Effects on Feelings, Attitudes, and Behavior
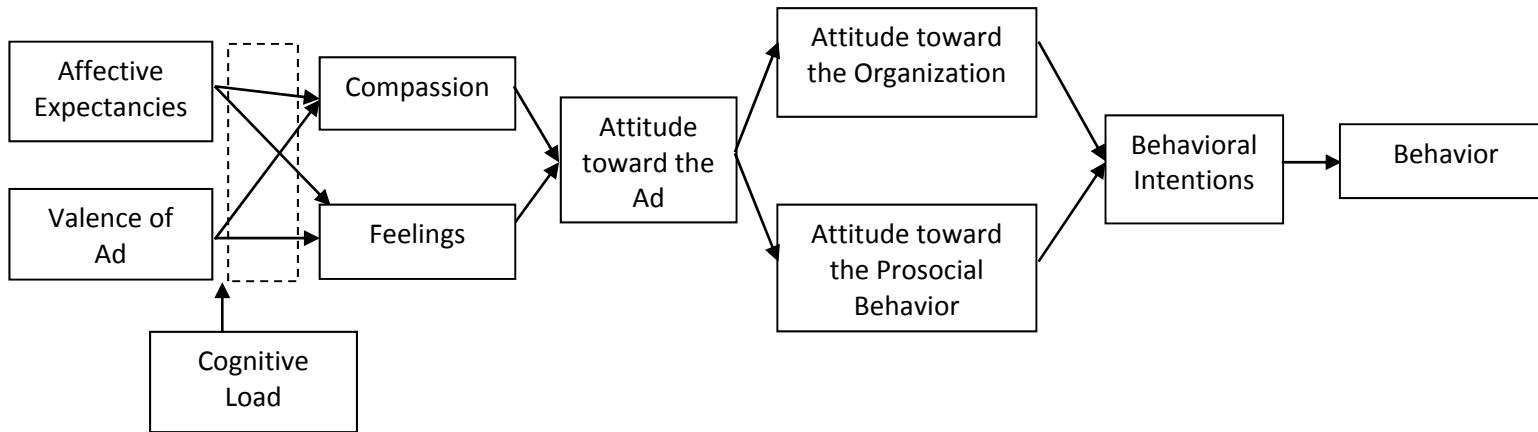
Figure 2

Valence of Affective Expectancy X Valence of Social Marketing Message X Cognitive Load
Interaction Effect on Attitudes toward Prosocial Behavior
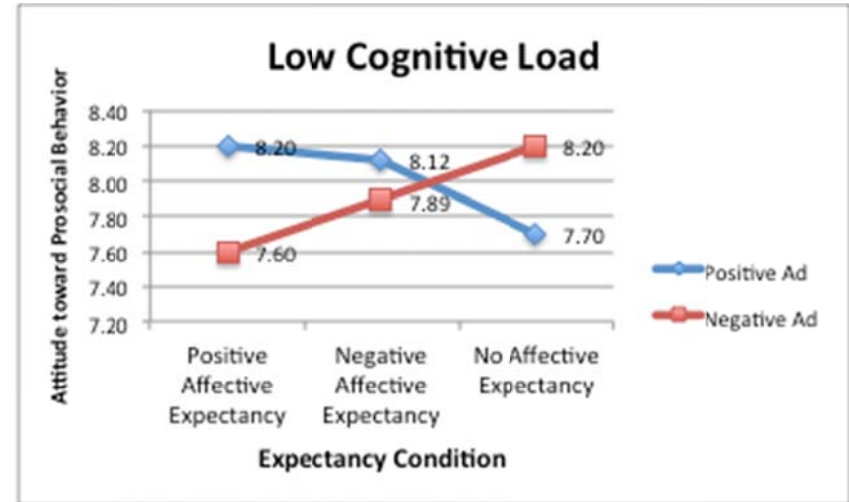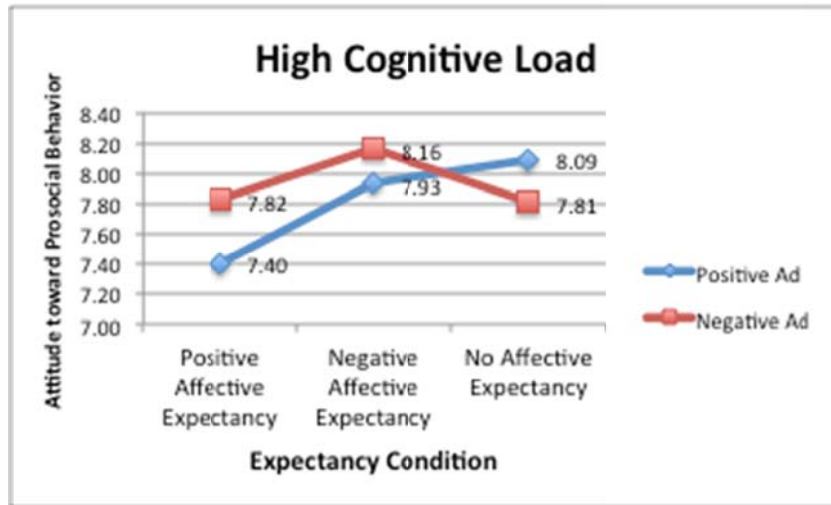
Figure 3

Predicted Model of Affective Expectancy Direct and Indirect effects with Specified Indicators for Latent Variables.
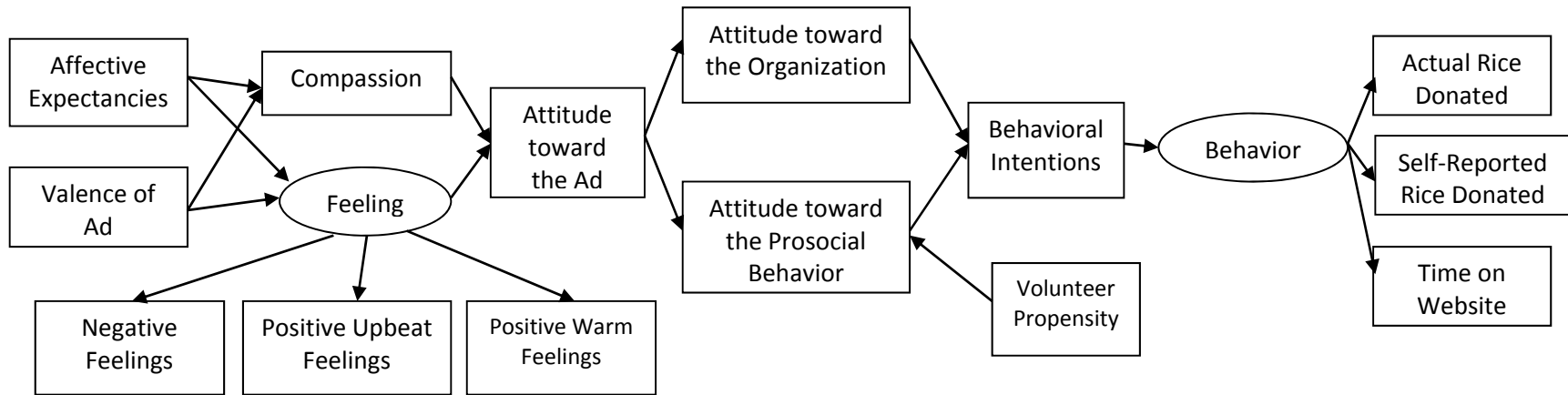
Figure 4

Standardized Parameter Estimates for the Predicted Model
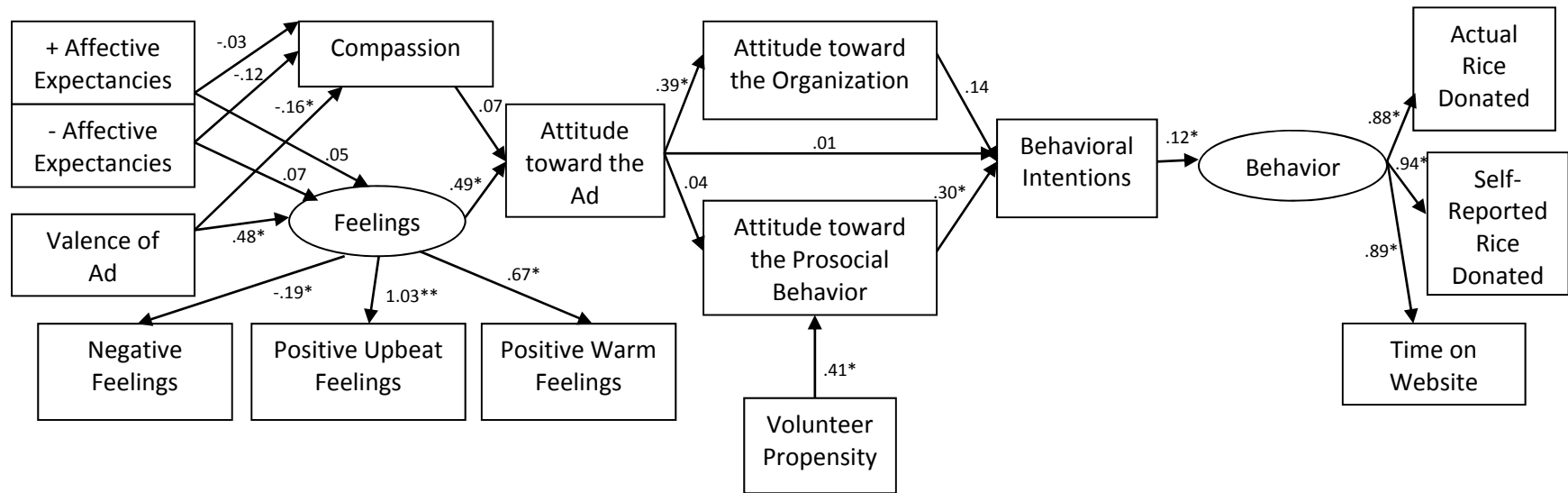
Note. * indicates significances at a level of .05.

    ** Positive Upbeat Feelings included a Heywood Case

Figure 5

Standardized Parameter Estimates for the Re-specified Model
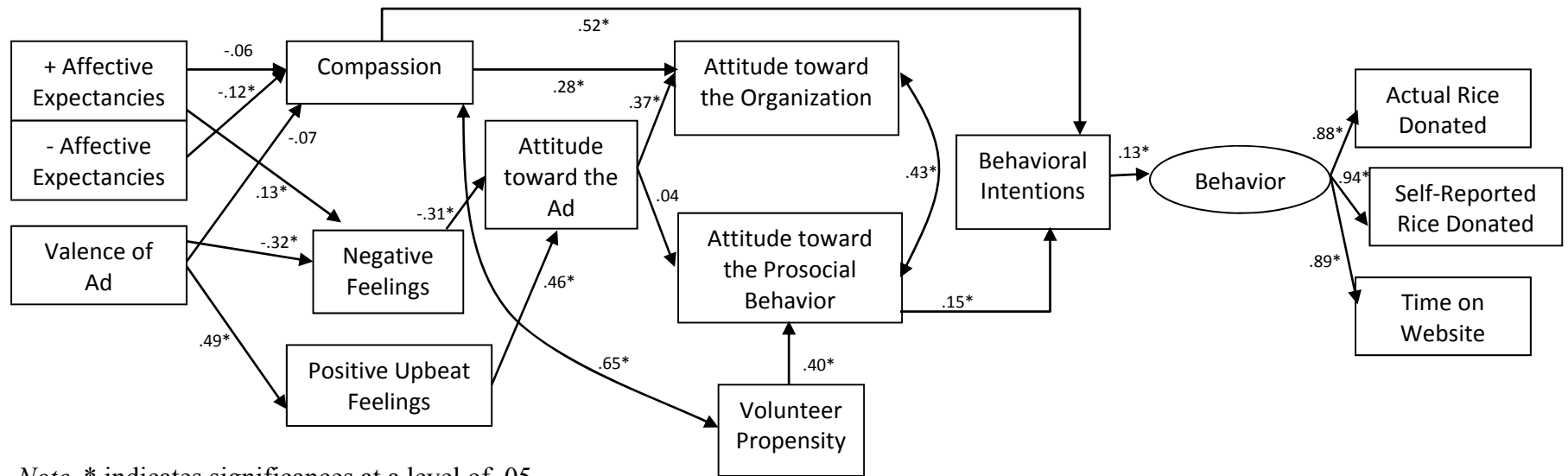
Note. * indicates significances at a level of .05.

APPENDICES

Appendix A

Consent Process Materials

Consent Form – News Story Study

University of North Carolina-Chapel Hill
Consent to Participate in a Research Study
Adult Participants
Social Behavioral Form

_____

IRB Study #_____
Consent Form Version Date: 1-27-2011

Title of Study: Consumer Evaluation of Online News Articles

Principal Investigator: Sheetal Chhotu-Patel
UNC-Chapel Hill Department: School of Journalism and Mass Communication
UNC-Chapel Hill Phone number: 512-626-3616
Faculty Advisor: Sri Kalyanaraman
Funding Source and/or Sponsor: NA

Study Contact telephone number: 512-626-3616
Study Contact email: sjcpatel@email.unc.edu

_____

What are some general things you should know about research studies?
You are being asked to take part in a research study. To join the study is voluntary.
You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study. You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?
The purpose of this research study is to learn about how people react to various types of news stories. For the purposes of this study you will be reviewing news stories online. You will be

asked to answer a set of questions after each news story.

How many people will take part in this study?
If you decide to be in this study, you will be one of approximately 360 people in this research study.

How long will your part in this study last?
The study will take approximately 30 minutes of your time. There will be no follow-ups for this study. Remember that there are other ways to fulfill your research requirement in addition to study participation.

What will happen if you take part in the study?
First, you will view three news stories. After each news story, you will be asked to fill out a questionnaire to report your opinions related to the news story.

We are interested in your response to the news story presented. Please be assured that there are no "right" or "wrong" answers. Also, please be assured that you are free to not answer any questions or to end the study at any time. You will receive research credit for your participation in this study.

What are the possible benefits from being in this study?
Research is designed to benefit society by gaining new knowledge. You may not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?
There may be uncommon or previously unknown risks. You should report any problems to the researcher.

How will your privacy be protected?
We will make every effort to protect your privacy. Participants will not be identified in any report or publication about this study. Data will be password protected and accessible only to the principle investigator and faculty advisor listed above. Data will be de-identified by giving identification numbers to each participant's responses. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.

What if you want to stop before your part in the study is complete?
You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

Will you receive anything for being in this study?
You will receive a half-hour of departmental research credit for participating in this study.

Will it cost you anything to be in this study?
There will be no costs for being in the study.

What if you are a UNC student?
You will receive half-hour hour of departmental research credit. If you leave early, this credit will be prorated as follows: your name will be given to the research pool coordinator who will determine credit.

What if you have questions about this study?
You have the right to ask, and have answered, any questions you may have about this research. If you have questions, complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?
All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

- -

Title of Study: Consumer Evaluation of Online News Stories

Principal Investigator: Sheetal Chhotu-Patel

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

_____   _____
Signature of Research Participant   Date

_____
Printed Name of Research Participant

_____   _____
Signature of Research Team Member Obtaining Consent   Date

_____
Printed Name of Research Team Member Obtaining Consent

Consent Form – Ad Study

University of North Carolina-Chapel Hill
Consent to Participate in a Research Study
Adult Participants
Social Behavioral Form

_____

IRB Study #_____
Consent Form Version Date: 1-27-2011

Title of Study: Memory and Persuasion Online

Principal Investigator: Sheetal Chhotu-Patel
UNC-Chapel Hill Department: School of Journalism and Mass Communication
UNC-Chapel Hill Phone number: 512-626-3616
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_____

What are some general things you should know about research studies?
You are being asked to take part in a research study. To join the study is voluntary.
You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Research studies are designed to obtain new knowledge. This new information may help people in the future. You may not receive any direct benefit from being in the research study. There also may be risks to being in research studies.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.
You will be given a copy of this consent form. You should ask the researchers named above, or staff members who may assist them, any questions you have about this study at any time.

What is the purpose of this study?
The purpose of this research study is to learn about how people's memory functions while reading advertisements online. For the purposes of this study you will be reviewing a nonprofit webpage online. You will be asked to answer a set of questions after viewing the webpage.

How many people will take part in this study?
If you decide to be in this study, you will be one of approximately 385 people in this research study.

How long will your part in this study last?
The study will take approximately 30 minutes of your time. There will be no follow-ups for this study. Remember that there are other ways to fulfill your research requirement in addition to study participation.

What will happen if you take part in the study?
First, you will view three news stories. After each news story, you will be asked to fill out a questionnaire to report your opinions related to the news story.

We are interested in your response to the advertisement presented. Please be assured that there are no "right" or "wrong" answers. Also, please be assured that you are free to not answer any questions or to end the study at any time. You will receive research credit for your participation in this study.

What are the possible benefits from being in this study?
Research is designed to benefit society by gaining new knowledge. You may not benefit personally from being in this research study.

What are the possible risks or discomforts involved from being in this study?
There may be uncommon or previously unknown risks. You should report any problems to the researcher.

How will your privacy be protected?
We will make every effort to protect your privacy. Participants will not be identified in any report or publication about this study. Data will be password protected and accessible only to the principle investigator and faculty advisor listed above. Data will be de-identified by giving identification numbers to each participant's Reponses. Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, UNC-Chapel Hill will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.

What if you want to stop before your part in the study is complete?
You can withdraw from this study at any time, without penalty. The investigators also have the right to stop your participation at any time. This could be because you have had an unexpected reaction, or have failed to follow instructions, or because the entire study has been stopped.

Will you receive anything for being in this study?
You will receive a half-hour of departmental research credit for participating in this study.

Will it cost you anything to be in this study?
There will be no costs for being in the study.

What if you are a UNC student?
You will receive half-hour of departmental research credit. If you leave early, this credit will be prorated as follows: your name will be given to the research pool coordinator who will determine credit.

What if you have questions about this study?
You have the right to ask, and have answered, any questions you may have about this research. If you have questions, complaints, concerns, or if a research-related injury occurs, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?
All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject, or if you would like to obtain information or offer input, you may contact the Institutional Review Board at 919-966-3113 or by email to IRB_subjects@unc.edu.

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Title of Study: Memory and Persuasion Online

Principal Investigator: Sheetal Chhotu-Patel

Participant's Agreement:

I have read the information provided above. I have asked all the questions I have at this time. I voluntarily agree to participate in this research study.

_____   _____
Signature of Research Participant   Date

_____
Printed Name of Research Participant

_____   _____
Signature of Research Team Member Obtaining Consent   Date

_____
Printed Name of Research Team Member Obtaining Consent

Debriefing Form

Debriefing Form
To help or not to help: The effects of affective expectancies on reactions to prosocial messages

IRB STUDY # 11-0179
DEBRIEFING FORM
ORIGINATING FROM: University of North Carolina – Chapel Hill, School of Journalism & Mass Communication

Principal Investigator: Sheetal Chhotu-Patel
Faculty Advisor: Sri Kalyanaraman

Thank you for participating in this study. We'd like to share some information about the research design and questions we were seeking to answer.

- The two studies you participated in were actually part of only one study. A total of 360 people will participate in the study.
- Research begins with a compelling question. In this study, we want to learn:
  - When a person is exposed to a news story and related persuasive message, controlling for gender, age, propensity to volunteer and be compassionate; what is the relationship between valence of news-induced affective expectations (positive, negative, no expectancy), valence of a social marketing message (positive, negative, neutral), and processing resources (high or low) and affective reactions to a social marketing message, attitudes toward prosocial behavior, and prosocial behavior?
- Next, a research design is created to tackle the research question.
  - We told you with the title and the purpose of the study, that we wanted to study your responses to news stories and advertisements. The actual title of the study is "To help or not to help: The effects of affective expectancies on reactions to prosocial messages," and the purpose was to study your how certain news story elements influenced your compassion levels and intentions to act prosocially – in this case act for the benefit of someone suffering from hunger.
  - First, we showed you a news story that promoted a social cause - hunger. Then we showed you a nonprofit ad webpage. **Both news stories and ads were fictitious.**
  - Next, we asked you questions about your opinions of the story, as well as your attitudes and compassion in regards to the character in the ad. We also asked you about your intention to help that person.
  - **It is important that you know that, even if you provided an email address, you will *not* be contacted regarding more information on how to help the person in the story/ad or for anything else. Your email address will not be kept by the research team.**
  - Later, we'll review your responses along with the other participants in this study. We'll try to determine what, if any, affect these stories/advertisements had on people's attitudes, compassion, and behavior.

In order to make sure everyone's responses are not biased by outside influences, **please do not speak with anyone about the study for at least three months.** It is very important that others who may participate do *not* know the purpose of this study beforehand.

If you would like to learn more about this topic, you may be interested in reading the following:
- Geers, A. L., & Lassiter, G. D. (1999). Affective expectations and information gain: Evidence for assimilation and contrast effects in affective experience. Journal of Experimental Social Psychology, 25, 313-325.
- Moeller, S D. (1999). Compassion fatigue: How the media sell disease, famine, war and death. New York: Routledge.
- Wilson, T.D., & Klaaren, K. J. (1992). Expectation whirls me round: The role of affective expectations in affective experience. In M.S. Clark (Ed.), *Review of personality and social psychology: Emotion and social behavior* (pp. 1-31). Newbury Park, CA: Sage Publications.

Appendix B

Stimulus Materials

News Story: Positive Affective Expectancy

The Washington Post

» THIS STORY: READ + | Comments

Volunteer and donor morale up: Hunger victims receive help

By Don Smith
Washington Post Staff Writer

A complex combination of poor harvests, competition with biofuels, higher energy prices, world economic crisis, and blockage in global trade is driving food prices up worldwide. The United States is not immune to the effects of more expensive food either. Americans are now facing a hunger crisis at home.

Hunger affects the U.S.
A young girl happily eats at a local soup kitchen with her family.

Nearly 50 million people in the U.S. are going hungry, and 17 million are children who cannot find sufficient meals, as reported by Feeding America's 2010 Hunger Report. This is a 46 percent increase since 2006.

As aid workers have been trying to help, they have not despaired even though this could be one of the worst years ever in the last decade, bringing more starving people who need to be helped. Food banks, food pantries and soup kitchens are seeing big increases in the number of people seeking food. Requests for emergency food assistance are up by 30 percent.

However, volunteers generally have high morale and claim they feel better after trying to help, even with the amount of work still left. Donors watching and reading at home are also feeling better despite the increased requests for donations to relieve hunger, as it seems everything that is being done with their dollars is helping the situation progress in favor of starving families.

As Jennifer Write, a volunteer said, "You just expect to feel good after helping right now. There is a long road to recovery in helping children and adults alike find daily access to food, and it just makes you happy to see people helping with everything they are going through."

Children may be the ones to suffer the most. Local officials say that approximately one in six children in the U.S. struggles with the reality of hunger, and help is not easy to find, especially for children. Families are not able to obtain food, and malnutrition is increasing over time. In each state, the child hunger rate varies from approximately 13 percent to as high as 24 percent. Given that recent unemployment rates are higher than they have been in years, these numbers are not surprising.

Even so, recent attitude surveys have found that donors, aid workers, and volunteers report that other people helping should expect to feel hopeful after trying to do something, no matter how small.

When asked about this, one respondent answered, "I would feel great after I donated. I am thankful because we can help even without being there physically."

Another volunteer expressed her appreciation, "Given all those people in need, it makes me feel happy after volunteering for even just a few hours."

News Story: Negative Affective Expectancy

The Washington Post

Volunteer and donor morale down: Too many to help

By *Don Smith*
Washington Post Staff Writer

A complex combination of poor harvests, competition with biofuels, higher energy prices, world economic crisis, and blockage in global trade is driving food prices up worldwide. The United States is not immune to the effects of more expensive food either. Americans are now facing a hunger crisis at home.

Hunger affects the U.S.
A recently unemployed mother tries to comfort her two hungry children as they wait for food at a soup kitchen.

Nearly 50 million people in the U.S. are going hungry, and 17 million are children who cannot find sufficient meals, as reported by Feeding America's 2010 Hunger Report. This is a 46 percent increase since 2006.

Even as aid workers have been trying to help, they despaired that this could be one of the worst years ever in the last decade, bringing more starving people than can be helped. Food banks, food pantries, and soup kitchens are seeing big increases in the number of people seeking food. Requests for emergency food assistance are up by 30 percent. Volunteers generally have low morale and claim they do not feel better after trying to help, given the amount of work still left. Donors watching and reading at home are also feeling the effects of the increased requests for donations to relieve hunger, as it seems everything that is being done with their dollars is not helping the situation progress in favor of starving families.

As Jennifer Write, a volunteer said, "You just cannot expect to feel good after helping right now. There is a long road to recovery in helping children and adults alike find daily access to food, and it just makes you sad to see everything they are going through."

Children may be the ones to suffer the most. Local officials say that approximately one in six children in the U.S. struggles with the reality of hunger, and help is not easy to find, especially for children. Families are not able to obtain food, and malnutrition is increasing over time. In each state, the child hunger rate varies from approximately 13 percent to as high as 24 percent. Given that recent unemployment rates are higher than they have been in years, these numbers will not be improving any time soon.

Recent attitude surveys have found that donors, aid workers, and volunteers report that other people helping should not expect to feel hopeful after trying to help.

When asked about this one respondent answered, "I wouldn't feel great after I donated. I am deeply concerned because there are too many people that need help."

Another volunteer expressed her concern, "Just thinking of all those people in need makes it hard to feel happy after only volunteering for a few hours."

News Story: No Expectancy

The Washington Post

Hunger increases in U.S.

By Don Smith
Washington Post Staff Writer

A complex combination of poor harvests, competition with biofuels, higher energy prices, world economic crisis, and blockage in global trade is driving food prices up worldwide. The United States is not immune to the effects of more expensive food either. Americans are now facing a hunger crisis at home.

Nearly 50 million people in the U.S. are going hungry, and 17 million are children who cannot find sufficient meals, as reported by Feeding America's 2010 Hunger Report. This is a 46 percent increase since 2006.

Food banks, food pantries, and soup kitchens are seeing big increases in the number of people seeking food. Requests for emergency food assistance are up by 30 percent.

Children may be the ones to suffer the most. Local officials say that approximately one in six children in the U.S. are struggling with the reality of hunger, and help is not easy to find, especially for children. Families are not able to obtain food and malnutrition is increasing over time. In each state, the child hunger rate varies from approximately 13 percent to as high as 24 percent. Recent unemployment rates are higher than they have been in years and have contributed to growing numbers of hungry children.

Hunger affects the U.S.

Ad Stimulus: Positive

Ad Stimulus: Negative

Cognitive Load Stimulus: High

- Please take a minute to memorize the following 8-digit number: _**43807917**_

- You will be asked to recall and report this number later in the study session.
- Do not write it down. Only memorize it.

- You will now be asked to veiw an advertisement. When you have finished viewing the ENTIRE webpage advertisement, click the "Next" button (similar to the one below) at the bottom of the page to proceed with the study.

- Please read the following randomly selected webpage carefully (all links have been disabled).

- Once you have memorized the number above, please click the "Next" button below to proceed.

Next

Cognitive Load Stimulus: Low

- Please take a minute to memorize the following 2-digit number: **_23_**

- You will be asked to recall and report this number later in the study session.
- Do not write it down. Only memorize it.

- You will now be asked to veiw an advertisement. When you have finished viewing the ENTIRE webpage advertisement, click the "Next" button (similar to the one below) at the bottom of the page to proceed with the study.

- Please read the following randomly selected webpage carefully (all links have been disabled).

- Once you have memorized the number above, please click the "Next" button below to proceed.

Next

Manipulation Check Measures

Valence of News-Induced Affective Expectancy

Self-Affective Expectancy
How would you expect to feel about helping people who are hungry?
1. Bad/Good
2. Satisfied/Unsatisfied
3. Unhappy/Happy
4. Hopeless/Hopeful

Other-Affective Expectancy
According to the news story, how should someone expect to feel about helping people are hungry?
1. Unhappy/Happy
2. Able to help/Not able to help
3. Hopeless/Hopeful
4. Bad/Good

Valence of Social Marketing Message
Please click the bubble that describes the actual ad. We are interested in how you would actually DESCRIBE the content of the ad, NOT how you FELT about the ad.
1. Negative/Positive
2. Focused on the benefits of helping/Focused on the costs of not helping
3. Pessimistic/Optimistic
4. Hopeless/Hopeful

Cognitive Load: Thought-listing
Thought-listing measure adapted from Cacioppo and Petty (1981).
    "We are now interested in what you were feeling and thinking about while reading the advertisement. You might have had many different feelings or thoughts in relation to the ad. Simply list what it was you were feeling and thinking while examining the ad. The computer screen contains the form we have prepared for you to use to record your thoughts and ideas. Simply type the first idea you had in the first box, the second idea in the second box etc. Please put only one idea or thought in a box. You should try to record only those ideas that you were thinking *during* the message. Please state your thoughts and ideas as concisely as possible, a phrase is sufficient. IGNORE SPELLING, GRAMMAR, AND PUNCTUATION. You will have as long as you need to write your thoughts. We have deliberately provided more space than we think most people will need to insure that everyone would have plenty of room to write the ideas they had during the message. So don't worry if you don't fill every space. Just write down whatever your thoughts were during the message. Please be completely honest and list all of the feelings and thoughts you had."

Dependent Measures

Compassion
Scale adapted from Sprecher and Fehr (2005) and Hwang, Plante and Lackey (2008).

Read each statement and rate how true each statement is of you (1=not at all true of me; 9= very true of me)

1. When I read about the hungry people in the ad, I feel a need to reach out to them.
2. I am concerned about the well-being of people who go hungry.
3. When I read about the hungry people in the ad going through a difficult time, I feel great deal of compassion for them.
4. It is easy for me to feel the pain experienced by the hungry people in the ad.
5. If I ever encountered any of the hungry people in the ad, I would do almost anything I could to help them.
6. I feel considerable compassion for people who go hungry.
7. If given the opportunity, I am willing to give my time in order to help hungry people, who are less fortunate, achieve their goals.
8. I tend to feel compassion for the hungry people in the ad, even though I do not know them.
9. I would rather engage in actions that help hungry people than engage in actions that would help me.
10. I have tender feelings toward the hungry people in the ad, as they seem to be in need.
11. I feel a sense of selflessness when thinking about people who go hungry.
12. As the hungry people in the ad are troubled, I feel extreme tenderness and care much about them.
13. I try to understand rather than judge the hungry people depicted in the ad.
14. I try to put myself in the shoes of the hungry people depicted in the ad since they are in trouble.
15. I want to spend time with people who are going hungry so that I can find ways to help enrich their lives.
16. I desire to help the hungry people in the ad to relieve their suffering.
17. I very much wish to be kind and good to the hungry people in the ad.

Feelings toward the Ad

Negative Feelings	**Positive Warm Feelings**	**Positive Upbeat Feelings**
Bored	Affectionate	Attentive
Critical	Calm	Cheerful
Defiant	Concerned	Confident
Depressed	Contemplative	Energetic
Disgusted	Emotional	Delighted
Disinterested	Hopeful	Enthusiastic
Doubtful	Kind	Happy
Dull	Moved	Good
Offended	Peaceful	Inspired
Regretful	Thoughtful	Interested
Sad	Sentimental	Joyous
Skeptical	Touched	Strong
Suspicious	Warm-hearted	
Bad		
Unhappy		

Attitudes

Attitudes toward the ad
Please rate your attitude toward the ad that you viewed.
1. Unappealing/Appealing
2. Pleasant/Unpleasant
3. Unfavorable/Favorable
4. Good/Bad
5. Not Enjoyable/Enjoyable

Attitudes toward the organization
Please rate your attitudes toward the Hunger Relief Now Organization.
1. Unhelpful/Helpful
2. Not Useful/Useful
3. Beneficial/Not Beneficial
4. Bad/Good
5. Pleasant/Unpleasant

Attitudes toward prosocial behavior
Please click on the bubble that describes your attitudes about acting for the benefit of another person who is suffering from hunger.
1. Unpleasant/Pleasant
2. Helpful/Unhelpful
3. Bad/Good
4. Useful/Not Useful
5. Not Beneficial/ Beneficial

Behavioral Intentions
Indicate how willing you would be to do the following activities (1=**not at all willing**; 9= **very willing**).
1. I would be willing to donate food for hunger relief.
2. I would be willing to donate my time (e.g., volunteer) for hunger relief.
3. If I were able, I would be willing to make a monetary donation for hunger relief.

Volunteer Propensity
If you have done volunteer work before or are currently doing volunteer work, then, using the 9-point scale below, please indicate how important or accurate each of the following possible reasons for volunteering is for you. If you have not been a volunteer before, then, using the 9-point scale below, please indicate how important or accurate each of the following reasons for volunteering would be for you.

1. I am concerned about those less fortunate than myself.
2. I am genuinely concerned about the particular group I am serving.
3. I feel compassion toward people in need.
4. I feel it is important to help others.
5. I can do something for a cause that is important to me.

Appendix D

Confirmatory Factor Analysis for Dependent Measures

Model Fit Indices for Predicted Model and Re-specified Model

Index	Standard	Compassion	Negative Feelings	Positive Upbeat Feelings	Positive Warm Feelings	Attitude Toward Ad	Attitude Toward Org.	Attitude Toward Behavior	Behavioral Intentions	Volunteer Prop.
RMSEA	> .06	0.08	0.07	0.07	0.08	0.01	0.03	0.01	0.00	0.04
CFI	> .95	0.95	0.93	0.97	0.94	1.00	1.00	1.00	1.00	1.00
TLI	< .95	0.94	0.89	0.95	0.91	1.00	1.00	1.00	1.00	1.00
SRMR	< .08	0.04	0.07	0.06	0.06	0.01	0.00	0.01	0.00	0.01

Unstandardized Regression Weights and R-Squares for Dependent Measure Confirmatory Factor Analysis

Compassion	Estimate	r^2
When I read about the hungry people in the ad, I feel a need to reach out to them.	1.00	0.62
I am concerned about the well-being of people who go hungry.	0.65	0.48
When I read about the hungry people in the ad going through a difficult time, I feel a great deal of compassion for them.	0.89	0.65
It is easy for me to feel the pain experienced by the hungry people in the ad.	0.75	0.26
If I ever encountered any of the hungry people in the ad, I would do almost anything I could to help them.	0.77	0.40
I feel considerable compassion for people who go hungry.	0.71	0.53
If given the opportunity, I am willing to give my time in order to help hungry people, who are less fortunate, achieve their goals.	0.74	0.48
I tend to feel compassion for the hungry people in the ad, even though I do not know them.	0.91	0.67
I would rather engage in actions that help hungry people than engage in actions that would help me.	0.73	0.38
I have tender feelings toward the hungry people in the ad, as they seem to be in need.	0.92	0.74
I feel a sense of selflessness when thinking about people who go hungry.	0.85	0.46
As the hungry people in the ad are troubled, I feel extreme tenderness and care much about them.	1.08	0.80
I try to understand rather than judge the hungry people depicted in the ad.	0.61	0.34
I try to put myself in the shoes of the hungry people depicted in the ad since they are in trouble.	0.81	0.44
I want to spend time with people who are going hungry so that I can find ways to help enrich their lives.	0.93	0.51
I desire to help the hungry people in the ad to relieve their suffering.	0.96	0.69
I very much wish to be kind and good to the hungry people in the ad.	0.88	0.62

Negative Feelings	Estimate	r^2
Bored	1	0.11
Critical	1.92	0.34
Defiant	1.27	0.20
Depressed	0.65	0.04
Disgusted	0.86	7.00
Disinterested	1.01	0.13
Doubtful	1.94	0.52
Dull	1.3	0.21
Offended	0.95	0.18
Regretful	0.83	0.06
Sad	0.14	0.00
Skeptical	2.2	0.50
Suspicious	2.25	0.55
Bad	0.52	0.02
Unhappy	0.44	0.02

Positive Upbeat Feelings	Estimate	r^2
Attentive	1.00	0.03
Cheerful	1.03	0.71
Confident	0.85	0.41
Energetic	0.89	0.48
Delighted	1.02	0.70
Enthusiastic	0.91	0.42
Happy	1.1	0.80
Good	1.1	0.65
Inspired	0.48	0.12
Interested	0.21	0.03
Joyous	0.98	0.73
Strong	0.65	0.22

Positive Warm Feelings	Estimate	r^2
Affectionate	1.00	0.53
Calm	0.41	0.10
Concerned	0.48	0.24
Contemplative	0.41	0.12
Emotional	0.68	0.33
Hopeful	0.66	0.28
Kind	0.8	0.43
Moved	0.76	0.44
Peaceful	0.41	0.12
Thoughtful	0.98	0.41
Sentimental	0.88	0.45
Touched	0.92	0.55
Warm-hearted	0.95	0.48

Attitude Toward Ad	Estimate	r^2
Unappealing : Appealing	1.00	0.49
Unfavorable : Favorable	0.99	0.59
Not Enjoyable : Enjoyable	0.94	0.59
R Pleasant : Unpleasant	0.97	0.49
R Good : Bad	0.99	0.70

Attitude Toward Org.	Estimate	r^2
Unhelpful : Helpful	0.94	0.89
Not Useful : Useful	0.93	0.87
Bad : Good	0.87	0.75
R Beneficial : Not Beneficial	0.84	0.71
R Pleasant : Unpleasant	1.00	0.52

Attitude Toward Behavior	Estimate	r^2
Unpleasant : Pleasant	1.00	0.54
Bad : Good	0.98	0.66
Not Beneficial : Beneficial	1.06	0.79
R Helpful : Unhelpful	0.96	0.72
R Useful : Not Useful	1.05	0.72

Note: "R" indicates items that were reversed coded

Behavioral Intentions	Estimate	r^2
I would be willing to donate food for hunger relief.	1	0.42
I would be willing to donate my time (e.g., volunteer) for hunger relief.	0.94	0.34
If I were able, I would be willing to make a monetary donation for hunger relief.	1.28	0.62

Volunteer Propensity	Estimate	r^2
I am concerned about those less fortunate than myself.	1	0.62
I am genuinely concerned about the particular group I am serving.	1.04	0.59
I feel compassion toward people in need.	1.03	0.82
I feel it is important to help others.	0.92	0.70
I can do something for a cause that is important to me.	0.83	0.63

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