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The effect of color congruency and involvement on non-profit organizational messaging

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The Effect of Color Congruency and Involvement on Non-Profit Organizational
Messaging

by

Claire Selius

A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
School of Mass Communications
College of Arts and Sciences
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ABSTRACT

Color is a major factor in persuasive communication and messaging. This study examines the role of color and other variables in the communication of environmental causes. Many environmental organizations are starting to use color to generate awareness and create symbolic color associations. Based on the congruency theory and the elaboration likelihood model, this study tested specific research hypotheses pertaining to the effects of color-cause congruency and involvement with the cause on consumer reactions through a controlled experiment. Results reveal that involvement and the congruency between color and cause had an effect on attitude toward the organization and attitude toward the message. However, the hypothesized interaction effects of congruency and involvement failed to reach statistical significance. The study thus provides support for the congruency theory and elaboration likelihood model by showing the independent influence of color-cause congruency and cause involvement.

Chapter One

Introduction

Colors are everywhere, and for-profit as well as non-profit organizations commonly use them to their advantage. Positive and negative color associations are created through our life experiences (Cerbus & Nichols, 1963). We respond cognitively, emotionally and behaviorally to colors, which explains why color influences decision-making in today's consumer world.

For example, diamond jewelers are beginning to allow consumers to choose the color of the stones in their jewelry using the Pantone Color Guide (Gambhir, 2009). With the color guide, jewelers are able to track the most popular colors and styles and consumers can then pick the colors based on their popularity. These jewelry trends help make up Pantone's annual color report on the latest color crazes in the fashion world. Just to name a few, Fushia Red (Pantone 18-2328), Dark Citron (Pantone 16-0435), Super Lemon (Pantone 14-0704), and Salmon Rose (Pantone 15-1626) earn the highest honors for this year's list of top fashion colors (Gambhir, 2009).

Colors are not only symbolic in nature; they also define some organizations. Coca-Cola is globally known as having a schema of red; the McDonald's arch is easily recalled as yellow; and Starbucks quickly comes to mind as green. These corporations have created brand awareness by linking their brands to specific colors. Once a strong brand-color link is created, it is nearly impossible to break (Skorinko, Kemmer, Hebl, & Lane, 2006). Most corporations are not as lucky, and such a clear association of colors rarely occurs.

Non-profit and cause-related organizations utilize colors for association purposes.

For example, Susan G. Komen for the Cure promotes breast cancer awareness by featuring the color pink. Its success has attracted support from commercial organizations such as Yoplait yogurt. For each Yoplait yogurt container lid mailed back, Yoplait donates 10 cents towards breast cancer research. Also, Mothers Against Drunk Driving (MADD) is known for its emblematic red ribbons and Autism Society of America is known for dispersing pins with multi-colored puzzle pieces to raise awareness. However, as Grossman & Wisenblit (1998) pointed out, non-profit organizations need to choose their colors wisely by examining stakeholders' reactions to specific color-organization associations.

All organizations rely on the acceptance of the public for survival and success. Non-profit organizations goals differ from those of for-profit organizations. Also, they often must create awareness and a public connection with limited resources. Unlike for-profit organizations, whose communication strategies aim at selling products and services, non-profit organizations communicate with the public to promote awareness of specific causes, solicit support for a target group or area and provide a solution or "cure" to pervasive issues or problems. It is in this unique context that color-cause associations render an opportunity for achieving great success in non-profit communications.

Despite the growing popularity of the use of colors in non-profit communications, little empirical research has been done to examine the effectiveness of colors and their association with different causes. Conclusions which link color to cause are often made on the basis of limited data, with little or no consideration of the conditions in which certain these color associations may be more or less effective. Preoccupied with short-

term pragmatic implications, most industry-sponsored studies of colors are poor in theoretical reasoning, if not outright atheoretical (e.g., Gambhir, 2009). As such, they lack the power in describing, explaining, and predicting the effects of color in non-profit communications.

This thesis attempts to provide a theoretical framework for approaching the role of color in persuasive communications. A major argument derived from the theoretical framework is that color effects are contingent upon (1) the perceived congruency or fit between the color and the cause, and (2) the levels of involvement or personal relevance with non-profit causes. This thesis then reports a controlled experiment designed to test research hypotheses derived from the theoretical framework.

In presenting the theoretical discussions and empirical data this thesis has been divided into five chapters. Following this Introduction, Chapter Two reviews relevant literature from which research hypotheses were derived. Chapter Three describes the research methodology that was used in the collection of empirical data. Chapter Four presents results of the experiment in detail. Chapter Five summarizes the results and discusses their theoretical and practical implications.

Chapter Two

Review of Literature

Elements of Color and Perceptions

Colors are seen constantly and often go unnoticed. The color wheel, as Poynter Institute (2008) illustrates, is composed of the two basic color sets of primary (yellow, blue, red) and complementary (orange, green, purple). In order to recognize exactly what the eye sees, it is important to look deeper into the elements that make up a color.

The main components of color are hue and brightness. Both of these involve visual sensations of a color and how we respond to it. Hue is the pigment of a color. In other words, it is the degree to which a color is comparable to the colors blue, green, red, yellow, or a combination. Hue is determined by wavelength. Cooler colors such as violet, blue and their deviations have short wavelengths, and warm colors like red and orange have longer wavelengths (Rose, 2007). Our eyes prefer shorter wavelengths that can lead to positive and/or improved emotional states (Babin, Hardesty & Suter, 2003).

Value is also an important element as it refers to the lightness or darkness of the color (Birren, 1978; Rose, 2007). Adding various amounts of black or white to a color creates different values. Elements of the gray scale can be used if color is not a possibility. An example of this is black and white photography. Texture can still be created because of the variance of color.

Different colors have various perceived meanings and it is common that individuals respond in specific ways. Red is often perceived as a harsh color that arouses

energy level and appetite. It also raises blood pressure and body temperature. It is a very poignant color and tends to stir up such emotions as love and anger. Red is often attached to sexual emotions and connotations including passion, excitement, and infatuation. Pink, a lighter shade of red, tends to have calming effects. Often associated with young females, pink also connotes sweetness and innocence. Orange most commonly stimulates thirst and can cause the feelings of sociability, cheerfulness, and vigorousness (Babin, Hardesty & Suter, 2003).

Yellow, which stimulates memory, is the hardest color for us to see and process, due to its exceptionally long wavelength. It is associated with enlightenment and sunshine. Green behaviorally induces quietness, comfort, and relaxation. It has an extremely short wavelength, so it is the easiest color for the eye to see. As such, green creates a sense of visual relaxation, which progresses throughout the whole body. Green is also associated with nature, growth, and new beginnings. Blue and its deviations hold the distinction of being the most popular colors. Blue is proven to lower blood pressure and is known as the color of reliability, longevity, and trust (Cerbus & Nichols, 1963). Also known to help lower blood pressure, purple calms overactive glands and suppresses appetite. It is most commonly associated with religion and loyalty (Babin, Hardesty & Suter, 2003). Finally, black is a very mysterious color and has various meanings. Philosophically, it is the absence of color. Black is frequently coupled with death and evil, suggesting power and dignity. Its opposite, white, expresses cleanliness, purity, and innocence (Cerbus & Nichols, 1963).

The importance of color in communication is not limited to its influence on human perceptions. Over the years, researchers have identified important cognitive and

emotional reactions to color in a variety of contexts.

Cognitive Reactions

A seminal study by Siple and Springer (1983) examined color memory and matching of hue, chroma and saturation. Participants were exposed to sets of photographs containing different fruits and vegetables. They were then asked to match the fruit and vegetable colors as accurately as possible with colors presented to them from the Munsell color chart. They were also instructed to select colors that they believed the fruits and vegetables should be.

It was discovered that memory of the hue and brightness of colors was precise in matching the colors to the objects. This was not the case when saturation was recalled. Participants of the study recollected objects to be more saturated and when asked, expressed preference for an increased amount of saturation of the color. Siple and Springer (1983) concluded, "Such results are more consistent with a theory of memory representation in which the color of an object is stored as an independent attribute rather than one in which color is an integral part of a prototypic representation" (p. 369).

Color is often used in advertising to catch the eye of the reader. In magazine advertising, it is difficult to make an ad stand out. People need a reason not to turn the page, and color plays an important role. Schindler (1985) studied the effects of color in magazine advertising in terms of readability and legibility. His results showed that increased contrast achieved higher readability. However, only 14 percent of the ads studied used high contrast (out of the options of high, moderate, and low). According to Schindler (1985), "Many advertisers fail to optimize the legibility and readability of their

ads by the colors they select. Color should enhance, not restrict, legibility” (p. 75). He further cautioned that organizations might have excessively tried to catch the reader’s eye. Although some colors may be more fashionable, the eye does not respond to fashion trends.

Some of the basic findings of the effects of color on memory remain relatively unchanged, however. After reviewing extant literature, Clark and Clark (1978) summarily stated:

“... three main color preferences exist: 1) light colors are remembered more and chosen as the best example of a particular color over dark colors, 2) bright colors are remembered more and chosen as the best example of a particular color over dull colors, and 3) focal (or primary) colors (e.g., red, yellow, and blue) are remembered more and chosen as the best example of a color over secondary colors” (p. 978).

Emotional Reactions

Emotions are complicated and vary with each individual. Starting at a young age, color can cause an individual to feel specific emotions (Boytzis & Varghese, 1994). At the age of 5, children have already developed color-emotion associations. Brighter colors are preferred (pink, blue, red), while darker colors (brown, black, grey) evoke negative emotions. The partiality for bright colors increases as we grow. It is hard to ignore our response to colors, especially emotionally. This section looks at research which reveals a connection between color and emotions.

Gorn, Chattopadhyay, Yi, and Dahl (1997) studied color in advertising by linking hue, chroma, and the value of color in an ad to affective and emotional responses. Color was treated as an executional element in a print advertisement, and the Munsell system

was used as the color collaboration system. Gorn et al. (1997) purposely used a product with no color associations in order to ensure no bias was formed. Results of the study indicated that increased levels of chroma and value could influence excitement and relaxation feelings. Specifically, high chroma and hues generated positive advertisement attitudes by inducing feelings of excitement. This study explains the components of color and illustrates their influence on affective responses of the consumer.

The research clearly supports the influence of color on human cognitions and emotions. What remains relatively unclear is the power of color in shaping or changing attitudinal and behavioral responses to persuasive communications. Another noticeable limitation of existing research is the assumption of a direct relationship between color and response variables, with little or no consideration of other message elements in communication or the context in which communication takes place. In addition to asking whether color has an effect on communication, an equally important question is under what conditions color may exert stronger or weaker influence on the acceptance of a message.

Cerbus and Nichols (1963) indirectly explored the color-emotion link by relating color response to a number of personality variables. Specifically, they derived research hypotheses from Rorschach (1940) which stated that responses to colors were related to such personality variables as impulsivity or difficulties in control, suggestibility and passivity, and abundance of affect or emotion. Their results showed an inverse relationship between impulse control and responsiveness to color. That is, participants who exhibited the least amount of impulse control were most responsive to color.

Similarly, emotionally abundant and disobedient participants were more responsive to colors than those who were less emotional and obedient.

Valdez and Mehrribian (1994) more directly examined the relationship between colors and emotions. Unlike previous studies that adhered theoretically to Rorschach (1942), Valdez and Mehrribian (1994) derived their hypotheses from the Pleasure-Arousal-Dominance Emotion Model (PAD). First introduced by Mehrribian and Russel (1974), this PAD model claims that human emotions vary along the dimensions of pleasure-displeasure, arousal-nonarousal, and dominance-submissiveness. The model can thus be used to describe and determine varying emotional states with sufficient detail and flexibility. After carrying out multiple experiments, Valdez and Mehrribian (1994) concluded that color brightness and saturation held a strong relationship with emotional response. In contrast, the relationship between hue and emotion was significantly weaker.

In the next sections, we will examine two of the conditioning or qualifying variables in the context of persuasive communication. The first variable is the degree of congruency between color and the theme or cause promoted in the message. The second variable is the level of involvement or personal relevance perceived by the message recipient upon exposure to persuasive communication.

Congruency Theory and Color

Congruency theory was chosen for this study because it explicitly addresses the interactive effects of elements in persuasive communication. In the present study, the theory prescribes that a specific color may have greater (weaker) influence when its perceived meaning is congruent (incongruent) with other elements of the message.

Osgood and Tannenbaum (1955) were among the first to explore congruency theory. Their original conception emphasized the importance of congruency among three key variables: existing attitude toward the source of message, existing attitude toward the concept evaluated by the source, and the nature of the evaluating assertion which relates source and concept in the message. According to their theory, congruent attitudes would likely result in yielding to persuasive communication. However, incongruent attitudes may give rise to psychological discomfort which creates pressures to seeing resolution, thus prolonging or impeding persuasion (Gassenheimer, Davis, & Dahlstrom, 1998).

Campbell and Goodstein (2001) extended the reasoning by showing that congruency is related to conforming to the norm. The level of risk or threat involved in complying with, or deviating from, the perceived norm may thus determine congruency and incongruency. In the context of non-profit communication, for example, the perceived risk in ignoring or rejecting the promoted cause could affect one's reaction to the communication.

More pertinent to the present study is Osgood and Tannenbaum's (1955) assertion that, "The issue of congruity arises whenever a message is received which relates two or more objects of judgment via an assertion" (p. 43). The "objects" of judgment (or message elements) examined in this study are the color used and the promoted cause in non-profit communication.

To illustrate, let's consider pairing money (object 1) and the color black (object 2). We can further assume that money has a positive attitude rating of +5 and black has a negative rating of -5. Pairing the two would result in incongruity and consequently, according to Osgood and Tannenbaum (1955), both money and black would have an

assessment of somewhere between +5 and -5. In other words, negative attitudes become less negative, while positive attitudes also become less positive. The reasoning may be extended to congruent pairings between, for example, money (+5) and the color of orange (+3). The theory predicts that money and orange color will be perceived more positively when they are presented together than when are presented separately. Intentionally or otherwise, the principle of congruency is often applied in designing advertising messages. For instance, Rolex consistently uses black or dark grey background in its ads to convey the image of sophistication, classiness, and power (Cerbus & Nichols, 1963).

In the case of non-profit organizations, color is often used to create congruency. It would be inconceivable for Green Peace not to maximize the congruency of its cause with the color of green. Equally inconceivable is the notion of presenting Green Peace in a sea of red or orange. Unlike Green Peace, however, most non-profit organizations are not strongly associated with specific colors, and the congruency between the colors used and the causes promoted is often based on intuitive judgment or guesswork. One of the main purposes of this study is to present some initial empirical evidence of the importance of color-cause congruency.

Elaboration Likelihood Model

The elaboration likelihood model (ELM) is a major theory in persuasion research. Developed by psychologists Petty and Cacioppo (1986), the model takes into account the different depth or amount of information involved in processing persuasive information. The model may be best be illustrated through consumer processing of advertising information. At one extreme, the consumer can consciously and diligently consider the information provided in the ad in forming attitudes towards the advertised brand.

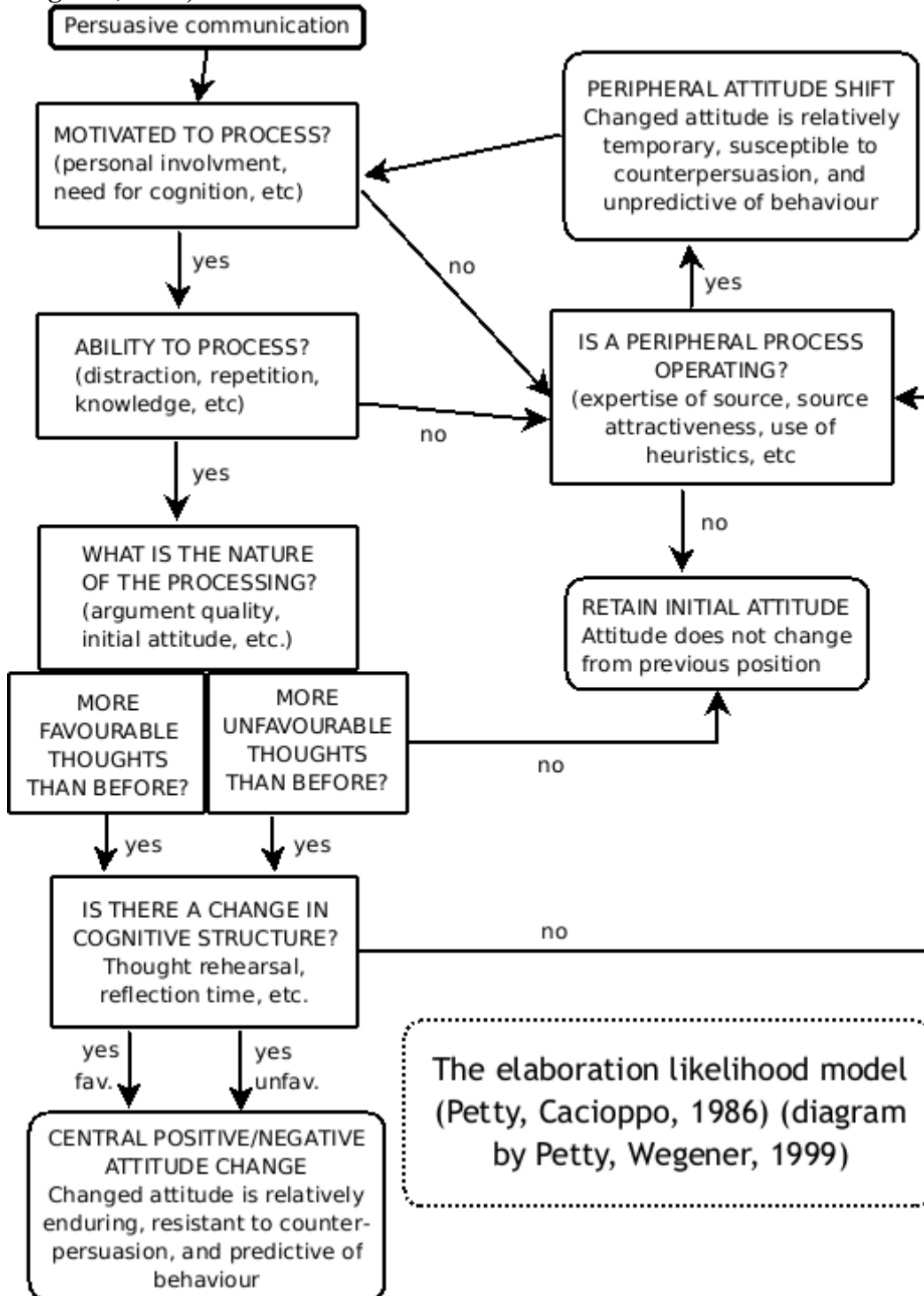
Attitudes are thus changed or formed by careful consideration, thinking, and integration of information relevant to the advertised product. This type of persuasion is termed the *central route* to attitude change. According to Petty, Cacioppo, and Schumann (1983), "...the central route, views attitude change as resulting from a person's diligent consideration of information that s/he feels is central to the true merits of particular attitudinal position" (p.132). Through the central route, advertising could persuade the consumer to take action by presenting convincing product information, rational arguments and concrete evidence. In response, the consumer is likely to process the advertising message deeply and result in long-term attitude change and product adoption. A good example of central route persuasion is to tell consumers how fuel efficient and reliable an automobile is.

In contrast to such central processing, there also exists the *peripheral route* to attitude change. "Attitude changes that occur via the peripheral route do not occur because an individual has personally considered the pros and cons of the issue, but because the attitude issue or object is associated with positive and negative cues" (Petty, Cacioppo, and Schumann, 1983, p. 132). In advertising communication, brand attitudes are formed and changed without active thinking about brand attributes and the strengths and weaknesses. Rather, the persuasive impact occurs by associating the product with positive or negative aspects or executional cues in the ad that really are not central to the product. Through the peripheral route, advertising may attempt to persuade the consumer through superficial means. A good example of peripheral persuasion is the use of a well-known celebrity as product spokesperson. The goal is to create positive association between the celebrity and the product without explaining the real reasons why the

product should be considered. Compared to central route, peripheral route tends to produce short-term attitude change, if any change at all.

According to Petty and Cacioppo (1986), a key determining factor in the choice between central and peripheral routes is the level of involvement (or personal relevance) the consumer experiences in the decision process. When involvement is high, as in the process of buying a new car, the consumer is more likely persuaded through the central route. When involvement is low, as in the case of buying a can of soda, the consumer is more likely persuaded through the peripheral route. Involvement is a direct function of motivation. Central processing requires first the motivation to process information, because information processing requires effort. Unless there is some reason to expend the energy or effort, the information in the ad will not be actively processed. Such effort will not be made unless the consumer is involved with the product and only unless the information in the ad is relevant and important (Petty & Wegener, 1999). Figure 1 shows how the different routes of persuasion operate.

Figure 1. The Elaboration Likelihood Model of Persuasion (Petty & Wegener, 1999)



From the consumer's point of view, the key implication of the ELM is that motivational factors play a big role in the processing of information. If motivation is high and the information is processed centrally, the consumer is more likely to focus on the reasons why a product or brand is better, resulting in more informed purchase decisions. When the motivation is low and the chance for peripheral processing rises, the consumer is increasingly affected, willingly or not, by unimportant or perhaps irrelevant product claims in making purchasing decisions. As Batra, R., Myers, J., & Aaker, D. (1996) point out, the fact that advertising may be persuasive without providing strong convincing arguments of the merits of the product may be good news to some advertisers. It also helps explain why consumers sometimes make foolish or erroneous product decisions at a result of advertising exposure.

Involvement

Involvement is a facet of ELM that will be used and manipulated as a variable in this experiment. It has also been named 'personal relevance' by the original theory creators Petty and Cacioppo (1986). Personal relevance is one of the three main situational variables introduced which affect our internal motivation to process the information or message. The other two are 'personal responsibility for message evaluation' and 'the number of message sources' (p. 81). The factor of personal relevance is crucial to the model because it allows us to seek out individual significance in a message. Creating personal relevance is a difficult task for organizations, because it varies so much with each individual. For example, it may be difficult to create personal relevance among college students when speaking of social security, or saving the beaches if reaching out to those who live in mountainous areas. Involvement is a key element

when creating non-profit organizational communication, and this study recognizes the importance of ELM. Non-profit causes reach out to their audience with the hopes that their goals and what the organization is trying to accomplish will be cared about. The use of ELM in this study will help to explain if involvement increases audience awareness and attention, or creates an unexciting, tedious environment for the reader, giving them information or ideas that they have heard many times prior.

Sherif and Hovland (1961) originally identified the greater difficulty of persuading a consumer who was already personally invested in an idea, simply because he or she already had set opinions about the issue (p. 82). According to Gardner, Mitchell, and Russo (1985), "Involvement is conceptualized as a state variable with the components, intensity and direction" (p. 4). Intensity is denoted by the amount of consideration devoted to a specific ad, while direction is the processing strategy. It is also stated that low involvement through low attention actually develops a more positive attitude toward the ad (p. 5). As involvement increases, the importance of message elaboration in producing persuasion increases (p. 87). This relates directly back to the central and peripheral routes of persuasion. It can be more difficult to adjust or change ideas, views and opinions, specifically if an individual has taken the central route of persuasion, and has high involvement in that issue or message. Message involvement in advertising has an increasingly deciding impact on brand attitude, brand loyalty, and the forming and changing of brand attitudes (Laczniak, Muehling, & Grossbart, 1989). When devising communication for non-profit organizations, this information should be taken into account. It may be more or less difficult to reach an audience depending on their involvement with a specific issue. Through this research, involvement is elucidated and

can be manipulated in the experiment in order to further understand the conscious and unconscious thoughts of consumers.

ELM and Color

The results from prior research studies using ELM do not show a clear consensus on whether the cognition of color and other forms of aesthetic message elements such as music take place in the peripheral or central route. It is necessary to identify and evaluate the elements of both routes in order to choose a starting point and a cognitive basis for this study. Levy and Peracchio (1995) used ELM to identify which type of processing occurs when colors are viewed. Advertisements were used in which color or black and white photos were displayed. The results explain that color's effect on consumer attitude depends on three factors:

“(1) consumers are motivated to process and substantiate the ad effortfully, (2) ad processing and/or substantiation is highly resource consuming, and (3) the resources available for processing and/or substantiating the ad are sufficient to accommodate both the resources consumed by the presence of potentially distracting color and those required to draw sensory or subjective inferences from the color” (p. 134).

In other words, if the consumer already has high involvement in the issue, this research moves forward the idea that the color in the advertisements has little to no effect. However, if the consumer has little to no interest or involvement in the issue and the peripheral route is being taken, the color has a large impact in determining attitude toward the product.

When color is used as a peripheral cue, it can affect attitude change. This is explained initially by Petty and Cacioppo (1986), as stating, “Variables can affect the amount and direction of attitude change by (a) serving as persuasive arguments, (b) serving as peripheral cues and/or (c) affecting the extent or direction of issue and

argument elaboration” (p. 16). People hold opinions and views for different reasons, and some are more easily influenced or persuaded than others. Because an individual may or may not hold as headstrong of an opinion, some persuasion techniques are more effective in different situations. Color used as a peripheral cue can be more effectual depending on the strength of a position held. Individuals respond differently to not only social and personal situations, but also to messages. In other words, the personal elaboration encountered with each message depends on the color, depends on involvement as well as other factors with each message

It is crucial to understand not only audience response to specific colors, but also congruency responses of the consumer. ELM explains involvement as an important attribute of message elaboration. However, there is a lack of research combining involvement with other variables. This study will combine involvement with congruency to further understand this relationship. Involvement and color/cause congruency will be the main independent variables in this experiment.

ELM and Non-Profit Organizations

Non-profit organizations are only successful with an excessive amount of donations and volunteering. They stay afloat on the public’s foundation of helping the community, or donating to a cause they find relevant and important. It can be stated that people generally want to do the right thing. The right thing may be defined by society, by family, or by peers. The ELM offers an explanation involving development of elaboration. For example, very young children base their decisions on personal preference and what feels good or bad to only themselves. They pay no attention, and doubtfully understand the choices that society wants or prefers them to make. However,

once they become older, they begin to notice society's norms. When old enough to understand society, one commences to become influenced by it. Because their ideas and opinions of correct attitude are based on society, the ability to sway opinions may be increased. Petty and Cacioppo (1986) specify that even though individuals may possess the obligation and motivation to analyze probe issues, "...they will lack motivation and ability on others. Thus, simple inferences and affective cues may still product attitude change in adults" (p. 10).

Petty and Cacioppo (1986) also explain that individuals may be more motivated and/or able to process a message in an objective manner when argument scrutiny is increased or decreased. Knowing this, non-profit organizations can take risks by overloading individuals with information through public service announcements, advertisements or collateral materials. According to ELM, it may be more beneficial, and increase motivation if they leave the message recipient some curiosity, or room to find things out for themselves. Allowing the recipient to be active may create a more positive response. If the recipient is receiving the information with high involvement and is motivated, it can be assumed according to ELM, that s/he is attempting to do the right thing and is seeking out the truth (p. 19). This can be positive or negative for the organization, depending on the ethical standards and other factors of the organization.

ELM furthers the statement that individuals are motivated to hold correct attitudes. But, it is also explained that involvement is a factor when correct attitudes are identified. Specifically, Petty and Cacioppo (1986), "Although people want to hold correct attitudes, the amount and nature of issue-relevant elaboration in which they are

willing or able to engage to evaluate a message vary with the individual and situational factors” (p. 6).

In other words, individuals will pay attention to correct attitudes only if they are able to stay engaged in the message. Therefore, when related to non-profit organizations, the theory explains that non-profit organizations have a slim window of opportunity to attract and retain the attention of their target audience. The message must catch the attention of the audience, and must be relevant to even begin to make an impact. When the conditions engage individual’s motivations and create the ability to involve issue-relevant thinking, the ‘elaboration likelihood’ is increased (p. 7). This experiment will attempt to gain and keep the attention of the audience by manipulating involvement and color/cause congruency.

Park (2004) also used the Elaboration Likelihood Model to study public service announcements for the Special Olympics. Empathetic tendency was introduced as a moderator. Furthermore, involvement was applied as a covariate. As predicted, subjects with lower empathy had an increased motivation to process the strong arguments because the messages were focused on empathy-appeal. Also, involvement was successfully manipulated and was established to have an influence on the argument processing of low empathy subjects. Involvement and empathy were successfully proven to sway subjects one way or the other. Park (2004) adds to the knowledge of ELM by introducing the variable of empathy.

ELM was used in a study by Carson (1991), in order to investigate profit and non-profit sponsorship in comparative messaging. Specifically, a 2x3x2 experimental design was used: (profit / non-profit sponsor) x (direct comparative ad, indirect comparative ad,

and non-comparative ad) x (high/low involvement).

Through this research, it was unveiled that non-profit sponsors were deemed more credible than profit sponsors. Furthermore, attitude toward the ad, attitude toward the service, and measures of intention to seek information and purchase rated more positively when the ad was sponsored by the non-profit organization. As predicted by the ELM, the differences were increased in the low involvement condition.

Because a new view of involvement is introduced, as well as an insight into what may connect viewer to non-profit messaging; these studies directly relate and add insight into this experiment where involvement and cause/color congruency will be examined.

Research Hypotheses

The main objective of this study is to explore the influence of color congruency with varied levels of involvement using the variables of attitude toward the flier and behavioral intention. Non-profits use a variety of communication devices, such as fliers, in an attempt to get noticed by the public and to build the public's knowledge of the organization. In addition, participation is vital in all non-profit organizations. Non-profits typically focus on building their volunteer base and on fundraising. Because of the unique attributes of non-profit organizations, behavioral intention is introduced as a variable in this experiment.

In this study, experimentation will identify the conditions in which color influences consumer reactions to cause-related communications. Specifically, this study attempts to examine cognitive and emotional responses using color in combination with other variables. As attitude is a common term in this experiment, and can be defined by Petty and Cacioppo (1986) as, a general favorable, unfavorable, or neutral evaluation of a

person, object, or issue” (p. 26). Effect of consumer response will be moderated by level of involvement and color/cause congruency. Through literature and theoretical framework, the following hypotheses are presented:

Hypothesis 1

H1-a. The higher the involvement, the more favorable the attitude toward the cause.

H1-b. The higher the involvement, the more favorable the attitude toward the organization.

H1-c. The higher the involvement, the more favorable the attitude toward the flier.

H1-d. The higher the involvement, the more higher the behavioral intention.

Hypothesis 1 explains that participants will respond more positively to causes in which high involvement is expressed. The Elaboration Likelihood Model states that a message can change attitudes or create resistance to change. As involvement increases, the importance of message elaboration in producing persuasion increases. If participants have knowledge and awareness of the cause, and they process the cause with high involvement, a positive response will occur. If the participants’ ideals, interests, and lifestyle characteristics are congruent with the cause, they will be more likely to have a positive response.

Hypothesis 2

H2-a. The higher the color/cause congruency, the more favorable the attitude toward the cause.

H2-b. The higher the color/cause congruency, the more favorable the attitude toward the organization.

H2-c. The higher the color/cause congruency, the more favorable the attitude toward the flier.

H2-d. The higher the color/cause congruency, the more higher the behavioral intention.

As previously stated, congruency through colors creates a connection between brand and audience. A specific color may have greater (weaker) influence when its perceived meaning is congruent (incongruent) with other elements of the message.

It is hypothesized that color-cause congruence can root shifts in opinion, thought, and feeling towards a particular cause or message.

Hypothesis 3

H3-a. Involvement effects on attitude toward the cause are dependent upon color/cause congruency.

H3-b. Involvement effects on attitude toward the organization are dependent upon color/cause congruency.

H3-c. Involvement effects on attitude toward the flier are dependent upon color/cause congruency.

H3-d. Involvement effects on behavioral intention are dependent upon color/cause congruency.

H3: Involvements effects on attitudes and behavioral intention are dependent upon the congruency between color and cause. Therefore, involvement levels will have a

stronger(weaker) influence on attitudes and behavioral intention when color/cause congruency is high(low).

Because of expected interaction effects between variables, if positive attitude toward a high involvement cause are present, there will be an increased amount of cause/color congruency and vice versa. H3 introduces the variable of interaction effects between involvement and color cause congruency. Much research has been done on color and color effects. However, H3 fills a gap in social science research in which it will help to create not only a greater understanding of involvement, but demonstrate a significant connection between the congruency of the color and the cause; while also linking these variables to various attitude scales. Previous research listed in the review of literature has made elementary connections between these variables, but never tested for specific interaction effects. Through this hypothesis, it is expected that interaction between attitude toward the cause, attitude toward the organization, attitude toward the flier, and behavioral intention will create significant results revealing that these variables are directly related and dependant upon color/cause congruency and involvement. Ideally, this hypothesis will add to the ELM as well as Congruency Theory.

Chapter Three

Methodology

Participants

A total of 103 undergraduate students at the University of South Florida participated in the experiment. The students majors were mass communications and biology. Some received extra credit for participation, but most completed the experiment voluntarily. A participant profile is presented in Table 1.

Table 1.

Distribution of Participants in Experimental Conditions

		Frequency	Percent
Gender	Male	35	34.0
	Female	68	66.0
	Total	103	100.0
Student Status	Sophomore	25	24.3
	Junior	35	34.0
	Senior	43	41.7
	Total	103	100.0
Ethnicity	Caucasian	69	67.0
	African-American	10	9.7
	Hispanic	17	16.5
	Asian	5	4.9
	Other	2	1.9
	Total	103	100.0
Home-town	Tampa, FL	19	18.4
	Florida	90	87
	Other States	14	14
	Total	103	100.0

Experimental Design

The experimental design was a 2x2 factorial: Involvement with cause (high vs. low) and color/cause congruency (high vs. low). The design created four between-subjects conditions: High color/cause congruency + high cause involvement, high color/cause congruency + low cause involvement, low color/cause congruency + high cause involvement, and low color/cause congruency + low cause involvement. Each of the four conditions were replicated twice using different color/cause combinations, resulting in eight experimental stimuli as shown in Table 2.

Table 2. Experimental Design

	High Involvement Cause	Low Involvement Cause
High Color/Cause Congruency	Manatee Protection – Blue Tampa Wildlife Protection – Green	Florida Plants and Palms – Blue Denver Wildlife Protection – Green
Low Color/Cause Congruency	Manatee Protection – Orange Tampa Wildlife Protection – Red	Florida Plants and Palms – Orange Denver Wildlife Protection – Red

Involvement with the cause was the first independent variable manipulated in the design. Consistent with ELM, involvement with the cause determines how much personal attachment or relevance one may have in reaction to a specific cause (Petty & Cacioppo, 1986). A set of four fictional organizations were created for this study. Fictional organizations were used to minimize the influence of prior familiarity and other extraneous factors. Two of the organizations, Manatee Protection Association and Florida Plants and Palms Association, represented high and low involvement causes as determined by perceived relevance and importance of the organizations' purposes. Two other organizations, Tampa Wildlife Protection and Denver Wildlife Protection, represented high and low involvement as determined by geographic proximity.

Geographic proximity has frequently been used in previous studies to create variations in personal involvement. Petty and Cacioppo (1986), for example, manipulated involvement by comparing issues occurring at near and far locations.

The second independent variable, color/cause congruency, was manipulated by pairing organizations with different background and font colors in communication flyers. Specifically, four different colors were chosen for the present study: green, blue, orange and red. Green symbolizes “verdancy of growing things” (Sloane (1989), p. 123) and is commonly associated with nature and the environment schema (Dee & Taylor, 2002). Blue, a calming and pleasing color, is rated the most popular color in America. It is related to perceptions of longevity, trust, reliability, and often associated with water, specifically the ocean (Cerbus & Nichols, 1963). Opposite to blue, orange is an energetic color that symbolizes exuberance, playfulness, and liveliness. However, it also connotes such negative meanings as laziness and dependency (Norris, 2001; Dee and Taylor, 2002; Jasper, 2005). Red has a similar wavelength as orange and is also a bright and harsh color. Its vibrancy is known to stir up emotions related to sex, passion, lust and love (Babin, Hardesty & Suter, 2003).

A series of pretests were conducted to determine the congruency between the four fictional organizations and colors. Specifically, each organization was presented in four different flyers, and each flyer used a different color background and font. A total of sixteen flyers (4 organizations x 4 colors) were thus created. They were presented to groups of participants similar to those in the main experiment for congruency and “fit” rankings. Based on the ranking data, the following organization/color combinations were selected for the main experiment.

High Congruency

Manatee Protection Association – Blue

Tampa Wildlife Association – Green

Florida Plants and Palms Association – Blue

Denver Wildlife Association – Green

Low Congruency

Manatee Protection Association – Orange

Tampa Wildlife Association – Red

Florida Plants and Palms Association – Orange

Denver Wildlife Association – Red

Stimulus Materials

The eight flyers created for the experiment are presented in Appendix A. Each flyer (letter-sized, single-sided) contains pictures of the causes promoted by the organization. The headline and body copy describe the causes and calls for participation, donation and/or request for further information. To maximize internal validity, the verbal content of the flyers were kept nearly identical.

Procedure

Eight experimental sessions took place in regularly scheduled undergraduate classes. Each session consisted of eight to twenty participants and they were randomly assigned to one of the four experimental conditions. At the beginning of each session, participants were informed that the purpose of the study was about organizational messaging. They were then given the response questionnaire and instructed to pay attention to the PowerPoint presentation on the screen. The PowerPoint presentation

showed two fliers, one at a time, in each session. Each flier was presented for three minutes, followed by instructions to answer questions pertaining to the flyer on the questionnaire. On average, the experimental sessions took about 15-20 minutes to complete.

Due to time and resource limitations, the distribution of participants in the four experimental conditions was uneven. The actual number of participants in each of the experimental conditions is presented in Table 3.

Table 3.

Distribution of Participants in Experimental Conditions

Condition	<i>n</i>	%
High Involvement/ High Congruency	27	26
High Involvement/ Low Congruency	33	32
Low Involvement/ High Congruency	20	19
Low Involvement/ Low Congruency	23	22
Total	103	100

Specifically, participants in the four conditions were exposed to the experimental stimuli as follows: The first group ($n=27$) viewed two high involvement and high color/congruency fliers (Manatee Protection Association–Blue, Tampa Wildlife Protection Association – Green); the second group ($n=33$) viewed two high involvement and low color/congruency fliers (Manatee Protection Association–Orange, Tampa Wildlife Protection Association–Red); the third group ($n=20$) viewed two low involvement and high color/congruency fliers (Florida Plants and Palms Society-Blue and Denver Wildlife Protection Association-Green); and the fourth group ($n=23$) viewed two

low involvement and low color/congruency fliers (Florida Plants and Palms Society-Orange and Denver Wildlife Protection Association-Red).

Dependent Measures

Four sets of dependent measures were taken to determine participants' reaction to the experimental stimuli (see Appendix B). They were attitude toward the cause (ATTC), attitude toward the organization (ATTO), attitude toward the flier (ATTF), and behavioral intention (BI). ATTC and ATTF were measured by four 7-point semantic differential items (Good/Bad, Favorable/Unfavorable, Likeable/Unlikeable, Positive/Negative). ATTO was measured by five 7-point semantic differentials (Good/Bad, Favorable/Unfavorable, Likeable/Unlikeable, Positive/Negative, Important/Unimportant). Behavioral intention was measured by the likelihood of (1) obtaining more information from the organization, (2) donating to the organization, (3) telling others about the organization, and (4) volunteer for the organization on 7-point (Likely/Unlikely) scales. All attitude and behavioral intention measures were adopted from previous studies of persuasive communications (e.g., MacKenzie, Lutz, and Belch).

Reliability tests were performed to ensure the internal consistency of the dependent measures. Results (Table 3) indicated all measures achieved "acceptable" reliability, as determined by Cronbach's alphas (Morgan, Reichert, & Harrison, 2002). Specifically, alphas ranged from .789 to .901 for ATTC, .896 to .942 for ATTO, and .863 to .908 for ATTF across high- and low-involvement organizations. Similarly, alphas for BI were .892 and .918 for high- and low-involvement organizations respectively.

Table 4. Reliability Tests for Dependent Measures

Measure	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
ATTC (High Inv.)	.789	.794	4
ATTC (Low Inv.)	.901	.905	4
ATTO (High Inv.)	.896	.900	5
ATTO (Low Inv.)	.942	.946	5
ATTC (High Inv.)	.863	.858	4
ATTC (Low Inv.)	.908	.908	4
BI (High Inv.)	.892	.894	4
BI (Low Inv.)	.918	.919	4

Manipulation Check Measures

Manipulation checks “offer evidence that the variables manipulated were accurately understood by the receivers the way they were meant to be” (Morgan, Reichert & Harrison, 2002). For each flier, two sets of measures were included in the questionnaire to determine if the experiment successfully manipulated the independent variables of interest. The first independent variable, involvement with the organization/cause, was measured by the Personal Involvement Inventory (PII) developed by Zaichkowsky (1985). The PII is composed of 20 semantic differential items scored on 7-point scales. The second independent variable, color/cause congruency, was measured by seven 7-point semantic differential items (good/bad, fitting/unfitting, congruent/incongruent, match/mismatch, creative/uncreative, correct/incorrect,

suitable/unsuitable). Both sets of manipulation check measures showed high reliability, as measured by Cronbach's alpha (Table 5 and 6).

Table 5.
Reliability Tests for Involvement

Condition	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
High Involvement	.951	.952	20
Low Involvement	.951	.951	20

Table 6.
Reliability Tests for Congruency

Condition	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
High Congruency	.900	.899	7
Low Congruency	.939	.940	7

A series of t-tests were performed to determine if the experiment manipulated the independent variables successfully. Since the experiment contained two replications (i.e., both involvement with the cause and color/cause congruency were tested twice in each of the four experimental conditions), the t-tests were performed separately for each replication. Test results indicate that participants were more involved with the Manatee Protection (Mean = 4.60) than Florida Plants Protection (Mean = 4.09) ($t = 2.67$, $df = 86$, $p = .009$). They were also more involved with Tampa Wildlife (Mean = 4.73) than Denver Wildlife (Mean = 4.37), although the difference was only marginally significant ($t = 1.82$, $df = 86$, $p = .072$).

The manipulation of color/cause congruency was also successful. Blue color (Mean = 3.59) was rated more congruent than orange (Mean = 2.85) for Manatee

Protection and Florida Plants Protection ($t = 3.195$, $df = 84$, $p = .002$); green color (Mean = 4.15) was rated more congruent than red (Mean = 3.31 for Tampa Wildlife Protection and Denver Wildlife Protection ($t = 2.901$, $df=83$, $p = .005$).

Table 7.
Manipulation Check for Involvement

Involvement /Replication	Fliers	N	Mean	Std. Deviation
High/A	Manatee/Blue & Manatee/Orange	50	4.6000	.94031
Low/A	Florida Plants/Blue & Florida Plants/Orange	38	4.0900	.78466
High/B	Tampa Wildlife/Green & Tampa Wildlife/Red	51	4.7300	.95302
Low/B	Denver Wildlife/Green & Denver Wildlife/Red	37	4.3700	.90094

Table 8.
T-test for Involvement

	t	df	Sig.	Mean Diff.	Std. Error Difference
Involvement A	2.67	86	.009	.507	.189
Involvement B	1.82	86	.072	.367	.201

Table 9.
Manipulation Check for Congruency

Congruency/ Replication	Fliers	N	Mean	Std. Deviation
High/A	Manatee/Blue & Florida plants/Blue	37	3.5900	1.04446
Low/A	Manatee/Orange & Florida Plants/Orange	49	2.8500	1.08304
High/B	Tampa Wildlife/Green & Denver Wildlife/Green	36	4.1500	1.19618
Low/B	Tampa Wildlife/Red & Denver Wildlife/Red	49	3.3100	1.39117

Table 10.
T-test for Congruency

	t	df	Sig.	Mean Diff.
Congruency A	3.195	84	.002	.742
Congruency B	2.901	83	.005	.836

Chapter Four

Results

In this chapter, hypothesis testing results are presented. Each hypothesis was tested twice, one in each experimental replication. To facilitate presentation, test results are organized by the dependent variables of interest. The principal statistical procedure used was Analysis of Variance (ANOVA) which allowed comparisons between sample means.

H1-a, H2-a, H3-a: Effects on Attitude Toward the Cause

Hypotheses 1-a, 2-a, and 3-a predict the main and interaction effects of cause involvement and cause/color congruency on attitude toward the cause (ATTC). For Florida Manatee Protection vs. Florida Plants Protection, ANOVA results showed that both main effects of cause involvement and cause/color congruency reached statistical significance. Supporting H1-a, attitude toward Manatee Protection (Mean = 6.15), the high involvement cause, was more favorable than attitude toward Florida Plants (Mean = 5.57), the low involvement cause ($F(1, 82) = 8.24, p = .005, \eta^2 = .09$). Consistent with H2-a, high cause/color congruency (Manatee Protection/Blue and Florida Plants Protection/Blue, Mean = 6.14) resulted in more positive attitude toward the cause than low cause/color congruency (Manatee Protection/Orange and Florida Plants Protection/Orange, Mean = 5.71) ($F(1, 82) = 5.20, p = .025, \eta^2 = .06$). The interaction effect between cause involvement and cause/color congruency, however, failed to reach

statistical significance ($F(1,82) = .564, p = .455, \eta^2 = .007$). H3-a was thus not supported in this group.

Table 11.
Attitude Toward the Cause Mean Scores: Manatee vs. Florida Plants

Involvement	Congruency	Mean	Std. Deviation	N
High: Manatee	High: Blue	6.3100	.83256	21
	Low: Orange	6.0200	.93265	27
	Total	6.1500	.89299	48
Low: Florida Plants	High: Blue	5.1900	.58363	16
	Low: Orange	5.3300	.97708	22
	Total	5.5700	.87361	38
Total	High: Blue	6.1400	.75368	37
	Low: Orange	5.7100	1.00435	49
	Total	5.8900	.92477	86

Table 12.
Interaction Effect of Involvement and Congruency on Attitude Toward the Cause:
Manatee vs. Florida Plants

	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Square d
ATTC						
Corrected Model	11.056	3	3.685	4.903	.003	.152
Intercept	369.496	1	369.496	491.570	.000	.857
Involvement	6.194	1	6.194	8.240	.005	.091
Congruency	3.909	1	3.909	5.200	.025	.060
Involvement * Congruency	.424	1	.424	.564	.455	.007
Error	61.637	82	.752			
Total	454.688	86				
Corrected Total	72.693	85				

For Tampa Wildlife vs. Denver Wildlife, however, ANOVA results showed none of the main and interaction effects of cause involvement and cause/color congruency.

For lack of statistical significance in this replication, H1-a, H2-a and H3-a were not supported. (Involvement, $(F(1, 82) = 1.64, p = .203, \eta^2 = .02)$, Cause/color Congruency, $(F(1, 82) = .693, p = .408, \eta^2 = .008)$, Interaction, $(F(1, 82) = .003, p = .956, \eta^2 = .00)$).

Table 13.

ATTC: Attitude Toward the Cause Mean Scores: Tampa Wildlife vs. Denver Wildlife

Involvement	Congruency	Mean	Std. Deviation	N
High: Tampa Wildlife	High: Green	6.1200	.85739	21
	Low: Red	5.9300	1.03963	27
	Total	6.0100	.95922	48
Low: Denver Wildlife	High: Green	5.8300	.59665	16
	Low: Red	5.6600	1.24295	22
	Total	5.7300	1.01406	38
Total	High: Green	5.9900	.76031	37
	Low: Red	5.8100	1.13108	49
	Total	5.8900	.98791	86

Table 14.

Interaction Effect of Involvement and Congruency on Attitude Toward the Cause: Tampa Wildlife vs. Denver Wildlife

ATTC	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2.370 ^a	3	.790	.804	.495	.029
Intercept	372.273	1	372.273	378.800	.000	.822
Involvement	1.615	1	1.615	1.643	.203	.020
Congruency	.681	1	.681	.693	.408	.008
Involvement * Congruency	.003	1	.003	.003	.956	.000
Error	80.587	82	.983			
Total	467.063	86				
Corrected Total	82.957	85				

H1-b, H2-b, H3-b: Effects on Attitude Toward the Organization

Hypotheses H1-b, H2-b, and H3-b predict the main and interaction effects of cause involvement and cause/color congruency on attitude toward the organization (ATTO). Results pertaining to attitude toward the organization (ATTO) were nearly identical to that of attitude toward the cause (ATTC). For Florida Manatee Protection vs. Florida Plants Protection, ANOVA results revealed a significant main effect of cause involvement.

For Florida Manatee Protection vs. Florida Plants Protection, ANOVA results showed that both main effects of cause involvement and cause/color congruency were statistically significant. Supporting H1-b, attitude toward Manatee Protection (Mean = 6.08), the high involvement cause, was more favorable than attitude toward Florida

Plants (Mean = 5.32), the low involvement cause ($F(1, 82) = 10.75, p = .002, \eta^2 = .116$).

Consistent with H2-b, high cause/color congruency (Manatee Protection/Blue and Florida Plants Protection/Blue, Mean = 6.10) resulted in more positive attitude toward the cause than low cause/color congruency (Manatee Protection/Orange and Florida Plants Protection/Orange, Mean = 5.433) ($F(1, 82) = 8.983, p = .004, \eta^2 = .099$). The interaction effect between cause involvement and cause/color congruency, however, failed to reach statistical significance and H3-a was not supported ($F(1,82) = .150, p = .700, \eta^2 = .002$).

Table 15.

ATTO: Attitude Toward the Organization Mean Scores:
Manatee vs. Florida Plants

Involvement	Congruency	Mean	Std. Deviation	N
High: Manatee	High: Blue	6.4500	.76395	21
	Low: Orange	5.7100	1.21444	27
	Total	6.0800	1.09570	48
Low: Florida Plants	High: Blue	5.6500	.72111	16
	Low: Orange	5.0800	1.04318	22
	Total	5.3200	.95356	38
Total	High: Blue	6.1000	.83749	37
	Low: Orange	5.4300	1.17260	49
	Total	5.7200	1.08915	86

Table 16.
Interaction Effect of Involvement and Congruency on Attitude
Toward the Organization: Manatee vs. Florida Plants

ATTO	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	20.158 ^a	3	6.719	6.830	.000	.200
Intercept	430.828	1	430.828	437.922	.000	.842
Involvement	10.571	1	10.571	10.745	.002	.116
Congruency	8.838	1	8.838	8.983	.004	.099
Involvement * Congruency	.147	1	.147	.150	.700	.002
Error	80.672	82	.984			
Total	548.440	86				
Corrected Total	100.830	85				

Just as in attitude toward the cause (ATTC), the ANOVA results for Tampa Wildlife vs. Denver Wildlife showed none of the main and interaction effects of cause involvement and cause/color congruency. Therefore in this replication, H1-b, H2-b and H3-b were not supported. (Involvement, $(F(1, 82) = 2.36, p = .128, \eta^2 = .028)$, Cause/color Congruency, $(F(1, 82) = 2.14, p = .147, \eta^2 = .025)$, Interaction, $(F(1, 82) = .255, p = ., \eta^2 = .003)$).

Table 17.

ATTO: Attitude Toward the Organization Mean Scores:
Tampa Wildlife vs. Denver Wildlife

Involvement	Congruency	Mean	Std. Deviation	N
High: Tampa Wildlife	High: Green	6.0900	.76830	21
	Low: Red	5.8700	1.11907	27
	Total	5.9600	.97776	48
Low: Denver Wildlife	High: Green	5.8500	.81813	16
	Low: Red	5.4000	1.28285	22
	Total	5.5900	1.12076	38
Total	High: Green	5.9800	.78793	37
	Low: Red	5.6600	1.20554	49
	Total	5.8000	1.05362	86

Table 18.

Interaction Effect of Involvement and Congruency on Attitude
Toward the Organization : Tampa Wildlife vs. Denver Wildlife

ATTO	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5.394 ^a	3	1.798	1.657	.183	.057
Intercept	401.837	1	401.837	370.375	.000	.819
Involvement	2.561	1	2.561	2.361	.128	.028
Congruency	2.324	1	2.324	2.142	.147	.025
Involvement * Congruency	.277	1	.277	.255	.615	.003
Error	88.966	82	1.085			
Total	511.480	86				
Corrected Total	94.360	85				

H1-c, H2-c, H3-c: Effects on Attitude Toward the Flier

Results pertaining to attitude toward the flier (ATTF) varied from attitude toward the cause (ATTC) and attitude toward the organization (ATTO). Hypotheses H1-c, H2-c, and H3-c predict the main and interaction effects of cause involvement and cause/color congruency on attitude toward the flier (ATTF). For Tampa Wildlife vs. Denver Wildlife, ANOVA results revealed a significant main effect of cause involvement.

For Florida Manatee Protection vs. Florida Plants Protection, ANOVA results showed no statistical significance for the main or interaction effects. Therefore, this replication revealed no support for H1-c, H-2c, and H3-c.

Table 19

ATTF: Attitude Toward the Flier Mean Scores: Manatee vs. Florida Plants

Involvement	Congruency	Mean	Std. Deviation	N
High: Tampa Wildlife	High: Green	3.63	1.23132	26
	Low: Red	4.33	1.43324	32
	Total	4.02	1.37957	58
Low: Denver Wildlife	High: Green	5.12	1.03714	20
	Low: Red	4.27	1.25886	23
	Total	4.67	1.22562	43
Total	High: Green	4.28	1.36179	46
	Low: Red	4.31	1.35117	55
	Total	4.29	1.34926	101

Table 20.
Interaction Effect of Involvement and Congruency on Attitude
Toward the Flier: Manatee vs. Florida Plants

ATTF	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	7.794 ^a	3	2.598	1.608	.194	.056
Intercept	1105.028	1	1105.028	684.082	.000	.894
Involvement	3.850	1	3.850	2.383	.127	.029
Congruency	.188	1	.188	.116	.734	.001
Involvement * Congruency	5.088	1	5.088	3.150	.080	.037
Error	130.843	81	1.615			
Total	1300.438	85				
Corrected Total	138.637	84				

For Tampa Wildlife vs. Denver Wildlife, however, ANOVA results did show significance in the main effect of involvement, consistent with H1-c. In this replication, attitude toward Tampa Wildlife (Mean = 4.18), the high involvement cause, was more favorable than attitude toward Denver Wildlife (Mean = 5.06), the low involvement cause ($F(1, 82) = 10.291, p = .002, \eta^2 = .112$). However, H2-b, cause/color congruency showed no statistical significance ($F(1, 82) = .836, p = .363, \eta^2 = .112$). And just as in the previous results for interaction effects, ATTF showed no significance and was inconsistent with H3-c. Therefore, in this replication, H1-a, was supported, while color/cause congruency and interaction effects showed no statistical significance, revealing no support for H2-c and H3-c.

Table 21

ATTF: Attitude Toward the Flier Mean Scores: Tampa Wildlife vs. Denver Wildlife

Involvement	Congruency	Mean	Std. Deviation	N
High: Tampa Wildlife	High: Green	4.0800	1.42156	21
	Low: Red	4.2500	1.66266	27
	Total	4.1800	1.54796	48
Low: Denver Wildlife	High: Green	5.4700	.56917	16
	Low: Red	4.7600	1.22833	22
	Total	5.0600	1.05497	38
Total	High: Green	4.6800	1.31979	37
	Low: Red	4.4800	1.49115	49
	Total	4.5700	1.41547	86

Table 22

Interaction Effect of Involvement and Congruency on Attitude Toward the Flier:
Tampa Wildlife vs. Denver Wildlife

ATTF	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	21.467 ^a	3	7.156	3.942	.011	.126
Intercept	937.336	1	937.336	516.419	.000	.863
Involvement	18.679	1	18.679	10.291	.002	.112
Congruency	1.518	1	1.518	.836	.363	.010
Involvement * Congruency	3.966	1	3.966	2.185	.143	.026
Error	148.836	82	1.815			
Total	1183.938	86				
Corrected Total	170.303	85				

H1-d, H2-d, H3-d: Effects on Behavioral Intention

Hypothesis H1-d, H2-d, and H3-d predict the main and interaction effects of cause involvement and cause/color congruency on behavioral intention (BI). Results relating to behavioral intention (BI) revealed no statistical significance in the main or interaction effects. (Tampa Wildlife vs. Denver Wildlife, (Involvement) $F(1, 83) = .281, p = .597, \eta^2 = .003$). (Congruency) $F(1, 83) = 2.445, p = .122, \eta^2 = .029$). (Interaction) $F(1, 81) = 2.566, p = .113, \eta^2 = .030$). Therefore, H1-d, H2-d, and H3-d were not supported in this replication.

Table 23

BI: Behavioral Intention Mean Scores: Manatee vs. Florida Plants

Involvement Congruency	Mean	Std. Deviation	N
High: Tampa High: Green Wildlife	2.001	.72457	21
Low: Red	2.000	1.20662	28
Total	2.001	1.01869	49
Low: Denver High: Green Wildlife	2.250	1.29422	16
Low: Red	1.511	.96510	22
Total	1.823	1.15943	38
Total High: Green	2.108	1.00267	37
Low: Red	1.790	1.12413	50
Total	1.925	1.07975	87

Table 24

Interaction Effect of Involvement and Congruency on Behavioral Intention:
Manatee vs. Florida Plants

BI A	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	5.769 ^a	3	1.923	1.689	.176	.058
Intercept	3069.085	1	3069.085	2695.7 43	.000	.970
Involvement	.320	1	.320	.281	.597	.003
Congruency	2.784	1	2.784	2.445	.122	.029
Involvement * Congruency	2.922	1	2.922	2.566	.113	.030
Error	94.495	83	1.138			
Total	3310.750	87				
Corrected Total	100.264	86				

The ANOVA results for Tampa Wildlife vs. Denver Wildlife showed none of the main and interaction effects of cause involvement and cause/color congruency.

Therefore, behavioral intention (BI) showed no effects and resulted in a lack of support for H1-d, H2-d and H3-d in this replication.

Table 25

BI: Behavioral Intention Mean Scores: Tampa Wildlife vs. Denver Wildlife

Involvement	Congruency	Mean	Std. Deviation	N
High: Tampa Wildlife	High: Green	2.2700	1.18560	21
	Low: Red	2.2500	1.39940	28
	Total	2.2600	1.29900	49
Low: Denver Wildlife	High: Green	3.0000	1.46059	16
	Low: Red	2.4200	1.22082	22
	Total	2.6400	1.33972	38
Total	High: Green	2.5900	1.34270	37
	Low: Red	2.3300	1.31344	50
	Total	2.4400	1.32464	87

Table 26
 Interaction Effect of Involvement and Congruency on
 Behavioral Intention: Tampa Wildlife vs. Denver Wildlife

BI B	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	6.616 ^a	3	2.205	1.269	.291	.044
Intercept	2543.054	1	2543.054	1462.879	.000	.946
Involvement	4.203	1	4.203	2.418	.124	.028
Congruency	1.903	1	1.903	1.095	.298	.013
Involvement * Congruency	1.615	1	1.615	.929	.338	.011
Error	144.286	83	1.738			
Total	2843.500	87				
Corrected Total	150.902	86				

Chapter Five

Discussion and Implications

Discussion

The analyses of the data collected revealed several patterns as well as other interesting findings which are highlighted in this section. In review, the hypotheses of this study attempted to explain the main affect of cause involvement, color/cause congruency and the interaction of these variables. The interaction hypothesis is explained by stating that involvement levels will have a stronger(weaker) influence on attitudes and behavioral intention when color/cause congruency is high(low) and vice versa. The research did express that attitude toward the cause and attitude toward the organization can be affected by variables such as involvement and cause/color congruency.

Through the results, attitude toward the cause and attitude toward the organization showed the most significance when interacting with involvement and congruency specifically in Manatee Protection vs. Florida Plants. Through these outcomes, it is clear the higher the involvement and the color/cause congruency, the more favorable the attitude toward the cause and the attitude toward the organization. These findings are a step forward for these variables and succeed in proving that consumers are affected by the color of advertisements, and depending on how involved they are in the cause, attitudes can be shifted. Attitudes are important and can lead to loyalty and future business for that cause or organization. It is expensive for non-profits to use most communication tools; therefore they must reach their audiences in the most direct way

possible. Combining and focusing on these variables can give non-profit and for-profit organizations an edge that others may not hold.

Significance was also shown in ANOVA testing while measuring attitude toward the flier in the variable of involvement, specifically to the Tampa Wildlife and Denver Wildlife replication. Attitude toward the flier is the most direct route, and an instinctual reaction by the participants. In the case of this research, it can be concluded that it is possible to shift attitudes when a visual communication device connects to the audience through involvement. Also, a connection can be created with the audience if the color in the flier is consistent with the color expectations of the audience. For example, when water causes are blue, forest causes are green, or desert causes are orange and yellow. Attitude toward the flier showed some statistical significance, but only in certain replications. It can be argued that any advertisement or visual stimuli such as a flier is just a message tool, which leads to the creation of attitudinal decisions about the organization or cause. Therefore, the results for attitude toward the flier are of less importance than that of the other variables.

Although a limited number of conditions were found to be statistically significant through ANOVA testing, when looking at the means, it is illustrated that with the exception of the Manatee vs. Florida Plants replication of attitude toward the flier and attitude toward the cause in both replications, high involvement/ high congruency (Manatee/Blue and Tampa/Green) showed higher means than the high involvement/low condition (Manatee/Orange and Tampa/Red). Furthermore, the low involvement/ high congruency condition (Florida Plants/Blue and Denver/Green) illustrated higher means

than the low involvement/ low congruency condition (Florida Plants/Orange and Denver/Red).

With the exception of both sets of fliers measuring attitude toward the flier and the Tampa vs. Denver replication of behavioral, the affect of involvement was shown to be most significant. The variable involvement illustrated the lowest p value regardless of statistical significance, meaning it consistently had the most affect on the dependent variables. The means offer support of the hypothesis, however the ANOVA results failed to do so. This just adds to the complication of involvement. The Elaboration Likelihood Model does suggest that involvement is a multi-dimensional variable that depends on many factors including environment, situation and social pressures (Laczniak, Muehling, & Grossbart, 1989). Furthermore, involvement of fictitious organizations may have been an obstacle in this experiment. Because participants have no prior knowledge of the organization, involvement can only be manipulated to a certain point before extraneous factors begin to play a role.

When looking at the means, it can also be argued that attitude toward the cause and attitude toward the organization are more likely to be affected by the variables of involvement and congruency than that of the other variables, although there is no statistical significance proving this. All organizations seek the goals of acceptance, loyalty, and support from their audience using various forms of messaging. The results from this experiment suggest that using the manipulation factors of involvement and color/cause congruency, attitude toward the cause and attitude toward the organization can be altered.

Also when looking at the means of low involvement and high congruency, support is displayed that color/cause congruency can impact attitudes and behavioral intention as displayed through mean measures. These results also further ELM by agreeing that color is more affective as a peripheral cue than a central cue. As previous studies have shown, and Petty and Cacioppo (1986) explain, color has more of an affect when used as a peripheral cue in messages.

As described in the results section, this study yielded a variation of results not identified in the hypotheses. The complete ANOVA results revealed many questions, specifically, the unexpected difference in the replications of Manatee vs. Florida Plants and Tampa vs. Denver. There are many possibilities which could prove as insight. It is possible that because manatees are actually living creatures, rather than plants or general wildlife, they may appeal more to participants, and create more of a realistic threat. Also, color may be contributing to the lack of statistical significance. Perhaps the participants were not able to connect to the causes enough because they didn't feel the color related enough to the cause. It is another possibility that the colors in the Manatee vs. Florida Plants fliers make more of an impact than those in Tampa vs. Denver fliers. If this is the case, blue and orange reach and are able to sway audiences in a way that green and red cannot. Furthermore, these factors could add to the ELM, by explaining that elaboration of messages can be swayed more by specific peripheral cues (such as individual colors) more than others.

Behavioral intention did not show any statistical significance, and showed very low means. Therefore, the variables had little to no affect on manipulating intentions to become pro-active with the cause or the organization. This furthers the belief that

behaviors are very complicated, especially when linking to attitudes. College students often have good intentions, and as the research shows from the composite means, have positive attitudes about the organizations and causes presented. This demographic however, may fall short when it comes to actions or intentions to act, because of their distinctive set of priorities. It is a common concept that attitudes may not always lead to behaviors. According to Ajzen and Fishbein (1977), “Attitudinal and behavioral entities may be viewed as consisting of four different elements: the action, the target at which the action is directed, the context in which the action is performed, and the time at which it is performed” (p. 889). It is further explained that in order for attitudes to predict behaviors, the attitudinal and behavioral entities must match, and the attitude must be strong enough to create action. In this case, it is possible that attitudes were not strong enough in this case to even consider action.

For example, although ninety percent of the population feels that the declining environment is a problem, and eighty percent have access to recycling programs such as plastic bottle recycling, only 24 percent of those programs are used (American Chemistry Council, 2008). Also, Americans have created so many different diets, and are supposedly becoming more health conscious. Restaurants have lower calories and low fat sections, and healthy cookbooks are on the rise. However, in most states, adult obesity rates have either stayed the same or increased (Center for Disease Control and Prevention, 2008). These statistics show good intentions and attitudes, but resistance to follow through and be active.

The ELM is a very strong and helpful theory, which explains much message and issue-elaboration. As previously stated, ELM explains that many variables combine to

create a specific context for overall persuasion. Some examples of external variables in this experiment are: responsibility, social pressures, or distractions. ELM states that these factors can be considered, "...separately and independently regardless of the levels of the other variables with which it is combined" (Petty and Cacioppo, 1986, p. 198). However, even if these variables can be pointed out, in the case of this experiment, there is no way to identify if they caused a difference in the results. Also, because significance was shown in one replication more than others, it is clear that involvement is not as clean cut or straightforward a variable as this experiment attempted to manipulate and illustrate as such. It can be multi-dimensional and situational.

Furthermore, it was this experiments goal to use the theory of ELM in order to depict that affective message elements can persuade message elaboration, depending on certain situational factors. It suggests a limitation of ELM that the results of this experiment found little to no statistical significance. However, it is more likely that the reason for the relatively null results were due to the experimental limitations.

Study Limitations

The manipulations imposed by experimental research necessary to isolate certain causal factors are often achieved at the expense of external validity and generalizability. This study is no exception. First, the fliers used in the experiment were artificial and described a limited number of hypothetical causes promoted by non-profit organizations.

Second, the conditions for stimulus exposure and processing were atypical in several respects: Participants were tested in groups; exposure to fliers were forced and highly compressed into a short period of time; fliers were projected on screens in

classrooms rather than in a natural environment. All these factors may give rise to a processing mode that is different from what would be expected in real-life situations.

Also, in the interest of time, efficiency, and convenience, classes containing college students were used as participants in this study. It should be noted that many college students may not have the excessive funds to contribute to organizations of these types, regardless of their involvement in a particular cause or issue. Also, college students have a very different set of priorities than the rest of the population. If extra money may arise, it is more likely to be used for collegiate activities, or for basic needs and wants. According to a representative of 2,000 surveyed adults in 2003, about half of the Generation Y population (18-26) has donated between 1 and 99 dollars to charitable and/or non-profit organizations. Furthermore, fifty-seven percent of Gen. Y's elucidated in the survey that they planned to volunteer time and/or donate other items such as clothes, food, etc. However, this number is significantly less than that of the over seventy percent of Generation X and Baby Boomers have donated to charitable and/or non-profit organizations over the studied yearly period (Gardyn, 2003). Therefore, since the experiment was done with college students, the results should be generalized only to people similar to the group of students participated in the study.

As listed in Table 5, the participants had a large variation of hometowns. This factor could have contributed to the study limitations. It is possible that the participants do not specifically have a home concept, and if one is present, it may not be in Tampa, or even Florida. Only 19 of the participants listed Tampa as their hometown, equating to 18 percent. So, although Petty and Cacioppo (1965) often used location and hometown as a manipulation of involvement when experiments contained college students; the variation

of cities and states may have caused an unexpected hurdle in this specific experiment. All these limitations should be kept in mind when evaluating the results and their implications.

In addition, it should be noted that it is not uncommon for individuals to have pre-existing feelings, emotions, or memories which they link to specific colors. Therefore, the colors in each flier could trigger a difference in each participant which further adds to the complexity of the study of color.

Pragmatic Implications

As strategic communication practitioners, it is vital to understand an organization's relationship with the public. Obtain thought processing knowledge when elaborating a message is a consistent goal in the field. Non-profit organizations do not have the resources that many for-profit organizations possess. They may lack the employees, the publicity, and most of all money. When non-profit organizations do decide where to place their funds, knowledge of the public is vital. This study helps to comprehend feelings toward non-profits when interacted with various variables. Specifically, this study shows supports that involvement and color/ cause congruency do have an affect, specifically when viewing the results from attitude toward the cause and attitude toward the organization. For non-profits, this study is helpful in identifying areas that should be focused on when creating a message to be distributed. Color can have an impact on a message, and feelings towards an organization, but according to this study only in a certain circumstances, and with specific variables.

As previously stated, all organizations eventually want advertisements and other types of messaging to lead to a positive feeling towards their organization and what is

being promoted. Color has often been used as the focus of multiple studies and revealed varying results. Creating a color-organizational connection is difficult, especially for non-profit organizations. The results of this study suggest that non-profit organizations should try to create color congruency with their organization and its initiatives, as lower color/cause congruency displayed lower means equaling to lower on the attitudinal scale.

It also should be noted that because of limited resources of non-profit organizations, targeting demographics and pinpointing where to put focus is always a big decision. Through this study, we can see that college students may not have non-profit organizations in their list of priorities. It may be more beneficial for non-profits to focus on higher age demographic.

Theoretical Implications

This experiment married involvement to congruency, and in earlier sections identified focal points and assumptions based on those theories. The results further congruency theory, which was chosen for this study because of its ability to predict the conditions in which color may have stronger or weaker influence: A specific color may have greater (weaker) influence when its perceived meaning is congruent (incongruent) with other elements of the message. Attitude toward the organization and attitude toward the cause show significance and scored means coinciding with the main ideas of congruency theory. As stated, increased color/cause congruency equated to higher attitude toward the organization and the cause.

Congruency theory can be helpful in practice when for-profit and non-profit organizations are creating messaging and a brand identity for themselves. However, when discussing other variables in the experiment, such as behavioral intention and

attitude toward the flier, congruence may not be very significant, which leads to a possible limitation of congruency theory. As previously stated, attitude toward an organization cannot always coincide with intention and action. It is easier to hold an attitude than to act on it or create reality for the attitude. Also, attitudes are rarely created totally by an individual, extraneous factors play a part in the creation of attitudes, which may be the reason the results are inconsistent. This being said, congruency may not be enough of a factor in this experiment to create significance in attitudinal change in the variables of behavioral intention and attitude toward the flier.

As for the theory of ELM, elaboration is a very complicated process, which is consistently studied through various fields. Petty and Cacioppo (1986) explain that individuals learn right from wrong by their surroundings including friends, family, relationships, and media influence. This theory can help to understand why the means were extremely high when measuring attitude toward the cause and the organization. It is socially expectable and encouraged to feel that the environment is important and an issue that should take precedence. However, behavioral intention's means were lower, which puts forth the idea that individuals may think the cause is important, but not enough to use their time volunteering, or their money for assistance. This furthers the idea of ELM by explaining that attitudes may be altered by social pressures, but not enough to take action.

Also, in the majority of studies that include ELM and color, color is used as a peripheral cue and can sway opinions or attitudes when involvement is low. As reviewed in the previous section, the means illustrated in this study explain that when involvement is low, color has more of an affect on attitudes and behavioral intention. This experiment

is very limited and exclusive in its findings, but the theory of ELM held strong throughout the majority of results.

Conclusion

No other study has attempted to create solid results out of such objective variables such as attitudes and behavior, while taking on the challenge of establishing interaction between these variables. That makes this study distinctive and unique. This study did reveal statistically significant results that can be added to the field of social science. In advertising, involvement is often taken into account, but as the results of this study show, its interaction with other variables such as color should be considered. Does the color of the advertisement match the product and the organization? Questions such as this should continue to be asked and studied.

Also, non-profit organizations can use this information when they are creating collateral items, and in other communications with their audience. Because it is common that non-profits have fewer resources such as money, time, and manpower; they must ensure that their communications are reaching audiences and making a difference. This has become increasingly difficult with the amount of constant stimuli that individuals are exposed to on a daily basis from media outlets such as the internet, television, radio, and the extensive use of outdoor advertising.

Although these specific results are limited to the participants of this study, it is indicated that involvement and congruency can have an affect on the audience, and influence their feelings toward their cause and towards the organization. Non-profits should consider involvement and congruency in order to create a positive connection with their audience.

These results add to the growing curiosity of color in advertisements, and its affects. It also opens new doors for involvement, the congruency of color and cause, as well as the underlying interaction of these variables. The attitudes and intentions of consumers are very complicated and multi-dimensional. Once consumer patterns are uncovered, non-profit communication can be improved to be more efficient. This research attempted to fill a gap in social science and non-profit organizational research, and yielded interesting findings a progress. However, further research must be completed in order to create a coherent understanding of the depth of these variables.

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Appendix A
Stimulus Materials

You can help save our manatees!



Protect

Manatees and habitat

From extinction

From hunters

Our Manatees!

Join In!

-Become a member

Receive a subscription to *Florida Sea Life*, special event information, and updates!

-Donate

Tax-deductible

Make a difference!

Florida Manatee Protection Society

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Our beaches

Our oceans

Our animals

Our plant life

Your Bay!

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-Donate

Tax-deductible

Make a difference!

Florida Manatee Protection Society

www.fmp.org/joinin

©FMPS

We need YOU to keep Tampa beautiful!



Protect

Our beaches

Our oceans

Our animals

Our plant life

Our Bay!

Join In!

Become a member

**-Receive a subscription to *Tampa Wildlife* Journal,
special event information, and updates.**

Donate

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Tampa Wildlife Protection Association

www.twp.org/joinin

©TWLPA

Help keep our Florida plant life beautiful!



Protect

Our wildlife

Our plant life

Our Palms!

Join In!

-Become a member

**Receive a subscription to *Florida Plant Life*,
special event information, and updates!**

-Donate

Tax-deductible

Make a difference!

Florida Plants and Palms Society

www.fpps.org/joinin

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We need YOU to keep Denver beautiful!



Protect

Our animals

Our plants

Our rivers

Our mountains

Our Colorado!

Join In!

Become a member

**-Receive a subscription to *Denver Wildlife* journal,
special event information, and updates.**

Donate

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Denver Wildlife Protection Society

www.toc.org/joinin

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Help keep our Florida plant life beautiful!



Protect

Our wildlife

Our plant life

Our Palms!

Join In!

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We need YOU to keep Denver beautiful!



Protect

Our animals

Our mountains

Our lakes

Our plants

Our Colorado!

Join In!

-Become a member

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-Donate

Tax-deductible

Make a difference!

Denver Wildlife Society

www.dws.org/joinin

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Appendix B
Questionnaire

Dear Participants,

This research investigates environmental organizational communication. Please read the informed consent statement below, and indicate your willingness to participate in this research by signing in the space provided.

Informed consent statement: This research is being conducted under the supervision of Dr. Scott Liu, USF School of Mass Communications, 4202 East Fowler Ave, CIS1040, Tampa, FL 33620; (813) 974-6797. Your responses will remain confidential to the extent provided by law. You do not have to answer any questions you do not wish to answer, and you have the right to withdraw consent at any time without consequence. There are no anticipated risks associated with your participation in this research and you will receive no compensation for your participation. If you decide not to participate in this study, your course grade will not be affected in any way. If you have any questions concerning the procedures used in this study, you may contact me at the e-mail address cselius@mail.usf.edu. Questions or concerns about your rights as a participant can be directed to the University of South Florida Institutional Review Board, 12901 Bruce B. Downs Blvd., MDC35, Tampa, FL 33612.

Print Name

Signature

Date

Please take 5 minutes to rate your level of agreement with the statements about the organization represented by each flier, on the scale below by putting “X” in the appropriate section of the scale.

Example: USF Parking is a large problem at the University.

Strongly Agree : X : _____ : _____ : _____ : _____ : _____ : _____ : Strongly Disagree

Please complete the following measures to rate the organization.

I think this organization’s initiatives are...

Unfavorable _____ : _____ : _____ : _____ : _____ : _____ : _____ Favorable
 Negative _____ : _____ : _____ : _____ : _____ : _____ : _____ Positive
 Unimportant _____ : _____ : _____ : _____ : _____ : _____ : _____ Important
 Good _____ : _____ : _____ : _____ : _____ : _____ : _____ Bad

To me, this organization is...

Good _____ : _____ : _____ : _____ : _____ : _____ : _____ Bad
 Favorable _____ : _____ : _____ : _____ : _____ : _____ : _____ Unfavorable
 Unlikable _____ : _____ : _____ : _____ : _____ : _____ : _____ Likeable
 Positive _____ : _____ : _____ : _____ : _____ : _____ : _____ Negative
 Unimportant _____ : _____ : _____ : _____ : _____ : _____ : _____ Important

Now please use the following measures to rate the flier.

This flier is...

Good _____ : _____ : _____ : _____ : _____ : _____ : _____ Bad
 Favorable _____ : _____ : _____ : _____ : _____ : _____ : _____ Unfavorable
 Positive _____ : _____ : _____ : _____ : _____ : _____ : _____ Negative
 Unlikable _____ : _____ : _____ : _____ : _____ : _____ : _____ Likeable

Please use the following measures to rate your intention to get involved in this organization.

I intend to obtain more information on this organization in the next month.

Unlikely _____ : _____ : _____ : _____ : _____ : _____ : _____ Likely

I intend to donate to this organization.

Unlikely _____ : _____ : _____ : _____ : _____ : _____ : _____ Likely

I intend to tell others about this organization.

Unlikely _____:_____:_____:_____:_____:_____:_____Likely

I intend to volunteer for this organization.

Unlikely _____:_____:_____:_____:_____:_____:_____Likely

Brand familiarity:

I know of this organization.

Strongly Disagree _____:_____:_____:_____:_____:_____:_____ Strongly Agree

Please rate the flier:

The language/wording in this flier is...

Good _____:_____:_____:_____:_____:_____:_____ Bad

Favorable _____:_____:_____:_____:_____:_____:_____ Unfavorable

Positive _____:_____:_____:_____:_____:_____:_____ Negative

The color in this flier is...

Good _____:_____:_____:_____:_____:_____:_____ Bad

Favorable _____:_____:_____:_____:_____:_____:_____ Unfavorable

Positive _____:_____:_____:_____:_____:_____:_____ Negative

The design/ graphics in this flier are...

Good _____:_____:_____:_____:_____:_____:_____ Bad

Favorable _____:_____:_____:_____:_____:_____:_____ Unfavorable

Positive _____:_____:_____:_____:_____:_____:_____ Negative

To me, this organization is...

Important :_____:_____:_____:_____:_____:_____:_____ : Unimportant

Of no concern :_____:_____:_____:_____:_____:_____:_____ : Of concern to me

Irrelevant :_____:_____:_____:_____:_____:_____:_____ : Relevant

Means a lot to me :_____:_____:_____:_____:_____:_____:_____ : Means nothing to me

Useless :_____:_____:_____:_____:_____:_____:_____ : Useful

Valuable :_____:_____:_____:_____:_____:_____:_____ : Worthless

Trivial :_____:_____:_____:_____:_____:_____:_____ : Fundamental

Beneficial :_____:_____:_____:_____:_____:_____:_____ : Not beneficial

Matters to me :_____:_____:_____:_____:_____:_____:_____ : Doesn't matter

Uninterested: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Interested
 Significant: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Insignificant
 Boring: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Interesting
 Unexciting : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Exciting
 Appealing : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unappealing
 Mundane : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Fascinating
 Not needed: _____ : _____ : _____ : _____ : _____ : _____ : _____ : Needed
 Good : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Bad
 Creative : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Uncreative
 Informative : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Uninformative
 Likeable : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Unlikable

The use of color in this flier is...

Good : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Bad
 Unfitting : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Fitting
 Congruent : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Incongruent
 Mismatch : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Match
 Creative : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Uncreative
 Correct : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Incorrect
 Unsuitable : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Suitable

I enjoyed viewing this flier.

Agree : _____ : _____ : _____ : _____ : _____ : _____ : _____ : Disagree

Demographic variables

Sex

_____ Male _____ Female

Age _____

Academic Level:

_____ Freshmen

_____ Sophomore

_____ Junior

_____ Senior

Ethnicity:

_____ Caucasian

_____ African-American

_____ Hispanic

_____ Asian

_____ Other _____

Hometown (City, State, Country) _____