

University of South Florida Scholar Commons

Graduate Theses and Dissertations

Graduate School

2011

Goal Compatibility and Emotional Intensity: An Experimental Study of Graphic Images in Strategic Communication

Lauren Marie Klinger University of South Florida, lauren.klinger@gmail.com

Follow this and additional works at: http://scholarcommons.usf.edu/etd Part of the <u>American Studies Commons</u>, and the <u>Mass Communication Commons</u>

Scholar Commons Citation

Klinger, Lauren Marie, "Goal Compatibility and Emotional Intensity: An Experimental Study of Graphic Images in Strategic Communication" (2011). *Graduate Theses and Dissertations*. http://scholarcommons.usf.edu/etd/3186

This Thesis is brought to you for free and open access by the Graduate School at Scholar Commons. It has been accepted for inclusion in Graduate Theses and Dissertations by an authorized administrator of Scholar Commons. For more information, please contact scholarcommons@usf.edu.

Goal Compatibility and Emotional Intensity: An Experimental Study of Graphic Images

in Strategic Communication

by

Lauren Marie Klinger

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts Department of Mass Communications College of Arts and Sciences University of South Florida

Major Professor: Kelly Page Werder, Ph.D. Scott Liu, Ph.D. Michael Mitrook, Ph.D.

Date of Approval: July 6, 2011

Keywords: attitude, public relations, behavioral intention, willingness to communicate, sadness

Copyright © 2011, Lauren Marie Klinger

Dedication

In every dedication section of every thesis I've ever read, which is, admittedly, only two, the student writes that the thesis is —dr" her parents, her partner, or, in one instance (50% of theses I've read, if we're manipulating statistics) her dog. I'm a good daughter, and I love my dad. But this thesis isn't —dr" him. I know I never needed to write a thesis or get a master's degree *for* my dad. I have the most amazing father (and had the most amazing mother) anyone could ever want. Unconditionally, my dad has supported and loved me my entire life, including through this master's degree program. For all the times I called him when I was frustrated, overworked, sleep-deprived, angry, or lost, and he talked me down or built me back up, or just listened, I am thankful. I needed that support. I love you, Dad.

Table of Contents

List of Tables	
List of Figures	V
Abstract	vi
Chapter One: Introduction	1
Theoretical Framework	2
Chapter Two: Literature Review	11
Offensive Advertising	11
Effects of Offensive Advertising	13
Emotional Images	15
Hypotheses	19
Chapter Three: Methodology	22
Design of Study	23
Instrumentation	25
Data Analysis	
Chapter Four: Results:	27
Frequencies	27
Descriptive Statistics	
Preliminary Data Analysis	29
Hypothesis Testing	
Hypothesis 1	
Hypothesis 2a	40
Hypothesis 2b	40
Hypothesis 3a	42
User ath aging 2h	42
Hypothesis 30	
Hypothesis 30	
Hypothesis 30 Hypothesis 4a Hypothesis 4b	
Hypothesis 30 Hypothesis 4a Hypothesis 4b Exploratory Analysis	
Hypothesis 30. Hypothesis 4a. Hypothesis 4b. Exploratory Analysis	
Hypothesis 30 Hypothesis 4a Hypothesis 4b Exploratory Analysis Chapter Five: Discussion Chapter Six: Conclusion	
Hypothesis 30 Hypothesis 4a Hypothesis 4b Exploratory Analysis Chapter Five: Discussion Chapter Six: Conclusion Suggestions for Future Research	

References	62
Appendix A: Script for Waiver of Informed Consent	67
Appendix B: Instrument	69
Appendix C: Open-ended Question Responses	75

List of Tables

Table 1: Descriptive Statistics	29
Table 2: Cronbach's Alpha for Multiple-Item Indexes	30
Table 3: Rotated Factor Matrix	32
Table 4: Total Variance Explained	33
Table 5: Oneway ANOVA: Differences in Treatment and Control	35
Table 6: Regression Model for Goal Compatibility Predicting Emotional Intensity	36
Table 7: Regression Model for Goal Compatibility Predicting Anger	37
Table 8: Regression Model for Goal Compatibility Predicting Guilt	38
Table 9: Regression Model for Goal Compatibility Predicting Sadness	38
Table 10: Regression Model for Goal Compatibility Predicting Disgust	39
Table 11: Regression Model for Goal Compatibility Predicting Fear	39
Table 12: Regression Model for Goal Compatibility Predicting Willingness to Communicate	41
Table 13: Regression Model for Emotions Predicting Willingness to Communicate	41
Table 14: Regression Model for Goal Compatibility Predicting Attitude Toward the Organization	43
Table 15: Regression Model for Emotions Predicting Attitude Toward the Organization	43
Table 16: Regression Model for Goal Compatibility and Emotion Predicting Behavior Intention	al 45
Table 17: Regression Model for Emotions Predicting Behavioral Intention	45
Table 18: ANOVA with Goal Compatible Attitude with Mean Split	47

Table 19: ANOVA with Goal-directed Advocacy with Mean Split	48
Table 20: ANOVA with Goal Compatible Behavior 1: Alternative Transportation with Mean Split	50
Table 21: ANOVA with Goal Compatible Behavior 3: Donation with Mean Split	51
Table 22: ANOVA with Goal Compatible Behavior 4: Volunteerism with Mean Split	53

List of Figures

Figure 1: Hypothesized Model	19
Figure 2: Hypothesized Relationships	24

Abstract

The purpose of this quantitative study is to examine receiver variables involved in strategic communications and to look specifically at the use of graphic images in strategic communication materials. It argues that any complete, general model of persuasion effects will include both goal compatibility and emotional determinants. It argues that some influential theories used in strategic communications scholarship, including the situational theory of publics and the elaboration likelihood model, are incomplete because they have omitted these variables. This study also tests variables related to willingness to communicate, behavioral intention, and attitude towards the organization. These variables are drawn from prominent, well-tested theories in strategic communications, and used to begin building a new model of the effects of messages featuring graphic images.

Chapter One

Introduction

A stop at just about any environmental activist group's website can lead to a variety of videos featuring images of wildlife impacted by the 2010 Deepwater Horizon/BP oil spill. The Greenpeace website features a series of videos titled –Oil Spill Truth" (Greenpeace, 2010); the Sierra Club's site links to a number of oil-drenched bird videos about the TransCanada pipeline (Sierra Club, 2011). As with anything on the Internet, these videos can be easily closed or stopped with a click of a mouse, but the images one sees can elicit negative emotions such as anger, disgust, fear, guilt, and sadness, and shocking or graphic images may not be as easily removed from the viewer's mind (Safer, Christianson, Autry, & Österlund 1998; Dahl, Frankenberger, &Manchanda, 2003). Examples of emotionally evocative videos and advertisements are easy to find on activist websites, but prevalent does not necessarily mean effective. This study will provide some data on the use of these images.

This study is the beginning of an attempt to bridge some of the seminal works in public relations through an interdisciplinary approach appropriate for the field of strategic communications. Holtzhausen and Hallahan (2007) argue that across disciplines, similar theories are used –often without making logical connections or cross-references that might enlighten researchers on this single notion: how communicators who act on behalf of a communicative entity can use this knowledge to improve their practice and understand their impact on society" (p. 1). The broad purpose of this study is, therefore,

to examine the role of emotionality in persuasion from an interdisciplinary perspective; and, more specifically, to provide some useful data on the use of graphic images and emotionality, and allow additional theorizing about the role of goal compatibility and emotions in theories used in the study of strategic communication. In sum, the goal of this study is to develop a new way to understand the effects of graphic images used in strategic communication.

Theoretical framework

This research has three theoretical bases: the elaboration likelihood model, the situational theory of publics, and the cognitive-functional model. This section will give an overview of these theories in an effort to situate this study in the scholarly literature on emotions, persuasion, and activism in strategic communications. It is beyond the scope of this study to provide an in-depth analysis of all previous literature on emotion and persuasion, but for a thorough and recent look at these concepts in the communications literature, see, for example, Wirth and Schramm (2005).

Petty and Cacioppo's (1986) elaboration likelihood model (ELM) posits that messages can be processed either centrally or peripherally. Central processing is the considered, reasoned processing that happens when a message receiver is sufficiently motivated and able, whereas peripheral processing is surface-level and absorptive rather than deep and rational. If either motivation or ability to process a message is absent or low, peripheral processing happens instead of central processing. Attitude change based on central processing should be more stable, long lasting, and predictive than attitude change resulting from peripheral processing (Nabi, 1999).

There are a few limitations of the ELM, though, as many researchers have pointed out. First, as Nabi (1999) notes, the ELM posits a message-processing dichotomy: messages can be processed either centrally or peripherally, with no middle option. For something as seemingly complex as the processing of a persuasive message, this may be unreasonably simplistic. The ELM also does not address the effects of emotion on processing.

To fill in the emotional gap in the elaboration likelihood model, Nabi (1999) proffered the cognitive-functional model, or CFM. The CFM argues that whether a message is deeply or superficially processed (centrally or peripherally), whether a message is recalled, and whether a persuasive message is accepted or rejected is determined by 1) the type and intensity of emotion produced by the message, 2) the assumption or expectation that the message contains reassuring information, and 3) the strength of the argument (Nabi, 1999). Nabi considered five discrete negative emotions: anger, disgust, fear, guilt, and sadness. Emotions produced by messages either cause the receiver to have an inclination Nabi calls —**p**proach," which means a person tries to get closer to the message in order to lessen the negative feeling or –**n**voidance," which means a person tries to avoid the message in order to lessen the negative feeling (Nabi, 1999, p. 304).

When people experience negative emotions, their natural response is to try to lessen or eliminate these bad feelings. When a message produces negative emotions, Nabi posits, people will only tune in to the point of the message (and centrally process it) if they expect it to contain information on how to lessen or eliminate the feelings they have. –If afraid, receivers seek information about protection; if angry, about retribution; if sad,

about coping with loss; if disgusted, about avoidance of the noxious element; if guilt ridden, about proper reparation" (Nabi, 1999, p. 305).

This makes intuitive sense; if you see something that makes you feel angry or disgusted, you can imagine that you would not let it keep making you angrier and more disgusted unless you felt that what you saw would lead you to how to stop those feelings. Or at the very least, you would try to turn off the part of your mind that was processing those messages in a meaningful way. Nabi says, –expectation of message content likely serves as an additional influence on receiver motivation to engage in information processing and, coupled with actual message features, including argument strength and peripheral cues, should help determine persuasive outcome" (1999, p. 306).

The CFM is a thorough attempt to fill a gap in the ELM, but it too has gaps and, though it is complex, may be too simplistic. One could imagine that there could be a positive emotion induced by the same message that induced a negative emotion. An advertisement that angers you because it is sexist might also entertain you because it has catchy music and attractive models. Then you might feel guilty for feeling attracted to objectified models but simultaneously intrigued by the product the ad is promoting. Furthermore, multiple negative emotions could be caused by one message (Hammond, Fong, McDonald, Cameron, & Brown, 2003; Harris, Mayle, Mabbott, &Napper, 2007; Leshner, Vultee, Bolls & Moore, 2007). One can easily imagine a message using a graphic image that is disgusting and language that is angering, or a message with a fear appeal that also elicits guilt. This is complicated, then, and raises a number of questions. Disgust and anger have opposite tendencies; disgust has an avoidance tendency, while anger has an approach tendency (Nabi, 2002). Predicting behavior based on the premise

that a viewer of an image only experiences one emotion as a result of that image is, then, obviously incomplete.

To figure out, then, which tendency will –win" based on which emotion is stronger would be a much more impressive predictive feat. In a test of this, one could operationalize the emotion elicited from a message by asking participants to name the emotion they felt most strongly while watching or reading a message, but since emotions are not experienced in an isolated or hierarchical way it may not be productive to require them to be ranked. The other option is to attempt to create messages that obviously and purposefully only elicit one main emotion. Many researchers rely on messages that focus on eliciting only one strong emotion; they test a fear appeal, or a guilt message (LaTour& Pitts, 1989; Thornton, Rossiter, & White, 2000; Lindsey, 2005; others). This adds to the general knowledge of the interplay between persuasion and emotions, of course, but may fail to replicate real-world conditions in a practical way.

Delving into one of the emotions described by Nabi (1999), the anger activism model (AAM) posits that anger can be used successfully to engender behavior and attitude change when the message is received by someone who already has a positive attitude towards the topic and the receiver feels a strong sense of efficacy (Turner, Bessarabova, Hambleton, Sipek, Weiss, & Long, 2006). In other words, the AAM –proposes that anger only facilitates attitudes, intentions, and message processing when the message is processed by a favorable audience" (Turner et al., 2006, p. 5). So a message that makes a person angry will not inspire her to make behavioral changes if she is not agreeable to the source of the message or the topic of the message already. Anger will not only fail to work on people who have negative attitudes about the source or the

topic, but will —deilitate persuasion" when the message is attempting attitude change (Mitchell, 2007, p. 115). However, –anger can aid in persuading people to do behaviors that they would typically find too difficult to do" (p. 116).

If using graphic images causes people to become angry, then, graphic images should only be successful at effecting attitude and behavior changes in people who are already predisposed to think positively about the organization or the issue. When individuals have preexisting negative ideas about the organization or the issue, and the individuals are made angry by the messages, -the receivers' angry feelings will not be targeted at the persuasive endpoints, but rather at the source of the message" (Mitchell, 2001).

The AAM also posits that audiences can be categorized into four groups: activist, empowered, disinterested, and angry (Mitchell, 2001). The activist group feels both angry and efficacious and –will have the most positive attitudes regarding the topic, will be the most willing to engage in higher commitment behaviors, and will engage in the most systematic processing" (p. 117). The empowered group feels efficacious but not angry (something can be done to address the problem, but the problem does not anger them); the disinterested group is neither angry about the problem nor feeling efficacious about it; and the angry group is mad about the problem but does not feel anything can be done to fix the issue.

The AAM, then, is a sort of emotional echo of Grunig's situational theory of publics (STP). To Grunig, communication is essentially –a tool for solving problems" (Grunig, 1997, p. 11). A public, in the traditional definition, is a group of people who (1) face a similar problem (2) recognize the problem and (3) decide to do something about

the problem (Dewey, 1927). Hallahan (2000) argues that a public should be defined as –a group of people who relate to an organization, who demonstrate varying degrees of activity-passivity, and who might (or might not) interact with others concerning their relationship with the organization" (p. 502).

Essentially, the STP provides a means of categorizing people in ways relevant to public relations practitioners and the strategic campaigns they engineer. Grunig (1989) says the STP was originally developed -as a device to segment the publics of organizations according to the nature and extent of their communication about problems or issues that result when organizations behave in ways that have consequences on people outside the organization" (p. 4). It posits that a person becomes active about an issue because she realizes there is a problem, feels involved in the problem, and feels she can do something about the problem. Said differently, -people seldom seek information about situations that do not involve them. Yet, they will randomly process information about low-involvement situations, especially if they also recognize the situation as problematic" (Grunig, 1997, p. 10). According to the STP, when someone (or a public) feels personally affected by or involved in a situation or problem (that she recognizes as a problem) and has relatively few constraints on her ability to act, she is more likely to become a member of an active public (Grunig, 1989; 1997). As an example, Grunig notes, -People who normally would not be in environmental publics became members of hot-issue publics when issues such as the energy shortage and air pollution affected them directly" (1997, p. 15).

Hallahan (2000) would add a fifth group to the four publics delineated by Grunig and Hunt (1984): inactive publics. Members of inactive publics, Hallahan (2000) notes,

might be inactive because they are satisfied with the way their needs are being met by an organization, they might take the relationship for granted, they might believe the effort required to make a change would not be worthwhile, or they might —**a**ke a fatalistic position that nothing can be done to alter the situation" (p. 504). Additionally, Hallahan (2000) argues that —theinertia that characterizes inactive publics places the burden on the organization to establish communication programs that gain the attention and engage less attentive publics" (p. 511). This is especially relevant to the current study; if we accept that it is incumbent upon an organization to get the attention of inactive publics, it makes sense that in order to do this, an organization might rely on shocking or graphic images. Indeed, Dahl et al. (2003) argue that shocking ads are —**u**sed in a bid to draw attention to an advertisement with the expectation that further processing will take place if the advertisement is noticed" (p. 268). Thus, it is important to examine whether graphic images capture the attention of the audience and whether (and under what conditions) they do so in meaningful ways.

Once an organization has captured the attention of a member of an inactive public, it has to keep it. The AAM and the CFM posit that emotions elicited by messages can make people more or less likely to process an organization's messages in a deliberate, reasoned way, and thus more or less likely to be swayed to be part of what Grunig calls a <u>hot-issue</u>" public (Grunig, 1989, p. 7).

What may be missing here, though, is goal compatibility. What Turner et. al (2006) term a *-favorable* audience" might be more appropriately thought of as an audience with high goal compatibility. Goal compatibility is defined as: *-te* extent to which the goals or objectives of one party are similar to and coincide with the goals and

objectives of another party" (Werder, 2005, p. 227). Werder (2005) argues that —if members of a public perceive that an organization's goals are similar to their own, they will likely be more receptive to messages output from the organization" and –eonversely, a public may resist messages if its goals are not aligned with those of the organization" (p. 227). This may be more appropriate because positive affect towards an organization may not exist even though goal compatibility does.

An example here may be helpful. One can imagine a situation in which there is high goal compatibility, but low positive affect. An activist organization known for using extreme tactics is a good example. Urbanik (2009) discusses —Hoters for Neuters," a campaign in which Hooters restaurants worked to raise money for animal shelters and encourage people to neuter their pets. If one believes it is important to control the population of dogs and cats, but one sees Hooters restaurants as offensive or sexist, one's perceived goal compatibility might be quite high, whereas the affect towards the organization might remain low. One could rearrange the premise and ask about affect towards the cause, the spaying and neutering of pets, but then one is asking about a goal, not an organization, and this would further support the contention that to understand the role of emotion in persuasion, it is important to investigate the variable of goal compatibility.

In order to add specificity and depth to the concept of goal compatibility, this study investigates two variables related to goal compatibility: goal compatible attitudes and goal compatible behaviors. Previous research in this area (Werder, 2005; 2006) focused on goals as attitudes towards an organization's objectives. This study examines goal compatibility as it has been conceptualized previously but also personal behaviors as

reflections of true goal compatibility in participants' personal lives.

This study is premised upon the idea that goal compatibility may be an important but missing variable in the STP and the CFM. It should provide some useful data on the use of graphic images and emotionality, and allow additional theorizing about the role of goal compatibility and emotions in strategic communications.

Chapter Two

Literature Review

Offensive advertising

The focus of this study is strategic communication messages that include shocking or graphic images. Much of the research in this area focuses on public health communications and public service announcements, with some focusing on advertising. This section will give an overview of this literature.

An advertisement could be offensive because it advertises an essentially offensive product, or because it uses offensive or shocking methods to advertise an innocuous product (Phau & Prendergast, 2001). Essentially offensive products have been defined as –products, services, or concepts that for reasons of delicacy, decency, morality, or even fear tend to elicit reactions of distaste, disgust, offense, or outrage when mentioned or when openly presented" (Wilson & West, 1981, p. 92). Unmentionables themselves fall into two categories: products that are generally taboo but highly desirable to a relatively small number of people, such as prostitution and pornography; and products that are purchased –only when the need is sufficiently acute to overcome the threshold of embarrassment, disgust, or fear" such as personal hygiene products, funeral arrangements, and certain medical supplies (Wilson & West, 1981, p. 92). Which products offend people, of course, can vary by culture and over time. Additionally,

—ptentially offensive products and services and the appeals used in advertisements are influenced by the changing environment and attitudes and demographics of the

consumers" (Phau& Prendergast, 2001, p. 79). So what offends a group of nursing home residents might not offend a cohort of college students, and vice versa, and what offended a group of nursing home residents when they were college students might not offend today's college students.

Waller (2005) offers another way of conceiving of offensive advertising, his umbrella definition of –eontroversial" advertising. In his conception, there is an umbrella term necessary, because controversial advertising does not always result in negative effects, so offensive advertising should be defined as controversial advertising *with negative results*, such as: irritation, outrage, disgust, embarrassment, distaste, or offense.

Advertising –unmentionables" is a tricky and sensitive proposition. Perhaps even trickier and more sensitive is the harnessing of negative emotions in order to create positive affect or positive behavioral intention for a product or idea that is not itself offensive. The current study is concerned with the use of graphic images in persuasion efforts, and so falls into the category of controversial and potentially offensive methods, not —unmetionable" products.

Using shock tactics to break the monotony of ordinary advertising techniques is not limited to inherently controversial products. Dahl et al. (2003) explain that a shocking advertisement is one that deliberately –startles and offends its audience" through the process of –norm violation, encompassing transgressions of law or custom (e.g. indecent sexual references, obscenity), breaches of a moral or social code (e.g., profanity, vulgarity), or things that outrage the moral or physical senses (e.g. gratuitous violence, disgusting images)" (p. 268). In their study of the effects of shocking advertisements on college students, they found that, indeed, a shock appeal —**w**sures that subjects remember

the message and engage in message-relevant behavior" (p. 277). However, they note that the students recognized the appeals they created as norm-violating, but that the students largely liked the appeals. Untested in this study were appeals that the students actually disliked.

Effects of Offensive Advertising

Shocking advertisements are used because they -eut through the clutter" of the everyday methods of persuasion used in advertising. Shocking ads are -used in a bid to draw attention to an advertisement with the expectation that further processing will take place if the advertisement is noticed" (Dahl et al., 2003, p. 268). In their study of university students, Dahl et al. (2003) found that -shocking content in an advertisement significantly increases attention, benefits memory, and positively influences behavior" (p. 268). In two creatively designed experiments, the researchers asked participants to wait in a room before the experiment began; the participants were unaware that the experiment had already started. The room in which they waited was decked with a handful of posters, some featuring shock appeals, some featuring fear appeals, and some featuring simple informational appeals. After the dummy -experiment" was over, participants completed the questionnaire about the posters. In this experiment, the shocking posters were much more likely to be remembered than the fear or informational posters.

In a variation of the Dahl et al. (2003) experiment, researchers told participants who had seen some of the same posters in an earlier phase that the club that normally met in the room in which they had waited was getting rid of a box of random items. Participants were encouraged to take from the box anything they wished. In this experiment, the posters featuring shock appeals were just as likely as those featuring fear

appeals to motivate participants to engage in the message-relevant behavior of choosing a related item from the club's giveaway box. These two experiments by Dahl et al. (2003) demonstrate that shocking messages can be effective when appropriately targeted. They add the important caveat, though, that people may have a greater tolerance for norm violation and shocking advertisements in a public-policy context —beause viewers may agree that _the ends justify the means''' (p. 277). This is interesting with respect to the current study because it hints at goal compatibility. Perhaps if people have low goal compatibility, this study seems to suggest, they will not have as much tolerance for shock because the ends may not, to them, justify the means.

It may also be true that different types of shocking messages affect people in different ways, depending on the emotions elicited by the particular message. For example, Newhagen (1998) found that television stories featuring disgusting images were remembered less well than were stories that angered participants, which were remembered easily.

The discipline of political science provides a wealth of research on the effects of negative advertising on memory, behavioral intention, and affect, including backlash effects. For a more complete picture of the effectiveness of negative campaign ads, see Lau, Sigelman, and Rovner's 2007 meta-analysis. They found significant positive effects on memory for negative campaigns but also significant backlash effects against attackers. Ultimately, they conclude that the premise that –negative campaigning is no more effective than positive campaigning holds *even though* negative campaigns appear to be somewhat more memorable and to generate somewhat greater campaign-relevant knowledge" (p. 1183). This is perhaps counterintuitive but easily understandable. You

may pay more attention to an ad, understand it better, and recall it more clearly, but still feel irritated by the ad and thus the candidate who signed off on it.

The current study falls within Waller's (2003) conception of controversial advertising, and Dahl et al.'s (2005) definition of shocking advertisements, as it uses a treatment featuring startling, unsettling images.

Emotional Images

Nabi (1999) discusses five discrete emotions: anger, disgust, fear, guilt, and sadness. There is a massive amount of research on fear appeals, and less on the other four discrete emotions. This literature review will highlight some of the research on the discrete negative emotions, but cannot possibly catalog all of it. Also, this literature review will highlight some of the more general literature on emotional images and persuasion.

The question of whether people pay more attention to emotional stories and pictures, over neutral ones, is well answered. Calvo and Lang (2004) found that when people are presented with both neutral and emotional pictures, they pay more attention to the latter, regardless of whether the emotions displayed in the images are positive or negative. Additionally, they found that people are likely to pay attention to negative, injury-related pictures when they first notice them, but then they typically avoid looking at them. This is related to the present study because the oil spill video shows injured animals. Though the animals featured are not bleeding, they strain to breathe and are visibly ill. Calvo and Lang (2004) conducted several thorough experiments, but only looked at eye movement and attention, so the present study is necessary to explore

whether graphic images spur a willingness to communicate, even if they repulse the viewer.

While fear appeals have been extensively researched for decades, we still know relatively little about how people cognitively and emotionally process these messages, and the way multiple emotions interact in these processes (De Hoog, Stroebe, &deWit, 2007;Leshner, et al., 2010). In their meta-analysis of fear appeals and the dual-models of message processing, De Hoog et al. (2007) found that –extremely _fear-arousing' messages are no more effective than messages that simply state the negative consequences of a certain behavior" (p. 280).

However, fear appeals may be used with varied effectiveness, depending on the level of fear evoked and the other message stimuli. Thornton, Rossiter, and White (2000) found that high fear messages were more effective than medium or low fear messages in a study examining drivers' intention to drive above the speed limit. Lewis, Watson, White, and Tay (2007) suggest that perhaps fear appeals are not ineffective because that emotion has an inherently inhibitory effect on message processing, but ineffective because people are simply tired of the fear approach to persuasive communications.

Asking the question, –Do graphic negative images make fear appeals more effective?" Leshner et al. (2010) tested anti-tobacco messages with varied levels of fear combined with disgusting images. In this study, Leshner et al. (2010) found that disgusting images increased participants' attentiveness to low fear messages, but decreased participants' processing of high-fear messages (p. 485). They also found that the severity of the fear aroused affected participants' attitudes towards message.

In a study examining the processing and recognition of news stories featuring either high fear content or high disgust content, Miller and Leshner (2007) found that fear stories were recognized and processed at higher rates than disgust stories. Ultimately, they conclude that -including disgust-eliciting images in television news stories hinders processing" (p. 23).

Newhagen (1998) examined news stories also, looking specifically at participants' recognition of information following angering, frightening, or disgusting news stories. He argues that –Viewers can cognitively <u>turn away</u>' from a negative stimulus when a compelling or threatening component is not present" (p. 275). Furthermore, he notes, –a producer's intuition that information worth remembering should go after images evoking disgust may be exactly the wrong strategy" (p. 275).

Additionally, Dillard and Nabi (2006) point out that emotions do not have the same effects across messages or for all viewers. They emphasize that —unitentionally aroused affects have the potential to work against persuasive goals" (p. 5131). Thus, they argue, it may not be that a particular emotion always inhibits processing and persuasion, but that the combination of intended and unintended emotions elicited by a specific message may result in a failure to persuade.

As mentioned earlier, it is possible that those who develop communications strategies for activist groups may be assuming that the more emotional the images their communications include, the more likely viewers will be to discuss the images. Dunlop, Wakefield, and Kashima (2008) emphasize that if a message –elicits an emotional response, it is likely to be discussed" (p. 64). They found that emotional messages —re not only likely to directly influence the individual, but also indirectly, by encouraging

discussion about the message" (p. 69). This informs the current study's willingness to communicate variable.

In their study of emotional images, Hamann, Ely, Grafton, and Kilts (1999) showed participants four types of pictures: pleasant, aversive, neutral (i.e. a book; chess players), and interesting but unarousing (i.e. a chrome rhinoceros). In the immediate memory test as well as a surprise memory recognition test after a month had passed, they found that the interesting, pleasant, and aversive images were more likely to be remembered than the neutral pictures. This is important to the current study but, as a neuroscience study unconcerned with persuasion and organizational relationships, it does not provide insight into the effects of seeing aversive images and if (and how) people communicate about the images when (if) they think of them later.

So while there is a significant body of literature on emotions in persuasion and on emotions and memory, there is a need for more studies linking these areas. Without retesting any specific theory, the current study will pull from a variety of important theories and concepts in an effort to begin to understand the effects of graphic images in strategic communications materials.

Figure 1 illustrates the hypothesized relationships examined in this study.



Figure 1: Hypothesized Model

Hypotheses

Based on the literature reviewed for this study, a model was proposed to explain some of the interactions among variables related to emotionality and strategic communications. While it is beyond the scope of this research to test each variable included in the STP, CFM, and ELM, it is feasible to test many of the variables of the model.

H1: Goal compatibility influences intensity of emotion.

Hypothesis 1 tests a premise related to the cognitive functional model and the situational theory of publics. If we accept that goal compatibility is an important but

understudied variable of the situational theory of publics, and we accept that emotion is an understudied concept in the STP, it is easy to see that these concepts should be examined for any relationship to one another. Additionally, the anger activism model –proposes that anger only facilitates attitudes, intentions, and message processing when the message is processed by a favorable audience" (Turner et al., 2006, p. 5). If we substitute –goal-compatible audience" for –favorable audience" here, it is clear that we must study whether goal compatibility (or the degree to which an audience is favorable) is related to the intensity of the emotions elicited by the strategic communications message before we can proceed with studying how emotional intensity relates to other variables of interest.

H2a: Goal compatibility influences willingness to communicate.

H2b: Intensity of emotion influences willingness to communicate.

One of the reasons activist organizations rely on shocking or highly emotional images is the assumption that emotional images are likely to be discussed (Dunlop et al., 2008). Activist organizations may rely on this tactic more so than corporations because activist organizations may not have the resources to ensure a message is seen multiple times by the same individual. Thus, it is important to learn whether issues are likely to be discussed, and what influence emotion and goal compatibility have on this likelihood. These hypotheses are premised loosely on the cognitive functional model as well. They are relational statements positing that the degree to which participants are willing to communicate is predicted by the intensity of their emotional response to the issue as well as their attitudinal and behavioral goal compatibility.

H3a: Goal compatibility influence attitude toward the organization.

H3b: Intensity of emotion and goal compatibility influence attitude toward the organization.

Hypothesis 3a and 3b are related to the anger activism model, which posits that when anger is used to effect behavior or attitude change in an unfavorable audience, the anger may be redirected toward the source of the message (Turner et al., 2006). This study does not test that premise specifically, but these hypotheses assert that the degree to which an audience is favorable (recast as goal-compatible here) and the degree of emotional intensity are related to the attitude toward the organization.

H4a: Goal compatibility influences behavioral intention.

Hypothesis 4 is a relational statement based on previous goal compatibility research. Werder (2006) found that goal compatibility is a strong predictor of information seeking. The behavioral intention variable encompasses information seeking, as well as other activist behaviors, such as signing a petition and donating time (through volunteering) or money.

H4b: Intensity of Emotion influences behavioral intention.

Hypothesis H4b is a relational statement based loosely on the cognitive functional model, which examines individual discrete emotions (Nabi, 1999). This hypothesis posits that the message receiver's overall level of emotionality will predict the behavioral intention variable.

The chapters that follow detail the methods used in testing these four hypotheses, as well as the data analysis and exploratory research conducted.

Chapter Three

Methodology

The purpose of this study is to test a combination of message design and strategic communications theories, including the elaboration likelihood model (ELM), the cognitive functional model (CFM), and the situational theory of publics (STP). These theories work together and need not be marshaled into separate cells as though they exist entirely independent of one another. This study examines goal compatibility as a concept that bridges the ELM and CFM and adds to the STP. It draws variables from each theory to form the beginning of a new conceptualization of how messages with graphic images are received by audiences of varying types, but does not specifically test each theory from which the variables are drawn. The hypotheses tested are:

H1: Goal compatibility influences intensity of emotion.

H2a: Goal compatibility influences willingness to communicate.

H2b: Intensity of emotion influences willingness to communicate.

H3a: Goal compatibility influences attitude toward the organization.

H3b: Intensity of emotion influences attitude toward the organization.

H4a: Goal compatibility influences behavioral intention.

H4b: Intensity of emotion influences behavioral intention.

A controlled experiment was conducted to test the hypotheses. Without conducting an experiment, it would be impossible to tell whether the graphic images caused any change in the participants' affect towards the issue, or any other dependent variables. And, as one of the goals of this study is to add to the body of theory-driven strategic communications research, it is more useful to be able to conclude that a certain type of image effected a certain emotion.

Design of study

The participants of this study were undergraduates enrolled in mass communications courses. Forty-four participants, the control group, read a brief statement of goals for the created organization and completed the questionnaire. The treatment groups, 76 students total, read the same statement of goals, but also saw a brief video before answering the questionnaire. All students were read a statement notifying them that they were not obligated to participate in the study, participating in the study would not affect their grades, and that those who choose to participate could opt-out at any time and leave the room. No students declined to participate.

To use an actual message from a well-known organization would have presented a plethora of methodological problems. Therefore, this experiment used a made-up organization, purporting to have the goals similar to other environmental groups, so goal compatibility could be assessed without these methodological issues.

This experiment used one treatment, an existing graphic slideshow-style video. After viewing the video, the participants answered demographic questions and questions to assess the following variables: goal compatible attitude, goal compatible behavior, attitude toward the organization, behavioral intention, willingness to communicate, emotion type, and emotion intensity. At the conclusion of the experiment, the participants were debriefed and the video properly attributed.

The relationships among the variables tested in this study are illustrated in the following model.



Figure 2: Hypothesized Relationships

The treatment was an existing graphic slideshow-style video, comprised of Associated Press images depicting the wildlife affected by the Deepwater Horizon/BP oil spill that occurred in 2010. The control group's questionnaire used 24 items, and the treatment group's questionnaire used 26 items, measuring goal compatible attitude, goal compatible behavior, willingness to communicate, behavioral intention, and emotional intensity. Participants were also asked to provide demographic information, including: ethnicity, age, gender, and major. Two open-ended questions were also asked to the treatment group, in order to provide a depth of understanding to the results.

Instrumentation

As previously mentioned, two conceptions of goal compatibility were measure d in this study: goal compatible attitude and goal compatible behavior. Goal compatible attitude was measured using the following statements: 1) The goals of this organization are very important to me; 2) This organization and I do not want the same thing; 3) I support the goals of this organization; 4) I consider myself an advocate for environmental causes.

Goal compatible behavior was measured using the following statements: 1) I bike, walk, or use public transportation frequently; 2) I try to persuade friends and family to recycle; 3) I have donated money to an environmental organization or group; 4) I have volunteered for an environmental organization or group.

Attitude towards the organization was measured using a semantic differential scale. The statement, — think this organization is" was anchored by the following endpoints: good/bad; positive/negative; fair/unfair.

Behavioral intention was assessed using the following statements: 1) In the future, I plan to donate my time or money to an environmental protection organization; 2) I plan to seek out more information about ways to protect the environment; 3) I would sign a petition to change laws to protect the environment; 4) I will probably visit this organization's website.

The willingness to communicate variable was measured using the following statements: 1) I will probably talk to friends or family about the organization; 2) I will probably tweet, blog, or post on Facebook about this issue; 3) I will probably talk to

friends or family about this issue; 4) I am unlikely to discuss this issue with friends or family.

Emotional intensity was measured using a series of semantic differential scales. The first, —The issue of environmental destruction and the oil spill makes me feel angry", was anchored by the endpoints —ntbat all angry" and —intensely angry." The same statement was used for each of the five discrete emotions (anger, disgust, fear, guilt, and sadness) with the endpoints being —not at all angry/disgusted/afraid/guilty/sad" and —intensely angry/disgusted/afraid/guilty/sad."

In addition, demographic variables were measured, including gender, ethnicity, age, and college major.

Data Analysis

Data were analyzed using SPSS 19.0. A p value of .05 was used as the threshold for significance in all statistical analysis.

Data analysis began with an examination of frequencies for the demographic variables measured in this study. Next, descriptive statistics were calculated for each item testing the variables of interest. Cronbach's alpha and factor analysis were used to assess the internal consistency of the multi-item scales used to measure the variables of interest. Where appropriate, items were collapsed to form single-item measures to test the hypotheses proposed in this study. Finally, multiple regression analysis was used to test the hypotheses.

The following chapter includes the results of the hypothesis testing.

Chapter Four

Results

The purpose of this study was to begin building a new model of the relationships between variables involved in the reception of strategic communications messages featuring graphic images. To examine these variables, this study tested the following hypotheses:

H1: Goal compatibility influences intensity of emotion.

H2a: Goal compatibility influences willingness to communicate.

H2b: Emotional intensity influences willingness to communicate.

H3a: Goal compatibility influences attitude toward the organization.

H3b: Emotional intensity influences attitude toward the organization.

H4a: Goal compatibility influences behavioral intention.

H4b: Emotional intensity influences behavioral intention.

Frequencies

The participants in this experiment were 120 students in four mass

communications classes. One class served as the control group, and thus completed the questionnaire without seeing the treatment, and the other three classes both completed the questionnaire and watched the video. There were 44 students in the control group, and 76 students in the treatment group. Eighty-four participants reported their gender as female (70 percent), and 33 were male (27.5 percent), with three participants (2.5 percent) choosing not to report their gender. This is typical of mass communications courses at
this university. The participants were also asked to report their ethnicity in a fill-in-theblank question. Seven participants, or about 6 percent, elected not to report their ethnicity, but one (.8 percent) reported --multiracial"; one (.8 percent) said --Pacific Islander"; two (1.7 percent) said --other"; four (3.3 percent) said --Arican-American"; six (5 percent) said --Asian"; 16 said --Itspanic" or --Latina" (13.3 percent); and 83 (69.2 percent) reported their ethnicity as --white" or --Caucasian." The participants ranged from age 18 to 52, with the average age being 22.

The experiments were conducted in four mass communications classes, with one class being an introductory course. Thus, 99 participants (82.5 percent) were mass communications majors, and 20 (16.8 percent) reported majors outside of mass communications.

Descriptive Statistics

Prior to hypothesis testing, descriptive statistics, shown in Table 1, were performed to assess the means and standard deviations for each item on the questionnaire.

Table 1: Descriptive Statistics

Item	Ν	Mean	SD
Q1: Goal Compatible Attitude 1	120	5.30	1.294
Q2: Behavioral Intention 1	120	4.16	1.561
Q3: Goal Compatible Behavior 2	120	3.11	1.974
Q4: Willingness to Communicate 1	120	3.30	1.663
Q5: Goal Compatible Behavior 2	120	4.63	1.860
Q6: Goal Compatible Attitude 2	119	2.06	1.451
Q7: Goal Compatible Behavior 3	120	2.99	2.163
Q8: Goal Compatible Behavior 4	120	3.75	2.309
Q9: Willingness to Communicate 2	120	2.67	1.746
Q10: Behavioral Intention 2	120	3.83	1.751
Q11: Behavioral Intention 3	120	5.57	1.538
Q12: Willingness to Communicate 3	120	4.08	1.761
Q13: Behavioral Intention 4	120	3.38	1.871
Q14: Willingness to Communicate 4	120	3.49	1.843
Q15: Goal Compatible Attitude 3	120	5.85	1.241
Q16: Goal Compatible Attitude 4	120	3.88	1.578
Q17: Anger	120	5.35	1.345
Q18: Guilt	120	3.75	1.755
Q19: Sadness	120	5.59	1.344
Q20: Disgust	120	5.09	1.572
Q21: Fear	120	3.87	1.842
Q22A: Attitude Toward the Organization 1	119	6.06	1.028
Q22B: Attitude Toward the Organization 2	119	6.14	1.355
Q24C: Attitude Toward the Organization 3	119	6.07	1.517

Preliminary Data Analysis

Each concept tested, goal compatible attitude, goal compatible behavior,

behavioral intention, willingness to communicate, attitude towards the organization, and intensity of emotion, was measured using either three or four items on the questionnaire. Cronbach's alpha was used to assess the internal consistency of the multiple-item scales for goal compatible attitude, goal compatible behavior, behavioral intention, willingness to communicate, and attitude toward the organization. The final Cronbach's alphas are shown in Table 2.

Variable	α	Number of Items
Goal Compatible Attitude	.806	3
Goal Compatible Behavior	.506	4
Behavioral Intention	.779	4
Willingness to Communicate	.874	4
Attitude Toward the Organization	.785	3
Emotional Intensity	.824	5

Table 2: Cronbach's Alpha for Multiple-Item Indexes

Four items were included to test goal compatible attitude and each of the other four concepts; however, the alpha indicated scale reliability for goal compatible attitude would be higher by dropping the item, —I-consider myself an advocate for environmental causes." The other three items in this index are commonly used and oft-tested items (Werder, 2005, 2006), so it makes sense to drop the more unconventional item. In addition, it is strikingly similar to the goal compatible behavior item, —I-try to persuade friends and family to recycle" and thus was explored as part of a new two-item index of advocacy. The nature of exploratory research is such that new themes and concepts occasionally emerge that can provide a depth of understanding of the topic or suggest new areas of research. Stacks (2002) says that —aceptable reliability should be between .80 and 1.00" (p. 140). Goal compatible attitude and willingness to communicate meet these criteria, while behavioral intention and attitude toward the organization approach it.

Since this study proposes that the concept of goal compatibility consists of two constructs—goal compatible attitude and goal compatible behavior—a factor analysis of the eight items measuring these constructs was conducted to determine if two separate constructs were indeed present. Factor analysis was conducted in two stages as articulated by Green, Salkind, and Akey (2000).

The dimensionality of the eight items used to measure the two goal compatibility constructs—goal compatible attitude and goal compatibility behavior—was assessed using maximum likelihood factor analysis. First, the factorability of the correlation matrix was assessed. The Kaiser-Meyer-Olkin measure of sampling adequacy was .767 indicating an adequate sample. In addition, Bartlett's Test of Sphericity was significant (p=.000).

The analysis was conducted in two stages according to the procedures outlined by Green, Salkind, and Akey (2000). Factor extraction in stage one was conducted using principal components analysis. Four criteria were used to determine the appropriate number of factors to extract: 1) a priori conceptual beliefs about the number of underlying dimensions of the goal compatibility concept; 2) the latent root criterion; 3) the scree test; and 4) the interpretability of the factor solution. Both the latent root criterion and the scree test suggested a three factor solution, rather than the two factor structure hypothesized. Consequently, three factors were rotated using a Varimax procedure. The rotated solution, shown in Table 3, yielded three interpretable factors. Three items loaded on the goal compatible attitude factor, which accounted for 37.5% of the item variance (eigenvalue=3.001). Only one item loaded cleanly on the goal compatible behavior factor, which accounted for 15.9% of the item variance (eigenvalue=1.274). Two items—one intended to measure goal compatible attitude and one intended to measure goal compatible behavior—loaded on a third factor, which was labeled goal-directed advocacy due to the nature of the items.

	Table 3	: Rotate	d Factor	Matrix
--	---------	----------	----------	--------

Variable	Factor				
	Factor 1: Goal	Factor 2: Goal	Factor 3:		
	Compatible	Compatible	Goal-directed		
	Attitude	Behavior	Advocacy		
Q1: Goal Compatible Attitude 1	.614	.059	.445		
Q3: Goal Compatible Behavior 1	.170	.190	.055		
Q5: Goal Compatible Behavior 2	.197	.104	.563		
Q6: Goal Compatible Attitude 2	.775	.066	.148		
Q7: Goal Compatible Behavior 3	.029	.340	.356		
Q8: Goal Compatible Behavior 4	.056	.985	.158		
Q15: Goal Compatible Attitude 3	.765	.124	.222		
Q16: Goal Compatible Attitude 4	.268	.151	.631		

Based on the factor analysis, the decision was made to collapse the three items that loaded on the goal compatible attitude factor into a composite variable named goal compatible attitude. The Cronbach's alpha coefficient for these three items was .806, suggesting strong internal consistency. The two items that loaded on the goal-directed advocacy factor were assessed using Pearson's Correlation Coefficient and were found to have a strong correlation (r = .432, $p \le .000$). The two items were then collapsed into a composite variable named goal-directed advocacy. Since only one of the four items intended to measure goal compatible behavior loaded on that factor, the decision was made to treat three of the items (excluding the item that loaded on the goal-directed advocacy factor) separately in subsequent hypothesis testing.

Component	Initial Eigenvalues					
	Total	% of Variance	Cumulative %			
1	3.001	37.511	37.511			
2	1.274	15.929	53.440			
3	1.020	12.753	66.193			
4	.836	10.444	76.637			
5	.581	7.266	83.903			
6	.519	6.484	90.386			
7	.410	5.128	95.515			
8	.359	4.485	100.000			

Table 4: Total Variance Explained

The rotated component matrix produced three components, which explained approximately 66% of the variance, as shown in Table 4. -Good' factors are produced by (1) at least two items that load' at $\pm .60$ and (2) do not load' on other factors greater than \pm .40, thus producing a _dean' dimension" (Stacks, 2002, p. 140). Factor one obtained three of the goal compatible attitude variables, while the fourth goal compatible attitude variable (Q16) loads onto a different factor, labeled advocacy, ' as shown, the same factor as one of the goal compatible behavior variables (Q5). This makes sense; the goal compatible attitude item - consider myself an advocate for environmental causes," friends and family to recycle." Both of these items concern others and are measures of the degree to which one's goals can be other-directed; in other words, the degree to which one advocates for certain goals. The goal compatible behavior item, - have donated money to an environmental organization or group," does not load onto any of the factors. The goal compatible behavior item - have volunteered for an environmental organization or group," is a unique contributor to the amount of variance explained, which could mean that volunteerism may be a sort of activism that operates differently

than the goal-directed advocacy, perhaps because it may not necessarily involve broadcasting one's beliefs. Additionally, the goal compatible behavior item – bike, walk, or use public transportation frequently," does not load onto any of the factors cleanly. This means that this item measures something independent from the other goal compatibility items. This could be due to the sample being comprised of college students who may bike or walk often due to living on or near their campus rather than a choice related to a commitment to environmentalism. In regression analyses, these variables were included, as single-item measures of various behaviors thought to represent goal compatible behavior.

After considering the similarity of the concepts measured by the two advocacy variables, it was decided that these variables should be collapsed into an independent index. The new two-item advocacy index, called –goal-directed advocacy" was tested for internal consistency using Pearson correlation coefficient. The results indicated that the items had a strong correlations (r=.432, p \leq .001).

In order to confirm that there were differences in the treatment group and the control group, making sure that the treatment had some effect on the participants, a oneway ANOVA was conducted. There were significant differences found for sadness, willingness to communicate, and goal compatible behavior 1: alternative transportation, as shown in Table 5.

Variable		Ν	Mean	SD	Mean square	р
Goal Compatible	Treatment Group	75	5.7200	1.13111	.079	.805
Attitude	Control Group	44	5.6667	1.14797	1.294	
	Total	119	5.7003	1.13280		
Goal-directed	Treatment Group	76	4.3618	1.35055	2.221	.308
Advocacy	Control Group	44	4.0795	1.62446	2.121	
	Total	120	4.2583	1.45663		
Attitude toward the	Treatment Group	75	6.1511	1.04017	.767	.428
Organization	Control Group	44	5.9848	1.20068	1.214	
C C	Total	119	6.0896	1.10016		
Behavioral Intention	Treatment Group	76	4.3487	1.31598	2.562	.222
	Control Group	44	4.0455	1.28302	1.701	
	Total	120	4.2375	1.30684		
Willingness to	Treatment Group	76	3.8651	1.46540	10.544	.029
Communicate	Control Group	44	3.2500	1.47853	2.161	
	Total	120	3.6396	1.49396		
Emotion	Treatment Group	76	4 8579	1 22281	3 390	130
Linovion	Control Group	44	4 5091	1 18082	1 458	
	Total	120	4 7300	1 21438	1.100	
Anger	Treatment Group	76	5 38	1 395	207	737
ringer	Control Group	44	5 30	1 268	1.823	
	Total	120	5 35	1 345	1.020	
Guilt	Treatment Group	76	3 91	1 790	5 167	196
Cull.	Control Group	44	3 48	1 677	3.062	
	Total	120	3 75	1 755	2.002	
Sad	Treatment Group	76	5.84	1.155	13.000	.007
Suu	Control Group	44	5.16	1 539	1 712	,
	Total	120	5 59	1 344	,=	
Disgust	Treatment Group	76	5.14	1 598	584	629
Disgust	Control Group	44	5.00	1 540	2 487	.029
	Total	120	5.09	1.572	2.107	
Fear	Treatment Group	76	4 01	1.956	4 448	354
1 cui	Control Group	44	3.61	1.530	3 385	
	Total	120	3.87	1.842	5.505	
O3: Goal	Treatment Group	76	2.62	1 712	49 748	000
Compatible	Control Group	44	3.95	2.124	3 507	.000
Behavior 1 (Alt.	Total	120	3 11	1 974	5.507	
Transportation)	Totur	120	5.11	1.571		
07: Goal	Treatment Group	76	3.16	2.136	5.727	.270
Compatible	Control Group	44	2.70	2.205	4.672	
Behavior 3	Total	120	2.99	2.163		
(Donation)						
Q8: Goal	Treatment Group	76	3.51	2.242	11.627	.140
Compatible	Control Group	44	4.16	2.391	5.279	1
Behavior 4	Total	120	3.75	2.309		1
(Volunteerism)						

Table 5: Oneway ANOVA: Differences in Treatment and Control

Hypothesis Testing

Hypothesis 1

Hypothesis 1 posited that goal compatibility influences emotional intensity.

To test this hypothesis, multiple regression was conducted. Results, shown in Table 6, indicated that approximately 37% of the variance in emotional intensity was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables). R = .630, $R^2 = .397$, Adj. $R^2 = .371$, F(5 df, 113 df) = 14.892, p = .000.

Both goal compatible attitude and the new goal-directed advocacy index are significant predictors of emotional intensity; therefore, the results of the regression support Hypothesis 1.

Table 6: Regression Model for Goal Compatibility Predicting Emotional Intensity

Variable	В	SE	Beta	t	р
Goal Compatible Attitude	.548	.089	.509	1.982	.000
Goal-directed Advocacy	.180	.072	.215	6.124	.014
Goal Compatible Behavior 1 (Biking)	027	.047	043	2.495	.574
Goal Compatible Behavior 3 (Donation)	004	.046	007	563	.933
Goal Compatible Behavior 4 (Volunteerism)	.004	.044	.007	084	.934

Additionally, multiple regression analysis was conducted using each of the discrete emotions (anger, guilt, sadness, disgust, and fear). This being exploratory research, it was of interest to look at any potential differences among the emotions measured.

In the first of these separate regression analyses, anger was used as the dependent variable, regressed on goal compatibility (including the goal compatible attitude index,

the goal-directed advocacy index, and the three separate goal compatible behavior variables). Results indicated that approximately 31% of the variance in anger was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables), for which R = .583, $R^2 = .340$, Adj. $R^2 = .310$, F(5 df, 113 df) = 11.618, p = .000. However, only goal compatible behavior and goal-directed advocacy were significant predictors of anger in the population studied, as shown in Table 7.

Variable	В	SE	Beta	t	р
Goal Compatible Attitude	.481	.104	.403	4.635	.000
Goal-directed Advocacy	.247	.083	.267	2.956	.004
Goal Compatible Behavior 1 (Biking)	064	.055	094	-1.173	.243
Goal Compatible Behavior 3 (Donation)	026	.054	042	483	.630
Goal Compatible Behavior 4 (Volunteerism)	.055	.051	.095	1.094	.276

Table 7: Regression Model for Goal Compatibility Predicting Anger

In the second regression analysis conducted with an individual emotion variable, guilt was used as the dependent variable, regressed on goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables). Results indicated that approximately 11% of the variance in guilt was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables), for which R = .388, $R^2 = .250$, Adj. $R^2 = .113$, F(5 df, 113 df) = 3.995, p = .002. Goal compatible attitude was shown to be a significant predictor in the variance of guilt (shown in Table 8).

Variable	В	SE	Beta	t	р
Goal Compatible Attitude	.442	.153	.284	2.878	.005
Goal-directed Advocacy	.186	.124	.154	1.502	.136
Goal Compatible Behavior 1 (Biking)	.064	.081	.071	.784	.435
Goal Compatible Behavior 3 (Donation)	.013	.080	.015	.158	.875
Goal Compatible Behavior 4 (Volunteerism)	070	.075	092	937	.351

Table 8: Regression Model for Goal Compatibility Predicting Guilt

Sadness was used as the dependent variable in the third regression analysis with an individual emotion variable, regressed on goal compatibility (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables). Results indicated that approximately 34% of the variance in sadness was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables), for which R = .60, $R^2 = .372$, Adj. $R^2 = .344$, F(5 df, 113 df) = 13.394, p = .000. Both goal compatible attitude and goal-directed advocacy were significant predictors of sadness (shown in Table 9).

Table 9: Regression Model for Goal Compatibility Predicting Sadness

Variable	В	SE	Beta	t	р
Goal Compatible Attitude	.535	.101	.449	5.299	.000
Goal-directed Advocacy	.249	.081	.269	3.064	.003
Goal Compatible Behavior 1 (Biking)	077	.053	113	-1.445	.151
Goal Compatible Behavior 3 (Donation)	001	.052	001	014	.989
Goal Compatible Behavior 4 (Volunteerism)	.002	.049	.004	.049	.961

Disgust was used as the dependent variable in the fourth regression analysis with an individual emotion variable. Disgust was regressed on goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables). Results indicated that approximately 24% of the variance in disgust was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables), for which R = .520, $R^2 = .271$, Adj. $R^2 = .239$, F(5 df, 113 df) = 15.926, p = .000. Only goal compatible attitude was a significant predictor of disgust, shown in Table 10. Table 10: Regression Model for Goal Compatibility Predicting Disgust

Variable	В	SE	Beta	t	р
Goal Compatible Attitude	.636	.127	.456	4.992	.000
Goal-directed Advocacy	.107	.103	.099	1.045	.298
Goal Compatible Behavior 1 (Biking)	111	.067	139	-1.646	.102
Goal Compatible Behavior 3 (Donation)	.041	.066	.056	.615	.540
Goal Compatible Behavior 4 (Volunteerism)	.008	.062	.012	.131	.896

In the final regression analysis with individual emotion variables used to test Hypothesis 1, fear was used as the dependent variable. Fear was regressed on goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables). Results indicated that approximately 17% of the variance in fear was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables), for which R = .457, $R^2 = .209$, Adj. $R^2 = .174$, F(5 df, 113 df) = 16.733, p = .000. Again, the only significant predictor of fear was goal compatible attitude, as shown in Table 11. Table 11: Regression Model for Goal Compatibility Predicting Fear

Variable	В	SE	Beta	t	р
Goal Compatible Attitude	.645	.155	.397	4.169	.000
Goal-directed Advocacy	.110	.125	.087	.879	.381
Goal Compatible Behavior 1 (Biking)	.056	.082	.060	.680	.498
Goal Compatible Behavior 3 (Donation)	046	.080	054	572	.568
Goal Compatible Behavior 4 (Volunteerism)	.022	.075	.028	.297	.767

These regression analyses indicate support for Hypothesis 1. For each individual emotion variable, as well as for the emotion index, goal compatible attitude was shown to be a significant predictor.

Hypothesis 2a

Hypothesis 2a posited that goal compatibility influences willingness to communicate. To test this, the dependent variables of goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables) were regressed on the willingness to communicate variable. Results indicated that approximately 44% of the variance in willingness to communicate was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables), for which R = .687, $R^2 = .471$, Adj. $R^2 = .443$, F(6 df, 118 df) = 16.650, p = .000. Hypothesis 2a is supported. *Hypothesis 2b*

Hypothesis 2b was that emotional intensity influences willingness to communicate. Included in the regression model shown in Table 12, emotional intensity was shown to be significant. Results indicated that approximately 17% of the variance in willingness to communicate was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables) and emotional intensity, for which R = .687, $R^2 = .471$, Adj. $R^2 = .443$, F(6 df, 118 df) = 16.650, p =.000. Thus, Hypothesis 2b is supported.

Table 12: Regression Model for Goal Compatibility Predicting Willingness to Communicate

Variable	B	SE	Beta	t	p
Emotional Intensity	.301	.109	.245	2.767	.007
Goal Compatible Attitude	.155	.119	.117	1.296	.197
Goal-directedAdvocacy	.427	.086	.415	4.992	.000
Goal Compatible Behavior 1 (Biking)	.060	.055	.079	1.092	.277
Goal Compatible Behavior 3 (Donation)	.071	.054	.102	1.315	.191
Goal Compatible Behavior 4 (Volunteerism)	022	.050	034	.433	.666

To further test Hypothesis 2b, the individual emotion variables were included in a separate multiple regression analysis. Here, willingness to communicate was the dependent variable, regressed on the five individual emotion variables: anger, guilt, sadness, disgust, and fear. Results indicated that 26% of the variance in willingness to communicate was accounted for by its linear relationship with the emotion variables, for which R = .540, $R^2 = .292$, Adj. $R^2 = .260$, F(5 df, 113 df) = 9.384, p = .000 (shown in Table 13). The significant predictors of willingness to communicate are anger and guilt, according to the results of the regression analysis.

Variable	В	SE	Beta	t	р
Anger	.309	.147	.278	2.097	.038
Guilt	.203	.084	.238	2.414	.017
Sadness	.156	.135	.140	1.159	.249
Disgust	054	.205	057	517	.606
Fear	.069	.086	.085	.797	.427

Table 13: Regression Model for Emotions Predicting Willingness to Communicate

Hypothesis 3a

Hypothesis 3a was that goal compatibility influences attitude toward the organization. Here, the dependent variable, attitude toward the organization, was regressed on goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables), and emotional intensity. Results indicated that approximately 15% of the variance in attitude toward the organization was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables) and emotional intensity variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables) and emotional intensity, for which R = .434, $R^2 = .189$, Adj. $R^2 = .145$, F(6 df, 117 df) = 4.303, p = .001 (shown in Table 14). Only goal compatible attitude is shown to be a significant predictor of attitude toward the organization, so Hypothesis 3a is supported.

Hypothesis 3b

Hypothesis 3b was that emotional intensity influences attitude toward the organization. Results indicated that approximately 15% of the variance in attitude toward the organization was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables) and emotional intensity, for which R = .434, $R^2 = .189$, Adj. $R^2 = .145$, F(6 df, 117 df) = 4.303, p = .001 (shown in Table 14). However, only goal compatible attitude is shown to be a significant predictor of attitude toward the organization, so Hypothesis 3b is not supported.

Variable	В	SE	Beta	t	р
Emotional Intensity	.366	.109	.154	1.400	.164
Goal Compatible Attitude	112	.078	.376	3.358	.001
Goal-directed Advocacy	.140	.100	148	-1.430	.156
Goal Compatible Behavior 1 (Biking)	053	.050	095	-1.055	.294
Goal Compatible Behavior 3 (Donation)	009	.049	017	173	.863
Goal Compatible Behavior 4 (Volunteerism)	.033	.047	.068	.703	.483

Table 14: Regression Model for Predicting Attitude Toward the Organization

To further test H3b, the individual emotion variables were included in a separate multiple regression analysis. Here, attitude toward the organization was the dependent variable, regressed on the five individual emotion variables: anger, guilt, sadness, disgust, and fear. Results indicated that approximately 8% of the variance in attitude toward the organization was accounted for by its linear relationship with the individual emotion variables, for which R = .351, $R^2 = .123$, Adj. $R^2 = .084$, F(5 df, 113 df) = 3.168, p = .010. The only significant predictor of attitude toward the organization is sadness, according to the results of the regression analysis (shown in Table 15).

Variable	В	SE	Beta	t	p
Anger	110	.446	134	902	.369
Guilt	.056	.069	.089	.811	.419
Sadness	.240	.111	.294	2.162	.033
Disgust	.039	.086	.055	.449	.655
Fear	.058	.071	.097	.821	.413

Table 15: Regression Model for Emotions Predicting Attitude toward the Organization

Hypothesis 4a

Hypothesis 4a was that goal compatibility influences behavioral intention. To test H4a, behavioral intention was regressed on goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables), and emotional intensity. Results indicated that approximately 64% of the variance in behavioral intention was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible attitude index, the goal-directed advocacy index, and the three separate goal compatible behavior variables) and emotional intensity, for which R = .808, $R^2 = .653$, Adj. $R^2 = .635$, F(6 df, 112 df) = 35.184, p = .000 (shown in Table 16). Emotional intensity, goal compatible attitude, and goal-directed advocacy were all significant predictors of behavioral intention, so H4a is supported.

Hypothesis 4b

Hypothesis 4b was that emotional intensity influences behavioral intention. To test H4b, behavioral intention was regressed on goal compatibility (including the goal compatible attitude index, the goal directed advocacy index, and the three separate goal compatible behavior variables), and emotional intensity. Results indicated that approximately 64% of the variance in behavioral intention was accounted for by its linear relationship with the goal compatibility variables (including the goal compatible behavior variables) and emotional intensity. Results indicated that index, the goal-directed advocacy index, and the three separate goal compatible behavior variables) and emotional intensity, for which R = .808, $R^2 = .653$, Adj. $R^2 = .635$, F(6 df, 112 df) = 35.184, p = .000 (shown in Table 16). Emotional intensity, goal compatible attitude, and goal-directed advocacy were all significant predictors of behavioral intention, so H4b is supported.

 Table 16: Regression Model for Goal Compatibility and Emotion Predicting Behavioral

 Intention

Variable	В	SE	Beta	t	p
Emotional Intensity	.255	.077	.237	3.301	.001
Goal Compatible Attitude	.394	.085	.340	4.654	.000
Goal-directed Advocacy	.306	.061	.340	5.045	.000
Goal Compatible Behavior 1 (Biking)	.045	.039	.068	1.169	.245
Goal Compatible Behavior 3 (Donation)	.107	.038	.176	2.805	.006
Goal Compatible Behavior 4 (Volunteerism)	036	.036	064	-1.017	.312

For further testing of H4, the dependent variable behavioral intention was regressed on the emotion variables individually. Results indicated that approximately 40% of the variance in behavioral intention was accounted for by its relationship with the emotion variables. for which R = .649, $R^2 = .421$, Adj. $R^2 = .395$, F(5 df, 114 df) = 16.565, p = .000. Anger, guilt, and sadness were shown to be significant predictors of behavioral intention for this sample, as shown in Table 17.

Variable	В	SE	Beta	t	р
Anger	.339	.116	.349	2.914	.004
Guilt	.145	.066	.195	2.183	.031
Sadness	.213	.106	.219	2.004	.047
Disgust	.015	083	.018	.181	.857
Fear	.016	.068	.023	.237	.813

Table 17: Regression Model for Emotions Predicting Behavioral Intention

Exploratory Analyses

After hypothesis testing, additional data exploration involved dividing the sample into two groups: those with —hilg' goal compatibility and those with —low goal compatibility. In this final set of ANOVAs, the data were split into two groups for each goal compatibility variable, including: goal compatible attitude, goal-directed advocacy, and the three individual goal compatible behavior measures. The skewness of the data did not allow median splits, so the data were split instead using the means. For the goal compatible attitude index, the mean was 5.7003, so the -low" goal compatibility group consisted of responses 0-5.7003, while the -high" goal compatibility group consisted of responses 5.7004-7. This broke the sample into two groups, with the -low" goal compatibility group consisting of 58 respondents, or 48.3 percent, and the -high" goal compatibility group consisting of 61 respondents, or 50.8 percent. For each variable tested, the differences between the -low" goal compatibility group and the -high" goal compatibility group were significant. The ANOVA results are shown in Table 18.

Variable		N	Mean	SD	df	F	р
Attitude	Low GC	58	5.7011	1.14570	1	16.258	.000
toward the	Attitude						
Organization	High GC	60	6.4722	.92321	116		
	Attitude						
	Total	118	6.0932	1.10415	117		
Behavioral	Low GC	58	3.4698	1.05971	1	57.110	.000
Intention	Attitude						
	High GC	61	4.9672	1.09969	117		
	Attitude						
	Total	119	4.2374	1.31236	118		
Willingness	Low GC	58	3.0388	1.20380	1	21.550	.000
to	Attitude						
Communicate	High GC	61	4.2172	1.53601	117		
	Attitude						
	Total	119	3.6429	1.49985	118		
Emotional	Low GC	58	4.1517	1.14635	1	32.581	.000
Intensity	Attitude						
	High GC	61	5.2852	1.01880	117		
	Attitude						
	Total	119	4.7328	1.21913	118		
Anger	Low GC	58	4.76	1.368	1	26.668	.000
	Attitude						
	High GC	61	5.92	1.069	117		
	Attitude						
	Total	119	5.35	1.350	118		
Guilt	Low GC	58	3.26	1.517	1	9.339	.003
	Attitude						
	High GC	61	4.21	1.863	117		
	Attitude						
	Total	119	3.75	1.762	118		
Sadness	Low GC	58	5.03	1.401	1	22.536	.000
	Attitude						
	High GC	61	6.11	1.066	117		
	Attitude						
	Total	119	5.59	1.349	118		
Disgust	Low GC	58	4.48	1.625	1	19.533	.000
	Attitude						
	High GC	61	5.67	1.300	117		
	Attitude						
	Total	119	5.09	1.578	118		
Fear	Low GC	58	3.22	1.644	1	16.325	.000
	Attitude						
	High GC	61	4.51	1.813	117		
	Attitude						
	Total	119	3.88	1.842	118		

Table 18: ANOVA with Goal Compatible Attitude with Mean Split

The same procedure was used for the goal-directed advocacy (GDA) index. The split was again along the mean, though for the goal-directed advocacy, it is slightly

unbalanced, with 55 respondents (46 percent) falling into the -low" goal-directed advocacy category, and 64 (54 percent) falling into the -high" goal-directed advocacy category. The mean for goal-directed advocacy was 4.2583, so the -low" group consists of any responses 4.2583 and lower, and the -high" group consists of responses 4.2584 and higher. For each variable except attitude toward the organization, the difference in means between the -low" and -high" groups was significant. The results are shown in Table 19.

Variable		N	Mean	SD	df	F	p
Attitude toward	Low GDA	55	6.0303	1.13361	1	.296	.588
the Organization	High GDA	64	6.1406	1.07694	117		
	Total	119	6.0896	1.10016	118		
Behavioral	Low GDA	55	3.4818	1.02498	1	47.107	.000
Intention	High GDA	65	4.8769	1.17603	118		
	Total	120	4.2375	1.30684	119		
Willingness to	Low GDA	55	2.8318	1.20767	1	39.217	.000
Communicate	High GDA	65	4.3231	1.37267	118		
	Total	120	3.6396	1.49396	119		
Emotional	Low GDA	55	4.1855	1.16864	1	24.438	.000
Intensity	High GDA	65	5.1908	1.05796	118		
	Total	120	4.7300	1.21438	119		
Anger	Low GDA	55	4.65	1.265	1	34.869	.000
	High GDA	65	5.94	1.116	118		
	Total	120	5.35	1.345	119		
Guilt	Low GDA	55	3.33	1.689	1	6.146	.015
	High GDA	65	4.11	1.742	118		
	Total	120	3.75	1.755	119		
Sadness	Low GDA	55	4.98	1.408	1	25.143	.000
	High GDA	65	6.11	1.048	118		
	Total	120	5.59	1.344	119		
Disgust	Low GDA	55	4.53	1.538	1	14.587	.000
	High GDA	65	5.57	1.447	118		
	Total	120	5.09	1.572	119		
Fear	Low GDA	55	3.44	1.740	1	5.761	.018
	High GDA	65	4.23	1.861	118		
	Total	120	3.87	1.842	119		

Table 19: ANOVA with Goal-directed Advocacy with Mean Split

The same procedure was used for the individual measure of goal compatible behavior, the item – bike, walk, or use public transportation frequently." The results are

shown in Table 20. This mean split was more unbalanced than those for the goal compatible attitude and the goal-directed advocacy, with 77 (64 percent) being considered –how" and 43 (36 percent) being considered –high." The mean for this variable was 3.11, so any participants with responses 3.11 and lower fell into the –how" group, and those with responses 3.12 and higher fell into the –high" group. There was one respondent who did not complete the questionnaire, so for the attitude toward the organization item, the total number of participants is 119 instead of 120, as it is for the other items. None of the variables are significant for the mean-split groups, and only the behavioral intention variable approaches significance.

Mean Split

Variable		N	Mean	SD	df	F	р
Attitude toward the	Low GCB1	76	6.0789	1.08439	1	.020	.889
Organization	High GCB1	43	6.1085	1.14022	117		
	Total	119	6.0896	1.10016	118		
Behavioral Intention	Low GCB1	77	4.0844	1.34544	1	2.998	.086
	High GCB1	43	4.5116	1.20138	118		
	Total	120	4.2375	1.30684	119		
Willingness to	Low GCB1	77	3.4773	1.51374	1	2.570	.112
Communicate	High GCB1	43	3.9302	1.42921	118		
	Total	120	3.6396	1.49396	119		
Emotional Intensity	Low GCB1	77	4.6883	1.22625	1	.252	.617
	High GCB1	43	4.8047	1.20356	118		
	Total	120	4.7300	1.21438	119		
Anger	Low GCB1	77	5.32	1.371	1	.076	.784
	High GCB1	43	5.40	1.312	118		
	Total	120	5.35	1.345	119		
Guilt	Low GCB1	77	3.68	1.802	1	.387	.535
	High GCB1	43	3.88	1.679	118		
	Total	120	3.75	1.755	119		
Sadness	Low GCB1	77	5.62	1.298	1	.119	.731
	High GCB1	43	5.53	1.437	118		
	Total	120	5.59	1.344	119		
Disgust	Low GCB1	77	5.13	1.609	1	.126	.723
	High GCB1	43	5.02	1.520	118		
	Total	120	5.09	1.572	119		
Fear	Low GCB1	77	3.69	1.859	1	2.032	.157
	High GCB1	43	4.19	1.790	118		
	Total	120	3.87	1.842	119		

The individual measure of goal compatible behavior, the item - have donated money to an environmental organization or group," was also divided along the mean. In the table below, this variable is called -GCB3" so as to differentiate between this item and the goal compatible behavior item - try to persuade friends and family to recycle," which is included in the goal-directed advocacy index. With this mean split, the - how" group was comprised of 66 participants (55 percent), while the - high" group contained 54 participants (45 percent.) The mean for this variable was 2.99, so any responses 2.99 and lower were coded as - hw," and any responses 3.00 or higher were coded as - hig."

There was one respondent who did not complete the questionnaire, so for the attitude toward the organization item, the total number of participants is 119 instead of 120, as it is for the other items. The difference in means between the -low" and -high" groups was significant for the behavioral intention, willingness to communicate, and disgust variable. It was not significant for the attitude toward the organization, intensity of emotion, anger, guilt, sadness, or fear variables. However, the differences in the means of the -low" and -high" groups did approach significance for both the anger and sadness variables. The results are shown in Table 21.

Variable		N	Mean	SD	df	F	р
Attitude toward the	Low GCB3	65	6.0359	1.15939	1	.340	.561
Organization	High GCB3	54	6.543	2.03240	117		
	Total	119	6.0896	1.10016	118		
Behavioral Intention	Low GCB3	66	3.8674	1.26508	1	12.942	.000
	High GCB3	54	4.6898	1.22179	118		
	Total	120	4.2375	1.30684	119		
Willingness to	Low GCB3	66	3.2917	1.37811	1	8.452	.004
Communicate	High GCB3	54	4.0648	1.53204	118		
	Total	120	3.6396	1.49396	119		
Emotional Intensity	Low GCB3	66	4.5424	1.16870	1	3.575	.061
-	High GCB3	54	4.9593	1.24044	118		
	Total	120	4.7300	1.21438	119		
Anger	Low GCB3	66	5.15	1.373	1	3.254	.074
_	High GCB3	54	5.59	1.281	118		
	Total	120	5.35	1.345	119		
Guilt	Low GCB3	66	3.62	1.752	1	.788	.376
	High GCB3	54	3.91	1.762	118		
	Total	120	3.75	1.755	119		
Sadness	Low GCB3	66	5.39	1.391	1	3.233	.075
	High GCB3	54	5.83	1.255	118		
	Total	120	5.59	1.344	119		
Disgust	Low GCB3	66	4.82	1.578	1	4.574	.035
-	High GCB3	54	5.43	1.512	118		
	Total	120	5.09	1.572	119		
Fear	Low GCB3	66	3.73	1.651	1	.839	.362
	High GCB3	54	4.04	2.055	118		
	Total	120	3.87	1.842	119		

Table 21: ANOVA for Goal Compatible Behavior 3: Donation with Mean Split

For the goal compatible behavior item + have volunteered for an environmental organization or group." The mean was 3.75, so the -low" group is made up of those with responses 3.75 and lower, while the <u>high</u> group is made up of those with responses 3.76 and higher. In the table below, this variable is called -GCB4" so as to differentiate between this item and the goal compatible behavior item -try to persuade friends and family to recycle," which is included in the goal-directed advocacy index, and GCB1 and GCB3, for which the ANOVA results with the mean-split groups comprise the tables above. Fifty-nine respondents (49 percent) make up the -low" group, and 61 respondents (51 percent) comprise the <u>high</u> group. There was one respondent who did not complete the questionnaire, so for the attitude toward the organization item, the total number of participants is 119 instead of 120, as it is for the other items. The difference in means between the <u>low</u>" and <u>high</u>" goal compatibility groups was significant for the behavioral intention, willingness to communicate, and anger variables. It was not significant for the sadness, guilt, fear, or disgust variables, and approaches significance for the overall intensity of emotion and attitude toward the organization variables. The results are shown in Table 22.

Variable		Ν	Mean	SD	df	F	р
Attitude toward	Low GCB4	59	5.9096	1.20794	1	3.192	.077
the Organization	High GCB4	60	6.2667	.96023	117		
	Total	119	6.0896	1.10016	118		
Behavioral	Low GCB4	59	3.9915	1.33662	1	4.223	.042
Intention	High GCB4	61	4.4754	1.24223	118		
	Total	120	4.2375	1.30684	119		
Willingness to	Low GCB4	59	3.3686	1.49233	1	3.911	.050
Communicate	High GCB4	61	3.9016	1.46008	118		
	Total	120	3.6396	1.49396	119		
Emotional	Low GCB4	59	4.5390	1.37427	1	2.918	.090
Intensity	High GCB4	61	4.9148	1.01421	118		
	Total	120	4.7300	1.21438	119		
Anger	Low GCB4	59	5.03	1.450	1	6.718	.011
	High GCB4	61	5.66	1.167	118		
	Total	120	5.35	1.345	119		
Guilt	Low GCB4	59	3.69	1.850	1	.113	.737
	High GCB4	61	3.8	1.672	118		
	Total	120	3.75	1.755	119		
Sadness	Low GCB4	59	5.39	1.509	1	2.654	.106
	High GCB4	61	5.79	1.142	118		
	Total	120	5.59	1.344	119		
Disgust	Low GCB4	59	4.92	1.715	1	1.468	.228
	High GCB4	61	5.26	1.413	118		
	Total	120	5.09	1.572	119		
Fear	Low GCB4	59	3.66	1.953	1	1.452	.231
	High GCB4	61	4.07	1.721	118		
	Total	120	3.87	1.842	119		

Table 22: ANOVA with Goal Compatible Behavior 4: Volunteerism with Mean Split

A discussion of these results comprises the chapter that follows. Each hypothesis is examined in detail, with a theory-driven interpretation of the results and implications. Following the discussion are conclusions about the study, its implications for the theories from which its variables are drawn, its limitations, and suggestions for future research.

Chapter Five

Discussion

The broad purpose of this study was to examine the role of emotionality in persuasion from an interdisciplinary perspective; and, more specifically, to provide some useful data on the use of graphic images and emotionality, and allow additional theorizing about the role of goal compatibility and emotions in theories used in the study of strategic communication. To accomplish these objectives, an experiment was conducted to test four hypotheses and provide data for additional exploratory research.

Hypothesis 1, which posited that goal compatibility influences intensity of emotion, was supported by this study. The adjusted R^2 indicates that goal compatibility accounts for 37 percent of the variance in intensity of emotion. The design of this experiment does not allow the assertion that goal compatibility *caused* participants to become emotional about the topic. However, for the participants in this experiment, the level of goal compatibility predicts the level of emotional intensity. In other words, the degree to which a participant's goals match up with the goals of the organization predicts how much emotion they report feeling about the issue.

Hypotheses 2a and 2b, which posited that intensity of emotion and goal compatibility influence willingness to communicate, were also supported. However, not all goal compatibility measures were shown to be predictors of willingness to communicate. The goal-directed advocacy measure and the emotional intensity measure were significant predictors of willingness to communicate. Goal compatibility and

emotional intensity account for 44 percent of the variance in willingness to communicate. This suggests that participants who are emotional about the issue are more likely to communicate about the issue.

Hypotheses 3a and 3b, which posited that intensity of emotion and goal compatibility influence attitude toward the organization, were partially supported. The model explained almost 15 percent of the variance in attitude toward the organization, though only goal compatible attitude was shown to be a significant predictor of the variance in attitude toward the organization. While the overall emotional intensity measure was not significant in predicting attitude toward the organization, sadness was found to be a significant predictor on its own.

Hypothesis 4a and 4b, which were that intensity of emotion and goal compatibility influence behavioral intention, were supported. Goal compatible attitude, goal-directed advocacy, and intensity of emotion were all significant predictors of the variance in behavioral intention, and the model predicted almost 64 percent of the variance in behavioral intention. Additionally, sadness, guilt, and anger were the significant predictors among the emotion variables. The finding that goal compatible attitude is a significant predictor of behavioral intention is consistent with previous research (Page 2000; Schuch 2007) which found that goal compatibility was a predictor of information seeking behavior. This study's behavioral intention measure is informed by the information seeking behavior measure, which is used in situational theory research, but the variable used here is slightly different in that it addresses activist activities as well, including donating time or money and signing a petition.

The exploratory analyses demonstrated that for this sample, participants with -low" goal compatible attitudes reported less emotional intensity, a more negative view of the organization, less willingness to communicate, lower behavioral intention, and less anger, disgust, fear, guilt, and sadness. Likewise, the group with —hgh" goal compatible attitudes reported higher emotional intensity, a more positive view of the organization, more willingness to communicate, higher behavioral intention, and more anger, disgust, fear, guilt, and sadness. The difference between the groups was significant at the .000 level. This may seem obvious; of course issues that match up to our goals emotionally affect us, and of course we are less likely to communicate about issues we aren't emotional about. However, this study also used a treatment involving emotional graphic images. The oneway ANOVA for differences between the treatment group and the control group showed significant differences for willingness to communicate, sadness, and one of the goal compatible behavior measures, alternative transportation.

This research suggests that attempting to evoke negative emotions (anger, disgust, fear, guilt, and sadness) through the use of graphic images may be a worthwhile strategy to pursue if the goals are communication, activist activities, and positive attitude toward the organization.

According to the anger activism model, anger can be used successfully to engender behavior and attitude change when the message is received by someone who already has a positive attitude towards the topic and the receiver feels a strong sense of efficacy (Turner, et al., 2006). In other words, the AAM —poposes that anger only facilitates attitudes, intentions, and message processing when the message is processed by a favorable audience" (Turner et al., 2006, p. 5). So a message that makes a person angry

will not inspire her to make behavioral changes if she is not agreeable to the source of the message or the topic of the message already. Anger will not only fail to work on people who have negative attitudes about the source or the topic, but will —deilitate persuasion" when the message is attempting attitude change (Mitchell, 2007, p. 115). The findings of the current study are consistent with this model, and could be indicative of a possible extension of the model.

This study was inspired by and drew variables from the cognitive functional model. Nabi (1999) posits that the action tendency of sadness is not simple aversion, but can be more –inaction and withdrawal" (p. 298). However, Nabi (1999) says, research also indicates that —Sadess motivates problem-solving activity by forcing people to focus inward, looking for possible solutions, and/or help from others" (p. 298). The relationship between sadness and behavioral intention in this study could be read as consistent with this conception of sadness's action tendency, as sadness was predictive of behavioral intention but not willingness to communicate. In future research, the anger activism model might be useful as a guide for investigating the interplay between the feeling of sadness about an issue and the feeling of efficacy or inefficacy about the issue.

Chapter Six

Conclusion

One of this study's contributions to strategic communications research is its examination of variables related to goal compatibility. While goal compatibility has been shown to be a valuable addition to the STP (Werder, 2005, 2006; Schuch 2007), it had always been conceptualized as simply an attitude. This study is the first to examine whether goal compatibility could be measured not only as an attitudinal construct but also as a behavioral construct. While the measures of goal compatible behavior used in this study were largely unsuccessful as predictors of variance in various dependent variables and need significant refinement, the new concept of goal-directed advocacy proved to be a useful predictor. This variable, as well as new, more effective, more internally valid, measures of goal compatible behavior, could be fodder for future research. That being said, goal compatible attitude, the more traditional measure of goal compatibility, was an almost universal predictor of the variance in every dependent variable examined in this study. This further strengthens the case that goal compatibility is an important variable in the situational theory of publics.

This study also contributes to the body of strategic communications through the data on emotional intensity. Nabi (1999) theorized that negative discrete emotions could cause message receivers to approach or avoid a given message, but this study also provides some evidence to suggest that the overall intensity of emotion may also be a useful predictive variable.

Suggestions for Future Research

In addition to further investigation into measuring goal compatible behavior, trying to find more general items or more accurate, generalizable items, this study could also serve as a precursor to more in-depth study of graphic images, and the role of emotions in persuasion.

In this study, it was found that goal compatibility and emotional intensity are significant predictors of willingness to communicate. This suggests that participants who are emotional about the issue are more likely to communicate about the issue, which makes intuitive sense. While the results of this experiment are not generalizable, as the participants were not representative of the general population, this finding has practical implications for practitioners who engineer strategic communications campaigns. It can be said that for this sample, emotional intensity was related to willingness to communicate. If one accepts that one of the goals of a strategic communications campaign is to spread word of the issue, organization, or product, it might be useful to further examine options for strengthening or magnifying a public's emotional intensity related to an issue, in order to get that public to begin communicating about the issue.

Limitations of the Study

This study did not use a random sample of students, so the data is not generalizable to the general student population. Additionally, many of the participants in this study were students in upper-level mass communications courses, and as such were former students of the researcher. This could have confounded the results, exacerbating social desirability responses. This is evidenced by the results of the exploratory analyses; the high means scores could indicate that students were unlikely to report being indifferent or opposed to the goals of the fake organization. Indeed, many students' responses to the open-ended question (about whether the video was emotional) contained a suggestion for how to make the video more emotionally evocative. This indicates that these students were under the impression that the researcher was attempting to arouse a certain response, and thus may have attempted to provide said response in the questionnaire. This could be problematic for any experiment, but could have been exacerbated by the researcher's familiarity with many of the participants.

Another possible reason that the means scores were so high for the attitude toward the organization and goal compatibility variables is that the fake organization may have not been polarizing. To select a well-known organization, about which participants may have already formed opinions would have presented its own methodological challenges, but creating an organization with which participants could not have been familiar may partially explain the high means scores.

The organization being unknown and relatively innocuous is one limitation, and the treatment is another. The video had hard-to-read (but largely unimportant) text on the bottom of the screen, which could have distracted participants and decreased the emotional effects. A few participants mentioned this problem in their responses to the open-ended question. The instrument was also not without its methodological problems. While the goal compatibility, behavioral intention, and willingness to communicate items were presented in random order, the attitude toward the organization and emotional intensity items were presented one after another. It is possible that this led to the high means scores, as participants may have simply selected the high end of the scale for one

question and continued to select that answer for the remaining items, choosing consistency over careful consideration of the subtle differences between items.

Despite these limitations, this study contributes to the theory-driven study of strategic communications by adding to our understanding of the role of emotion in persuasion, the measurement and role of goal compatibility, and the effects of using graphic images in strategic communications materials.

References

- Calvo, M. & Lang, P. (2004). Gaze patterns when looking at emotional pictures: Motivationally biased attention. *Motivation and Emotion*, 28(3), 221-243.
- Dahl, D., Frankenberger, K., &Manchanda, R. (2003). Does it pay to shock? Reactions to shocking and nonshocking content among university students. [Electronic version]. *Journal of Advertising Research*, 43(3), 268-280.
- De Hoog, N., Stroebe, W., & de Wit, J. (2007) The impact of vulnerability to and severity of a health risk on processing and acceptance of fear-arousing communications: a meta-analysis. *Review of General Psychology*, *11*(3), 258-285.

Dewey, J. (1927). The public and its problems. Chicago: Swallow.

- Dillard, J. & Nabi, R. (2006). The persuasive influence of emotion in cancer prevention and detection messages. *Journal of Communication*, *56*(s1), S123-S139.
- Dunlop, S., Wakefield, M., & Kashima, Y. (2008). Can you feel it? Negative emotion, risk, and narrative in health communication. [Electronic version].*Media Psychology*, 11(1), 52-75.
- Green, S. B., Salkind, N. J., & Akey, T. M. (2000). Using SPSS for Windows: Analyzing and understanding data (2 ed.). Upper Saddle River, NJ: Prentice Hall.

Greenpeace. (2011). http://www.greenpeace.org/usa/en/multimedia/videos/

Grunig, J. (1989). Sierra club study shows who become activists. *Public Relations Review*, 15(3), 3-24.

Grunig, J. (1997). A situational theory of publics: conceptual history, recent challenges

and new Research. In D. Moss, T. MacManus, & D. Vercic (Eds), *Public Relations Research: An international perspective* (pp. 3-48). London: International Thomson Business Press.

Hallahan, K. (2000). Inactive publics: the forgotten publics in public relations. *Public Relations Review*, *26*(4), 499-515.

Hallahan, K., Holtzhausen, D., van Ruler, B., Verčič, D. &Sriramesh, K. (2007).
Defining strategic communication. *International Journal of Strategic Communication, 1*(1), 3-35.

- Hammond, D., Fong, G., McDonald, P., Cameron, R., & Brown, K. (2003). Impact of the graphic Canadian warning labels on adult smoking behavior. *Tobacco Control*, *12*, 391-395.
- Hanoch, Y. (2002). –Neither an angel nor an ant": Emotion as an aid to bounded rationality. [Electronic version]. *Journal of Economic Psychology*, 23(1), 1-25.
- Harris, P., Mayle, K., Mabbott, L., &Napper, L. (2007) Self-affirmation reduces smokers' defensiveness to graphic on-pack cigarette warning labels. *Health Psychology*, 26(4), 437-446.
- Hazleton, V., & Long, L.W. (1988). Concepts for public relations education, research,
 and practice: A communication point of view. *Central States Speech Journal*, *39*, 77-87.
- Holtzhausen, D. &Hallahan, K. (2007). Strategic directions for new journal. *The International Journal of Strategic Communication*, 1(1), 1-2.
- LaTour, M. & Pitts, R. (1989). Using fear appeals in advertising for AIDS prevention in the college-age population. *Journal of Health Care Marketing*, 9(2), 5-14.
- Lau, R., Sigelman, L. &Rovner, I. (2007). The Effects of Negative Political Campaigns: A Meta-Analytic Reassessment. *Journal of Politics*, 69(4), 1176-1209.
- Leshner, G., Vultee, F., Bolls, P., & Moore, J. (2010). When a fear appeal isn't just a fear appeal: the effects of graphic anti-tobacco messages. *Journal of Broadcasting & Electronic Media*, *54*(3), 485-507.
- Lewis, I., Barry, W., White, K., &Tay, R. (2007). Promoting public health message: should we move beyond fear-evoking appeals in road safety? *Qualitative Health Research*, 17(1), 61-74.
- Lindsey, L. (2005). Anticipated guilt as behavioral motivation.*Human Communication Research*, *31*(4), 453-481.
- Mitchell, M. (2001). Risk, threat, and information seeking about genital herpes: the effects of mood and message framing. [Electronic version].*Communication Studies*, *52*(2), 141-152.
- Nabi, R. (1999). A cognitive-functional model for the effects of discrete negative emotions of information processing, attitude change, and recall. [Electronic version]. *Communication Theory*, 9, 292-320.
- Newhagen, J.(1998) TV news images that induce anger, fear, and disgust: Effects on approach-avoidance and memory. *Journal of Broadcasting & Electronic Media*, 42(2), 265-276.
- Page, K.G. (2000). An exploratory analysis of goal compatibility between
 organizations and publics. Paper presented at the meeting of the Public Relations
 Division, Southern States Communication Association, New Orleans, LA.

PETA, (2009). http://www.PETA.org.

- Petty, R. &Cacioppo, J. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.) Advances in Experimental Social Psychology. New York: Academic Press.
- Safer, M., Christianson, S., Autry, M., &Österlund, K. (1998). Tunnel memory for traumatic events. *Applied Cognitive Psychology*, 12(2), 99-118.
- Schuch, A. (2007). An experimental analysis of activist message strategy effect on receiver variables. Unpublished MA thesis.University of South Florida.
- Sierra Club. (2011). http://www.sierraclub.org.
- Stacks, D. (2002). Primer of public relations research. New York: The Guilford Press.
- Thornton, J., Rossiter, J., & White, L. (2000). The persuasive effectiveness of varying levels of fear appeals: an anti-speeding advertising experiment. In: Proceedings of the ANZMAC 2000 Conference: Visionary Marketing for the 21st Century:
 Facing the Challenge, pp. 1279–1283.
- Turner, M., Bessarabova, E., Hambleton, K., Sipek, S., Weiss, M., & Long, K. (2006).Does anger facilitate persuasion? A test of the anger-activism model. Presented at the annual conference of the international communication association.
- Urbanik, J. (2009). -Hooters for Neuters": sexist or transgressive animal advocacy campaign? [Electronic version].*Humanimalia*, 1(1).
- Waller, D. (2005). A proposed model for controversial advertising. *Journal of Promotion Management*, 11(2/3), 3-15.
- Wilson, A. & West, C. (1981). The marketing of _unmentionables.' Harvard Business Journal, 59(1), 91-102.

- Werder, K. (2005). An empirical analysis of the influence of perceived attributes of publics on public relations strategy use. [Electronic version]. *Journal of Public Relations Research*, 17(3), 217-266.
- Werder, K. (2006). Responding to activism: an experimental analysis of public relations strategy influence on attributes of publics. [Electronic version].Public Relations Research, 18(4), 335-356.

Appendix A:

Waiver of Informed Consent Script



Informed Consent to Participate in Research Information to Consider Before Taking Part in this Research Study

IRB Study # 3955

You are being asked to take part in a research study. Research studies include only people who choose to take part.

The purpose of this study is to:

- Examine the effects of activist public relations strategies.
- Fulfill the requirements of a master's thesis.

If you take part in this study, you will be asked to:

• Complete an anonymous questionnaire.

About 120 individuals will take part in this study at USF, in two groups. Each group will complete the same questionnaire. This class was chosen to be the second group to participate simply out of convenience.

You do not have to participate in this research study. This study is not part of your Mass Communications coursework. You may leave the room now if you do not wish to participate, or at any time if you decide to stop participating.

This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day.

You will receive no payment or other compensation for taking part in this study.

It is up to you to decide whether you want to take part in this study. If you want to take part, please stay in class. If you do not want to take part, please leave the room at this time. Please raise your hand if you have any questions.

Appendix B:

Instrument

Please carefully read the statements below and answer the questions that follow. There are <u>_____</u> sections on <u>____</u> pages.

The Coastal Habitat Protection Association seeks to minimize the destruction of wild animal habitats through policy reform and encouraging people to be advocates for the environment.

Goals:

- 1. **To power America with cleaner, greener, more renewable energy.** Spread the word about wind, solar, and other safe, clean sources of power that will not endanger our coastal wildlife and their habitats.
- 2. **To support green transportation.** Encourage Americans to walk, bike, carpool, and take buses or trains whenever possible and to buy more energy-efficient vehicles, including hybrids and electrics.
- 3. **To take care of coastal habitats.** Reduce waste by recycling. Encourage Americans to volunteer to clean up our coastal habitats and to talk to others about protecting the environment.
- 4. **To be energy independent.** Lobby the government to stop offshore drilling and to increase the regulation of energy industries to prevent environmental destruction.

Please answer each of the following questions. Circle the number that best describes your opinion. Please read each question carefully, be sure to answer all questions, and circle only one number on a single scale. There are _____ sections on _____ pages.

Goal Compatible Attitudes

1) The goals of this organization are very important to me.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

2) This organization and I do not want the same thing.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

3) I consider myself an advocate for environmental causes.

Strongly Disagree 1 : 2 : 3 : 4 : 5 : 6 : 7 Strongly Agree

4) I support the goals of this organization.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

Goal Compatible Behaviors

5) I bike, walk, or use public transportation frequently.

Strongly Disagree 1 : 2 : 3 : 4 : 5 : 6 : 7 Strongly Agree

6) I try to persuade friends and family to recycle.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

7) I have donated money to an environmental organization or group.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

8) I have volunteered for an environmental organization or group.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

Information Seeking Behavior/Behavioral Intent

9) I will probably visit this organization's website.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

10) I plan to seek out more information about ways to protect the environment.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

11) In the future, I plan to donate my time or money to an environmental protection.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

12) I would sign a petition to change laws to protect the environment.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

Willingness to Communicate

13) I will probably talk to friends or family about this issue.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

14) I will probably tweet, blog, or post on Facebook about this issue.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

15) I am unlikely to discuss this issue with friends or family.

Strongly Disagree 1 : 2 : 3 : 4 : 5 : 6 : 7 Strongly Agree

16) I will probably talk to friends or family about the organization.

Strongly Disagree $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Strongly Agree

For the following section, please rate the intensity with which you feel each of the following. For these seven questions, A rating of -1" indicates that you do not feel the emotion at all, while -7" indicates that you feel the emotion very strongly.

Intensity of Emotion

17) The issue of environmental destruction and the oil spill makes me feel angry:

Not at all angry $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Intensely angry

18) The issue of environmental destruction and the oil spill makes me feel guilty:

Not at all guilty $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Intensely guilty

19) The issue of environmental destruction and the oil spill makes me feel sad:

Not at all sad $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Intensely sad

20) The issue of environmental destruction and the oil spill makes me feel disgusted:

Not at all disgusted $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Intensely disgusted

21) The issue of environmental destruction and the oil spill makes me feel afraid:

Not at all afraid $\underline{1}$: $\underline{2}$: $\underline{3}$: $\underline{4}$: $\underline{5}$: $\underline{6}$: $\underline{7}$ Intensely afraid

Attitude Toward Organization

22) I think this organization is:

 Unfair
 $\underline{2}$ $\underline{3}$ $\underline{4}$ $\underline{5}$ $\underline{6}$ $\underline{7}$ Fair

 Negative
 $\underline{1}$ $\underline{2}$ $\underline{3}$ $\underline{4}$ $\underline{5}$ $\underline{6}$ $\underline{7}$ Positive

 Bad
 $\underline{1}$ $\underline{2}$:
 $\underline{3}$:
 $\underline{4}$:
 $\underline{5}$:
 $\underline{6}$:
 $\underline{7}$ Positive

The following section consists of open-ended questions. Please answer each question thoroughly.

23) Would you say you were emotionally affected by the video?

24) If so, how?

Demographics	
Gender:	
•	

Age: _____ Major: _____ Ethnicity: _____

Class standing (please circle): Freshman Sophomore Junior Senior Graduate Student Other: Appendix C:

Open-ended Question Responses

Question 23: Would you say you were emotionally affected by the video?

- 1. yes
- 2. Yes.
- 3. No
- 4. sad/helpless
- 5. Yes
- 6. This video put things in perspective. Why should wildlife be killed b/c of a companies mistake lack of responsibility. All companies that can greatly harm wildlife, nature or humans need to participate in regular procedures that test the equipment. This should never happen again!
- 7. yes
- 8. somewhat
- 9. yes
- 10. yes
- 11. yes
- 12. yes
- 13. yes
- 14. yes and no
- 15. yes
- 16. yes
- 17. yes
- 18. in a way. More mentally.
- 19. yes, it was sad
- 20. yes
- 21. yes
- 22. yes
- 23. yes, I was emotionally affecte and O plan to research more before making an opinion.
- 24. yes
- 25. not really. The birds were a bit disturbing.
- 26. yes
- 27. these animals made me think of my pets; I was emotionally touched.
- 28. yes
- 29. When the spill happened, these videos did have an effect on me. It is a little irrelevant in timing to get the expression wanted
- 30. no
- 31. yes
- 32. yes I think music could have been more effective though
- 33. yes even though there was no background music whatsoever to amplify the effect
- 34. no
- 35. yes
- 36. some images were disturbing but I am not emotionally affected
- 37. yes

38. yes, but sad music with the slides would make it more emotional, I think

39. yes

- 40. seeing the animals suffer made me sad. I hope more is done to protect/heal them.
- 41. yes
- 42. yes
- 43. yes
- 44. yes, it is upsetting to see that the oil spill happened and it didn't just afect us. The environmnet is forever damaged and many animals and people suffered from it.
- 45. yes
- 46. YES
- 47. yes
- 48. yes
- 49. yes
- 50. yes
- 51. I was sad and upset by the video oil soaked birds and the oil spill was the fault of gross incopetency and what happened to bp should have been stronger
- 52. to an extent I was emotionally affected
- 53. on some level, but not intensely
- 54. I think music or words read aloud would have benefitted I couldn't even see the words from where I was sitting
- 55. yes.
- 56. a little
- 57. yes
- 58. yes
- 59. yes this video affected me emotionally
- 60. yes
- 61. I feel sorry for the birds and wildlife but I probably won't do anything to help
- 62. yes
- 63. No--I was not because of the format. The captions were small and hard to read. Plus the video did not give me enough time to read the caption and look at the picture so I missed some of the pictures.
- 64. yes, the photos definitely appealed to emotion
- 65. somewhat
- 66. Sure, it evokes emotions for any warm blooded human. I think people who don't contribute to these organizations, myself included, have the feeling that the loss of animal life is not enough of value to take action. How is there a need for me to take action that would further this cause and why should it matter? Worse things are happening to humanity in other parts of the world.
- 67. yes
- 68. a little
- 69. somewhat. I think audio added would have had a greater affect many of the pictures are pictures I have already seen or are similar to pictures I have

already seen

- 70. a lil
- 71. yes
- 72. yes seeing helpless animals get hurt and not be able to do anything really saddens me. I think the video would have been sadder with sound/music. But the silence makes it serious/effective. I wish I could have been there to help these animals in need.
- 73. yes
- 74. yes
- 75. yes, more than it thought I would be
- 76. yes
- Q24: If so, how?
 - 1. I hate seeing animals die because of the greediness and mistakes of humans. I almost signed up to be a rescue volunteer but the hazmt training needed to clean the birds conflicted with my schedule. I sersiously considered though.
 - 2. I felt compassion for all the animals effected; As well as sad for the humans effected in the area.
 - 3. I was not emotionally affected. It is not an ideal situation but stuff happens
 - 4. not much could have been done for the animals effect immediately
 - 5. my hometown was affected by the oil spill and I am also an animal lover. I don't like seeing wildlife endangered by human mistakes
 - 6.
 - 7. it's sad to see these animals in that state. They never asked for that.
 - 8. it was sad to see the birds covered in oil, but the video only focused on one side and was very pro-green
 - 9. I wish I could do something. I wish the government would do something. This shouldn't happen
 - 10. it makes me sad when I see pictures of animals dying from a tragedy that could have been prevented
 - 11. if we don't protect the environment, we won't have one
 - 12. the video was disturbing and truly sad. Its terrible what kind of negative impact humans can have on their environment. The fact that our selfishness can do so much harm to other living things is depressing.
 - 13. animals being covered in oil in their natural environment is always sad.
 - 14. I've seen this video before and when I saw it the first time I was deeply affected. I wasn't as emotionally affected this time.
 - 15. it made me feeel sympathetic for the wildlife that is affected by human mistakes.
 - 16. it is sad to see the animals struggling due to humans' actions
 - 17. it made me feeel bad for the wildlife affected and made me want to do something about it.
 - 18. I got angry at the fact that animals are suffering due to stupid things like oil. But angry at people who actually allowed it to happen. I felt powerless.

- 19. it was very sad. I felt bad for the animals
- 20. I'm an animal lover and seeing the birds covered in oil when they can't do anything to help themselves makes me angry and I feel bad for them.
- 21. too sad to see our wildlife so bad. Makes me angry that the oil spill actually happened. There could have been something they could have done to prevent such a disaster
- 22. those birds are all so helpless and covered in oil, it's just so sad to see what a mistake like the oil spill can do to nature.
- 23. I am affected because I feel as though I am not educated enough on the topic.
- 24. it's sad to see poor animals struggle at human error.
- 25. poor birds
- 26. I didn't realize the devastation it caused for animals.
- 27. I feel depressed!
- 28. it's sad to see the unexpecting animals get hurt
- 29. I did feel very sorry and angry with BP.
- 30. the video highlighted things that I have seen many times befor and has no impact on me
- 31. it was sad to see those animals go through that.
- 32. I haven't seen any pictures from the oil spill so it made me sad that we could do that
- 33. it made me sad that animals that have no fault or protection have to suffer for human mistakes
- 34.
- 35. I consider myself an animal rights advocate so seeing those birds covered in oil upset me

36.

- 37. I felt sad that helpless birds couldn't help but die because of the bad choices oil companies make.
- 38. I felt bad for the animals in the video
- 39. I felt horrible for the helpless birds, and felt even worse knowing that if it weren't for the humans need to carry oil overseas, this all could have been spared.
- 40. we need to find other means of enrgy and fuel rather than oil.
- 41. I was sadden by all the bird being affected by the mess humans made
- 42. sad for the birds and environment effected from the oil spill
- 43. I think that it's definitely a little, if not a large bit, distrubing to see animals so helpless to an incident that humans ultimately caused
- 44. knowing how the oil spill is going to forever affect the ocean and animals in it is upsetting
- 45. reminder of how time has a wayof making us forget. Guilty for not doing more.
- 46. it's sad; however I think it would have a greater impact with sound (sad music)
- 47. although I had seen images from the spill before, the reminder did make me a little sad again
- 48. I felt sad seeing the animals struggle to get out of the oil and even worse to see them covered with it.

- 49. I feel the flora and the fauna should not suffer the consequences of the human's mistakes
- 50. this was a man-made disaster I believe could have been avoided in numerous ways. To see animals suffering and dying is not something enjoyable. For one to be unaffected they would have to be heartless.
- 51.
- 52. even though the video was a compiltion of photographs. The photographs appealed emoptionally with closeups the struggle of the animals affected was evident
- 53. seeing the look on the animals faces was admittedly harrowing

54.

- 55. people tend to forget that their actions harm other humans and animals. Society and technology make it easy to tune out issues like this. Society is lazy and unmotivated to spark change. We need more activists.
- 56. seeing the animals suffer is a little saddening
- 57. the images of nature mired in the mistakes of man struck an emotional chord. It showed the effects of an oil spill upon animals that are big enough to feel sympathy for.
- 58. I felt bad for the birds affected, they had and have no control of their situations
- 59. it really just made me sad for the animals and the environment
- 60. our carelessness in the gulf killed wildlife and their habitats
- 61.
- 62. I felt sad and angry after seeing these images
- 63. Had there been no captions and music added I may have been more emotionally affected
- 64. it made me feel bad for the animals because they are suffering when they did nothing wrong and are helpless
- 65. the images were rather disturbing and sad to watch
- 66. I care about whales.
- 67. I was sad toward a few of the pictures. Some effects could have made it more poignant (i.e. Sarah McLachlan)
- 68. it makes me sad to see animals suffer and die because of something that can be prevented or taken care of.
- 69. the dead bird made me very sad seeing that it doesn't make them dirty, it kills them

70.

71. the images were powerful and showed the pain the wildlife is sufferinng due to our ignorance and selfishness

72.

- 73. I feel for the animals that are vicimized in their own environment
- 74. the pictures focused on the tragedy more than the cleanup (which is most of what I've seen)
- 75. I could barely watch I was disgusted and felt horrible for the animals
- 76. it is tough to see innocent animals struggling like that