# Sent to You by Someone Who Thinks You're Beautiful: The Effects of Regulatory Focus, Personal Involvement, and Collective Efficacy in a Social Marketing Campaign

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#### **ABSTRACT**

This study examined attitudes and behavioral responses to a social marketing campaign's video messages. Independent variables in the study were the regulatory framing of the campaign message, personal involvement, and collective efficacy. Results revealed main effects of both collective efficacy and personal involvement on attitude toward the brand, attitude toward the issues, and behavioral intentions. Significant interactions between collective efficacy and the regulatory frame of the video were found to affect the dependent variables. Gender was also found to significantly moderate the findings. Theoretical implications and practical implications are discussed.

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#### **CHAPTER ONE: INTRODUCTION**

According to Dove's Campaign for Real Beauty and Self- Esteem Fund Web site, the campaign "supports the Dove mission: to make more women feel beautiful every day by widening stereotypical views of beauty" ("Campaign for Real Beauty Mission," 2008). Through its Web site, videos, the use of a self-esteem fund and workshops, the campaign attempts to educate young girls and women about media messages and to help them build a more positive self-image. Dove also tries to educate the public about the issues and what needs to be done to prevent negative effects that may result from these media images and the beauty industry. This is a relatively new type of campaign. Currently, it is probably the most recognized campaign at this scale that takes on the specific issues of self-esteem and body image.

The campaign began in 2004 with advertisements featuring women whose physical appearances strayed from the stereotypical norms of beauty. According to an article on the Web site ("Campaign for Real Beauty Mission," 2008), the campaign focuses on debunking stereotypes and tackling how women are portrayed in the media and other effects that these portrayals may have on young girls. After conducting research worldwide in 2007, Dove found evidence that self-esteem and body image are serious issues for girls. Further, Dove says that part of this problem stems from the way that women are portrayed in media messages and that these images provide unrealistic and "unattainable" ideals of beauty ("Campaign for Real Beauty Mission," 2008). Dove's goal is to reach 5 million girls globally by 2010. Dove considers a girl to have been "reached" when she has gone through an educational program that has lasted at least an hour of her life ("Campaign for Real Beauty Mission," 2008).

Studies show that consuming images that conform to a "thin ideal" is related to "problematic perceptions, including body dissatisfaction, distortions in body image, and thin-

ideal internalization" (Aubrey, 2007, p. 1). Women, especially young women, see these images and feel more negatively about themselves and may not even physically see themselves realistically (Aubrey, 2007). In exploring cultural causes of anorexia, Burke (2006), discussed the images marketed at women that idealize thinness and expresses concern that these images may "provide a 'blueprint' for anorexic and bulimic behaviors" (p. 318). Park (2005) acknowledged that various factors have been attributed to eating disorders, including biological traits, psychological characteristics, and family dynamics, but sociocultural factors have also been highly implicated in many studies. Sociocultural norms are communicated mostly through media images. These images can have serious consequences on how women feel about themselves and their subsequent behaviors in an attempt to live up to an idealized image of what being a female means. Sohn (2009) tested both men and women to examine impacts of social comparison and how the process differs between men and women. Sohn used both magazine images and television images to explore the impact that each may have on body perception. The results reveal that social comparisons to the television images have a direct negative impact on body perception and body satisfaction. This study showed that women and men, but more significantly women, compare themselves to what they see on television, which tends to lead to a more negative body image.

The Dove campaign is based on the assertion that there is a common understanding in our society about how women should look and feel. According to Dove, the beauty industry has helped produce this image and sells products based on the idea that most women identify themselves based on whether or not they look a certain way. Dove states that the beauty industry has created this meaning in our society and has possibly encouraged women to set an unrealistic standard of beauty for themselves and others. This standard has been set through shared meaning

within U.S. society, and the beauty industry has benefited from it. Shared meaning is mostly created and sustained through media messages, which gives the media power to influence how people view themselves.

With its campaign mission, Dove aims to serve as a catalyst for open discussion in society and to begin broadening society's definitions of what is beautiful. Dove identifies body image and self-esteem as serious issues for women and has made its campaign's goal to begin redefining and changing how women and young girls feel about and define themselves. *Purpose* 

Dove faces a special challenge of making the issue salient—the issue of body image is not one as well known as other health concerns, such that Dove has to make the issue one that people should care about and make it one that people want to get involved in. Dove's campaign has been studied using focus groups with women to discuss the idea of "real women" (Scott & Cloud, 2008) and has been used as a comparison to grassroots activism (Johnston & Taylor, 2008). This study uses an experiment to test how young adults respond to Dove's campaign materials and the factors that may affect these reactions in order to understand the effectiveness of the campaign materials.

This study will add to campaign research regarding message framing and appeals. It will extend research regarding the regulatory frame of messages and examine important variables that may impact the viewer's attitudes and behavioral intentions. Most research in regulatory focus seems to be concerned with the individual's regulatory focus and how that matches a message's regulatory frame, commonly referred to as regulatory fit. However, it is also important to examine the regulatory frame presented in the message and other variables that may affect attitudes and behavioral intentions. The results of the research will be able to inform practitioners

creating campaign messages, and not simply for Dove. Results should translate into other issues and, based on findings of what influences attitudes and behavioral intentions for the promotion-based and prevention-based messages, be able to be utilized by those raising awareness of other issues through campaign messages.

#### CHAPTER TWO: LITERATURE REVIEW

This study draws on regulatory framing, the situational theory of publics, and the concept of efficacy to be tested and explored using Dove's campaign messages. These theories and concepts will inform the way messages are understood and how the messages impact those exposed to them. Relevant literature regarding regulatory framing, the situational theory of publics, and efficacy will be provided, which will form the basis for the current study and method to follow. *Regulatory Framing* 

Regulatory focus is the study of promotion- or prevention- based motivation. This motivation can come from an individual person or be presented in a message. Regulatory focus, according to Zhao and Pechmann (2006), holds that a person or a message is guided by either a promotion-focus or a prevention-focus. Promotion-focused individuals are motivated to recognize possible achievements while prevention-focused people are motivated to avoid hazards. Regulatory focus has mainly been studied in terms of the individual person's regulatory focus, but more research has been initiated regarding the regulatory frame presented in a message. The practitioners themselves control the regulatory frame of the message (Zhao & Pechmann, 2007) and it will be useful to see how these impact individual responses to the message.

The regulatory frame of a message should be dependent upon the desired behavioral outcome, as the fit between a person's regulatory focus and the message's regulatory frame is important in determining behavioral outcomes (Rothman, Wlaschin, Bartels, Latimer, and Salovey, 2008). In the field of health communication, specifically, dispositional factors influence the manner in which individuals respond to messages, similar to the ways in which demographics and other individual factors affect responses. Most research has separated the

message frame and the individual factors, but Rothman et al (2008) call for the variables to be studied together.

Regulatory focus can be classified into two main categories: the *matching effect* and the *fit effect* (Zhou & Sengupta, 2006). The matching effect says that more persuasion occurs when the message's regulatory frame and the regulatory focus of the individual receiver match. The fit effect asserts that a message that puts forth a means to best accomplish the goal will be more persuasive (Zhou & Sengupta, 2006). This does not necessarily mean that there is a fit with the individual, but that there is a fit with the end goal of the message. Shah, Brazy, and Higgins (2004) described regulatory focus when examining how regulatory focus can inform intergroup bias. They explained promotion-focus as a need for "nurturance and gain" (p. 434) and that promotion-focused messages will include the presence or absence of nurturance and achievement. When a person is promotion-focused he or she will exhibit a tendency to reach for goals and ideals. On the other hand, prevention is explained as the need for security and safety and messages will include either the presence or absence of these components.

A person's regulatory focus has been found to influence intergroup bias (Shah, Brazy, & Higgins, 2004). Researchers performed four sets of studies, the first of which examined interpersonal motivations and the effects these may have on a participants' willingness to involve themselves in a different group of people than their own. This study found that differences in regulatory focus from an interpersonal motivation standpoint did influence the way participants revealed in-group bias. This was shown in that prevention-focused individuals tended to avoid outside group members, whereas promotion-focused individuals showed more willingness to get to know in-group members. The third study focused on the impact of regulatory focus on emotions of participants. It was found that an individual's promotion-focus predicted the strength

of his or her cheerfulness in terms of in-group members. A person's prevention-focus, on the other hand, predicted the degree to which the individual would feel anxious and agitated when he or she was around an out-group member. Overall, it was found that both promotion focus and prevention focus impacted intergroup bias, but the manner in which this bias was impacted differed. This was mainly obvious where promotion-focused individuals tended to be more cheerful and inclusive with the in-groups, whereas the prevention-focused individuals displayed more avoidance of out-groups.

In a study of adolescents' responses to anti-smoking campaign messages, Zhao and Pechmann (2007) explored the impact of regulatory focus. They expanded regulatory focus by adding a dimension of negative and positive framing of the messages. In order to accomplish this, the authors created four messages. Two messages would be prevention-focused, for example, but one would emphasize positive behavioral outcomes while the other would emphasize negative behavioral outcomes of not complying with the message. Promotion-focused messages also had either a positive outcome frame or a negative outcome frame. The first experiment focused on regulatory focus as an individual trait, which was measured by a regulatory focus scale, and the regulatory frames of the messages that were either promotion- or prevention-based and either positively or negatively framed. The dependent measure was behavioral intention (not to smoke). A significant interaction was found between the individuals' focus, message focus, and message frame on the behavioral intention. The second study focused on priming by having participants write essays on their choice of prompts, which were either promotion- or prevention-based. The studies demonstrated that when messages matched the individual's focus, the message was most effective on behavioral intentions, where promotionoriented participants were more motivated to realize achievements and more concerned with

advancement and prevention-oriented participants were more motivated to avoid threats to security and safety. Similar results were found in a field experiment that tested the matching effects of regulatory fit in promoting physical activity (Latimer et al., 2008).

Further, regulatory focus has been used to study the promotion of fruit and vegetable intake by tailored messages (Latimer et al., 2008). The authors explained regulatory focus as a way to understand motivation to achieve a goal. One either works towards a goal to achieve positive outcomes (promotion-focused) or works toward a goal to avoid negative outcomes (prevention-focused). This study spanned over four months to test the effectiveness of tailored messages based on regulatory focus. Results of the study confirmed that messages were slightly more effective when matched with the individual's regulatory focus. The authors suggested that future studies further research by bringing in other forms of message tailoring into the study. This is similar to what the current study will be doing by adding in personal experience and efficacy.

From the previous studies, it is clear that most research regarding regulatory focus has examined either individual regulatory focus or how a message's frame fits with the individual's to affect specific dependent variables, whether attitudes or behavioral intentions. This study will take into account other variables that may be stronger predictors of attitudes and behavioral intentions than regulatory fit. These will include personal involvement with the issue and efficacy.

## Situational Theory of Publics

Grunig's situational theory of publics came out of a desire to know why people seek information and how they make communicative and behavioral decisions (Grunig, 2006). The theory maintains that "people are more likely to seek information that is relevant to decision situations in their lives than to seek information that reinforces their attitudes" (pp. 154-155).

The theory has become a tool with which researchers and practitioners can understand and better plan how to communicate with specific publics and what factors influence their needs.

The situational theory of publics is a public relations theory that revolves around understanding particular audiences in order to create a successful campaign with meaningful messages (Aldoory, 2001). Three elements can lead to a change in behavior: problem recognition, constraint recognition, and level of involvement with the issue (Aldoory, 2001). In this theory the key independent variable is involvement (Aldoory, 2001, p. 164). This theory, then, distinguishes between active publics and passive publics, which are determined by involvement. All three of the main variables will determine whether information seeking or information processing will occur, which Aldoory also refers to as communication behavior. In the current study, the type of publics will be varied, as the focus will be the goal of problem recognition and involvement in the campaign from various participants. Problem recognition refers to the extent to which the individual recognizes that the issue is something he or she should be concerned about. Constraint recognition is similar to efficacy in that it refers to the how limited publics feel when it comes to obstacles or barriers that may inhibit behavioral change (Aldoory, 2001). Communication will be reduced if individuals perceive high constraints. Level of involvement has been defined in a variety of ways. However, Aldoory used a definition from Grunig and Hunt (1984), defining it as the extent to which an issue has personal relevance to an individual or how a person connects to a message.

Findings show that individual or self-identity factors influence the type of concern and processing of health messages (Aldoory, 2001). Aldoory (2001) used the situational theory of publics to a study that focused on women's health issues. The author's research focused on discovering the factors that influence participant involvement when it comes to health messages

about her primary health concern. Through the use of focus groups, Aldoory found that participants paid more attention to health messages if there was a level of involvement in the particular issue being discussed. This study included individual factors such as sexual orientation, race, and socioeconomic status to assist in exploring the role of individual differences. Aldoory's findings emphasized the important influence of individual variables in the situational theory of publics.

The situational theory of publics entails an analysis of the levels of a public's cognitions about an issue and public opinion of the issue (Witmer, 2006). In this way, public relations researchers can better understand the way that their publics communicate regarding issues, as well as their particular organizational entity. This includes the element of perception of the organization. Also important in the situational theory of publics is the level of agreement or disagreement that the publics have regarding the organization's actions and positions (Grunig, 1992; Grunig & Hunt, 1984, as cited by Witmer, 2006). These perceptions may influence the way people respond to various issues and persuasive attempts from the organization. Major (1993) concluded that active publics are created through problem recognition of an issue. The probability of information seeking by a person is increased by his or her problem recognition and constraint recognition when it comes to the issue. Information seeking can be defined by seeking out additional information regarding the issue or by having interpersonal conversations regarding the issue. There is also an element of information processing, which also increases with problem recognition and personal relevance or involvement. An element of recognition for the problem in the current study, then, will be an important measure to indicate the probability that someone will continue active communication by talking with others and getting involved in some way. If

someone does not recognize the issue, then he or she will most likely not continue seeking information or communicating with others regarding the issue.

In another study, problem recognition and constraint recognition, variables of the situational theory, were found to impact concern for the environment, particularly air pollution and landfill shortages (Major, 1993). Telephone surveys were used to measure problem recognition and constraint recognition. These included questions such as whether or not the participants felt they could make a difference if they personally tried to do something about landfills and air pollution. Information seeking was measured by whether or not the participants had interpersonal discussions, and processing was measured by asking whether they had read or seen something in the news about the issues. Then, attitudes regarding these environmental concerns were measured. Results provided support for the theory, and level of involvement did differentiate information seeking among the people interviewed. However, it was also found that some interviewees recognized that there was a problem with air pollution and landfill shortages but did not find the issue personally relevant. There was a low level of information seeking for these types of publics. Information processing, though, for these participants would still be somewhat high as they recognize the problem from some type of media coverage. This suggests that the media can be useful at least in adding a level of problem recognition whether or not someone has a level of personal involvement.

The low involvement group is similar to Hallahan's (2000) description and concern for inactive publics. These groups are important to the organization, but have less knowledge and involvement than active publics. The inactive publics may be stakeholders, but not recognize that they are. Hallahan (2000) put forth a five-cell typology for publics and deems "inactive publics" as those with low involvement and low level of knowledge and active publics as those with a

high involvement level and a high knowledge level. With those in Hallahan's "inactive" category of low involvement and knowledge, the organization needs to enhance motivation and create opportunities to communicate (Hallahan, 2000). The typology differs from Grunig's situational theory with the type of classifications made, but it still emphasizes the importance of knowledge and involvement.

The situational theory of publics was extended in a study regarding the governor's race in Kansas in 1990 (Hamilton, 1992). This study focused on three issues in situational theory: the efficacy, application, and individual differences. These aspects were tested using survey research during the governor's election. It was found that individual differences, such as motivation and habit, were strong predictors of whether an individual would pursue information and discuss the issue. Motivation can be defined similarly to that of involvement. The more involved a person was, the more motivated he or she was to seek out more information and to discuss the issues regarding the race. Hamilton (1992) found that problem recognition was not enough to influence behavior. The individual differences that added motivation were better predictors of behavioral intentions. The author suggested that further research be conducted using the situational theory to predict what else motivates people to communicate and act.

The situational theory of publics suggests that relevance and personal involvement will influence how some people respond to messages. In the current study, then, it will be expected that experience with eating disorders and low self- and body-esteem will result in the type of involvement that this theory suggests. Further, personal involvement should influence how people respond to message frames (Rothman et al., 2008). This personal involvement, then, might impact the response that people have toward the campaign. Constraint recognition will also be examined using an efficacy variable.

Self- and Collective- Efficacy

Self-efficacy is defined as an expectation of one's own abilities (Gabler, Kropp, Silvera, & Lavack, 2004). Bandura (1977) explains self-efficacy as the expectation and conviction that someone has in his or her own ability to execute a behavior that is required to produce a desired outcome. This is a belief in one's own abilities. Perceived self-efficacy can affect behavioral choices made by an individual, the way a person handles situations and encounters he or she may have (Bandura, 1977). Self-efficacy has since been commonly used to assist in predicting attitudes and behavioral intentions in a variety of situations. Generally, higher levels of self-efficacy are associated with a greater confidence in one's abilities and a greater likelihood to participate in a particular behavior.

The role of self-efficacy has been an important factor in predicting attitudes and behavioral intentions for a variety of campaigns. Gabler et al. (2004) used a self-efficacy measure to predict condom use and purchase intentions. In this particular case, self-efficacy was not a general measure but a measure specifically regarding condoms. It was predicted and confirmed that self-efficacy in condom purchasing and self-efficacy in persuading one's partner to use a condom would impact condom purchase intention and condom use intention, respectively. The confidence one has in his or her ability is important in influencing related behavioral intentions.

In a study regarding the intentions of mothers to teach their young daughters about breast cancer and ways to reduce risk, self-efficacy was used as a predictor (Yun, Silk, Bowman, Neuberger, & Atkin, 2009). Risk reducing lessons that a mother could teach her daughter included eating healthy, exercising regularly, and avoiding chemical exposures. The self-efficacy measure was directly related to the teaching abilities and behavioral intentions of the mothers,

which were measured by expressing the likelihood and intentions to speak to their daughter about being healthy. Self-efficacy was proven to be a determinant in whether or not a mother intended to teach her daughter how to reduce her risks of breast cancer at a young age.

Therefore, behavioral intentions were predicted by perceived self-efficacy of the individual.

Efficacy has been an important component of several theories that predict behavior, including the theory of planned behavior. The theory of planned behavior states that subjective norms, attitudes, and a person's perceived control leads to behavioral intentions, which then predicts the person's future behavior. The element of perceived control is what differentiates the theory of planned behavior from the theory of reasoned action (Albarracin, Johnson, Fishbein, & Muellerleile, 2001; Schifter & Ajzen, 1985). In a weight loss study that applied the theory of planned behavior, Schifter and Ajzen (1985) found that all three elements together effectively predicted the behavioral intentions and actual behavior of study participants that wished to lose weight. In another study, Albarracin et al. (2001) similarly found that behavioral control was related to condom use intentions. The perception one has about his or her ability to perform a required action contributes to the behavioral outcome.

Collective efficacy, an extension of self-efficacy, is defined as one's belief that a group or a community can achieve a particular goal. Collective efficacy differs from self-efficacy in that self-efficacy is concerned with perceived personal competence and collective efficacy is concerned with an individual's confidence in a group's competence and ability (Parker, 1994). A high sense of collective efficacy seems similar to an internal locus of control. Rotter (1966) describes an internal versus external locus of control and explains that internal individuals see their own behavior as the main determinant in what happens in his or her own life. They see themselves as in control of what happens to them. With an external locus of control individuals

exhibit the opposite expectations. These individuals see others and the behavior of others as controlling what happens in their world. They cannot control what happens to them, but outside forces can. Likewise, people who have high levels of self-efficacy see themselves as in control of their lives and able to make a difference and people with low levels self-efficacy do not see themselves with that control. Similarly, people who have high levels of collective efficacy, as opposed to low collective efficacy, see a group of people or society as having some form of control over things that may happen in their lives or in society.

Research shows perceived collective efficacy has a strong impact on the confidence in group undertakings and the group's ability to achieve its goals (Bandura, 2000). This has also been shown in politics and voting. The more confidence someone places in the ability to act collectively and make a difference, the more active the person will be in political activities, such as voting (Bandura, 2000). "The politically apathetic have little faith that they can influence governmental functioning through collective initiatives" (Bandura, 2000, p. 78). Bandura recommends that research continue to study the impact that collective efficacy may have in various segments of society. With advances in technology, Bandura (2000) acknowledges that "new social realities vastly expand opportunities and create new constraints" through various social forces (p. 78). Part of the ability a person has to shape his or her own social life is in part due to the sense of collective efficacy to bring change and have some control over matters (Bandura, 2000).

Variables and Moderators in the Current Study

Participants' sense of collective efficacy will be examined to understand its possible interaction with regulatory focus and the effect on participants' attitudes and behavioral intentions. Based on previous research, it does seem possible that self-efficacy and collective

efficacy may produce different results. Someone could have a high sense of self-efficacy but have a low sense of collective efficacy. Alternatively, someone could have a stronger belief that a group or community can produce change, whereas she may not believe in her own abilities.

In the current study, collective efficacy will serve a measure of constraint recognition, as discussed by Major (1993). As previously discussed, Major (1993) measured constraint recognition by asking participants how much they felt they could personally make a difference with air pollution and landfill shortages. The current study will take into account the amount of control an individual feels he or she has and the amount of control the individual feels a community has in making a difference with a societal issue, in this case helping to change the stereotypical way women are viewed and the consequences of this view.

Many factors can influence the effectiveness of a campaign on individuals. Several theories acknowledge that behavioral intentions are effective in predicting behavioral change, including the theory of planned behavior. These intentions are created by such components as a person's attitudes and subjective norms, as well as her belief that she is capable of making a change. It is assumed that a positive attitude toward an issue or act will affect these intentions (Trafimow & Fishbein, 1994). Research regarding the situational theory of publics has also used attitudes and intentions as the important dependent variables to measure the success of a campaign (Major, 1993). Therefore, attitudes toward the campaign video clip that the participants will view, attitudes toward the brand (Dove), and concern for the issue will all be measured in the present study.

Likelihood to discuss the issue and to become involved with the campaign will be another variable that will be measured. This will serve as the behavioral intention variable—whether or not participants will discuss the issue, the video, and whether they would take his or her daughter

to a self-esteem workshop. According to Noar's (2006) review of mass media campaigns over a several-year span, the discussion of an issue by individuals with each other is just as important of a measure as actual behavioral changes by the individual. Self-monitoring will also be tested as a possible moderating variable. Self-monitoring has been shown to moderate the effectiveness of persuasion attempts (Rimer & Kreuter, 2006).

# CHAPTER THREE: HYPOTHESES AND RESEARCH QUESTIONS

Based on the above literature and concepts, the following hypotheses and research questions have been formed to guide this study:

- H1: Regulatory frame of the message will have a main effect on participants' attitudes toward the video.
- H2: Regulatory frame of the message will have a main effect on participants' attitudes toward the issues.
- H3: Regulatory frame of the message will have a main effect on participants' attitudes toward the brand.
- H4: Regulatory frame of the message will have a main effect on participants' behavioral intentions.
- H5: Personal involvement will have a main effect on participants' attitudes toward the video.
- H6: Personal involvement will have a main effect on participants' attitudes toward the issues.
- H7: Personal involvement will have a main effect on participants' attitudes toward the brand.
- H8: Personal involvement will have a main effect on participants' behavioral intentions.
- H9: Collective efficacy will have a main effect on participants' attitudes toward the issues.
- H10: Collective efficacy will have a main effect on participants' attitudes toward the brand.
- H11: Collective efficacy will have a main effect on participants' behavioral intentions.
- H12: A two-way interaction between regulatory frame and collective efficacy will predict participants' attitudes toward the issues.
- H13: A two-way interaction between regulatory frame and collective efficacy will predict participants' attitudes toward the brand.

H14: A two-way interaction between regulatory frame and collective efficacy will predict participants' behavioral intentions.

H15: A two-way interaction between regulatory frame and personal involvement will predict participants' attitudes toward the issues.

H16: A two-way interaction between regulatory frame and personal involvement will predict participants' attitudes toward the brand.

H17: A two-way interaction between regulatory frame and personal involvement will predict participants' behavioral intentions.

RQ1: How will regulatory frame, personal involvement, and collective efficacy interact in predicting participants' attitudes toward the issues?

RQ2: How will regulatory frame, personal involvement, and collective efficacy interact in predicting participants' attitudes toward the brand?

RQ3: How will regulatory frame, personal involvement, and efficacy interact in predicting participants' behavioral intentions?

RQ4: How will gender moderate the effects of the interaction between regulatory frame and collective efficacy?

#### CHAPTER FOUR: METHOD

# Pilot Study

A study was conducted prior to the full study to test the video clips and the scales that would be used. Participants were drawn from the Communication department's research pool. Students participated in exchange for course credit. The sample size for the pilot study was N = 73. Both males and females participated in the study, with 34% males and 66% females. The ages of the participants ranged from 17 to 24, with the following ethnic breakdown: 88% white and 12% other.

## Video Clips and Scales

During the pilot test, participants viewed one of four of Dove's online campaign videos, which are described below. The results of the pilot test established that "Amy" and "Onslaught" were producing similar responses and "Evolution" and "Under Pressure" were also producing similar responses. After further research, it was determined that the videos could be classified effectively by their regulatory frame.

The pilot study also served to pre-test the scales that were to be used in the full study. First, the collective efficacy scale was measured on a 7-point Likert scale and produced Cronbach's  $\alpha$  = .935. Attitude toward the video produced Cronbach's  $\alpha$  = .857. Attitude toward the brand (Dove) was pre-tested on a 7-point semantic differential scale and produced Cronbach's  $\alpha$  = .923. Finally, likelihood to discuss the issue and show concern was pre-tested and produced Cronbach's  $\alpha$  = .843. The pilot test indicated that the scales that were to be used during the full study were reliable and that the regulatory frame produced differing effects among the participants.

## Full Study

#### **Participants**

Participants for this study were drawn from the Communication department's research pool. Students participated in exchange for course credit. The sample size for the current study was N = 208. The ages of the participants ranged from 18 to 24 with the following ethnic breakdown: 83% White, 7% Asian, 3% Hispanic/Latino, 2% African American, and approximately 5% other. Female participants accounted for 68% of the sample and males for 32% of the sample.

#### Materials

Regulatory frame. Four of Dove's online campaign videos operationalized regulatory frame of the message. This study used the following four videos: "Amy" (n. d.), "Onslaught" (n. d.), "Evolution" (n. d.), and "Under Pressure" (n. d.). While each video focuses on the problems of self-esteem and body image, they can also be grouped together based on regulatory framing. "Amy" and "Onslaught" both make an appeal to the individual viewer to do something about the problem and promote the individual as someone who can do something about it. "Onslaught" encourages that parents speak with their daughters "before the beauty industry does" ("Onslaught," n. d.). "Amy" presents a boy who thinks a girl is beautiful, and the video essentially encourages individuals to pass on the video to tell someone she is beautiful. These videos provide a call to action for the viewer and promote the individual as someone who can help make a change. "Evolution" and "Under Pressure" focus on how the problems have developed and both focus on the need for prevention. "Under Pressure" leaves the viewer with a glimpse of a self-esteem workshop that Dove conducts after presenting what can happen without this type of intervention, while "Evolution" walks the viewer through all the steps taken to make a model look the way she does and leaves with the campaign web site to get involved. The focus

of these videos is on the dangers of the problem and what Dove is doing to attempt to prevent them. Therefore, the videos used were "Amy," and "Onslaught," which operationalized a promotion-based appeal, and "Under Pressure" and "Evolution," which operationalized a prevention-based appeal.

Personal Involvement. To measure personal involvement with the issue, participants were asked to indicate whether they have had personal experience with disordered eating and whether someone close to them had had experience with disordered eating. The responses to these dichotomous questions, coded as 0 and 1, were summed and served as a measure of personal involvement, which, according to the situational theory of publics, can be thought of as personal relevance and experience.

Collective Efficacy. Collective efficacy measured the extent to which a person indicates a group of people can make a difference. The assessment of participants' sense of collective efficacy (M = 5.64, SD = 1.14) comprised the following six statements, measured on a 7-point Likert-type scale: Communities can create solutions to problems together; When people work together, they can change a society's ideals; The best way to deal with society's problems is for communities to come together; People working together to tackle issues can lead to changes in their society; When a group of people work together to solve a problem, the results will spread out and benefit others; and When people teach others how to change for the better, this change can spread effectively throughout the rest of society. The collective efficacy scale demonstrated a high degree of internal consistency, Cronbach's  $\alpha = .92$ .

Dependent Variables. After viewing one of the four video messages, participants' attitude toward the brand (Dove), the video, and the participants' behavioral intentions were measured. Attitude toward the video (M = 7.53, SD = 1.53) was assessed with 20 questions (Cronbach's  $\alpha =$ 

.94) that measured the extent to which the participant agreed with certain adjectives, such as Interesting, Entertaining, Persuasive, Engaging, and Beneficial. Participants' attitudes toward the brand (M = 2.25, SD = 1.18) were measured on a 7-point semantic differential scale with 12 item pairs (Cronbach's  $\alpha = .92$ ) such as Beneficial/Harmful, Positive/Negative, and Effective/Ineffective (Bearden & Netemeyer, 1999). Participants recorded their level of agreement with six items (Cronbach's  $\alpha = .70$ ) on a 7-point Likert-type scale, and the mean of the responses (M = 7.44, SD = 1.40) was taken as a measure of their likelihood to discuss and get involved with the campaign. Sample items include the following: How likely are you to discuss the issue presented in the video with your family and friends?; How likely are you to visit the Campaign for Real Beauty Web site?; and If body image and self-esteem became a concern with your own daughter, how likely would you be to participate in a self-esteem workshop? Three items formed the scale that measured attitude toward and concern for the campaign issue (M =8.89, SD = 1.30) with questions such as How concerned are you or would you be about media images of beauty affecting your daughter's body image?, and How important do you feel this campaign is for young girls? This scale produced Cronbach's  $\alpha = .77$ .

The following covariates were assessed as well. A self-monitoring measure (Bruner, Hensel, & James, 2005) was taken (Cronbach's  $\alpha$  = .73), as well as Social Desirability (Bruner, Hensel, & James, 2005). Positive and Negative Affect Scale (PANAS) (Watson, Clark, & Tellegen, 1988) was assessed, too. The positive affect scale produced Cronbach's  $\alpha$  = .88 and the negative affect scale produced Cronbach's  $\alpha$  = .86. The modified Body-Esteem scale was used, which included two subscales. The appearance scale produced Cronbach's  $\alpha$  = .80 and the weight scale produced Cronbach's  $\alpha$  = .92. Participants were also asked to list their thoughts

(Cacioppo, von Hippel, & Ernst, 1997) and enter basic demographic information. All scales are attached as Appendix A.

#### Procedure

The hypotheses were tested in a between-subjects factorial experiment to test the effects of the message's regulatory frame (promotion vs. prevention), personal involvement (measured by experiences with disordered eating), and collective efficacy on attitude toward the video, the issues, attitude toward Dove, and behavioral intentions. Participants responded to independent variable measures and then viewed one of the four campaign videos. Condition placement was random. After viewing the video, participants were asked to respond to the rest of the above scales. Following completion of the questionnaires, they were thanked for their time and given a debriefing statement.

#### CHAPTER FIVE: RESULTS

# Hypotheses 1-4

H1 predicted a main effect of regulatory frame on attitude toward the video. An ANOVA was not significant, F(1, 206) = .71, p = .401. Regulatory frame of the message did not appear to predict viewers' attitudes toward the video, and H1 was not supported. H2 predicted that regulatory frame of the message would predict participants' attitude toward the campaign issues. This prediction was unsupported, F(1, 206) = .02, p = .887. H3 posited that regulatory frame would predict participants' attitude toward Dove, the brand. An ANOVA was not significant, F(1, 206) = 1.24, p = .266, and H3 was unsupported. H4 further predicted that regulatory frame of the message would have a main effect on likelihood to discuss and show concern for the campaign. This, too, was unsupported, F(1, 206) = .083, p = .773. Regulatory framing of the message, therefore, did not have a main effect in predicting any of the dependent variables. *Hypotheses* 5-8

Hypotheses 5 through 8 predicted that personal involvement would have a main effect on the dependent variables of interest. H5 predicted a main effect of personal involvement on participants' attitudes toward the video. This hypothesis was unsupported, F(1, 205) = 1.47, p = .227. H6 predicted a main effect of involvement on concern for the campaign issues. An ANOVA was significant, F(1, 205) = 4.41, p = .037. Results showed that those participants who responded "false" to having any personal involvement with the issues were less likely to indicate concern for the campaign issues (M = 8.62, SE = .16) than those who responded "true" to the same questions (M = 9.02, SE = .11). This is depicted in Figure 1 and H6 was supported.

H7 posited that personal involvement would have a main effect on attitude toward Dove, the brand. An ANOVA was significant, F(1, 205) = 4.32, p = .039, and showed that those who

responded "false" to having personal involvement were more likely to rate themselves as having a higher opinion of Dove (M = 2.49, SE = .14) than those who responded "true" (M = 2.13, SE = .10). This relationship is shown in Figure 2 and H7 was supported.

H8 predicted a main effect of personal involvement on likelihood to discuss the issue and campaign. This test, too, was significant, F(1, 205) = 6.51, p = .012, and H8 was supported. Those who responded "true" to having personal involvement indicated a higher likelihood to discuss (M = 7.61, SE = .12) than those who responded "false" (M = 7.09, SE = .17), as represented in Figure 3. This was an opposite effect of that which involvement produced on attitude toward the Dove. That is, participants who responded "false" to having any personal involvement with the issues were more likely to rate themselves as having a higher opinion of Dove but less likely to indicate a likelihood to discuss, as compared to those who responded "true" to personal involvement.

# Hypotheses 9-11

Hypotheses 9 through 11 tested a main effect of collective efficacy on the dependent variables. H9 posited that collective efficacy would predict the participants' attitudes toward and concern for the issue. Regressing participants' attitudes toward the issue on collective efficacy revealed a significant relationship,  $\beta = .337$ , t(205) = 5.12, p < .001. The higher a participant rated his or her sense of collective efficacy, the more concern he or she would show concern for the issue, as illustrated in Figure 4. H9 was supported.

H10 posited that collective efficacy would predict attitudes toward Dove. Collective efficacy exhibited a significant main effect on attitudes toward Dove. A regression test revealed a significant and negative relationship,  $\beta = -.313$ , t(205) = -5.57, p < .001. The effect of collective efficacy on attitudes toward Dove is opposite that of concern for the issues. The higher

a participant's sense of collective efficacy, the lower his or her rating of Dove is, as depicted in Figure 5.

Finally, H11 predicted that collective efficacy would exhibit a main effect on likelihood to discuss the campaign. Regression testing revealed a significant and positive relationship,  $\beta$  = .264, t(205) = 3.92, p < .001, as shown in Figure 6. H11 was supported and revealed that the higher sense of collective efficacy an individual has, the more likely he or she will be to discuss and become involved in the campaign.

# Hypotheses 12-14

Hypotheses 12 through 14 predicted that a two-way interaction between regulatory frame of the message and collective efficacy would exhibit an effect on the dependent variables. H12 posited that a two-way interaction between regulatory frame of the message and collective efficacy would predict attitudes and concern for the issue. An ANOVA test revealed a significant relationship, F(3, 203) = 10.27, p < .001. The interaction between the two variables further revealed significance, F(1, 203) = 4.08, p = .045. An additional test revealed that collective efficacy was significant in a positive direction in both the prevention condition,  $\beta = .425$ , t(105) = 4.82, p < .001, and the promotion condition,  $\beta = .228$ , t(98) = 2.32, p = .022. While both slopes are significant, there was a stronger effect in the prevention condition. This relationship is represented in Figure 7, and H12 was supported.

H13 predicted a two-way interaction between regulatory frame of the message and collective efficacy would affect attitudes toward Dove. An ANOVA revealed a significant relationship, F(3, 203) = 13.80, p < .001. The interaction between regulatory focus and collective efficacy was also significant, F(1, 203) = 9.03, p = .003. A further analysis of the interaction revealed that the slope of collective efficacy was significant in the prevention focus condition,  $\beta$ 

= -.546, t(105) = -6.68, p < .001, but nonsignificant in the promotion condition,  $\beta$  = -.159, t(98) = -1.60, p = .114. This shows that participants who rated themselves higher in collective efficacy indicated a lower opinion of Dove when they viewed a prevention-focused video, but not when they viewed a promotion-focused video, as depicted in Figure 8. H13 was supported.

Would predict likelihood to discuss and become involved in the campaign. An ANOVA was significant, F(3, 203) = 5.59, p = .001. The interaction test was not significant, F(1, 203) = 1.37, p = .244. A further test, though, revealed that collective efficacy was not a significant predictor of likelihood to discuss in the promotion condition,  $\beta = .172$ , t(98) = 1.73, p = .088, but that it was a positive and significant predictor in the prevention condition,  $\beta = .367$ , t(105) = 4.04, p < .001. This difference is illustrated in Figure 9 and means that when a participant was high in collective efficacy and viewed a prevention-focused video, he or she was significantly more likely to indicate that they would discuss the campaign than those who viewed a promotion-focused video. Therefore, H14 was partially supported.

# Hypotheses 15-17

Hypotheses 15, 16, and 17 predicted that a two-way interaction between regulatory frame and personal involvement would predict effects on the dependent variables. H15 posited that regulatory frame and personal involvement would predict concern for the campaign issues. An ANOVA revealed a nonsignificant result, F(3, 203) = 1.79, p = .151 and a nonsignificant interaction result, F(1, 203) = .946, p = .332. Therefore, the regulatory frame of the message and personal involvement with the issue had no interaction effect on concern for the issues and H15 was unsupported.

H16 predicted that a two-way interaction between regulatory frame of the message and personal involvement would predict attitudes toward the brand. An ANOVA revealed a nonsignificant result, F(3, 203) = 2.27, p = .081. A further test indicated that for participants in the promotion condition, personal involvement did not have a significant effect on attitude toward Dove, F(1, 99) = .495, p = .483. However, for those in the prevention focus condition, personal involvement did have a significant effect on attitude toward Dove, F(1, 104) = 5.10, p = .026. In the prevention condition, those who responded "false" to personal involvement rated their attitudes toward Dove significantly higher (M = 2.5, SE = .19) than those who responded "true" (M = 1.98, SE = .14). When regulatory frame was not a part of the test, as in H7, the mean rating regarding attitude toward Dove was M = 2.49 when the response to personal involvement was "false" and M = 2.13 when "true."

H17 further posited that a two-way interaction between regulatory frame of the message and personal involvement would predict likelihood to discuss and show concern for the campaign. An ANOVA was nearing significance, F(3, 203) = 2.45, p = .065. However, the interaction test was nonsignificant, F(1, 203) = .787, p = .376. H17 was unsupported. *Research Questions* 

RQ1 asked how the regulatory frame of the message, collective efficacy, and personal involvement would interact in predicting attitudes toward the issue. An ANOVA revealed F(7, 198) = 5.98, p < .001. The three-way interaction did not produce significant results, F(1, 198) = .122, p = .728. These results are presented in Table 1. The interaction did not appear to have any effect on attitude toward the issue.

RQ2 asked how regulatory frame of the message, collective efficacy, and personal involvement would interact in predicting attitudes toward Dove. An ANOVA was significant,

F(7, 198) = 7.40, p < .001. The three-way interaction, though, did not reveal significant results, F(1, 198) = 1.44, p = .232, and the results are represented in Table 2. However, further tests of the relationship between the three independent variables revealed an interesting effect on attitude toward Dove. When personal involvement was a variable, the interaction between regulatory frame of the message and collective efficacy was still significant in predicting attitudes toward Dove, but the relationship was slightly weakened. When someone had no personal involvement with the issue, the interaction became F(1, 65) = 6.51, p = .031. When someone indicated personal involvement, the interaction became F(1, 133) = 3.92, p = .04. These results are illustrated in Figure 10. Again, this is a slightly weaker effect on attitude toward Dove than when personal involvement was not considered. Personal involvement appears to be explaining some of the interaction between regulatory frame and collective efficacy through suppression. Further, these tests also revealed a stronger effect among those who responded "false,"  $\beta = .289$ , t(65) = 2.55, p = .013, than "true,"  $\beta = .153$ , t(133) = 1.98, p = .049, to personal involvement.

RQ3 asked what the interaction would be between regulatory frame of the message, collective efficacy, and personal involvement on likelihood to discuss and show concern for the campaign. An ANOVA was significant, F(7, 198) = 4.14, p < .001. The three-way interaction term, however, was nonsignificant, F(1, 198) = .573, p = .449, and is shown in Table 3. Similarly, when grouped by personal involvement, there were no significant results.

Tests of Covariates

Other measures were tested in order to illuminate any possible effects on the independent and dependent variables of interest and interesting findings are discussed here. To ensure that differences among the experimental conditions were not due to the differences in affect, the Positive and Negative Affect Scale (PANAS) was tested for differences among conditions

(promotion or prevention). The positive affect scale (M = 5.78, SD = 1.74) was not significantly affected by the condition of the participants. Differences in positive affect between the promotion condition (M = 5.65, SE = .17) and the prevention condition (M = 5.90, SE = .17) were nonsignificant, F(1, 206) = 1.08, p = .300. Similarly, the negative affect scale (M = 2.73, SD = 1.52) was not significantly affected by the condition. In the promotion condition (M = 2.78, SE = .15) and in the prevention condition (M = 2.68, SE = .15) differences were nonsignificant, F(1, 206) = .254, p = .615. Importantly, it can be concluded that the results of the hypotheses tests were not a result of positive or negative affect created by the video condition.

Self-monitoring (M = 5.92, SD = 1.09) was also tested for possible effects. Self-monitoring did not differ across conditions. Differences between the promotion focus condition (M = 5.89, SE = .11) and the prevention focus condition (M = 5.95, SE = .11) were nonsignificant, F(1, 206) = .153, p = .696. However, when self-monitoring was included in an effects test for attitude toward Dove, it appeared to tighten the interaction between collective efficacy and regulatory frame in impacting that attitude. The significance of the two-way interaction was stronger, F(1, 199) = 11.26, p < .001 than when self-monitoring was not considered in the tests, F(1, 203) = 9.03, p = .003.

Similarly, a measure of social desirability bias (M = 6.77, SD = 2.35) was taken into account. Across conditions, social desirability did not differ significantly. The difference between the promotion condition (M = 6.62, SE = .23) and the prevention condition (M = 6.91, SE = .23) was nonsignificant, F(1, 204) = .787, p = .376. When social desirability was included in an effects test for attitude toward Dove, it appeared to slightly suppress the interaction between collective efficacy and regulatory focus. The interaction term was still significant, F(1, 197) = 5.50, p = .020, but it was slightly weaker than it was without that measure taken into

account, F(1, 203) = 9.03, p = .003. Although still a significant interaction, it appears that social desirability may explain some of the interaction that was previously found. Further, social desirability also appeared to significantly suppress the effect of the same interaction on attitude toward the issues. The significant interaction found when social desirability was not included became F(1, 197) = 1.256, p = .264, from F(1, 203) = 4.08, p = .045. Therefore, it might be that participants' reported collective efficacy might have reflected, in part, a social desirability bias.

Tests were also run to include the body-esteem scales. First, the means were checked for variation among conditions. Differences in the means of the appearance subscale (M = 6.29, SD= 1.38) between the promotion condition (M = 6.12, SE = .14) and prevention condition (M =6.46, SE = .13) were nonsignificant, F(1, 205) = 3.24, p = .073. Similarly, differences in the weight subscale (M = 5.83, SD = 2.52) between the promotion condition (M = 5.64, SE = .25) and the prevention condition (M = 6.01, SE = .24) were nonsignificant, F(1, 205) = 1.11, p =.293. Then, the appearance scale was included in tests on the dependent variables. The appearance measure appeared to strengthen the interaction effect of regulatory frame and collective efficacy on attitude toward Dove. The original test was significant, F(1, 203) = 9.03, p = .003, but when the body-esteem appearance measure was considered the effect was strengthened slightly, F(1, 189) = 10.80, p = .001. The appearance subscale did not have any other significant effects on the results. The weight subscale was also included in the tests. The weight measure appeared to have a main effect on attitude toward the issue,  $\beta = -.273$ , t(198) = -4.16, p < .001. It appears that the more positive a participant feels about his or her weight, the less likely he or she would be to have concern for the issue. Weight esteem also interacted with collective efficacy to predict attitude toward the issues,  $\beta = .184$ , t(198) = 2.76, p = .006. A three-way interaction between weight esteem, collective efficacy, and regulatory frame also

appeared to significantly affect attitude toward the issue,  $\beta = -.147$ , t(198) = -2.20, p = .029. Weight esteem did not have a significant main effect on likelihood to discuss the issue, but it did have a significant interaction with collective efficacy on likelihood to discuss,  $\beta = .182$ , t(198) = 2.57, p = .011. The higher a participant is in collective efficacy and the better one feels about his or her weight together predicted a higher likelihood to discuss. Weight esteem did not have a main or interactive effect on attitude toward Dove, nor did it significantly alter previous findings.

As previously mentioned, a locus of control (Rotter, 1966) measure was also taken to serve as a self-efficacy measure. A correlation test revealed that this measure was significantly related to the collective efficacy measure, r = -.176, p = .013. Based on how the terms were coded, the negative correlation shows that someone's high sense of collective efficacy is negatively correlated with his or her sense of external control. Therefore, the control an individual feels he or she has over things that happen in life is positively correlated with his or her sense of collective efficacy. However, this measure produced no significant results with any of the dependent variables. Future research may want to take a different self-efficacy measure into account, which will be discussed later.

## Gender as a Moderator

Finally, RQ4 asked how gender would moderate the effects of collective efficacy and regulatory framing on the dependent variables. First, gender was included in a full factorial test on attitude toward the issues. The results are presented in Table 4. The results first revealed a main effect of gender on attitude toward the issues, F(1, 199) = 37.73, p < .001. Females were significantly more likely to express concern for the issue (M = 9.21, SE = .09) than males (M = 8.21, SE = .13). Gender also significantly interacted with both collective efficacy and regulatory frame, as represented in Table 4. Further tests revealed that when it comes to attitude toward the

issue males are significantly affected by collective efficacy,  $\beta$  = .514, t(62) = 5.17, p < .001 and by regulatory frame, F(1, 62) = 5.14, p = .023. Further, collective efficacy and regulatory frame significantly interact in predicting attitude toward the issues in the male sample,  $\beta$  = -.217, t(62) = -2.18, p = .033. However, with the females, only collective efficacy had a significant effect on attitude toward the issues,  $\beta$  = .173, t(137) = 2.04, p = .043. The interaction between regulatory frame and collective efficacy was nonsignificant with the female sample,  $\beta$  = .029, t(137) = .34, p = .733. It appears as though the significant interaction previously found was due to the male population. The female population was only affected by collective efficacy, not the regulatory frame.

Gender was then included in the interaction test between regulatory frame and collective efficacy on attitude toward Dove. The results of the full factorial test are presented in Table 5. The results first revealed a main effect of gender on attitude toward Dove, F(1, 199) = 20.49, p < .001. Females were more likely to have a lower opinion of Dove (M = 2.05, SE = .09) than males (M = 2.75, SE = .13). Gender also interacted significantly with regulatory frame in predicting attitude toward Dove, F(1, 199) = 3.79, p = .053, as represented in Table 5. Further tests revealed males' attitudes toward Dove are significantly affected by collective efficacy,  $\beta = -4.75$ , t(62) = -4.76, p < .001, as well as the interaction between collective efficacy and regulatory frame,  $\beta = .305$ , t(62) = 3.05, p = .003. However, females were only significantly affected by collective efficacy  $\beta = -.284$ , t(137) = -3.46, p < .001 and not by the two-way interaction,  $\beta = .094$ , t(137) = 1.17, p = .246. Again, it appears as though the significant interaction found previously was due to the male population and not the female population. Females appear to be affected only by collective efficacy and not regulatory frame, whereas the interaction between regulatory frame and collective efficacy affect the male population.

Finally, gender was included with regulatory frame and collective efficacy to test the effects on likelihood to discuss. The results are presented in Table 6. The results revealed a main effect of gender, F(1, 199) = 39.16, p < .001. Females indicated that they were more likely to discuss the campaign and campaign issues (M = 7.85, SE = .11) than males (M = 6.68, SE = .15). Collective efficacy continued to have a main effect, as well,  $\beta = .264$ , t(199) = 4.10, p < .001. No other interaction effects were found, as shown in Table 6. Further tests revealed that collective efficacy was a strong predictor of likelihood to discuss among both the males,  $\beta = .366$ , t(62) = 2.88, p = .006 and the females,  $\beta = .247$ , t(137) = 2.94, p = .004. However, in the male sample, the effects of regulatory frame were present with the interaction between regulatory frame and collective efficacy nearing significance,  $\beta = .201$ , t(62) = -1.73, p = .089. This is compared to a nonsignicant interaction within the female sample,  $\beta = .052$ , t(137) = .63, p = .530. Gender appears to be an important moderator of the effects.

### CHAPTER SIX: DISCUSSION

Summary of Results

This experiment set out to understand the effects of regulatory framing, collective efficacy, and personal involvement on responses to Dove's campaign for Real Beauty and Self-Esteem Fund videos. Overall, results of the hypotheses tests revealed the importance of the independent variable measures—regulatory framing, collective efficacy, and personal involvement. The results indicate that personal involvement and collective efficacy are both significant main effect variables. Personal involvement, operationalized here as relevance and experience, significantly predicted attitudes toward the issues, attitudes toward the Dove brand, and likelihood to discuss the issue and become involved in the campaign. Experience with disordered eating, due to first-hand experience or knowledge of someone with a disorder, led to more concern for the issue and a higher likelihood to discuss. Personal involvement was also related to a lower opinion of Dove. Similarly to personal involvement, collective efficacy significantly predicted attitudes toward the issues, attitudes toward Dove, and likelihood to discuss. Participants higher in collective efficacy were significantly more likely to indicate greater concern for the issue and a higher likelihood to discuss than those lower in collective efficacy. An opposite effect occurred concerning attitude toward Dove—those higher in collective efficacy were more likely to indicate a lower opinion of Dove than those participants with a lower sense of collective efficacy. Thus, personal involvement and collective efficacy individually predicted these dependent variables.

Together, the independent variables revealed significant interaction effects on the dependent variables. The interaction between the videos' regulatory frame and audience member's collective efficacy produced significant results on attitude toward the issue. In both the

prevention condition and the promotion condition, collective efficacy was a significant and positive predictor of attitude toward the issues. There was a slightly stronger effect in the prevention condition, but both were statistically significant. Similarly, the two-way interaction was a significant and negative predictor of attitudes toward Dove. However, the relationship between the two independent variables indicated that collective efficacy was only a significant predictor of attitude toward Dove in the prevention condition, not in the promotion condition. As Figure 8 shows, attitude toward Dove did not change much in the promotion condition. Similarly, collective efficacy was only a significant predictor of likelihood to discuss in the prevention condition. However, likelihood to discuss remained relatively high in the promotion condition no matter one's sense of collective efficacy. Regulatory framing and personal involvement interacted only in affecting attitudes toward Dove. Personal involvement did not influence attitudes toward Dove in the promotion condition. However, for those participants in the prevention condition, personal involvement did impact attitudes. Those who responded "false" to personal involvement indicated a higher opinion of Dove than those who responded "true" to personal involvement. Personal involvement also appeared to moderate the interactive effects of regulatory frame and collective efficacy on responses to the video. The effects were still significant, but slightly weaker.

Gender also significantly affected the results. When the female population was examined, only collective efficacy remained a significant predictor of the responses to the campaign. The other effects found seem to be a result of the male population. When only the male population was considered, regulatory frame and collective efficacy were both significant predictors. It appears that with this particular issue the framing of the message and a sense of collective efficacy are important with males. However, with females the framing of the message does not

make any difference. It is collective efficacy that is important. This may be a result of Dove's campaign being perceived as a more feminine issue, so different variables are important based on gender.

# Theoretical Implications

The results of this research highlight the continued importance and interconnectedness of regulatory framing, the situational theory of publics, and the concept of efficacy. First, the results indicate that the regulatory frame of the message impacted responses among males and interacted with the other independent variables within the whole of the sample population. It has been suggested that the study of regulatory framing should take into account other behavioral consequences in the field of health, beyond detection and prevention practices (Rothman et al., 2008). The research presented here indicates that the regulatory framing of a message can have significant effects on social marketing campaigns such as Dove's. Further, the type of frame makes a significant difference on responses. According to the results, promotion-framed messages generally produced nonsignficant results on responses, even when collective efficacy or personal involvement was considered. Those in the promotion condition tended to indicate more concern for the issue, a higher likelihood to discuss, and a lower opinion of Dove, regardless of the participant's sense of collective efficacy or personal involvement. However, prevention framed messages did affect responses. Those participants who viewed a preventionframed video indicated more concern for the issue, a higher likelihood to discuss, and a lower opinion of Dove depending on the strength of collective efficacy. The higher the participants rated themselves in collective efficacy, the higher they rated concern and likelihood to discuss and the lower they rated Dove. Thus, for this type of campaign, promotion frames seem to be generally effective, but if the campaign can target someone's sense of collective efficacy, the

prevention frames may produce stronger results. The effects of the framing, however, seem to be dependent upon the particular population, as the effects of gender indicated.

Gender is an important consideration when it comes to regulatory framing. Promotion frames and prevention frames did not affect the responses of female participants. However, framing and collective efficacy affected responses of the male participants. Therefore, gender differences are important to take into account. The literature has advised that research needs to continue examining factors that affect responses to message framing, including individual differences (Rothman et al., 2008), and this study has started to do just that. It may be that males do not find a feminine campaign relevant, so collective efficacy and framing motivate them to respond. It is clear that individual factors, such as personal involvement and relevance, make significant differences in effects of regulatory framing of messages. While several studies have researched the fit effect or matching effect of regulatory focus and messages (Latimer et al., 2008; Zhou & Sengupta, 2006), this study highlights the importance of individual and situational factors in responses to the framing of the messages.

The situational theory of publics takes into account three main variables: problem recognition, constraint recognition, and personal involvement (Grunig, 2006). This research focused particularly on constraint recognition, operationalized by collective efficacy, and personal involvement, operationalized by experience with disordered eating. Results indicate the continued importance of these elements. Participants responded differently when personal relevance and efficacy were considered. Those with a personal experience with disordered eating were significantly more likely to indicate concern for the issue and likelihood to discuss and become involved in the campaign than those with no personal experience. Personal relevance continues to be an important variable in understanding attitudes and actions of publics. Similarly,

those who indicated a low sense of collective efficacy were significantly less likely to indicate a concern for the issue and likelihood to discuss and become involved in the campaign than those with a higher sense of collective efficacy. If people indicate that a group of people or our society cannot work together to make a difference, they appear to also not want to take part in the campaign. Therefore, perceived constraint of publics should be important to researchers and practitioners, as it seems a higher perception of constraint leads people to not want to take an active part in the campaign.

Bandura (2000) noted that as our world becomes more intertwined and society more interdependent, collective efficacy will become increasingly important. The results of the current study indicate the viability of collective efficacy in predicting attitudes and behavioral intentions. Further, it is important to note that locus of control, the measure of self-efficacy used here, had no significant effects on attitudes and behavioral intentions. Although the correlation between the locus of control measure and the collective efficacy measure was strong, only collective efficacy made significant impacts on attitudes and behavioral intentions. Bandura (2000) appears to be correct in his assertion of the importance of collective efficacy. Even with other measures taken into account, including gender, collective efficacy continued to be a strong predictor of responses to the campaign across conditions and a reliable measure of constraint recognition discussed in the situational theory.

These results also appear to begin to reconcile the situational theory and Hallahan's (2000) idea of the "inactive publics." Hallahan (2000) discusses the role of "inactive publics," describing them as stakeholders but as having a low level of involvement and low level of knowledge. He notes that the situational theory regards this type of public as "passive" and tends to group them in the same category as publics with no stake in an issue, which is not correct.

"Inactive publics" still have a stake in the issues, which separates them from "nonpublics" (Hallahan, 2000). He states that the challenge with "inactive publics" is to increase the motivation level of the group if the need is to move them into a more active classification. The current research points to the importance of this. Low involvement led to lower indications of concern and a reduced likelihood of discussing the issue and becoming involved in the campaign. However, this research also points to variables that may help increase the motivation level and help "inactive" groups become more "active" groups. Specifically, the influence of efficacy and message framing may help to accomplish this increase in motivation. Even those who indicated no experience with the issue were affected by the campaign depending on their level of collective efficacy and, particularly in the male sample, depending on the frame of the message. These groups, then, should not be categorized with "nonpublics." If practitioners can capitalize on collective efficacy and message framing, then even those targets with low involvement and knowledge may be persuaded to care about the issue and get involved in the campaign.

It is also important to explore the effect of gender in terms of the theories utilized in this research. As previously mentioned, gender significantly moderated the effects of the hypotheses tests. Females generally indicated more concern and a higher likelihood to discuss the campaign than the male participants. Females were also significantly affected by their level of collective efficacy and not by the framing of the message. However, both collective efficacy and the framing of the message significantly affected males. This seems to indicate a couple of important aspects of this study. First, gender may be a factor to consider in "personal involvement" as described by the situational theory. Studies using the situational theory of publics note that personal involvement can be operationalized as personal relevance and experience (Aldoory,

2001; Grunig, 2006; Major, 1993). If Dove's campaign is viewed as a feminine issue, then males may generally feel a low level of involvement with the issue. The situational theory of publics describes this low involvement as a passive public, as distinguished from an active public (Aldoory, 2001). However, males may be considered what Hallahan (2000) categorizes and describes as an "inactive public." Males should be considered a stakeholder, as they may have someone close with them deal with low self- and body-esteem or eating disorders and they may have daughters that battle these issues. They may perceive the issue as being less relevant to them, though, as the campaign is geared toward helping young girls, so there needs to be more to motivate them than personal involvement.

Second, concern for the issue and the likelihood to discuss the campaign appear to grow along with the sense of collective efficacy and the type of frame in the male sample. Aldoory (2001) notes that the situational theory is centered on understanding audiences in order to create meaningful messages and a successful campaign. Individual differences are key (Aldoory, 2001; Hamilton, 1992). It appears that females already have a higher sense of concern for the issue, but males do not. Instead of classifying them as passive publics, this research indicates that it is very possible to motivate them to show concern for the issue and discuss the campaign through the types of campaign messages used and their sense of collective efficacy. In other campaign research, these components will want to be considered for other types of low involvement publics.

Other variables, such as self-monitoring, social desirability, and body-esteem, are also important to note. These three variables revealed moderating effects on the results. Self-monitoring tightened the interaction between regulatory frame and collective efficacy in predicting attitude toward Dove. Social desirability, on the other hand, weakened the interaction

in predicting attitude toward Dove and attitude toward the issue. The appearance subscale of body-esteem also strengthened the interaction effects on attitude toward Dove. The weight subscale produced a main effect on attitude toward the issues and interacted with collective efficacy in predicting attitude toward the issue and likelihood to discuss. These continue to highlight the importance of individual differences, as Aldoory (2001) points out. These variables can help explain some of the effects found in the hypotheses tests by slightly strengthening or weakening the results. The weight body-esteem scale produced significant main effects as well. It appears that how a person feels about his or her weight may be included in personal relevance for this campaign. The more positive a person indicated feeling about his or her or weight was significantly related to less concern for the issue and a lower likelihood to discuss and become involved in the campaign. The lower one indicated feeling about his or weight was related to a more concern for the issue and higher likelihood to discuss. Personal involvement and relevance may be present in a many ways. This experiment illustrates the importance of personal involvement and how personal differences can vary the effects of a campaign message.

# Practical Implications

Another purpose of this experiment was to better inform practitioners involved in the creation of campaigns and messages by understanding the effects of regulatory frame, collective efficacy, and personal involvement on responses. In creating social marketing campaigns and messages, practitioners should understand the importance of the three main independent variables studied here. First, the importance of individual differences should be considered. The male population was significantly affected by both the regulatory framing of the message and collective efficacy, while the female population was not affected by regulatory framing. As mentioned before, males may not find this campaign as relevant as females. While relevance was

tested in terms of experience with disordered eating, the results indicate that males may not be as connected with this issue and practitioners may need to rely more on the males' sense of collective efficacy and the type of framing used in the campaign messages. Other campaigns will want to consider how much relevance a population has and how connected they are with the issue, beyond gendered differences. The choice of using promotion- versus prevention-framed messages is also important for different groups. The promotion-framed messages tended to result in more concern and a higher likelihood to discuss than the prevention-framed messages, unless collective efficacy was high. If a campaign can focus in on a group's sense of collective efficacy then using prevention-framed videos may be most effective in enhancing the campaign, particularly with low involvement groups.

One glaring result that practitioners will want to understand is the negative effect of the independent variables on attitude toward the brand. As attitudes toward the issue and likelihood to discuss increased, attitude toward Dove tended to decline. The benefits of the campaign versus the benefits of the corporation's image are not in line. Practitioners should understand that while they might be doing something positive for their community or even society as a whole, this does not necessarily translate into positive feelings toward their brand. With Dove's campaign, the participants indicated that even if they are concerned with the issue of the campaign, would discuss the campaign, and would even take their daughter to a Dove workshop, they also indicated a low opinion of Dove. In weighing the benefits and disadvantages of taking an active role in some sort of social corporate responsibility, it appears that companies should not expect their publics to have a high opinion of them.

Limitations and Future Research

Limitations in the research are important to consider. The most notable limitation was the sample population used. College-aged students may not be able to respond adequately to hypothetical questions, such as whether or not they would take their daughter to a workshop. There is also the generalizability issue of college students. The use of parents as a sample may have revealed different results, and it seems possible that the gender differences may not have been as pronounced in a sample of parents. However, the goal of understanding the elements that affect responses to the campaign was still met with this population.

This research also opens several avenues for future research. First, in understanding the effects of Dove's campaign, different populations may produce different results. As mentioned, the use of parents as a sample may reveal distinctions from the undergraduate sample. Also, it may be interesting to study the campaign messages and workshop materials geared towards young girls to understand the actual effectiveness of the campaign. Here we find that people may be concerned with the issue of self-esteem and that they would act by taking their daughters to a workshop, which may be an important step in helping body image and self-esteem. However, we do not know how effective these workshops will actually be.

Second, future research may benefit from further study of self-efficacy versus collective efficacy. The locus of control measure used here did not produce any significant results on responses to the campaign messages while collective efficacy produced significant results. Research may want to utilize a different measure of self-efficacy and compare the effects of collective efficacy and self-efficacy in different campaigns. Bandura (2000) advised that collective efficacy will become more important as our world becomes more interdependent. The current study showed the importance of collective efficacy, but it will still be interesting and important to understand these effects in other campaigns before generalizing the results. Further,

while collective efficacy significantly affected responses in both males and females, regulatory framing only affected the male sample. Future research will want to examine these variables in other campaigns, specifically in more gender neutral campaigns in order to better understand the role these variables play in certain groups of people.

### Conclusions and Contributions

This study contributes to current literature and research in important ways. First, the collective efficacy scale is important to note. This scale was developed for this study and produced strong reliability in both the pilot study and full study. Bandura (2000) stated that collective efficacy needed to be included in more studies as technology continues to advance. The current study shows how important collective efficacy is in predicting participants' attitudes and behaviors. The self-efficacy measure used, while significantly correlated to collective efficacy, produced no significant effects on attitudes and behaviors. The collective efficacy scale proved to be an important predictor and can be used in subsequent studies.

Second, this study makes contributions to regulatory framing and the situational theory of publics. Past research on regulatory framing suggested that more variables be studied to understand what affects responses to message frames. This study found strong predictors in personal involvement and collective efficacy, particularly in the prevention condition. These components should be understood and studied with regulatory framing. Practitioners should also understand these variables when creating messages. The findings of this study highlight the importance of personal involvement, which is a key variable in the situational theory. While personal involvement led to more concern for the issue and a likelihood to become involved with the campaign, it is important to note that it is possible to motivate those with less personal involvement to do the same. This is where Hallahan's (2000) "inactive publics" adds to the

situational theory by acknowledging there are more types of publics than active or passive. The current study helps to reconcile the situational theory and Hallahan's definitions. According to the results of this study, practitioners can target those with less involvement and motivate them to become more active through collective efficacy and the type of message frame. This will be important for health communication and other social marketing campaigns to understand. It is not just that a message frame needs to match or fit a person's regulatory focus, it is that the frame interacts with other personal variables, such as collective efficacy and involvement to influence attitudes and behaviors. It is clear from this study that these theories and concepts can be used together in order to better understand people's attitudes and to create more effective campaigns.

## References

- Albarracin, D., Johnson, B. T., Fishbein, M., & Muellerleile, P.A. (2001). Theories of reasoned action and planned behavior as models of condom use: A meta-analysis.

  \*Psychological Bulletin, 127(1), 142-161.
- Aldoory, L. (2001). Making health communications meaningful for women: Factors that influence involvement. *Journal of Public Relations Research*, *13*(2), 163-185.
- Amy [Video]. (n.d.). Retrieved November 8, 2009, from http://msbrandent.vo.llnwd.net/d1/msnbeet\_doveus/flv/v\_Amyv2\_med.flv
- Aubrey, J. S. (2007). The impact of sexually objectifying media exposure on negative body emotions and sexual self-perceptions: Investigating the mediating role of body self-consciousness. *Mass Communication & Society*, 10(1), 1-23.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, *9*(3), 75-78.
- Bearden, W. O., & Netemeyer, R. G. (Eds.). (1999). Attitude toward the product/brand. In Handbook of Marketing Scales: Multi-Item Measures for Marketing and Consumer Behavior Research, 2<sup>nd</sup> Ed. (pp. 75-87). Thousand Oaks: Sage Publications.
- Bissell, K. L., & Chung, J. Y. (2009). Americanized beauty? Predictors of perceived attractiveness from U.S. and South Korean participants based on media exposure, ethnicity, and socio-cultural attitudes toward ideal beauty. *Journal of Asian Communication*, 19(2), 227-247.
- Bruner, G. C., Hensel, P. J., & James, K. E. (Eds.). (2005). Self-Monitoring. In Marketing Scales

- Handbook Volume IV: A Compilation of Multi-Item Measures for Consumer Behavior & Advertising (pp. 541-542). Mason, OH: Thomson.
- Bruner, G. C., Hensel, P. J., & James, K. E. (Eds.). (2005). Social Desirability. In *Marketing Scales Handbook Volume IV: A Compilation of Multi-Item Measures for Consumer Behavior & Advertising* (pp. 586-589). Mason, OH: Thomson.
- Burke, E. (2006). Feminine visions: Anorexia and contagion in pop discourse. *Feminist Media Studies*, 6(3), 315-330.
- Cacioppo, J. T., von Hippel, W., & Ernst, J. M. (1997). Mapping cognitive structures and processes through verbal content: The thought listing technique. *Journal of Consulting and Clinical Psychology*, 65, 928-960.
- Campaign for Real Beauty Mission (2008). Retrieved from http://dove.msn.com/#/CFRB/arti\_CFRB.aspx[cp-documentid=7049726]/
- Evolution [Video]. (n.d.). Retrieved November 8, 2009, from http://msbrandent.vo.llnwd.net/d1/msnbeet\_doveus/flv/v\_Evolutionv2\_med.flv
- Gabler, J., Kropp, F., Silvera, D. H., & Lavack, A. M. (2004). The role of attitudes and self-efficacy in predicting condom use and purchase intentions. *Health Marketing Quarterly*, 21(3), 63-78.
- Grunig, J. E. (2006). Furnishing the edifice: Ongoing research on public relations as a strategic management function. *Journal of Public Relations Research*, 18(2), 151-176.
- Hallahan, K. (2000). Inactive publics: The forgotten publics in public relations. *Public Relations Review*, *26*(4), 499-515.
- Hamilton, P. K. (1992). Grunig's situational theory: A replication, application, and extension. *Journal of Public Relations Research*, 4(3), 123-149.

- Johnson, J., & Taylor, J. (2008). Feminist consumerism and fat activists: A comparative study of grassroots activism and the Dove Real Beauty campaign. *Journal of Women in Culture and Society*, 33(4), 941-966.
- Latimer, A. E., Rivers, S. E., Rench, T. A., Katulak, N. A., Hicks, A., Hodorowski, J. P, et al. (2008). A field experiment testing the utility of regulatory fit messages for promoting physical activity. *Journal of Experimental Social Psychology, 44*, 826-832.
- Major, A. M. (1993). Environmental concern and situational communication theory:

  Implications for communicating with environmental publics. *Journal of Public Relations Research*, *5*(4), 251-268.
- Mendelson, B. K., Mendelson, M. J., & White, D. R. (2001). Body-esteem scale for adolescents and adults. *Journal of Personality Assessment*, 76(1), 90-106.
- Mendelson, B. K., White, D. R., & Mendelson, M. J. (1996). Self-esteem and body esteem:

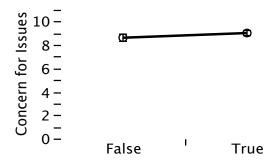
  Effects of gender, age, and weight. *Journal of Applied Developmental Psychology, 17*, 321-346.
- Noar, S. M. (2006). A 10-year retrospective of research in health mass media campaigns: Where do we go from here? *Journal of Health Communication*, 11, 21-42.
- Onslaught [Video]. (n.d.). Retrieved November 8, 2009, from http://msbrandent.vo.llnwd.net/d1/msnbeet doveus/flv/v Onslaught med.flv
- Park, S. Y. (2005), The influence of presumed media influence on women's desire to be thin. Communication Research, 32(5), 594-614.
- Parker, L. E. (1994). Working together: Perceived self- and collective-efficacy at the workplace. *Journal of Applied Social Psychology*, 24(1), 43-59.
- Rimer, B. K., & Kreuter, M. W. (2006). Advancing tailored health communication: A

- persuasion and message effects perspective. *Journal of Communication*, *56*, 184-201.
- Rothman, A. J., Wlaschin, J. T., Bartels, R. D., Latimer, A., & Salovey, P. (2008). How persons and situations regulate message framing effects: The study of health behavior. In A.J. Elliot (Ed.), *Handbook of Approach and Avoidance Motivation* (pp. 475-486). New York: Psychology Press.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 111-134.
- Schifter, D. E., & Ajzen, I. (1985). Intention, perceived control, and weight loss: An application of the theory of planned behavior. *Journal of Personality and Social Psychology*, 49(3), 843-851.
- Scott, J. A., & Cloud N. E. (2008). Reaffirming the ideal: A focus group analysis of the campaign for real beauty. *Advertising & Society Review*, *9*(4), Retrieved June 12, 2009, from Project MUSE database.
- Shah, J. Y., Brazy, P. C., & Higgins, E. T. (2004). Promoting us or preventing them: Regulatory focus and manifestations of intergroup bias. *Personality and Social Psychology Bulletin*, 30(4), 433-446.
- Sohn, S. H. (2009), Body image: Impacts of media channels on men's and women's social comparison process, and testing of involvement measurement. *Atlantic Journal of Communication*, 17, 19-35.
- Trafimow, D., & Fishbein, M. (1994). The moderating effect of behavior type on the subjective norm- behavior relationship. *The Journal of Social Psychology, 134*(6), 755-763.

- Under Pressure [Video]. (n.d.). Retrieved November 8, 2009, from http://msbrandent.vo.llnwd.net/d1/msnbeet\_doveus/flv/dsef\_working\_together.flv
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*, 1063-1070.
- Witmer, D. F. (2006). Overcoming system and culture boundaries: Public relations from a structuration perspective. In C.H. Botan & V. Hazleton (Eds.), *Public Relations Theory II* (pp. 361-374). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Yun, D., Silk, K. J., Bowman, N. D., Neuberger, L., & Atkin, C. K. (2009). Mothers' intentions to teach adolescent daughters about breast cancer risk reduction activities: The influence of self-efficacy, response efficacy, and personal responsibility.
  Communication Research Reports, 26(2), 134-145.
- Zhao, G., & Pechmann, C. (2006). Regulatory focus, feature positive effect, and message framing. *Advances in Consumer Research*, *33*, 100.
- Zhao, G., & Pechmann, C. (2007). The impact of regulatory focus on adolescents' response to antismoking advertising campaigns. *Journal of Marketing Research*, 44, 671-687.
- Zhou, R., & Sengupta, J. (2006). Motivational influences in consumer behavior: The role of regulatory focus. *Advances in Consumer Research*, *33*, 532-535.

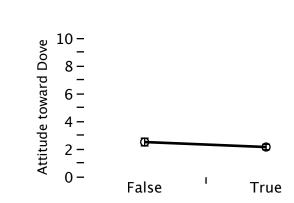
Figures

Figure 1.



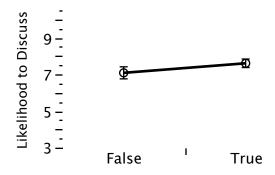
Concern for the issues as a product of personal involvement, F(1, 205) = 4.41, p = .037. Those who responded "true" to personal involvement questions were more likely to indicate a higher concern for the campaign issues.

Figure 2.



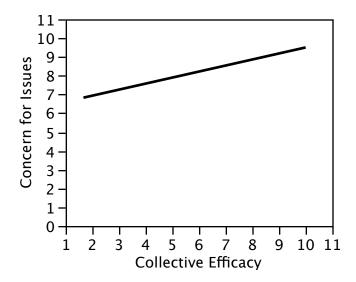
Attitude toward Dove as a product of involvement, F(1, 205) = 4.32, p = .03. Those who indicated "true" to having personal involvement with the issues indicated a lower opinion of Dove.

Figure 3.



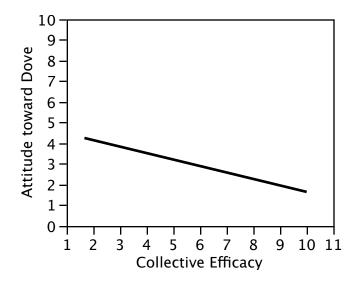
Likelihood to discuss as a product of personal involvement. F(1, 205) = 6.51, p = .012. Those who responded "true" to having personal involvement with the issue indicated a higher likelihood to discuss and show concern for the campaign.

Figure 4.



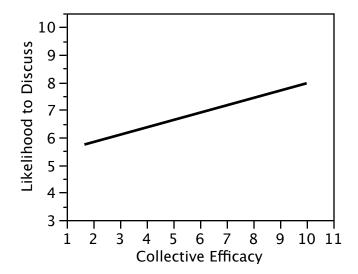
Concern for the issues as a product of collective efficacy.  $\beta = .337$ , t(205) = 5.12, p < .001.

Figure 5.



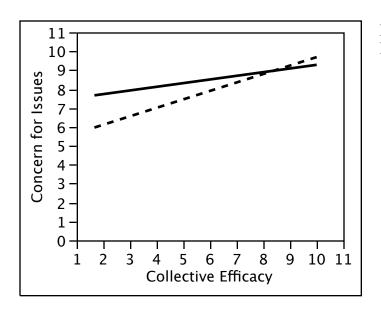
Attitude toward Dove as a product of collective efficacy.  $\beta = -.313$ , t(205) = -5.57, p < .001.

Figure 6.



Likelihood to discuss as a product of collective efficacy. B = .264, t(205) = 3.92, p < .001.

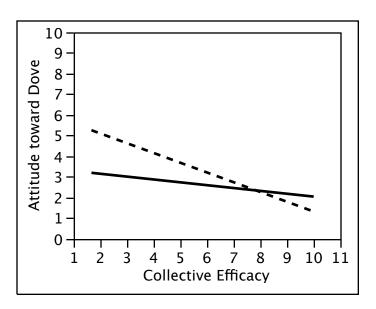
Figure 7.



Promotion = solid line Prevention = dotted line

Concern for the issues as a product of regulatory frame and collective efficacy. F(3, 203) = 4.08, p = .045. Collective efficacy was significant in a positive direction in both the prevention condition,  $\beta = .425$ , t(105) = 4.82, p < .001, and the promotion condition,  $\beta = .228$ , t(98) = 2.32, p = .022.

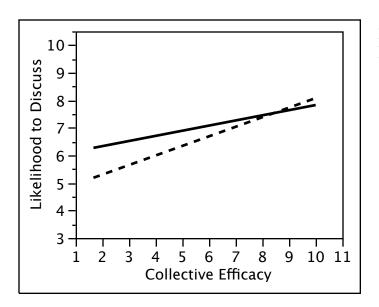
Figure 8.



Promotion = solid line Prevention = dotted line

Attitude toward Dove as a product of regulatory frame and collective efficacy. F(1, 203) = 9.03, p = .003. Participants who rated themselves higher in collective efficacy indicated a lower opinion of Dove when they viewed a prevention-focused video,  $\beta = -.546$ , t(105) = -6.68, p < .001, but not when they viewed a promotion-focused video,  $\beta = -.159$ , t(98) = -1.60, p = .114.

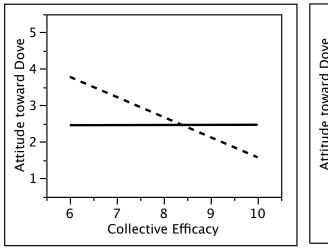
Figure 9.

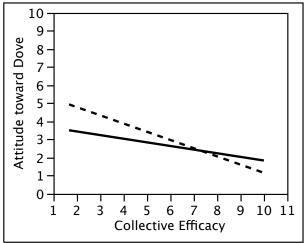


Promotion = solid line Prevention = dotted line

Likelihood to discuss as a product of regulatory frame and collective efficacy. F(3, 65) = 6.51, p = .031. Collective efficacy was not a significant predictor of likelihood to discuss in the promotion condition,  $\beta = .172$ , t(98) = 1.73, p = .088, but was a positive and significant predictor in the prevention condition,  $\beta = .367$ , t(105) = 4.04, p < .001.

Figure 10.





Given No Personal Involvement

Given Personal Involvement

Attitude toward Dove as a product of collective efficacy and regulatory frame by personal involvement. The solid line indicates the promotion condition and the dotted line the prevention condition.

# Tables

Table 1

Regulatory Framing, Collective Efficacy, and Personal Involvement on Attitudes toward the Issue.

| Measure   | В      | SE    | β      | t     | p      |
|---|--------|-------|--------|-------|--------|
| Collective Efficacy                                       | 0.288  | 0.071 | 0.3    | 4.01  | <.001* |
| Reg. Frame  | 0.008  | 0.09  | 0.01   | 0.089 | .929   |
| Personal Involvement                                      | -0.229 | 0.089 | -0.166 | -2.55 | .011*  |
| Collective Efficacy*Reg. Frame                            | -0.129 | 0.071 | -0.134 | -1.83 | .068   |
| Collective<br>Efficacy*Personal<br>Involvement            | -0.099 | 0.071 | -0.103 | -1.39 | .165   |
| Reg. Frame*Personal<br>Involvement                        | -0.109 | 0.089 | -0.084 | -1.21 | .227   |
| Collective<br>Efficacy*Personal<br>Involvement*Reg. Frame | -0.025 | 0.071 | -0.026 | -0.35 | .728   |

Table 2

Regulatory Framing, Collective Efficacy, and Personal Involvement on Attitude Toward Dove.

| Measure   | В     | SE    | β      | t     | p      |
|---|-------|-------|--------|-------|--------|
| Collective Efficacy                                 | 0.301 | 0.063 | -0.348 | -4.79 | <.001* |
| Reg. Frame  | 0.009 | 0.08  | 0.007  | 0.11  | 0.912  |
| Personal Involvement                                | 0.212 | 0.08  | 0.17   | 2.66  | 0.009* |
| Collective<br>Efficacy*Reg. Frame                   | 0.202 | 0.063 | 0.232  | 3.21  | 0.002* |
| Collective<br>Efficacy*Personal<br>Involvement      | 0.027 | 0.063 | 0.031  | 0.42  | 0.673  |
| Reg. Frame*Personal<br>Involvement                  | -0.09 | 0.8   | -0.076 | -1.13 | 0.26   |
| Collective Efficacy*Reg. Frame*Personal Involvement | 0.075 | 0.063 | 0.087  | 1.2   | 0.232  |

Table 3.

Regulatory Framing, Collective Efficacy, and Personal Involvement on Likelihood to Discuss.

| Measure   | В      | SE   | β      | t      | p      |
|---|--------|------|--------|--------|--------|
| Collective Efficacy                                 | 0.261  | 0.08 | 0.258  | 3.38   | <.001* |
| Reg. Frame  | -0.001 | 0.1  | -0.001 | -0.013 | 0.99   |
| Personal Involvement                                | -0.305 | 0.1  | -0.208 | -3.1   | 0.002* |
| Collective<br>Efficacy*Reg. Frame                   | -0.098 | 0.08 | -0.097 | -1.28  | 0.203  |
| Collective<br>Efficacy*Personal<br>Involvement      | -0.05  | 0.08 | -0.049 | -0.64  | 0.52   |
| Reg. Frame*Personal Involvement                     | -0.111 | 0.1  | -0.08  | -1.13  | 0.26   |
| Collective Efficacy*Reg. Frame*Personal Involvement | -0.058 | 0.08 | -0.058 | -0.76  | 0.45   |

Table 4.

Gender, Regulatory Framing, and Collective Efficacy on Attitude Toward the Issue.

| Measure                  | В      | SE   | β      | t     | p      |
|--------------------------|--------|------|--------|-------|--------|
| Gender                   | -0.5   | 0.08 | -0.358 | -6.14 | <.001* |
| Collective Efficacy      | 0.344  | 0.06 | 0.361  | 6.01  | <.001* |
| Reg. Frame               | 0.127  | 0.08 | 0.097  | 1.56  | 0.121  |
| Gender*Collective        |        |      |        |       |        |
| Efficacy                 | 0.214  | 0.06 | 0.225  | 3.75  | <.001* |
| Gender*Reg. Frame        | 0.223  | 0.08 | 0.17   | 2.74  | 0.007* |
| Collective Efficacy*Reg. |        |      |        |       |        |
| Frame                    | -0.107 | 0.06 | -0.112 | -1.87 | 0.063  |
| Gender*Collective        | 0.120  | 0.06 | 0.124  | 2.25  | 0.0064 |
| Efficacy*Reg. Frame      | -0.129 | 0.06 | -0.134 | -2.25 | 0.026* |

Table 5.

Gender, Regulatory Framing, and Collective Efficacy on Attitude Toward Dove.

| Measure             | В      | SE   | β      | t     | p      |
|---------------------|--------|------|--------|-------|--------|
| Gender              | 0.353  | 0.08 | 0.279  | 4.53  | <.001* |
| Collective Efficacy | -0.299 | 0.05 | -0.346 | -5.45 | <.001* |
| Reg. Frame          | -0.035 | 0.08 | -0.03  | -0.45 | 0.655  |
| Gender*Collective   | 0.051  | 0.05 | -0.059 | -0.93 | 0.252  |
| Efficacy            | -0.051 | 0.03 | -0.039 | -0.93 | 0.353  |
| Gender*Reg. Frame   | -0.152 | 0.08 | -0.128 | -1.95 | 0.053* |
| Collective          | 0.154  | 0.05 | 0.122  | 2.01  | 0.005* |
| Efficacy*Reg. Frame | 0.154  | 0.05 | 0.177  | 2.81  | 0.005* |
| Gender*Collective   | 0.071  | 0.05 | 0.001  | 1.20  | 0.100  |
| Efficacy*Reg. Frame | 0.071  | 0.05 | 0.081  | 1.29  | 0.199  |

Table 6.

Gender, Regulatory Framing, and Collective Efficacy on Likelihood to Discuss.

| Measure                                  | В      | SE   | β      | t      | p      |
|--|--------|------|--------|--------|--------|
| Gender                                   | -0.581 | 0.09 | -0.392 | -6.26  | <.001* |
| Collective Efficacy                      | 0.267  | 0.07 | 0.264  | 4.1    | <.001* |
| Reg. Frame                               | 0.052  | 0.09 | 0.038  | 0.559  | 0.577  |
| Gender*Collective<br>Efficacy            | 0.032  | 0.07 | 0.032  | 0.496  | 0.621  |
| Gender*Reg. Frame                        | -0.066 | 0.09 | -0.047 | -0.709 | 0.479  |
| Collective Efficacy*Reg. Frame           | -0.065 | 0.07 | -0.064 | -0.991 | 0.323  |
| Gender*Collective<br>Efficacy*Reg. Frame | -0.115 | 0.07 | -0.113 | -1.76  | 0.08   |

### Appendix A.

#### Measures

## **Demographics**

This section asks for basic information about you, the participant.

| 1. | What is your age?         |         | <u></u>    |           |            |           |
|----|---------------------------|---------|------------|-----------|------------|-----------|
| 2. | What is your gender?      | Male    | Female     | Other     | Prefer Not | to Answer |
| 3. | What is your major?       |         |            |           |            |           |
| 4. | What is your ethnicity?   | White 1 | Black Midd | le Easter | n/Arabic   |           |
|    | Indian Subcontinent Asian | Hispani | ic/Latino  | Pacific   | Islander   | Other     |

#### **Locus of Control**

### For questions 1 through 29 pick one statement only:

- 1. a. Children get into trouble because their parents punish them too much.
  - b. The trouble with most children nowadays is that their parents are too easy with them.
- 2. a. Many of the unhappy things in people's lives are partly due to bad luck.
  - b. People's misfortunes result from the mistakes they make.
- 3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
  - b. There will always be wars, no matter how hard people try to prevent them.
- 4. a. In the long run people get the respect they deserve in this world.
- b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
- 5. a. The idea that teachers are unfair to students is nonsense.
- b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
- 6. a. Without the right breaks one cannot be an effective leader.
- b. Capable people who fail to become leaders have not taken advantage of their opportunities.
- 7. a. No matter how hard you try some people just don't like you.
- b. People who can't get others to like them don't understand how to get along with others.
- 8. a. Heredity plays the major role in determining one's personality.
  - b. It is one's experiences in life which determine what they're like.

- 9. a. I have often found that what is going to happen will happen.
- b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
- 10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
- b. Many times exam questions tend to be so unrelated to course work that studying in really useless.
- 11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
  - b. Getting a good job depends mainly on being in the right place at the right time.
- 12. a. The average citizen can have an influence in government decisions.
- b. This world is run by the few people in power, and there is not much the little guy can do about it.
- 13. a. When I make plans, I am almost certain that I can make them work.
- b. It is not always wise to plan too far ahead because many things turn out to- be a matter of good or bad fortune anyhow.
- 14. a. There are certain people who are just no good.
  - b. There is some good in everybody.
- 15. a. In my case getting what I want has little or nothing to do with luck.
  - b. Many times we might just as well decide what to do by flipping a coin. 5
- 16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
- b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.
- 17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
- b. By taking an active part in political and social affairs the people can control world events.
- 18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
  - b. There really is no such thing as "luck."
- 19. a. One should always be willing to admit mistakes.
  - b. It is usually best to cover up one's mistakes.
- 20. a. It is hard to know whether or not a person really likes you.
  - b. How many friends you have depends upon how nice a person you are.

- 21. a. In the long run the bad things that happen to us are balanced by the good ones.
  - b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
- 22. a. With enough effort we can wipe out political corruption.
  - b. It is difficult for people to have much control over the things politicians do in office.
- 23. a. Sometimes I can't understand how teachers arrive at the grades they give.
  - b. There is a direct connection between how hard 1 study and the grades I get.
- 24. a. A good leader expects people to decide for themselves what they should do.
  - b. A good leader makes it clear to everybody what their jobs are.
- 25. a. Many times I feel that I have little influence over the things that happen to me.
- b. It is impossible for me to believe that chance or luck plays an important role in my life.
- 26. a. People are lonely because they don't try to be friendly.
- b. There's not much use in trying too hard to please people, if they like you, they like you.
- 27. a. There is too much emphasis on athletics in high school.
  - b. Team sports are an excellent way to build character.
- 28. a. What happens to me is my own doing.
  - b. Sometimes I feel that I don't have enough control over the direction my life is taking.
- 29. a. Most of the time I can't understand why politicians behave the way they do.
- b. In the long run the people are responsible for bad government on a national as well as on a local level.

### **Collective Efficacy**

Please indicate to what degree you agree or disagree with the following statements, where *1* = *strongly disagree* and *7* = *strongly agree*.

Communities can create solutions to problems together.

When people work together, they can change a society's ideals.

The best way to deal with society's problems is for communities to come together.

When a group of people work together to solve a problem, the results will spread out and benefit others.

People working together to tackle issues can lead to changes in their society.

When people teach others how to change for the better, this change can spread effectively throughout the rest of society

## **Positive and Negative Affect Scale**

This scale consists of a number of words that describe different feelings and emotions. Read each one and then mark the appropriate answer. Indicate to what extent you feel this way right now, that is, at the present moment. Use the following scale to record your answer:

1 = very slightly or not at all; 7 = extremely

- 1. interested
- 2. distressed
- 3. excited
- 4. upset
- 5. strong
- 6. guilty
- 7. scared
- 8. hostile
- 9. enthusiastic
- 10. proud
- 11. irritable
- 12. alert
- 13. ashamed
- 14. inspired
- 15. nervous
- 16. determined
- 17. attentive
- 18. jittery
- 19. active
- 20. afraid

### **Social Desirability**

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

| 1 | Before voting I thoroughly investigate the qualifications of all the candidates | Т | F |
|---|---|---|---|
| 2 | I never hesitate to go out of my way to help someone in trouble                 | Т | F |
| 3 | It is sometimes hard for me to go on with my work if I am not                   | Т | F |

|    | encouraged  |   |   |
|----|---|---|---|
| 4  | I have never intensely disliked anyone  | Т | F |
| 5  | On occasion I have had doubts about my ability to succeed in life   | Т | F |
| 6  | I sometimes feel resentful when I don't get my way  | Т | F |
| 7  | I am always careful about my manner of dress  | Т | F |
| 8  | My table manners at home are as good as when I eat out in a restaurant  | Т | F |
| 9  | If I could get into a movie without paying and be sure I was not seen I would probably do it                    | Т | F |
| 10 | On a few occasions, I have given up doing something because I thought too little of my ability                  | Т | F |
| 11 | I like to gossip at times   | Т | F |
| 12 | There have been times when I felt like rebelling against people in authority even though I knew they were right | Т | F |
| 13 | No matter who I'm talking to, I'm always a good listener  | T | F |
| 14 | I can remember "playing sick" to get out of something   | Т | F |
| 15 | There have been occasions when I took advantage of someone  | Т | F |
| 16 | I'm always willing to admit it when I make a mistake  | Т | F |
| 17 | I always try to practice what I preach  | Т | F |
| 18 | I don't find it particularly difficult to get along with loud mouthed, obnoxious people                         | Т | F |
| 19 | I sometimes try to get even rather than forgive and forget  | Т | F |
| 20 | When I don't know something I don't at all mind admitting it  | Т | F |
| 21 | I am always courteous, even to people who are disagreeable  | Т | F |
| 22 | At times I have really insisted on having things my own way   | Т | F |
| 23 | There have been occasions when I felt like smashing things  | Т | F |
| 24 | I would never think of letting someone else be punished for   | Т | F |

|    | my wrongdoings   |   |   |
|----|--|---|---|
| 25 | I never resent being asked to return a favor                                     | T | F |
| 26 | I have never been irked when people expressed ideas very different from my own   | Т | F |
| 27 | I never make a long trip without checking the safety of my car                   | Т | F |
| 28 | There have been times when I was quite jealous of the good fortune of others     | Т | F |
| 29 | I have almost never felt the urge to tell someone off                            | Т | F |
| 30 | I am sometimes irritated by people who ask favors of me                          | T | F |
| 31 | I have never felt that I was punished without cause                              | T | F |
| 32 | I sometimes think when people have a misfortune they only got what they deserved | Т | F |
| 33 | I have never deliberately said something that hurt someone's feelings            | Т | F |

#### Likelihood to Discuss the Issue/Concern for Issue

Please indicate your response to the items below on a scale of 1 to 7, where 1 = not at all and 7 = very much.

- **1.** How likely are you to discuss the issue presented in the video with your family and friends?
- **2.** If you have a daughter or were to have a daughter, how important do you think it is for you to assist in fostering a positive body image?
- **3.** How concerned are you or would you be about media images of beauty affecting your daughter's body image?
- **4.** How important do you feel this campaign is for young girls?
- **5.** If body image and self-esteem became a concern with your own daughter, how likely would you be to participate in a self-esteem workshop?
- **6.** How likely are you to visit the *Campaign for Real Beauty* Web site?
- 7. How likely are you to offer compliments to a friend?

- 8. How likely are you to offer positive words to a friend about his or her appearance?
- 9. How likely are you to offer positive words to a friend to boost his or her confidence?

#### **Body Esteem Scale**

On the below scales, please indicate your level of agreement or disagreement with the statements, where 1 = never and 7 = always.

I'm happy about the way I look

I often wish I looked like someone else

I like what I see when I look in the mirror

I worry about the way I look

Lwish Llooked better

I like what I look like in pictures

My looks upset me

I often feel ashamed of how I look

I think I have a good body

I'm as nice looking as most people

There are lots of things I'd change about my looks if I could

I'm proud of my body

I really like what I weigh

I wish I were thinner

My looks help me get dates

I am unhappy with my weight

**Self-Monitoring** Please indicate the degree to which you agree with the following statements, where *1* = *strongly disagree* and *7* = *strongly agree*.

- 1. I find it hard to imitate the behavior of other people.
- 2. At parties and social gatherings, I do not attempt to do or say things that others will like.

- 3. I can only argue for ideas which I already believe.
- 4. I can make impromptu speeches even on topics about which I have almost no information.
- 5. I guess I could put on a show to impress or entertain others.
- 6. I would probably make a good actor.
- 7. In a group of people I am rarely the center of attention.
- 8. In different situations with different people, I often act like very different persons.
- 9. I am not particularly good at make other people like me.
- 10. I'm not always the person I appear to be.
- 11. I would not change my opinions (or the way I do things) in order to please someone of win their favor.
- 12. I have considered being an entertainer.
- 13. I have never been good at games like charades or improvisational acting.
- 14. I have trouble changing my behavior to suit different people and different situations.
- 15. At a party I let others keep the jokes and stories going.
- 16. I feel a bit awkward in public and do not show up quite as well as I should.
- 17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
- 18. I may deceive people by being friendly when I really dislike them.

#### **Personal Involvement:**

I have personally dealt with some form of disordered eating. T/F

Someone close to me has dealt with disordered eating. T/F

Sometimes I think that being thinner would make me more successful. 1 = strongly disagree and 7 = strongly agree.

Sometimes I am more critical of myself when I compare to someone in the media. 1 =strongly disagree and 7 =strongly agree.

#### **Attitude Toward the Video**

Please express your general evaluation of the video you viewed by indicating the extent to which you agree with the following statements, where 1 = not at all and 7 = very much. In general, this video was:

- 1. interesting
- 2. inspiring
- 3. boring
- 4. entertaining
- 5. beneficial
- 6. high quality
- 7. creative
- 8. compelling
- 9. persuasive

- 10. detrimental
- 11. safe
- 12. happy
- 13. engaging
- 14. likeable
- 15. sophisticated
- 16. harmful
- 17. believable
- 18. useful
- 19. positive
- 20. sad

# **Attitude Toward the Brand.**

For the items below, please indicate your perceptions and feelings toward Dove

|              |   |   |   |   |   |   |   |   |   | 0               |
|--------------|---|---|---|---|---|---|---|---|---|-----------------|
| Good         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Bad             |
| Like         | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Dislike         |
| Pleasant     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Unpleasant      |
| Satisfactory | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Dissatisfactory |
| Beneficial   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Harmful         |
| Favorable    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Unfavorable     |
| Likeable     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Dislikable      |
| Positive     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Negative        |
| Unattractive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Attractive      |
| Superior     | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Inferior        |
| Healthy      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Unhealthy       |
| Effective    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | Ineffective     |