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Impact of endorser and message appeal on the success of an online AIDS PSA

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IMPACT OF ENDORSER AND MESSAGE APPEAL ON THE
SUCCESS OF AN ONLINE AIDS PSA

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Mass Communication

in

The Manship School of Mass Communication

by
Arti Kulkarni
M.C.M.S, University of Pune, 2004
December, 2009

DEDICATION

I dedicate this thesis to my parents (Aai & Baba), who encouraged me to complete my master's in the U.S. This thesis was not possible without their prayers and blessings.

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Getting a Master's degree from Louisiana State University is a dream come true and it was made possible only with love and support of my parents. I want to acknowledge my parents for giving me an opportunity to explore the educational world outside of India.

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ABSTRACT

This exploratory study investigated the impact of endorser type and message appeal on the success of an online AIDS public service announcement (PSA). The research sought to determine the main effects and interaction effects of endorser and message appeal on the measures of PSAs effectiveness (recall, recognition, attitudinal and behavioral). In order to achieve this goal, the research conducted a 3 X 2 factorial design experiment that manipulated three types of endorsers (celebrity, expert, and typical person) and two types of message appeals (emotional and rational) in the PSA. The researcher expected the expert endorser would be more effective than other endorsers, whereas in terms of message appeal, the researcher anticipated that the rational appeal would have a significant effect on PSA effectiveness. In addition, the study expected that the PSA that used an expert and rational appeal would have more impact than other endorser-appeal combinations.

The results were analyzed by conducting ANOVA analysis. The findings were not congruent to the researcher's expectations. A significant effect of expert and rational appeal was not found on any of the effectiveness variables. One of the interesting findings of the study was that there was no difference between the effectiveness of emotional and rational appeal. These findings were discussed by using the information processing explained in the Elaboration Likelihood Model (ELM). Based on the analysis, the research also offered practical and academic implications and suggestion for future research.

CHAPTER 1

INTRODUCTION

Public Service Announcements (PSAs) were first introduced in the U.S. during World War II. The initial goal for PSAs then was to garner support for war efforts and to establish a war advertising council (Dissart, n.d.). By the end of the World War II, PSAs had become a popular medium for disseminating information on various health and societal issues, such as smoking, drug, and tobacco use.

The emergence of dangerous diseases, such as AIDS (Acquired Immune Deficiency Syndrome), cancer, and obesity, increased the significance of PSAs as these diseases became public health crises and required greater education efforts to capture the attention of the masses. In order to maximize PSAs' effectiveness, two strategies have been particularly employed in promoting PSAs. The first strategy involves the use of different endorsers, such as well-known celebrity (famous actor or anchor) or knowledgeable experts (doctors). The second strategy is the use of different message appeals based on the context in which the PSA exists (emotional or rational). These two strategies are commonly used in PSA promotion because a trustful endorser and proper message appeal are expected to aid audiences' comprehension of PSAs (Perse, Nathon & McLeod, 1994).

In the past, PSAs have been researched in various ways. These include investigating people's perceptions of PSAs (Borzekowski & Poussaint, 1999), liking of PSAs (Nan, 2009), and cognitive evaluation of PSAs (i.e., recall, recognition & attitude) (Lee & Davie, 1999). However, despite the popularity of the use of endorsers and message appeals in promoting PSAs in practice, the impact of these two variables on PSA campaigns has not yet been researched.

The present study attempts to fill this gap by investigating how these two key determinants influence and interact with each other in the way that PSAs' perform.

The purpose of this research is twofold. First, this research attempts to develop a better conceptual understanding of the relationship between message appeal and endorser in PSAs. The second purpose of this research is to suggest useful and practical strategies to produce effective PSAs that include endorsers and message appeal.

The Elaboration Likelihood Model (ELM) was used to explain the information processing involved in different types of endorser and message appeals in PSAs. In the subsequent sections, this study reviewed the relevant literature on PSAs, endorser effects, message appeals, and suggested a theoretical framework to understand the information processing of different types of endorsers and message appeals in PSAs. Based on literature review and theoretical arguments, this study proposed hypotheses, and described a method used to test these hypotheses. The final part of this research included results, discussion, limitations and suggestions for future research.

CHAPTER 2

LITERATURE REVIEW

2.1 Public Service Announcements

The Federal Communication Commission (FCC) defines a public service announcement (PSA) as “one which serves community interests, by promoting programs, activities, or services of governmental or other nonprofit organizations” (FCC, 2002, p.8). PSAs serve two important functions. The first function is to educate, inform, and increase people’s awareness about certain societal or health issues (e.g., cancer) (Borzekowski & Poussaint, 1999; O’Keefe & Reid, 1990). The second function is to influence audiences’ attitude toward these critical issues and induce behavioral changes among the audience (Borzekowski & Poussaint, 1999). For instance, in 1971, with educational messages about the harmful consequences of smoking, an anti-smoking PSA successfully changed smokers’ attitudes and reduced smoking rates. As a result, for the first time, the tobacco industry in the U.S. had to withdraw all of its advertisements (Dissart, n.d.).

PSAs are similar to commercial advertisements in two aspects: their persuasive nature (Nan, 2008) and their use of media space and time for promoting messages (O’Keefe & Reid, 1990). For this reason, PSAs are also referred to as public service advertisements (Nan, 2008). However, substantive differences exist between the two. First, PSAs increase social or health awareness whereas advertisements increase brand awareness (O’Keefe & Reid, 1990). Second, PSAs serve community needs while advertisements are used for commercial purposes (e.g., sales) (Nan, 2008). Third, due to their societal contribution, PSAs are often exempted from paying advertising fees (Nan, 2008; O’Keefe & Reid, 1990). However, this exemption sometimes results in placing PSAs in less popular media times and spots compared to those in which advertisements are placed (O’Keefe & Reid, 1990). To overcome this problem and to

reach the intended audiences, some non-profit organizations frequently purchase air time for their PSAs (O'Keefe & Reid, 1990). Finally, since PSAs often use unpleasant images to depict social issues (e.g. lung cancer from smoking or memorials for people who are killed by drunk drivers), they often induce negative feelings (Nan, 2008). In contrast, positive and pleasant images are typically used in advertisements (Nan, 2008).

2.1.1 Previous Research on PSAs

PSAs have been studied in two ways: analyzing the PSAs' content and examining the factors that influence PSAs' effectiveness. For the former line of research, a great number of studies have conducted content analysis to analyze various aspects of PSAs (e.g., type of information, spokesperson, and message appeals). In an attempt to determine message strategy based on endorsers' gender, Johnson, Flora and Rimal (1997) found that PSAs were more factual than emotional. They also observed that male spokespersons appeared more in fact-based PSAs while female spokespersons were featured more in emotion-based PSAs. Their content analysis also showed that PSAs tended to provide issue awareness but lacked in providing information on preventive measures.

Similarly, DeJong, Wolf, and Austin (2001) argued that the content in HIV/AIDS prevention campaigns does not motivate or reinforce behavioral change in their intended audiences. DeJong et al. (2001) found that HIV/AIDS prevention PSAs were rich in information but lacked behavioral suggestions (e.g., warnings on needle sharing and injection or drug use). Slater (1999) also found that the contents of drinking and driving PSAs did not contain messages that encouraged behavioral changes against drunken-driving. Furthermore, Slater (1999) found that the majority of PSAs included emotional appeals that induced positive feelings and celebrity endorsers.

One of popular topics in the latter line of research, which seeks to identify factors that influence PSAs' effectiveness, has been the impact of spokespersons used in PSAs (Wei-Jen, 1993; Borzekowski & Poussaint, 1999). Wei-Jen (1993) found gender difference in audience perceptions of AIDS PSAs, especially when actual persons with HIV/AIDS endorse PSAs. The results indicate that subjects had a greater fear when a female with HIV/AIDS endorsed the message. Interestingly, the male subjects conceived greater risk when a female seropositive speaker endorsed the PSA (Wei-Jen, 1993). This study also found that the use of actual persons with HIV/AIDS in PSAs enhance greater perceptions on HIV/AIDS prevention than healthier, typical person because sharing real experience influences perceived risk. Similarly, Shanhan and Hopkins (2007) found that the actual use of people with HIV/AIDS in PSAs has a much stronger influence on behavioral change than when seronegative endorsers and actors are used.

2.1.2 PSAs and College Students

The health and societal issues, such as AIDS, drunken driving, and drugs have become common with college students. For instance, according to the Centre for Disease Control (CDC), in 2004, approximately 4,767 teenagers were dead due to drunken-driving. In case of AIDS, health reports show that the most vulnerable population effected by AIDS is youth. The increasing number of college students involved in health and societal issues has raised concerns of non-profits. Thus, non-profits are trying to communicate to college students using strategic PSAs.

The previous literature involving college students and PSAs have examined the impact gender of participants on effectiveness of PSAs. Lee and Davie (1997) found that college women have high recall more emotional messages on AIDS than rational messages. However, Brannon and Pilling (2005) found that gender has no impact on effectiveness of anti-drunken driving

PSAs. But their research revealed that under-graduate students feel more mature when they drink Alcohol. Similarly, Ansager, Austin, and Pinkleton(2001) studied the response of college students to 10 alcohol-driving commercials. The results revealed that college students could identify the themes in the PSA, but their mental processing to provide a response was not logic based, instead they enjoyed the messages (Ansager et. al, 2001).

2.2 Internet Advertising Effectiveness

The growth in number of Internet users encourages advertisers to also promote products online (Dahlen & Nergendahl, 2001). Reports predict that Internet advertising spending will reach \$26.7 billion in 2010 (Rosenkrans, 2009). The Internet as a medium has many advantages for consumers as well as advertisers. Consumers prefer the Internet because it is interactive, goal oriented, and information oriented (Cho & Cheon, 2004). Advertisers prefer the Internet because the interactivity function of the Internet will help them build a direct relationship with the consumer.

In order to gain the attention of Internet audiences towards Internet advertising and also increase the effectiveness of these advertisements, the agencies employ various creative forms of Internet advertisements, such as buttons, banner advertisements, paid text links, sponsorships, target sites, superstitials, and e-mail ads (Cho & Cheon, 2001). Among the various types of advertisements, the most popular form of Internet advertisement is banner advertisements (Baltas, 2003; Robinson, Wysocka, & Hand, 2007).

The effectiveness of Internet advertisements has been measured using different methods. Virtually, the effectiveness of Internet advertising has been evaluated by cost per thousands (CPMs) or impressions and click through rate (CTR) (Rosenkrans, 2009). The other measures used by advertising agencies are: acquisitions, branding and image change (Baltas, 2003). The

previous research has used CTRs (Baltas, 2003; Cho, Lee, & Tharp, 2001; Dahlen & Bergendahl, 2001), eye tracking (Dreze & Hussherr, 2003), and memory measures (Razzouk & Seitz, 2003), such as recall and recognition to test the effectiveness of Internet advertisements.

Internet advertising effectiveness was examined in terms of design and composition characteristics of the overall advertisement. The effectiveness of simple textual Internet advertisements found that concise messages generated a higher level of CTR than lengthy messages (Baltas, 2003). Conversely, Robinson et al. (2007) found that longer messages on banner ads generated higher CTRs. In terms of static images, the research found that absence of brand name or logo will stimulate consumers to click on Internet advertising (Baltas, 2003; Robinson et al., 2007).

The previous research also examined Internet advertising effectiveness by comparing the effectiveness of simple textual advertisements and advertisements that included graphics and animation. The previous research examining the Internet advertising effectiveness found that the advertisements that included graphics and animation have higher effectiveness than advertisements without graphics (Razzouk & Setiz, 2003). Similarly, Lothia, Donthu, and Hershberger (2003) found that presence of animation increased CTRs for banner advertisements designed for the consumers compared to the banner advertisements designed for business professionals. Yoo, Kim and Stout (2004) found that animation on the banner advertisements had higher attitude effects than static banner advertisements. On the contrary, the static advertisements have also been found more effective. Robinson et al. (2007) found that animated banners were ineffective in generating high CTRs. The static banner advertisements were preferred over animated banners because they do not interrupt the processing of information on the website (Cho & Cheon, 2004).

As the Internet advertising offers advantage of interactivity, at the same time it has disadvantages too. The excessive use of Internet advertisements is gradually leading to advertising irritation. This is the mainly a reason for banner blindness or banner avoidance, which may cause avoidance of the presence of banner advertisements (Cho & Cheon, 2004). Cho and Cheon (2004) identified two critical reasons for Internet advertising avoidance. First, in general, people have the tendency to pay closer attention to personally more salient information. This tendency may inhibit sharing attentions with other elements such as banner ads. Second, through their experiences, Internet users might have developed the idea that clicking animated banners may cause slower speed and delayed computer reactions.

2.3 Endorser Effects

An endorser is an individual who supports or recommends certain products, behaviors, services, and brands to audiences. Matching the right endorser with an appropriate message is a key determinant to gauge the success of brand because an endorser becomes the tangible representation of the brand or organization (Stafford, Stafford & Day, 2002). Scholars have identified two important characteristics to select an appropriate endorser: product matchup and source credibility (Erdogan, Baker & Tagg, 2002; Ohanian, 1991; Perse et al., 1994; Stafford et al., 2002).

The product matchup hypothesis explains the convergence or the fit between product image and endorser's image (Kahle & Homer, 1985; Kamins, 1990; Till & Busler, 1998). Research that investigated the celebrity endorser and product matchup hypothesis found that the perceived physical attractiveness of the celebrity enhances consumers' attitudes toward a brand and its advertisement (Kahle & Home, 1985; Kamins, 1990).

In general, the product matchup hypothesis has been examined using the variable of the endorser's perceived physical attractiveness (Kahle & Holmes, 1985; Kamins, 1990; Till & Busler, 1998). Kahle and Homer (1985) found that audiences' perceptions about the celebrity's physical attractiveness had a significant effect on brand recall. They explained that when a physically attractive endorser claims to use a beauty product, audiences often assume that using the beauty product endorsed by an attractive endorser will also make them attractive. Similarly, Kamins (1990) found that for a luxurious product such as a sports car, the perceived physical attractiveness of a celebrity spokesperson enhanced the spokesperson credibility and audiences' attitude towards the ad considerably when compared to an unattractive celebrity. In contrast, for a high-valued product (e.g. home computer), perceived physical attractiveness has little impact on ad recognition and source credibility.

The product matchup hypothesis has also been tested with endorser's expertise. For instance, in order to understand factors that influence product and endorser matchup, Till and Busler (1999) compared perceived physical attractiveness of an endorser and source expertise. Their research findings indicated that endorser expertise had much more significant effect on product matchup than physical attraction.

The previous literature has determined that source (endorser) credibility is another factor that examines endorser effects. Hovland, Janis, and Kelly (1953) argued that the effectiveness of a message depends upon perceived source credibility, which is determined by an endorser's perceived trustworthiness and expertise over the advocated issue. According to the source credibility model, a highly credible source enhances the impact of the message (Hovland et. al, 1953). To identify the source credibility of a celebrity, Ohanian (1990) examined the relationship among endorser's trustworthiness, expertise and attractiveness with intention to purchase and

found that endorser expertise had a more significant impact on subjects' purchase intentions than endorser trustworthiness and attractiveness. The results of this research conveyed that source credibility was higher when the endorser was an expert related to the product (Ohanian, 1990).

2.4 Endorser Types

The body of literature related to endorser effects has identified three types of endorsers: celebrities, experts, and typical persons (Friedman & Friedman, 1979; Friedman, Termini, & Washington, 1977; Kamins, 1989).

2.4.1 Celebrity Endorsements

Celebrity is defined as an individual who is well known to the public for his/her achievements in various areas (e.g., sports, television program, and movie) (Friedman & Friedman, 1979; Kamins, 1989). Similarly, Atkin and Block (1983) defined celebrity as a person who is famous, dynamic and has a quality that engages people.

Celebrity endorsements are popularly used in advertising for several reasons (Erdogan, Baker, & Tagg, 2001). First, because audiences easily recognize celebrities, it is thought that celebrity endorsements help a brand stand out from ad clutter and draw audiences' attention towards the promoted products (Atkin & Block, 1983; Erdogan et. al, 20001). Second, celebrities' attractiveness can capture audiences' attention and, accordingly enhance brand recall, recognition, and attitude towards the brand (Ohanian, 1991). Third, celebrity endorsements also draw media attention and create public relations opportunities (Erdogan et al., 2001; Stafford et al., 2002).

Past research has suggested that celebrity endorsements are more effective for promoting certain types of products over others (Alsmadi, 2006; Friedman & Friedman, 1979). Friedman and Friedman (1979) found that celebrity endorsements were more effective when celebrities

endorsed luxury products (e.g., jewelry). Celebrities were found to be effective at enhancing brand recall and ad recall (Friedman & Friedman, 1979). In addition, Kamins (1989) found that the use of a celebrity increases consumers' attitudes toward a brand. Kamins (1989) also found that celebrity endorsements enhance the believability of advertisement and product.

Previous research suggested that celebrity endorsements have a significant impact on purchase intention when they are perceived as experts. Ohanian (1991) found that a celebrity's attractiveness, expertise, and trustworthiness are related to purchase intention of certain products, such as women's cosmetics, cologne, and jeans. Ohanian (1991) explained that consumers assign importance to a brand according to their perceptions of a celebrity endorser's physical attractiveness, and thus, they believe the celebrity to be an expert on the product advertised, such as jeans, cologne, or cosmetics.

Amos, Holmes, and Strutton (2008) conducted a meta-analysis to identify the relationship among celebrity endorsement effects, and found that media coverage of a celebrity has a significant impact on the success of celebrity-endorsed ads. For example, pop star Michael Jackson's child molestation case provoked negative impressions of him and affected his Pepsi endorsement (Amos et. al, 2008). On the contrary, positive media coverage about a celebrity encourages the sales of the product/brand (Amos et al., 2008). For instance, Johny Cash's (a well known celebrity in the 1970's) favorable image was able to improve the image of American Oil Company (Kamen, Azhari, & Kragh, 1975).

2.4.2 Expert Endorsements

Experts are defined as individuals who have detailed knowledge about a product/service (Biswas, Biswas & Das, 2006). Expert endorsers are known for their ability to present more valid claims about a product than other types of endorsers (McCracken, 1989; Ohanian, 1990). Thus,

experts are more frequently used more to describe the details of products, particularly when products involve high risks due to their high value and technological complexities (Friedman & Friedman, 1979).

Freiden (1984) found that experts were more highly rated in terms of spokesperson knowledge than other endorsers. Biswas et al. (2006) argue that assertions and claims made by an expert are conceivably more factual because experts are assumed highly knowledgeable on the issue. Therefore, expert endorsements are considered more effective for products with higher risk or price (Biswas et al., 2006; Lafferty, Goldsmith & Flynn, 2005; Wang, 2005).

A handful of research has focused on the effectiveness of expert endorsement. A group of researchers have compared celebrity endorsements with expert endorsements (Biswas et al., 2006; Freiden, 1984; Friedman & Friedman, 1979). Friedman and Friedman (1979) compared a celebrity and a typical person with an expert and found that message believability was higher for an expert endorsing a vacuum cleaner. The researchers explained that subjects perceived honesty, expertise and sincerity when an expert endorsed a highly technical product (Friedman & Friedman, 1979).

Similarly, Biswas et al. (2006) examined the relationship between endorser types and risk perceptions toward products. The risk perception was defined as the level of audiences' perceived risk involved with products. The results suggest that audiences perceived lower financial and performance risk when experts endorsed high involvement technological products, as opposed to celebrities, because experts were able to explain the details on the product.

2.4.3 Typical Person Endorsement

A typical person is an individual who does not have special knowledge about a product but can speak about the products' use (Friedman & Friedman, 1979). Normally, a typical person

is used to encourage the purchase of the product as a consumer (Kamins, 1989). Generally, the findings of the previous research have shown that typical person endorsements are less effective than celebrity endorsement. Kamins (1989) examined impact of endorsers in a two-sided context where two types of endorsers (e.g. celebrity and typical person) made positive and negative claims about the product advertised. The results suggest that subjects rated celebrity endorsers more highly on likability and believability scales than typical person endorsers. However, conflicting results have also been observed. Friedman and Friedman (1979) found that typical person endorsers were more effective than experts and celebrities for the promotion of daily use products (e.g., cookies). The researchers explained that typical person endorsers are assumed to be more experienced in using daily products and are thereby perceived as experts on such products (Friedman & Friedman, 1979).

2.5 Message Appeal

Message appeal is defined as a dominating theme of an ad that motivates consumers to remember the ad and purchase the product in the ad (Mueller, 1987). Message appeal is an important determinant for a successful advertisement (Mueller, 1987). A successful message appeal should be related to a consumer's self interest, goals, needs and wants (Mueller, 1987). Scholars have identified various types of message appeals, such as hedonic, sex, utilitarian, cultural, emotional and rational (Kotler & Armstrong, 2001; Lothia, Donthu, & Hershberger, 2003; Stafford et. al, 2002). Among these, emotional and rational message appeals have been extensively studied in marketing and advertising literature (Holmes & Crocker, 1987; Miller & Stafford, 1999; Um, 2008).

In general, emotional message appeals are directed towards an individual's feelings and induce negative or positive emotions (Holmes and Crocker, 1987; Miller & Stafford, 1999).

Emotional appeals are used to build a friendly relationship with promoted brands (Miller & Stafford, 1999). On the other hand, rational message appeals encourage a consumer to contemplate arguments presented in ads and make logical decisions about purchasing the advertised product (Holmes & Crocker, 1987).

According to Kotler and Armstrong (2001), the appropriate use of message appeals depends on consumers' involvement in the products advertised. In general, promotion of high involvement products (e.g., computer) is more likely to include rational appeals whereas emotional appeals are more pervasively used to convey the advertising messages of low involvement products (e.g., cookies) (Kotler & Armstrong, 2001). Researchers have justified this difference by explaining that high involvement products are considered to entail high risk due to their high financial values or close personal relevance (Holmes & Crocker, 1987). Thus, for high involvement products, consumers require logical information to gain knowledge in order to prevent a financial loss in purchasing such products (Holmes & Crocker, 1987; Um, 2008). On the other hand, low involvement products generally involve less risk (Holmes & Crocker, 1987). Thus, when low involvement products are advertised, consumers are less likely to seek logical information. In this condition, other stimuli such as emotional information can be used to attract audiences' attention (Holmes & Crocker, 1987).

A great deal of research has confirmed the relationship between message appeals and involvement level of products (Holmes & Crocker, 1987, Um, 2008). Holmes and Crocker (1987) showed that rational appeals generate positive responses for high involvement products (e.g. car) because of high financial risk attached to the product. Emotional appeals produce positive responses for low involvement products (e.g. Diet Coke) because people do not relate low involvement products with financial risk (Holmes & Crocker, 1987).

2.5.1 Emotional Appeals

Emotional appeals are directed to induce emotional experiences in consumers' mind (Miller & Stafford, 1999). According to Kotler and Armstrong (2001),

“Emotional appeals attempt to stir up either negative or positive emotions that can motivate purchase. These include fear, guilt and shame appeals that get people to do things they should or stop doing things they shouldn't ... communicators also use positive emotional appeals such as love, humor, pride and joy.” (p. 522)

Due to this characteristic, Xie, Donthu, Lohtia, and Osmonbekov (2004) defined emotional appeals as feeling appeals.

Emotional appeals are popularly used in advertisements. Cutler and Javalgi (1971) conducted a content analysis of 471 magazine advertisements by inspecting various components of ads and found that an emotional approach dominated the majority of advertisements, particularly more in service advertisements. Similarly, Kelly and Turley (2004) detected that emotional appeals have been used as dominant strategy to lure audience's attention for Super Bowl commercials from 1996 to 2002.

The success of emotion-based messages is moderated by receivers' gender or media type (Gallup & Robinson, 2007; Moore, 2007; Stafford & Day, 1995). Moore found that females are more inclined towards emotional message appeals than males. In terms of medium, Stafford and Day (1997) found that emotional appeals are considered less effective than rational appeals in print and radio advertisements.

2.5.2 Rational Appeals

Rational message appeals are defined as an approach to encourage a person to make logical decisions or rational decisions involving serious thought processes (Miller & Stafford, 1999). Previous research has found that rational message appeals are generally more appropriate

for promoting high involvement products. Um (2008) examined the relationship between advertising appeals and brand loyalty. The results indicate that message (emotional and rational) appeals' effectiveness in an advertisement varies according to the consumer's the level of involvement with the product. Um (2008) found that behavior brand loyalty was higher for rational appeals than emotional appeals in a high involvement condition whereas cognitive measures (e.g., affect, identification, and trust) were rated more highly for emotional appeals.

A group of researchers have identified cultural differences in the use of rational appeals. Jeon, Franke, Huhmann, and Pheleps (1999) found that U.S. magazines include more rational appeals ads than Korean magazines in which emotional appeals are used more pervasively. In terms of products advertised, Miller and Stafford (1999) found that rational appeals are more prominently used for promoting general goods than services when the authors looked at the differences in the advertising appeals used in Brazil, Taiwan, Mexico, and the U.S.

In general, rational appeals have been found to be more effective for retail products than emotional appeals, particularly in print and radio media (Stafford & Day, 1999). Stafford and Day (1999) also detected that rational appeals generated more favorable attitude toward advertisements than emotional appeals.

2.6 Message Appeals in PSAs

Emotional message appeals have been popularly used in PSAs (Kelly & Turley, 2004). Lee and Davie (1997) found that emotional appeals were more effective than rational appeals in conveying messages to the audience when the recall and recognition of televised HIV/AIDS prevention PSAs were assessed. The results also reported an interaction between gender and type of message appeal, suggesting that the recall level of emotional messages was higher among female audiences.

The most frequently used emotional appeals in PSAs are fear/threat-oriented appeals (Dillard & Peck, 2000). Researchers argue that fear appeals are more effective because they can prevent audiences from committing to inappropriate practices (e.g., drugs and unprotected sex) (Dillard & Peck, 2000; Kotler & Armstrong, 2001). Because fear-centric PSA messages are processed more carefully than general emotional messages by analyzing information in the messages, they are often considered to be cognitive appeals (Dickinson & Holmes, 2008).

Rational appeals are also pervasively used in PSA promotions. Freimuth, Hammond, Edgar, & Monahan (1990) analyzed 127 televised AIDS PSAs and found that the messages in these PSAs overwhelmingly used rational appeals. In general, rational message appeals are used in PSAs to convey clear information about high involvement issues (e.g., AIDS, drug, smoking) and encourage audiences to think logically about the issues (Flora & Maibach, 1990).

CHAPTER 3

CONCEPTUAL UNDERSTANDING

Previous research has analyzed the effects of persuasive communication messages using dual processing models, such as the elaboration likelihood model (ELM, Petty & Cacioppo, 1986) and the heuristic systematic model (HSM, Chaiken, 1980). The present research attempts to understand persuasive effects of endorsers and message appeals in PSAs under the guidance of the ELM.

3.1 Elaboration Likelihood Model (ELM)

Petty and Cacioppo (1986) developed the ELM to understand the cognitive processes involved in the attitudinal impact of persuasive messages. Petty and Cacioppo (1986) argued that information processing is determined by numerous factors, including involvement, motivation, distraction, source credibility, need for cognition, and relevance. According to the model, people process a persuasive message in two distinct routes –either central or the peripheral route– based on personal involvement in a communication message (Petty & Cacioppo, 1983). In the central route of information processing, an attitude change is the result of the logical thought processing of communication messages. In this condition, people are highly involved in the argument presented in the communication campaign and are motivated to scrutinize the message carefully (Petty & Cacioppo, 1986). On the other hand, in the peripheral route, people are less motivated to process arguments. Thus, they are more likely to be attracted by other heuristic cues such as tone of the message, creative element or model (Petty & Cacioppo, 1986).

Petty, Kasmer, Haugtvedt, and Cacioppo (1987) argued that the information processing method is contingent upon the personal importance of the issue advocated in the message. They

explained that people generally pay closer attention to personally important messages while ignoring others. Thus, when a message consists of a persuasive argument central to an individual's needs and interests, messages are processed in a more systematic fashion through the central route. On the contrary, when the message is less important, cognitive processing of the message becomes less rigorous. In this condition, other cues that exist along with the messages (e.g., endorser's physical attractiveness, or emotions in the message) are likely to become more influential in affecting attitudes and behaviors (Petty & Cacioppo, 1986; Petty et al., 1987).

3.2 PSAs and the ELM

In general, PSAs are considered important messages because they include socially and personally beneficial information on certain social and health issues. The audience tends to attend this information because the message may have personal implications (Lee & Davie, 1999). Thus, audiences are more likely to be highly motivated for effortful processing of PSAs.

3.3 Endorser Types and the ELM

Biswas et al. (2006) found that information processing involving expert endorsements occurs through the central route, and information processing involving celebrity endorsements occurs through the peripheral route. Thus, when audiences are exposed to PSAs, which are socially important messages, information in the PSAs will be scrutinized systematically through cognitive processing. In this condition, according to the ELM, when the information is processed cognitively, people trust more credible source (endorser) (Heelsacker & Petty, 1983). Previous research on source credibility has concluded that a highly credible source is perceived to possess a high level of expertise and trustworthiness on the issue (Hovland, Janis & Kelly, 1953). In the present scenario, comparing the three endorser conditions (celebrity, expert, and typical person)

experts are assumed to be more credible because they have expertise on the issues presented in PSAs more than any other endorser. Moreover, according to the product match-up hypothesis, the expert's image is crucial for explaining the information in a high involvement message, such as PSA. Therefore, this study predicts that a PSA with an expert endorsement would result in higher recall, higher recognition, favorable attitude and intention to donate than the PSA endorsed by other endorser types (celebrity and typical person). This study proposes the following hypotheses:

H1: The PSA endorsed by an expert will have higher recall than the PSA endorsed by other endorser types (celebrity, and typical person).

H2: The PSA endorsed by an expert will have higher recognition than the PSA endorsed by other endorsers (celebrity, and typical person).

H3: The PSA endorsed by an expert will be more favorably evaluated in terms of attitude towards organization and attitude towards endorser than the PSA endorsed by other endorsers (celebrity, and typical person).

H4: The PSA endorsed by an expert will lead to a high intention to donate to the PSA organization than the PSA endorsed by other endorsers (celebrity and typical person).

3.4 Message Appeals and the ELM

The current research expects that PSAs with rational appeals will be more effective than emotional message appeals. According to ELM, when audiences process a high involvement message, such as one in a PSA, they would prefer message content that provides explicit and detailed information about the issue. In this case, rational messages appeals, which include logical information triggers cognitive thinking processes, and hence, rational messages would be more effective than emotion-based messages. Thus, the following hypotheses are proposed:

H5: The PSA promoted by rational message appeals will have higher recall than that promoted by emotional message appeals.

H6: The PSA promoted by rational message appeals will have higher recognition than that promoted by emotional message appeals.

H7: The PSA promoted by rational message appeals will be more favorably evaluated in terms of attitude towards organization and attitude towards endorser than that promoted by emotional message appeals.

H8: The PSA promoted by rational message appeals will lead to a high intention to donate to the PSA organization than that promoted by emotional message appeals.

3.5 Endorser Types and Message Appeal

Based on processing information about endorsers and message appeals, it is predicted that the combination of rational appeals and expert endorsement will be much stronger than other endorser and message combinations. Thus, this study proposes the following hypothesis:

H9: The PSA endorsed by an expert will be better recalled when it contains a rational message appeal than an emotional appeal.

H10: The PSA endorsed by an expert will be better recognized when it contains a rational message appeal than an emotional appeal.

H11: The PSA endorsed by an expert will be more favorably evaluated in terms of attitude towards organization and attitude towards endorser when it contains a rational message appeal than an emotional appeal.

H12: The PSA endorsed by an expert will lead to a high intention to donate to the PSA organization when it contains rational message appeal than an emotional appeal.

CHAPTER 4 METHOD

A 3X2 factorial design experiment was conducted to determine the impact of endorser and message appeal on Internet PSA effectiveness. The types of endorsers (celebrity, expert and typical person) and message appeals (emotional and rational) were manipulated in the Internet banner PSA for purpose of the study.

4.1 Independent Variables

The types of endorser and message appeals were used as independent variables for this study. They were manipulated in a 3X2 experimental design setting. Endorser types were categorized into three types: celebrity, expert, and typical person. This study included two message appeals, namely emotional and rational. The types of endorser and message appeal selected for this study are consistent with those in previous studies (Friedman & Friedman, 1979; Freiden, 1983; Kamins, 1989; Lee & Davie, 1999; Perse et al., 1994; Xie et.al, 2004).

4.1.1 Endorser Types

Celebrity: The previous research defined celebrity as an individual who is famous, and well-known to public for his/her his achievements in the area other than the product endorsed (Friedman & Friedman, 1971). Adopting this definition, the study used Angelina Jolie as a celebrity endorser. According to Forbes (2009), she was selected as the most powerful celebrity in the world. In addition, by participating in numerous charities and social work activities she was named as Goodwill Ambassador for the United Nations.

Expert: Adopting Ohanian's (1990) definition of experts, this research used a medical doctor as an expert endorser for AIDS PSA. In order to be consistent with the race and gender of

the celebrity (Angelina Jolie), this research selected a white female doctor wearing doctor's coat and a stethoscope.

Typical person: Consistent with the gender and race of other endorsers, an unknown white female was chosen as a typical person endorser.

4.1.2 Type of Appeal

Emotional Appeal: The present research included a fear-centric message for the emotional appeal. This study adopted an emotional appeal statement used by Perse et al. (1994). The message was modified and shortened so that it could be read on the banner. The statement used was: "AIDS is a killer disease, there is no vaccine and there is no cure. Talk about AIDS before it hits your home" (Perse et al., 1994, p. 189).

Rational Appeal: This study identified a cognitive appeal as the message that directs people to think logically about AIDS. The message for rational appeal was also included from Perse et al., (1994): "AIDS is a killer disease, there is no vaccine and there is no cure. Get tested for HIV today" (Perse et al., 1994, p.188).

4.2 Dependent Variables

The impact of the endorser and message appeal in a PSA was measured by recall, recognition, attitude, and behavioral evaluation of the PSA banner. These measures were assessed by a post-experiment questionnaire.

Recall: This study measured the recall of the banner on the website, product (theme) in PSA, organization in PSA, endorser, and message in a PSA. This research used an approach similar to that used in Lee and Davie's (1999) study. Participants were asked to list the banner PSA, product featured in the PSA, organization's name, endorser in PSA, and message after

browsing the experimental website. During the data analysis, the correct response in each of the recall measure was coded as 1 and the incorrect response was coded as 0.

Recognition: This study determined recognition of product type on the banner (themes of the banner), organization, endorser, and message. By adopting Ahn and Perle's (2008) method, this study provided a list of choices to participants including the one shown in the PSA and also some that were not included in the PSA. The data analysis coded the correct response for recognition as 1 and incorrect response as 0.

Attitude toward the organization: This study measured attitude towards the organization using the scale included in Yi's (1979) and (1990a; 1990b; 1993) study. Eleven descriptive adjective scales were used to determine attitude towards the organization: *Persuasive, Appealing, Easy to forget, Effective, Believable, Informative, Original, Interesting, Knowledgeable, Reliable, and Trustworthy*. The subjects assessed the organization in the PSA on a seven point integer scale ranging from "strongly disagree (1)" to "strongly agree (7)." In order to analyze the data for these scales, a variable named "attitude towards organization" was created. This variable was computed by calculating the average of these eleven measures.

Attitude towards endorser: This study measured attitude towards organization with the scales included in Friedman and Friedman's (1979) study. Eleven descriptive adjective scales were used to determine attitude towards endorser: *Appealing, Trustworthy, Persuasive, Believable, Reliable, Credible, Knowledgeable, Likeable, Competent, Good, and Expert*. The subjects in the experiment assessed the endorser on a seven point integer scales ranging from "strongly disagree (1)" to "strongly agree (7)." In order to analyze the data for these scales, a variable named "attitude towards endorser" was created. This variable was computed as an index score by calculating the average of these eleven measures.

Intention to donate: Finally, this study asked the participant's about their intention to donate to the organization featured in the PSA. The intention to donate to the organization was examined by modifying the question used in Yi's study (1990a; 1990b; 1993): "How likely is it that you would consider donating an amount to the organization included in PSA promoted on the website?" Participant's responses were assessed using three seven-point bipolar scales anchored by phrases: "likely-unlikely," "possible-impossible," and "probable-improbable." The data for this variable was analyzed by creating a variable intention to donate to the organization.

4.3 Research Procedure

4.3.1 Participants

Undergraduate students enrolled in a large university participated in the experiment. The use of undergraduate students in experiments has been criticized for it leads to generalizability towards population. However, according to U.S. Census data college students between the age group of 18-36 are highest users of the Internet (Internet Usage U.S. Census, 2007). Therefore, this study used student population. A total of 120 subjects participated in the experiment. Out of 120 participants, 64 (53.3%) were females and 56 (46.7%) were males. Ninety five percent of students were in the age group between 18 and 27-years-old.

The subjects were randomly assigned to one of six conditions of endorser and message appeal, and it involved two steps. First, the subjects were randomly assigned to one of three endorser conditions. Then the participants in each endorser condition were reassigned to one of the two message appeal conditions randomly. Assigning respondents in this way created six conditions and each condition was tested with 20 subjects. Thus, 40 participants were assigned to each of the endorser types, and 60 subjects were assigned to each emotional and rational appeal.

4.3.2 Experimental Materials

To produce commercial-level complexity for the website and banners, websites and banners were created using Dream Weaver-based computer graphic and art technology. This computer technology enabled this study to effectively manipulate information in the website and banners.

4.3.2.1 Theme of Website and Banner

To select an appropriate PSA topic for college students, a pretest was conducted involving 30 participants. Students were asked to list important issues that the nation is currently facing. The results showed that AIDS as the most important health issue that the nation and society currently faces. Moreover, the subjects in the pretest were asked the question, “How important is AIDS as an issue to you?” The majority of responses indicated AIDS as a very important issue for them as well as for society. In addition, similar to this study, AIDS has been the most frequently used topic in past PSA research studies (Johnston et al., 1999; Lee & Davie, 1999). AIDS is also relevant to the demographics of research participants since the most vulnerable population effected by AIDS is the youth of ages 18-25 (United States Statistics Summary, n.d.). Additionally, overall U.S. AIDS statistics for 2009 showed that Baton Rouge occupies the third position on the list of the most affected city by AIDS in the nation.

4.3.2.2 Website

The AIDS-themed website included information about general facts on AIDS. The website contained sections about the causes of AIDS, prevention, treatment, and drugs related to this epidemic. Information included in the experimental website was obtained from various

AIDS-themed websites such as, United Nations AIDS program, and a U.S. government website on AIDS awareness.

4.3.2.3 Banners

The study used a 468X60 (pixels) full size Internet banner PSA. The full size banner advertisement is the most popularly used for advertising on websites (IAB, 2009). The Internet AIDS banner PSAs were designed to appear on the experimental AIDS-themed website as they are commonly displayed on actual websites. They were placed on the top of the website, which is one of the standard positions for banner ads (IAB, 2008). The subjects were exposed to banners on every webpage of the website. For the purpose of the experiment, banner size was increased to 720 X 80 pixels. Increasing the banner size enhanced the quality of the banner PSA as well as a larger size displayed the content of the PSA more clearly.

A total of six banner PSAs were created with a combination of three types of endorsers (celebrity, expert, and typical person) and two types of message appeals (emotional and rational). A picture of the endorser (60X60 pixels) was placed on the left side of the banner. The current research used a 60X60 smiling image of Angelina Jolie, doctor, and typical person on the left side of the PSA banner. A fictitious organization, Global Health Association (GHA) was placed in the left side of the banner, while the PSA message appeared in the middle, between the endorser and organization logo (See Appendix A for banners).

4.3.2.4 Experimental Procedure

The experiment was conducted in a computer lab setting with 20 desktop computers. Once the participants arrived at the experimental location, they read and voluntarily signed the consent form (Appendix B). Then, participants were randomly assigned to one of the eight conditions of the three types of endorsers and two types of message appeals in PSAs. Participants

were then provided with the URL for the website in which AIDS-themed context and banner were incorporated. Then, they were asked to browse the website for fifteen minutes as they would normally do. Upon completion of browsing the website, the participants evaluated the endorser and appeal by answering a web-based survey. The questionnaire (Appendix C) included various measures of recall, recognition, and attitude with regards to types of endorser and type of message appeal.

CHAPTER 5 RESULTS

5.1 Research Background

This research conducted a 3 (endorser types) X 2 (message appeals) factorial design experiment to examine the impact of message appeal and endorser type on the success of PSAs. Endorser types were classified as celebrity, expert, and typical person, and message appeal was classified as emotional and rational. The effectiveness of PSA was measured by recall, recognition, intention to donate, and attitude towards organization and endorser.

In terms of endorser effects, this study predicted that PSAs with expert endorsement would be more effective than those the other endorsements. In terms of message appeal, this study expected that PSAs with a rational appeal would be more effective than those with an emotional appeal. To identify interaction effects of endorser and message appeal, this study hypothesized that a PSA with the combination of an expert and rational appeal would be more effective than other combinations of message appeals and endorser types. A series of two-way analysis of variances (ANOVA) were conducted to analyze the data.

5.2 Reliability Check

This study checked the reliability of three indexes constructed for attitude towards organization, attitude towards endorser, and intention to donate. The results of internal reliability of attitude towards organization (Cronbach's $\alpha = .91$) and endorser (Cronbach's $\alpha = .96$), which included eleven items each, indicated that the measures were reliable. The internal reliability of intention to donate, which included three descriptive attitude scales, was also found to be reliable (Cronbach's $\alpha = .97$).

5.3 Data Screening and Assumption Check

5.3.1 Data Screening

Before conducting ANOVA, this study screened the data to check for inconsistent responses or missing values. During this process, it was found that four participants did not answer 50% of the entire questions. Therefore, the data for these four subjects were eliminated. Thus, the total number of cases included in the analysis was reduced to 116. In addition, this study also detected missing responses for some scales from attitude and intention to donate measures. These missing values were replaced by the mean of the rest of the responses if a respondent answered more than 80% of the items.

5.3.2 Assumption Check

Prior to conducting ANOVA, this research performed three basic assumption checks: normality of the data, homogeneity of variance, and independent group assignments. The assumption of normality distribution was checked to determine whether the dependent variables were normally distributed for each of the populations as defined by the different levels of factor by analyzing skewness and kurtosis coefficients for all the dependent measures. The results showed that skewness of all dependent variables lies between ± 2 and kurtosis coefficient lies between ± 3 , indicating no outliers. Thus, the assumption for normality was satisfied.

The assumption of homogeneity of variances was assessed to see whether the variances of the dependent variable were the same for all populations. The Levene's test was performed to check the homogeneity of sample across each dependent variable. As shown in Table 1, the results indicated the violations of homogeneity assumption for three measures: message recall, product recognition, and endorser recognition. However, since each condition in the experiment

was equally distributed, it was expected that ANOVA can be successfully run on the given dataset. Finally, this study checked if the participants represented the random sample allocation from the populations and the evaluations of dependent measures were independent of each other. Since research participants were randomly and independently assigned to only one condition, the last assumption was met.

Table 1: Homogeneity of Variance

<i>Dependent Variables</i>	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>P</i>
Banner Recall	1.01	5	110	.41
Product Recall	1.63	5	110	.16
Organization Recall	1.03	5	110	.40
Endorser Recall	1.73	5	110	.13
Message Recall	2.82	5	108	.02
Product Recognition	3.50	5	110	.01
Organization Recognition	.15	5	110	.98
Endorser Recognition	4.29	5	110	.001
Message Recognition	1.20	5	110	.31
Attitude towards Organization	.72	5	110	.61
Attitude towards Endorser	.88	5	109	.49
Intention to Donate	.61	5	110	.69

5.4 Overall Descriptive Statistics

Table 2 compares values for maximum, minimum, mean standard deviations and skewness for all the dependent variables. As indicated in Table 2, among the five measures of recall, the mean was highest for endorser recall (.48), and lowest for organization recall (.15). Among the four measures of recognition, the mean was highest for product recognition (.59), and lowest for message recognition (.47). Table 2 also indicates the maximum and minimum values for attitude towards organization, endorser, and intention to donate. The mean was high for

attitude towards endorser (4.15) compared to attitude towards organization (3.94) and intention to donate (3.25).

Table 2: Overall Descriptive Statistics

<i>Dependent Variable</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>S.D.</i>	<i>Skewness</i>	<i>Kurtosis</i>
Banner Recall	1	0	.45	.50	.21	-1.99
Product Recall	1	0	.41	.49	.35	-1.90
Organization Recall	1	0	.14	.34	2.1	2.57
Endorser Recall	1	0	.48	.50	.07	-2.03
Message Recall	1	0	.18	.39	1.65	.73
Product Recognition	1	0	.59	.49	-.39	-1.88
Organization Recognition	1	0	.52	.50	-.07	-2.03
Endorser Recognition	1	0	.49	.50	.03	-2.03
Message Recognition	1	0	.47	.50	.14	-2.01
Attitude towards Organization	5.73	1.00	3.94	1.15	-.23	.24
Attitude towards Endorser	6.00	1.00	4.15	1.33	-.33	.013
Intention to Donate	6.00	1.00	3.25	1.67	.45	-.85

5.5 Descriptive Statistics for Each Condition

Finally, this study checked whether data in each condition met the assumption of ANOVA. The results indicated that all the assumptions for ANOVA were met. The analysis indicated that the results for skewness and kurtosis were within the boundary of ± 2 and ± 3 . This confirmed that the data was ready for ANOVA analysis.

5.6 Hypothesis Testing

After checking assumptions, a 3X2 ANOVA was performed to test the main effects of endorser and message appeals as well as their interaction on the effectiveness of PSAs. The main effect of endorser was assessed by considering the means among three endorser types for the dependent measures across the two message appeal methods. Similarly, the main effects of

message appeal were assessed by comparing the mean differences between two message appeals types for the dependent measures across the three groups of endorser types.

5.6.1 Main Effect of Endorser

Overall, this study predicted that a PSA endorsed by an expert would be more effective than a PSA supported by other endorser types. The results of the ANOVA test are presented in Table 3. In terms of recall, the results indicate that endorser type had minimal influence on five measures of recall (banner, product, organization, endorser, and message). Thus, hypothesis 1 was not supported. Interestingly, as shown in Table 3, although the differences among the three endorser types were not statistically significant, the mean was higher for celebrity than other endorser types in most of the recall measures (banner, product, organization and message).

Table 3: Endorser Differences (ANOVA Results)

<i>Dependent Variable</i>	<i>Celebrity M(SD)</i>	<i>Expert M(SD)</i>	<i>Typical Person M(SD)</i>	<i>F-Value</i>	<i>η^2</i>
Banner Recall	.55 (.50)	.36 (.49)	.44 (.50)	1.46	.02
Product Recall	.47 (.51)	.41 (.50)	.36 (.48)	.52	.01
Organization Recall	.16 (.37)	.10 (.31)	.15 (.37)	.29	.005
Endorser Recall	.39 (.50)	.56 (.50)	.49 (.51)	1.07	.02
Message Recall	.21 (.41)	.24 (.43)	.11 (.31)	1.19	.02
Product Recognition	.76 (.43) _B	.59 (.50)	.44 (.50) _A	4.51*	.08
Organization Recognition	.55 (.50)	.51 (.51)	.49 (.51)	.16	.003
Endorser Recognition	.58 (.50)	.51 (.51)	.38 (.49)	1.60	.03
Message Recognition	.58 (.50)	.44 (.50)	.38 (.49)	1.57	.03
Attitude towards Organization	4.05 (1.21)	3.96 (.98)	3.81 (1.27)	.40	.007
Attitude towards Endorser	4.35 (1.21)	4.22 (1.42)	3.89 (1.36)	1.17	.02
Intention to Donate	3.62 (1.67)	3.06 (1.69)	3.06 (1.62)	1.39	.03

Note: A: Subscripts placing next to the *F*-value indicate significant difference between endorsers in two-way ANOVA at a .05 significance level (i.e., $A < B$).

B: * $p < .05$

Similarly, the ANOVA failed to support the hypothesis predicting the recognition advantage of an expert endorsement over other types of endorsements. As shown in Table 3, the results indicate that recognition scores were not significantly higher for expert endorsement. On the contrary, significant effect of endorser was found with celebrity endorsement on product recognition, $F(2,115) = 4.51, p < .05, \eta^2 = .076$. The post-hoc test with the Scheffe's correction approach showed that the celebrity endorsement ($M = .55, SD = .43$) was significantly different from the typical person endorsement ($M = .44, SD = .50$). Moreover, consistent to recall measures, although the differences were not significant, recognition scores were higher for celebrity endorsement than other endorsement types in the product and message recognition measures.

Hypothesis 3 predicted that a PSA with an expert endorsement would produce a more favorable attitude than other endorsement types. As shown in Table 3 a significant main effect of endorser was not found on attitude towards organization and on attitude towards endorser. Thus, hypothesis 3 was not supported. On the contrary, the mean for attitude towards organization was higher for the celebrity endorsement ($M = 4.05, SD = 1.21$) than expert endorsement ($M = 3.96, SD = .98$) and typical person endorsement ($M = 3.81, SD = 1.27$). Similarly, for attitude towards endorser, the mean was higher for celebrity ($M = 4.35, SD = 1.21$), followed by expert ($M = 4.22, SD = 1.42$) and then typical person ($M = 3.89, SD = 1.36$). Although the differences were not statistically significant, these findings were different from the research expectations.

To obtain a more composite understanding of the endorser effects on attitude measures, hypothesis 3 was tested by conducting ANOVA analysis on each of the eleven scales from attitude towards organization and endorser. As shown in Table 4, a significant difference was found between the *expert* endorser in terms of attitude toward endorser measure, in which the score was significantly higher for expert endorsement ($M = 4.31, SD = 1.81$), and $F(2,115) = 8.54$,

$p < .01$, $\eta^2 = .14$ celebrity endorsement ($M = 2.81$, $SD = 1.49$) and typical person endorsement ($M = 3.41$, $SD = 1.52$). Thus, hypothesis 3 was partially supported.

Table 4: Endorser Differences - ANOVA Results for Attitude towards Endorser

<i>Dependent Variable</i>	<i>Celebrity M(SD)</i>	<i>Expert M(SD)</i>	<i>Typical Person M(SD)</i>	<i>F-Value</i>	η^2
Appealing	5.32 (1.33) _B	4.05 (1.43)	3.87 (1.37) _A	12.42**	.19
Trustworthy	4.50 (1.52)	4.18 (1.60)	4.03 (1.55)	.90	.02
Persuasive	4.34 (1.52)	3.85 (1.67)	3.66 (1.38)	2.08	.04
Believable	4.32 (1.59)	4.08 (1.67)	3.97 (1.56)	.46	.008
Reliable	4.16 (1.55)	4.21 (1.59)	3.89 (1.57)	.42	.008
Credible	4.0 (1.43)	4.36 (1.79)	4.08 (1.58)	.49	.009
Knowledgeable	3.97 (1.44)	4.28 (1.79)	3.95 (1.61)	.48	.009
Likeable	5.11 (1.37) _B	4.49 (1.52)	4.16 (1.40) _A	4.30*	.07
Competent	4.61 (1.53)	4.33 (1.71)	3.88 (1.59)	2.03	.03
Good	4.74 (1.37)	4.31 (1.68)	3.88 (1.62)	2.84	.05
Expert	2.82 (1.48) _A	4.31 (1.81) _C	3.41 (1.52) _B	8.54***	.14

Note: A: Subscripts placing next to the *F*-value indicate significant difference among endorser in two-way ANOVA at a .05 significance level (i.e., $A < B < C$; $A < B$).

B: *** $p < .001$; ** $p < .01$; * $p < .05$

In addition to the *expert* item for attitude toward endorser, significant findings were detected with the *appealing* measure of attitude toward organization as well as the *appealing* and *liking* measures of attitude toward endorser. However, the post-hoc analyses indicated that the directions of the findings were different from the hypotheses. As shown in Table 4, significant main effect of endorser was also found on *appealing* measure of attitude towards endorser, $F(2,115) = 12.24$, $p < .01$, $\eta^2 = .18$. The attitude score was higher for celebrity ($M = 5.32$, $SD = 1.34$) than typical person ($M = 3.87$, $SD = 1.37$). Consistently, for the *likeable* measure of attitude towards endorser, the score was higher for celebrity ($M = 5.11$, $SD = 1.37$) endorsement, $F(2,115) = 4.30$, $p < .05$, $\eta^2 = .07$ than typical person endorsement ($M = 3.41$, $SD = 1.52$). Similarly, as shown in Table 5, for the *appealing* measure of attitude toward organization, the attitude score was

significantly higher for celebrity endorsement ($M=3.89$, $SD=1.39$), $F(2,115)=4.138$, $p<.05$, $\eta^2=.70$ than expert endorsement ($M=2.97$, $SD=1.33$).

Table 5: Endorser Differences (ANOVA Results - Attitude towards Organization)

<i>Dependent Variable</i>	<i>Celebrity M(SD)</i>	<i>Expert M(SD)</i>	<i>Typical Person M(SD)</i>	<i>F-Value</i>	η^2
Persuasive	4.21 (1.58)	3.77 (1.46)	3.64 (1.61)	1.38	.02
Appealing	3.89 (1.39) B	2.97 (1.32) A	3.44 (1.48)	4.13*	.07
Easy to forget	3.58 (1.86)	3.31(1.79)	3.41 (1.83)	.22	.004
Effective	4.16 (1.36)	3.85 (1.41)	3.87 (1.70)	.49	.009
Believable	4.66 (1.32)	4.87 (1.52)	4.62 (1.54)	.38	.007
Informative	4.34 (1.69)	4.41 (1.62)	4.36 (1.73)	.02	.000
Original	3.53 (1.48)	3.33 (1.58)	3.18 (1.50)	.49	.009
Interesting	3.63 (1.53)	3.13 (1.70)	3.05 (1.52)	1.56	.02
Knowledgeable	4.0 (1.74)	4.31 (1.65)	4.00 (1.83)	.42	.008
Reliable	4.16 (1.60)	4.72 (1.94)	4.24 (1.81)	1.61	.03
Trustworthy	4.37 (1.49)	4.92 (1.79)	4.31 (1.54)	1.70	.03

Note: A: Subscripts placing next to the *F*-value indicate significant difference among endorser in two-way ANOVA at a .05 significance level (i.e., $A < B$).

B: *** $p < .001$; ** $p < .01$; * $p < .05$

Hypothesis 4 predicted that the intention to donate to the organization would be higher for the PSA endorsed by an expert than PSAs endorsed by other endorsers. As shown in Table 3, the result did not support the hypothesis. The mean differences among the three endorser types were not statistically significant. Moreover, consistent with other measures, participants showed a higher level of intention to donate to the PSA with celebrity endorsement ($M=3.62$, $SD = 1.67$) than to those with an expert endorsement ($M=3.06$, $SD=1.69$) and typical person endorsement ($M=3.06$, $SD=1.62$). To obtain better understanding of the endorser effects on individual measures of intention to donate, hypothesis 4 was also tested by conducting ANOVA on

individual scales, and as shown in Table 6, the results failed to support the hypothesis. A significant effect of endorser was not found on any of the scales for intention to donate.

Table 6: Endorser Differences (ANOVA Results for individual intention to donate items)

<i>Dependent Variable</i>	<i>Celebrity M(SD)</i>	<i>Expert M(SD)</i>	<i>Typical Person M(SD)</i>	<i>F-Value</i>	<i>η^2</i>
Likely	3.53 (1.64)	2.82 (1.87)	3.05 (1.73)	1.58	.03
Possible	3.68 (1.75)	3.28 (1.81)	3.10 (1.56)	1.13	.02
Probable	3.88 (1.81)	3.13 (1.58)	3.05 (1.63)	1.44	.03

5.6.2 Main Effects of Message Appeal

Overall, this study predicted that the PSA with a rational appeal would be more effective than the PSA with an emotional appeal in terms of recall, recognition, attitude towards organization/endorser, and intention to donate. As shown in Table 7, the findings from ANOVA failed to support hypothesis 5, which predicted that the PSA with rational appeal would have recall advantage over the PSA with emotional appeal. The differences between the two message appeals on the five measures (banner, product, organization, endorser, and message recall) of recall were not statistically significant. Consistent to the expectations of this research, the mean scores for rational appeal ($M=.48$, $SD=.50$) ($M=.16$, $SD=.37$) were higher for product recall and organization recall than mean scores for emotional appeal ($M=.12$, $SD=.33$) ($M=.34$, $SD=.48$) but were not significantly different. For other recall measures, the means of two appeal categories were about the same. Consistent to recall, Table 7 shows that ANOVA results did not support hypothesis 6. There was no statistical difference between the two appeals involving four recognition measures. Nonetheless, the recognition scores were higher for the PSA with a rational appeal compared to the PSA with an emotional appeal.

Table 7: Message Appeal Differences (ANOVA Results)

<i>Dependent Variable</i>	<i>Emotional Appeal M(SD)</i>	<i>Rational Appeal M(SD)</i>	<i>F-Value</i>	<i>η^2</i>
Banner Recall	.45 (.50)	.45 (.50)	.000	.00
Product Recall	.34 (.47)	.48(.50)	2.25	.02
Organization Recall	.12 (.32)	.16 (.36)	.26	.002
Endorser Recall	.48(.50)	.48(.50)	.001	.000
Message Recall	.19 (.39)	.18(.39)	.05	.001
Product Recognition	.55 (.50)	.64 (.50)	1.0	.009
Organization Recognition	.52 (.50)	.52 (.50)	.000	.000
Endorser Recognition	.41(.49)	.57 (.50)	3.09	.03
Message Recognition	.43 (.50)	.50 (.50)	.54	.005
Attitude towards Organization	3.98 (1.16)	3.90 (1.14)	.11	.001
Attitude towards Endorser	4.26 (1.39)	4.04 (1.28)	.79	.007
Intention to Donate	3.27 (1.57)	3.23 (1.77)	.01	0

As shown in Table 7, ANOVA results failed to support the hypothesis predicting that the PSA with a rational appeal will have higher attitude towards organization and endorser. This result opposes the expectations of this research, although the PSA with the rational message appeal ($M=3.90$, $SD=1.15$) was less favorably evaluated compared to emotional message ($M=3.98$, $SD=1.17$) but the differences were not statistically significant. Similarly, the mean for the emotional message ($M=4.26$, $SD=1.39$) was higher than that for the rational message appeal ($M=4.04$, $SD=1.28$) in the attitude toward endorser measure. Again, the difference was not statistically significant. To understand message appeal effects on individual items of attitude measures, Hypothesis 7 was tested to see the differences between the emotional appeal and rational appeal on individual items of attitude measures. As shown in Table 8 and Table 9, the results indicate that a significant main effect of message appeal was not found on any individual items of attitude towards organization and endorser.

Table 8: Message Appeal Differences (ANOVA Results for Attitude towards Endorser)

<i>Dependent Variable</i>	<i>Emotional Appeal M(SD)</i>	<i>Rational Appeal M(SD)</i>	<i>F-Value</i>	η^2
Appealing	4.52 (1.44)	4.30 (1.59)	.73	.007
Trustworthy	4.24 (1.60)	4.23 (1.52)	.002	.000
Persuasive	4.09 (1.51)	3.81 (1.58)	.94	.009
Believable	4.19(1.59)	4.05 (1.63)	.20	.002
Reliable	4.21 (1.63)	3.96 (1.50)	.65	.006
Credible	4.28 (1.67)	4.02 (1.54)	.68	.006
Knowledgeable	4.31(1.73)	3.82 (1.75)	2.59	.02
Likeable	4.62 (1.40)	4.54 (1.55)	.07	.001
Competent	4.34 (1.65)	4.20 (1.61)	.21	.002
Good	4.40 (1.54)	4.22 (1.65)	.34	.003
Expert	3.78 (1.76)	3.25 (1.62)	2.90	.02

Table 9: Message Appeal Differences (ANOVA Results for Attitude towards Organization)

<i>Dependent Variable</i>	<i>Emotional Appeal M(SD)</i>	<i>Rational Appeal M(SD)</i>	<i>F-Value</i>	η^2
Persuasive	3.81 (1.49)	3.93 (1.63)	.17	.002
Appealing	3.52 (1.48)	3.34 (1.41)	.46	.004
Easy to forget	3.69 (1.87)	3.17 (1.74)	2.36	.02
Effective	4.17 (1.35)	3.74 (1.61)	2.44	.02
Believable	4.57 (1.45)	4.86 (1.46)	1.17	.01
Informative	4.24(1.73)	4.50(1.61)	.67	.01
Original	3.48 (1.55)	3.21(1.47)	.90	.01
Interesting	3.53(1.53)	3.00(1.62)	3.30	.02
Knowledgeable	4.37(1.92)	3.65 (1.72)	.11	.001
Reliable	4.24 (1.81)	4.40 (1.62)	.27	.002
Trustworthy	4.45 (1.74)	4.62 (1.51)	.37	.003

Hypothesis 8 predicted that the PSA with rational appeal would elicit a higher intention to donate than the PSA with emotional appeal. The results failed to support this hypothesis. As shown in Table 7, the intention to donate was higher for emotional appeal ($M=3.27$, $SD=1.57$)

than rational appeal ($M=3.22$, $SD=1.77$) in a statistically non-significant direction. In order to clearly understand the message appeal effects on intention to donate, the study also identified the differences between emotional appeal and rational appeal on individual scale items of this behavioral measure. As shown in Table 10, again, a significant effect of rational appeal was not found on the three individual scales.

Table 10: Message Appeal Differences (ANOVA Results for Intention to Donate)

<i>Dependent Variable</i>	<i>Emotional Appeal M(SD)</i>	<i>Rational Appeal M(SD)</i>	<i>F-Value</i>	<i>η^2</i>
Likely	3.17(1.71)	3.09 (1.82)	.07	.001
Possible	3.24 (1.55)	3.36 (1.88)	.01	.000
Probable	3.29 (1.57)	3.26 (1.79)	.01	.000

5.6.3 Interaction Effect of Endorser Type and Message Appeal

This research hypothesized that the PSA with a rational appeal and an expert endorser would be more effective than a PSA with other combinations. The findings of the two-way (3X2) ANOVA are summarized in Table 11. First, the results show that recall scores were not significantly different among the six conditions of endorser types and message appeal methods. More specifically, the combination of rational appeal and expert endorser was not significantly different from other combinations in promoting the AIDS PSA for five measures of recall (i.e., banner, product, organization, endorser, and message). Thus, hypothesis 9 was not supported.

Table 11: ANOVA Results for Interaction Effects

<i>Dependent Variables</i>	<i>Mean Square</i>	<i>df</i>	<i>Interaction: F-value</i>
Banner Recall	.17	2	.72
Product Recall	.05	2	.23
Organization Recall	.02	2	.22

(Table 11 Continued)

<i>Dependent Variables</i>	<i>Mean Square</i>	<i>df</i>	<i>Interaction: F-value</i>
Endorser Recall	.17	2	.67
Message Recall	.06	2	.39
Product Recognition	.32	2	1.43
Organization Recognition	.12	2	.47
Endorser Recognition	.59	2	2.50
Message Recognition	.22	2	.88
Attitude towards Organization	.63	2	.46
Attitude towards Endorser	4.64	2	2.67
Intention to Donate	3.69	2	1.33

Similarly, hypothesis 10, which predicts a better recognition score for the combination of rational appeal and expert endorsement over other conditions, was not supported. As shown in Table 11, results of the two-way ANOVA showed that the differences among the six conditions of endorser types and message appeals were not significant to each other for all four recognition measures (product, organization, endorser, and message).

The ANOVA analysis indicated consistent findings for the two attitudinal measures. As shown in Table 11, the results did not find significant effect of expert and rational appeal on overall attitude measures. The means for the attitude toward organization and endorser among six conditions were not significantly different from each other. The results showed that the organization that used an expert endorser and rational message was not favorably evaluated compared to support for other combinations of message appeals and endorser types. Similarly, the evaluation of attitude towards endorser for the PSA with an expert and rational message was

not significantly favorable compared to PSAs supported by other combinations of message appeals and endorser types. Thus, hypothesis 11 was not supported.

To achieve a better understanding of relationship between endorser and message appeal on attitude measures, this research compared the differences between expert endorser and other PSA combinations for each item in attitude towards organization and endorser. Table 12 and 13 illustrate the results of the two-way ANOVA analysis with individual measures of attitude toward endorser and organization. The findings indicated that the interaction between message appeal and endorser types was significant for *knowledgeable*, $F(2, 115)=2.98, p<.05, \eta^2=.52$, and *competent*, $F(2, 115)=3.97, p<.05, \eta^2=.07$, items of attitude toward endorser. With these two items, this study conducted post-hoc analyses to identify which combination is significantly different from other message appeal endorser combination. Figure 1, and 2 show the relationship of endorser and message appeal on *knowledgeable* and *competent* items of attitude towards endorser.

Table 12: ANOVA Results, Interaction Effects for Attitude towards Endorser

<i>Dependent Variables</i>	<i>Mean Square</i>	<i>Df</i>	<i>Interaction: F-value</i>
Appealing	2.10	2	1.09
Trustworthy	1.78	2	.72
Persuasive	5.47	2	2.38
Believable	6.83	2	2.68
Reliable	5.58	2	2.30
Credible	3.65	2	1.41
Knowledgeable	7.46	2	2.97*
Likeable	3.29	2	1.60
Competent	9.88	2	3.97*
Good	4.29	2	1.76
Expert	5.74	2	2.30

(TABLE 12 Continued)

Note: A: Subscripts placing next to the *F*-value indicate significant interaction between endorser and message appeal in two-way ANOVA at a .05 significance level

B: *** $p < .001$; ** $p < .01$; * $p < .05$

Table 13: ANOVA Results, Interaction Effects for Attitude towards Organization

<i>Dependent Variables</i>	<i>Mean Square</i>	<i>Df</i>	<i>Interaction: F-value</i>
Persuasive	3.04	2	1.26
Appealing	2.06	2	1.04
Easy to forget	1.36	2	.40
Effective	2.07	2	.93
Believable	3.42	2	1.60
Informative	1.87	2	.65
Original	2.53	2	1.09
Interesting	3.11	2	1.26
Knowledgeable	6.69	2	2.22
Reliable	.10	2	.03
Trustworthy	1.24	2	.46

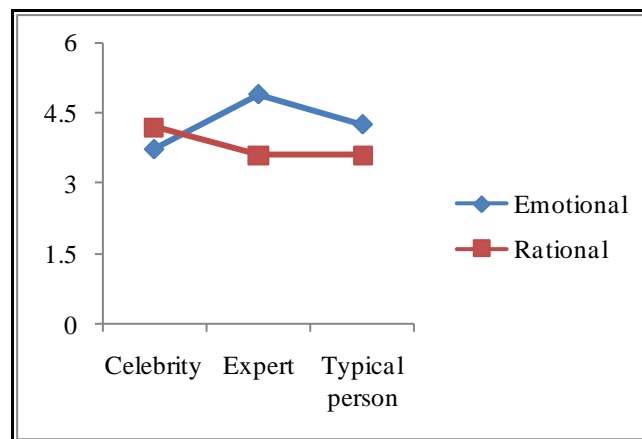


Figure 1: Endorser Message Appeal Relationship: Knowledgeable

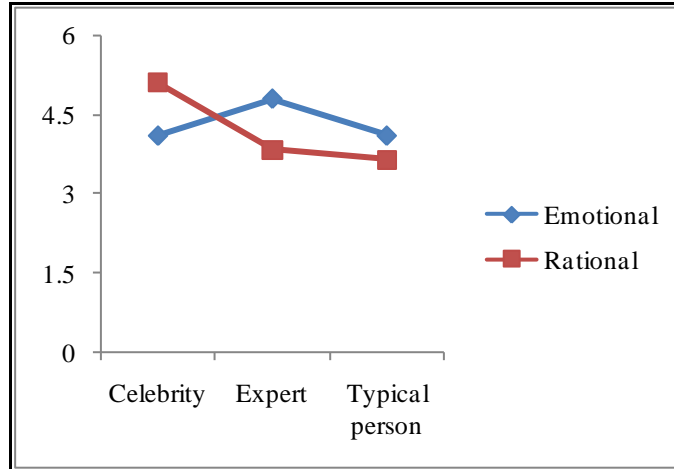


Figure 2: Endorser Message Appeal Relationship: Competent

In order to determine the simple main effect, this study used the contrast (lmatrix) option and Scheffé's correction approach, which is the conservative method of mean comparison (Brown & Barnes, 2001). First, the significance level of each main effect was assessed at $p < .05$. Then, using the Microsoft Excel program, the critical value of F-ratio (3.93) was calculated at the p -value of .05 with df of 1 and 109. These criteria (p -value of .05 and critical F -value of 3.93) were used as a comparison basis to detect the significant simple main effect. As shown in Table 14, the analysis found that message appeal comparisons within the expert endorsement condition had a smaller p -value (.014) and the larger F -value (15.68). Based on this information, this study examined the mean difference between two message appeals within the expert endorsement condition and found that the expert endorser was considered significantly more *knowledgeable* in the PSA with the combination of expert and emotional appeal ($M=4.90$) than the that of expert and rational appeal ($M=3.63$). Thus, the rejection of hypothesis 11 was confirmed.

A similar process was employed to detect the simple main effects of the *competent* item of the attitude towards endorser measure. Using the p -value of .05 and critical F -value of 3.93 as

comparison guidelines, this study found that endorser types are significantly different within the rational message appeal, with p -value of .01 and F -value of 11.79. The simple effect comparison is shown in Table 15. The follow-up mean difference analysis showed that the celebrity endorsement was highly competent in celebrity and rational appeal ($M=5.10$) combination than in expert rational combination ($M=3.85$). Again, the analysis of simple main effect does not support hypothesis 11. Significant interaction effects were not detected with other individual attitude measures in both toward endorser and organization.

Table 14: Simple Main Effect – Knowledgeable (Attitude towards Endorser)

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F-Value</i>
Celebrity PSA with (Emotional appeal or Rational appeal)	2.13	1	2.13	.85
Expert PSA with (Emotional appeal or Rational appeal)	15.67	1	15.67	6.25*
Typical Person PSA with (Emotional appeal or Rational appeal)	3.78	1	3.78	1.51
Emotional appeal with any three endorsers	13.24	2	6.62	2.64
Rational appeal with any three endorser	4.24	2	2.12	.84

*: Statistically significant (F-ratio is higher than $F_{.05, 1, 109} = 3.9282$ and $p < .05$)

Table 15: Simple Main Effect – Competent (Attitude towards endorser)

<i>Source</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F-Value</i>
Celebrity PSA with (Emotional appeal or Rational appeal)	9.50	1	9.50	3.81
Expert PSA with (Emotional appeal or Rational appeal)	8.94	1	8.94	3.59
Typical Person PSA with (Emotional appeal or Rational appeal)	1.90	1	1.90	.76
Emotional Appeal PSA with three endorsers	6.32	2	3.16	1.271
Rational Appeal PSA with three endorsers *	23.58	2	11.79	4.742

*: Statistically significant (F-ratio is higher than $F_{.05, 1, 109} = 3.9282$ and $p < .05$)

As indicated in Table 11, in terms of the intention to donate, the two-way ANOVA failed to detect the significant interaction between message appeal and endorser types. Thus, hypothesis 12 is not supported. Similarly, significant interaction effects were not found with individual

items of the intention to donate measurements. Table 16 shows the ANOVA results for individual items of intention to donate.

Table 16: ANOVA Results Interaction Effects (Individual Items of Intention to donate items)

<i>Dependent Variables</i>	<i>Mean Square</i>	<i>df</i>	<i>Interaction: F-value</i>
Likely	2.23	2	.72
Possibly	5.15	2	1.76
Probably	4.13	2	1.47

CHAPTER 6

DISCUSSION

6.1 Summary of Findings

This study investigates the impact of endorser and message appeal as well as their interactions on the effectiveness of the Internet PSAs. The PSA was evaluated by measuring recall, recognition, attitude towards endorser and organization, and intention to donate in a 3X2 factorial design experiment. The following section contains the key findings of this study followed by a discussion on its implications, limitations, and directions for future research.

This research predicted that a PSA that includes an expert endorser would be more effective than one including other endorsement types (celebrity and typical person). However, this prediction was not supported. The overall findings showed that the PSA endorsed by an expert was not significantly different from that endorsed by a celebrity and a regular person. Nonetheless, this study found partial support from an individual measure of the attitude toward endorser, *expertness*, in which an expert was considered to have more expertise on the issue compared to celebrity and typical person endorsers.

On the other hand, the study found some unexpected findings related to the endorser effect. The findings indicate that celebrity endorsement was found to be more favorable in terms of generating recognition towards PSA. Moreover, for individual measures of attitude towards endorser, a celebrity was considered as *appealing* and *likeable* as expert and typical person endorsers. Similarly, the celebrity endorser was effective on *appealing*, which was an individual measure of attitude towards organization.

In terms of message appeal, this study expected to find that the PSA with a rational appeal would be more effective than that with an emotional appeal. However, the analysis

revealed that rational appeal as well as emotional appeal had low impact on the performance of the Internet PSA. Both message appeals did not have significant impact on PSA effectiveness. Thus, the PSA that included a rational message appeal was neither better memorized nor did it influence attitude or intention to donate of the subjects.

This study also determined how endorser types and message appeals interact with each other with regard to the success of Internet PSA. This research predicted that a PSA supported by expert endorsement and a rational message would result in a more positive impact on PSA effectiveness than a PSA supported by other combinations of endorser types and message appeals. However, the findings failed to support this hypothesis.

6.2 Theoretical Interpretation of Findings

The findings of this study are contrasting to the previous studies that found expert endorsements to be more effective in generating better attitudes than celebrity endorsements for high involvement products (Biswas et al., 2006, Friedman & Friedman, 1971). Similarly, in terms of message appeal, the findings of this research are opposite to the previous studies that found that rational message appeals generated better attitudes than emotional message appeals for high involvement products (Holmes & Crocker, 1987). These unexpected findings can be explained by the college students' lack of interest in AIDS and/or PSAs.

AIDS was selected as the theme for the PSA and the website based on the pretest result in which the majority of students identified AIDS as the one of the most important issues to them as well as to society. Hence, this study considered AIDS to be personally relevant to the college student population and, students would be highly involved in processing related information. As a result, hypotheses regarding endorser types and message appeals as well as their interactions were constructed based on this notion. However, this research failed to obtain the support from

the analyses. Thus, this study re-inspected whether college students actually consider AIDS as a personally important issue by revisiting the participant's responses on questions during the main experiment.

This study observed some interesting differences. On one hand, participants expressed their concerns about AIDS as much as they did for the U.S. economy. On the other hand, college students rarely visit AIDS-related websites, and over 90% of participants reported that they never visited AIDS-themed websites. Instead, they are more interested in job searches, gaming, social networking sites, and music websites. Based on these observations, this study suspected that importance of an issue does not decide how to process the information, but that personal relevance/interest does. As evidence, AIDS, which was identified as an important issue, was not processed as this study predicted.

The elaboration likelihood model states that attitude change towards a communication message is the result of the extent to which an individual thinks about the message (Petty & Cacioppo, 1986). The factors that determine the degree of an individual's thought process are motivation and ability to process the communication message (Petty & Cacioppo, 1986). According to Petty and Cacioppo (1986), motivation and ability to process the message depends on the level of personal involvement in the issue. Thus, when an individual is highly involved in a certain issue, one is more likely to be highly motivated to process related messages by maximizing his/her processing ability (Petty & Cacioppo, 1986). As a result, information in this condition is more likely to be processed in a deeper level. However, when an individual has low involvement in a certain issue, he/she is less likely to be motivated to process related information in detail (Petty & Cacioppo, 1986). Instead, since the issue is not of his/her interest, an

individual's attention is diverted towards other heuristic cues, such as music or attractive sources presented together in the message (Petty & Cacioppo, 1986).

6.3 Endorser Effects

The premise of the proposed hypotheses is that PSAs are personally relevant issues, as they provide important information on personal health and societal concerns. Accordingly, PSAs are likely to be processed through the central route by systematically scrutinizing arguments in the message as guided by the ELM. Therefore, when people scrutinize the information provided in PSAs, which are assumed to be personally relevant, they are more likely to trust an endorser who has expertise on the issue and who is expected to provide more detailed explanations on the issue than other endorsers. However, instead, this study found that celebrity endorsement is generally more effective in promoting public messages.

The findings of this study are somewhat conflicting to this prediction. This research explored for a reason why expert endorsement was not more effective than celebrity endorsement in promoting PSAs from the low degree of relevancy between a college population and issue provided on the Internet PSA. According to ELM, when a communication message is less relevant to people, they are less likely to get motivated and engage in active thinking of the messages. In this condition, instead of issue relevant cues, peripheral cues become highly important. Therefore, it is suspected that participants might have processed the given stimuli as less relevant, and then instead of a doctor, who is more relevant to AIDS PSAs, a much more familiar and attractive endorser, such as Angelina Jolie became more distinguishable and memorable. These findings are consistent to Kahle and Homer's (1985) study that found that when the issue is less relevant, the attractive celebrity has higher effects on memory and attitude measures.

Adding to the low relevancy factor, one more explanation behind the effectiveness of celebrity in few cases than expert can be explained by the familiarity of Angelina Jolie compared to expert and typical person. Out of the three endorsers, Angelina Jolie was famous and well-known personality. On the other hand, expert and typical person might have appeared as strangers to the participants, as they never saw the pictures of expert and typical person endorsements earlier, which caused subjects to remember celebrity better than expert or typical person. This phenomenon of assessing a character in the PSA can be related to the perceived similarity concept explained by Moyer-Gusé (2008). According to Moyer-Gusé (2008), people are attracted to the media characters because they find the character similar to their demographics, personality or values. In this case, Angelina Jolie was similar in terms of familiar personality who is youthful and attractive, which made college students remember celebrity than a strange doctor.

Another possible explanation behind the failure of expert effectiveness could be the way the stimulus was designed. In particular, the way the three endorsers were pictured in the PSA were similar because of which the participants might not have found any difference or effect of expert. In addition, since the typical person was dressed formally, she was portrayed as more authoritative person similar to expert, which must have influenced the responses of participants on recall, and recognition. Further, the subjects may have perceived typical person as doctor, and may have answered incorrectly.

6.4 Message Appeal Effects

This study predicted that when highly relevant information is presented to people, they are highly motivated to process the information provided, and as a result, they engage in more systematic processing of the arguments provided in the given communication message. During

systematic processing of arguments, the information provided in the message should be clear, orderly, and central to the individuals needs. The message appeals, which have provided detailed, clear and issue relevant information are rational messages. Therefore, rational message appeals would be more effective in highly relevant conditions than emotional appeal.

Conversely, the results show that rational message appeals failed to be more effective. The college students' lack of interest and low degree of relevancy to the AIDS issue are considered the primary reasons for these unexpected results. According to ELM, when individuals are exposed to personally less relevant information, they are less likely to get motivated to process the information. In this case, even if the information is highly important, the individual might consider it as less relevant due to the lack of personal relevancy towards the issue. As a result, people are less likely to be engaged in effortful processing of the message, and instead, they are more likely to be involved with superficial processing of information. Therefore, when the messages are processed superficially, detailed information, such as rational appeals prove to be less effective, whereas the processing of the message takes peripheral route and cues such as emotions become more important.

However, the results involving emotional message appeals indicate a conflict. If participants perceived the AIDS PSA as less relevant, then PSAs promoted with emotional message appeals should be more effective than rational appeals. Nonetheless, the findings fail to detect such difference. This observation can be explained providing three reasons. First, the findings are consistent to Dillard and Peck's (2000) study, which suggested that the processing of emotional messages in PSA take cognitive route of evaluation because most PSA emotional messages are fear oriented. Thus, assuming that participants processed rational messages centrally, it can be predicted that since fear oriented emotional appeals raise personal concern

towards the messages, the messages encourage an individual to evaluate the issue in the central route (Dillard & Peck, 2003). Therefore, according to ELM, the students might have processed both emotional and rational message appeals central to their needs, which resulted in finding out no difference between both the appeals.

Second reason for the findings that revealed no significant difference between the emotional and rational message appeals can be explained by the nature of the text included in the stimulus. Both message appeals had similar starting sentence as “AIDS is a killer disease...” which might have induced a feeling of fear with the use of words, such as “killer disease.” As a result, subjects may have processed the message in similar way for both appeals. Therefore, although reliability of the message appeals was increased by using messages from a past research, the results of the experiment questioned the validity of stimulus message which may be considered as a limitation for the selection of messages. Third explanation is that the banner PSA had a limited space to include a detailed emotional as well as rational message. Since the information provided on the banner was limited, the subjects were not able to process the message systematically or peripherally. Hence, they did not find any difference between emotional and rational message appeal.

6.5 Interaction Effects

Similarly, by assuming that the AIDS issue is personally relevant to the college student population, this study predicted that the combination of an expert endorser, who is knowledgeable and matches with the AIDS issue, and a rational message appeal, which contains issue-relevant cues, is more effective than other combinations of endorsers and message appeals. However, such a difference was not observed in the present study.

The reason can be that participants did not consider AIDS as a personally relevant issue. As the elaboration likelihood model in terms of Internet advertising also suggests, the level of personal relevancy of the content to the subjects are important determinants for the message to be effective (Cho, 1999). Since the information was less relevant to the participants, they did not process the information with high motivation and instead, they processed the information with less effort, thinking in a more peripheral manner. Accordingly, the lack of motivation to process the less relevant message was influenced by the peripheral cues, such as attractiveness of celebrity and emotions in the message than the central cues. As evidence, the subjects preferred an attractive celebrity as more competent with rational appeal messages, and considered the expert as knowledgeable with the peripheral cue, emotional appeal.

Another reason for not finding a significant effect of expert and rational appeal can be due to the manipulation error in constructing the stimulus. Since the pictures of endorsers were similar in position, the participants could not find any difference between the endorsers. Moreover, message appeals were also similar in nature that the combination of both the variables in the stimulus might have caused conflict for participants to evaluate PSAs in all conditions.

Additional reason might be that the participants might not have noticed the Internet PSA. The Internet is considered as goal oriented medium (Cho & Cheon, 2004). Since people read the information provided carefully, they may ignore the advertisement. For instance, in this experiment, only 48% of sample viewed the internet PSA on the website. The results recommend that subjects have ignored the message which in turn might have inhibited them to process the Internet PSA. These results are congruent to the studies that tested the Internet advertising effectiveness and concluded that people intentionally ignore the advertisements on the website

which results in not viewing the banner on the website (Cho & Cheon, 2004). This phenomenon is called banner blindness.

6.6 Implications

The implications of this study are twofold. First, this study paves the road to study the effects of endorser types and message appeal methods as well as their interactions on the effectiveness of Internet PSAs. As a pioneer research, this study filled the gap between two popularly employed persuasion strategies in practice. Thus, the findings of this study contribute to a better understanding of Internet PSAs although most of the hypotheses were not supported. This study suspected the role of relevancy on the success of PSAs with the Internet as a major reason and attempted to explain the unexpected findings within a theoretical understanding of the ELM.

Second, the findings of this study imply that college students may not be highly interested in processing AIDS public service messages on the Internet. Considering the fact that the youth between the age group 18-28 are most vulnerable to AIDS, the results of this research are alarming. The finding suggests the producers of PSAs to find better communication strategies for the younger generation. In a way, this research yielded some useful promotional implications including endorsers and message appeals. For instance, although this research failed to find experts to be effective endorsers, the results suggest experts' use when the producers want their endorser image to be an expert on the issue, whereas overall finding of this research indicates that celebrity endorsements were more effective than expert and typical person endorsements. The subjects recognized the issue dealt with in the PSA better when a celebrity was featured in the campaign. Moreover, the students considered organization and endorser more appealing, and also liked the endorser in the message if a celebrity was present in the PSA.

6.7 Limitations

As an exploratory research study, this study may include some limitations. First, the theme of the PSA can be considered as the most important limitation that restricted the students from processing the PSA as it was expected. Since theme of the banner PSA as well as website was less relevant to subjects, the students were not encouraged to carefully scrutinize the message, which resulted in unexpected findings. Second, the use of college students can be considered as a limitation of the study. Although they were one of the major population segment to use the Internet, this study suspects that they are less interested in AIDS issues and overall PSAs as much as the other generations. Thus, the findings of this study may not be generalized to other populations.

Third, this study was conducted in a laboratory condition. In contrast to natural viewing situations, laboratory experiments have subjects view the designated website and banner ad and force reactions in an artificial environment. Hence, it may be questionable whether the findings of this study would be replicated in natural website conditions. Fourth, as this was the first attempt to understand the effectiveness of PSAs on the Internet, this study adopted the attitude measures from the advertising literature. The measures may not be suitable to determine attitude towards endorser and organization in the PSA. Moreover, the research did not measure overall attitude towards PSAs, thus it failed to record the general attitude of students towards PSAs.

The research followed a website experimental method that provided limited space to place the PSA banner. As a result, it restricted to include long messages or include greater information on the banner. Hence, space restriction to include the text message might have limited the research to determine the message appeal effects.

6.8 Suggestions for Future Research

The findings of this study may pave numerous avenues for future research. One approach is to broaden the examination of promotion strategies in PSAs. There is a need for replication using combinations of other variables, such as size of banner, different PSA themes, and different populations. The present research design can be extended by including more subjects, including non-student participants, and various PSA themes should be included in future studies. In addition, the findings of this research can be compared by replicating the study with other mediums, such as television, radio or newspapers.

This study suspects that student populations might not have considered the theme of the website, AIDS, as a relevant issue to them. Thus, future research should replicate this study to determine whether the hypotheses proposed in this study are supported using more themes that are relevant to the college student/ student sample. Extending the idea of relevant themes to context, this study suggests that researchers should determine the context effects of website contents in examining the endorser effects and message effects on PSA success. Because Internet PSAs are displayed on website, audiences may be influenced not only by the endorser and message appeals, but also by website contexts as well.

REFERENCES

- Ahn, J., & Ferle, C. L. (2008). Enhancing recall and recognition for brand names and body copy. *Journal of Advertising*, 27(3), 107-117.
- Alsmadi, S., (2006). The power of celebrity endorsement in brand choice behavior: An empirical study of consumer attitudes in Jordan. *Journal of Accounting – Business & Management*, 13, 69-84.
- Amos, C., Holmes, G., & Strutton, D. (2008). Exploring the relationship between celebrity endorser effects and advertising effectiveness. *International Journal of Advertising*, 27(2), 209-234.
- Andsager, J., L., Austin, E., W., & Pinkleton, B., E. (2001). Questioning the value of realism: Young adults' processing of messages in alcohol related public service announcements and advertising. *Journal of Communication*, 51(1), 121-142.
- Atkin, C., & Block, M. (1983). Effectiveness of celebrity endorser. *Journal of Advertising Research*. 23, 57-61.
- Baltas, G. (2003). Determinants of internet advertising effectiveness: An empirical study. *The Marketing Research Society*, 45(4), 505-513.
- Biswas, D., Biswas, A., & Das, N. (2006). The differential effects of celebrity and expert endorsements on consumer risk perceptions: The role of consumer knowledge, perceived congruency, and product technology orientation. *Journal of Advertising*, 35(2), 17-31.
- Borzekowski, L. G., & Poussaint, A. F. (1991). Public service announcement perceptions: A quantitative examination of anti-violence messages. *American Journal of Preventive Medicine*. 17(3), 181-188.
- Brinson, L. S., & Brown, H. M. (1997). The AIDS risk narrative 1994 CDC campaign. *Journal of Health Communication*, 2, 101-112.
- Cho, C., & Cheon, J. H. (2004). Why do people avoid advertising on the Internet? *Journal of Advertising*, 33(4), 89-97.

- Cutler, D. B., & Javalgi, G. R. (1993). Analysis of print ad features: Service versus products. *Journal of Advertising Research*, 33, 62-69.
- Dahlen, M., & Bergendahl, J. (2001). Informing and transforming on the web: An empirical study of response to banner ads for functional and expressive products. *International Journal of advertising*, 20, 189-205.
- Dejong, W., Wolf, C. R., & Austin, S. B. (2001). Federally funded television public service announcements (PSAs) to prevent HIV/AIDS: Content analysis. *Journal of Health Communication*, 6, 249-263.
- Dissart, G., Public service announcements. (n. d.). *The Museum of Broadcast Communication*. Retrieved February 9, 2009, from: <http://www.museum.tv/archives/etv/P/htmlP/publicservic/publicservic.htm>
- Dillard, J. P., & Pech, E. (2000). Affect and persuasion: Emotional responses to public service announcements. *Communication Research*, 27 (4), 461-495.
- Erdgan, Z. B., Baker, M. J., & Tagg, S. (2001). Selecting celebrity endorsers: The practitioner's perspective. *Journal of Advertising Research*, 41(3), 39-48.
- Friedman, H. H., & Friedman, L. (1979). Endorser effectiveness by product type. *Journal of Advertising Research*, 19, 63-71.
- Freiden, J. (1984). Advertising spokesperson effects: An examination of endorser type and gender on two audiences. *Journal of Advertising Research*, 24(5), 33.
- Freiden, J. (1982). An evaluation of spokesperson and vehicle source effects in advertising. *Current Issues & Research in Advertising*, 5(1), 77.
- Friedman, H., Termini, S., & Washington, R. (1976). The effectiveness of advertisements utilizing four types of endorsers. *Journal of Advertising*, 5(3), 22-24.
- Freimuth, S. V., Hammond, S. L., Edgar, T., & Monahan, L. J. (1990). Reaching those at risk: A content-analytic study of AIDS PSAs. *Communication Research*, 17(6), 775-791.
- Gallup & Robinson. (2007). Engagement, emotions, and power of Radio. *Radio Effectiveness Lab*, 1, 1-4.

- Heesacker, M., Petty R. E., & Cacioppo. J. T. (1983). Field dependence and attitude change: Source credibility can alter persuasion by affecting message-relevant thinking. *Journal of Personality*, 51(4), 653-666.
- Holmes, H. H., & Crocker, E. K., (1987). Predispositions and the comparative effectiveness of rational, emotional and discrepant appeals for both high involvement and low involvement products. *Journal of the Academy of Marketing Science*, 15(1), 27-35.
- Hovland, C. I., Janis, I. L., & Kelley, J. J. (1953). *Communication and persuasion*. New Haven: Yale University Press.
- Jeon, W., George, R., Huhmann, A. B. (1999). Appeals in Korean magazine advertising: A content analysis and cross-cultural comparison. *Asia Pacific Journal of Management*. 16, 249-258.
- Johnson, D., Flora, A. J., & Rimal, N. R. (1997). HIV/AIDS Public Service Announcement around the world: A descriptive analysis. *Journal of Health Communication*, 2, 223-234.
- Kahle, R. L., & Homer, P. M. (1985). Physical attractiveness of the celebrity endorser: A social adaptation perspective. *The Journal of Consumer Research*, 11(4), 954-961.
- Kamins, A. M. (1989). Celebrity and non-celebrity in two-sided context. *Journal of Advertising Research*, 29(3), 34-42.
- Kamins, A. M. (1990). An investigation into the "Match-Up" hypothesis in celebrity advertising: When beauty may be only skin deep. *Journal of Advertising*, 19(1), 4-13.
- Kamen, M. J., Abdul, C., & Kragh R. J. (1975). What spokesman does for a sponsor. *Journal of Advertising Research*, 15 (2), 17-24.
- Kotler, P. & Armstrong, G. (2001), *Principles of marketing*, 9th ed. Englewood Cliffs, NJ: Prentice-Hall.
- Kelly, W. S. & Turley, L. W. (2004). The effect of content on perceived affect of Super Bowl commercials. *Journal of Sport Management*, 18, 398-420.
- Lee, J., & Thorson, E. (2008). The impact of celebrity-product incongruence on the effectiveness of product endorsement. *Journal of Advertising Research*, 48(3), 433-449.


- Lee, S., & Davie R. W. (1997). Audience recall of AIDS PSAs among U.S. and international college students. *Journalism and Mass Communication Quarterly*, 74(1), 7-22.
- Lothis, R., Donthu, N., & Hershberger., E. K. (2003). The impact of content and design elements on banner advertising click-through rates. *Journal of Advertising Research*, 43(4), 410-418.
- Mueller, B., (1987). Reflections of culture: An analysis of Japanese and American advertising appeals. *Journal of Advertising Research*, 27(3), 51-59.
- McCracken, G. (1989). Who is the Celebrity Endorser? Cultural foundations of endorsements process. *Journal of Consumer Research*, 16, 310-321.
- Miller, N. D., & Stafford M. R. (1999). An international analysis of emotional and rational appeals in services vs. goods advertising. *Journal of Consumer Marketing*, 16(1), 42-55.
- Moore, J. D. (2007). Emotion as a mediator of the influence of gender on advertising effectiveness: Gender differences in online self-reports. *Basic and Applied Social Psychology*, 29(3), 203-211.
- Moyer-Gusé, E. (2008). Toward a theory of entertainment persuasion: Explaining the persuasive effects of entertainment-education messages. *Communication Theory*, 18(3), 407- 425.
- Nan, X. (2008). The influence of liking for a public service announcement on issue attitude. *Communication Research*, 35 (4), 503-528.
- Ohanian, R., (1991). The impact of celebrity spokespersons' perceived image on consumers' intention to purchase. *Journal of Advertising Research*, 13(1), 46-55.
- Ohanian, R., (1990). Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness. *Journal of Advertising*, 19(3), 39-52.
- O'Keefe, G. J., & Reid, K. (1990). The uses and effects of public service advertising. In J.E. Grunig and L.A. Grunig (Eds.), *Public Relations Research Annual*.(pp. 67-94). Hillsdale, NJ: Lawrence Erlbaum.
- Perse, M. E., Nathanson, A. I., & McLeod, D.M. (1996). Effects of spokesperson sex, public service announcement appeal, and involvement on evaluations of safe-sex PSAs. *Health Communication*, 8(2), 171-189.

- Petty, R. E., & Cacioppo, J. T., (1986). *Communication and persuasion: Central and peripheral routes to attitude change*, New York: Springer/Velag.
- Petty, R. E., Kasmer, J. A., Haugtvedt, C. P., & Cacioppo, J. T. (1987). Source and message factors in persuasion: A reply to stiffs critique of the elaboration likelihood model. *Communication Monographs*, 54, 257-262.
- Razzouk, N., & Seitz, V. (2003). Banner advertising and consumer recall: An empirical study. *Journal of Promotion Management*, 9(1/2), 71-80.
- Robinson, H., Wysocka, A., & Hand, C. (2007) Internet advertising effectiveness: The effect of design on click-through rates for banner ads. *International Journal of Advertising*, 26(4), 527-541.
- Rosenkrans, G. (2009). The creativeness and effectiveness of online interactive rich media advertising. *Journal of Interactive Advertising*, 9(2).
- Shanan, K. J., & Hopkins, D. J. (2007). Truths, half truths and deception: Perceived social responsibility and intent to donate for a nonprofit using implicature, truth, and duplicity in print advertising. *Journal of Advertising*, 36(2), 33-48.
- Slater, M. D. (1999). Drinking and driving PSAs: A content analysis of behavioral influence strategies. *Journal of Alcohol and Drug Education*, 44 (3), 68-81.
- Stafford, M. R., & Day, E. (1995). Retail services advertising: The effects of appeal, medium, and service. *Journal of Advertising*, 24(1), 57-71.
- Stafford, M. R., Stafford, T. F., & Day, E. (2002). A contingency approach: The effects of spokesperson type and service type on service advertising perceptions. *Journal of Advertising*, 31(2), 17-36.
- The United States Census Bureau (2007). *Table 1120. Internet Access and Usage: 2007*. retrieved on April 4th 2009, <http://www.census.gov/compendia/statab/tables/09s1120.pdf>
- Till, D. B., & Busler, M. (1998). Matching products with endorsers: Attractiveness versus expertise. *Journal of Consumer Marketing*, 15(6), 576-586.
- Treise, D., & Weigold, F. M. (2001). AIDS Public Service Announcements: Effects of fear and repetition on predictors of condom use. *Health Marketing Quarterly*, 18(3/4), 39-61.


- Um, N. H. (2008). Revisit elaboration likelihood model: How advertising appeals work on attitudinal and behavioral brand loyalty centering around low vs. high-involvement product. *European Journal of Social Sciences*, 7(1), 126-139.
- United States Statistics Summary (n.d.,) 2007Avert.Org, Retrieved April 22, 2008 from <http://www.avert.org/usa-statistics.htm>
- Wei-Jen, N. (1993). Public service announcements and AIDS risk perceptions: The impact of speaker characteristics. *The Canadian Journal of Human Sexuality*, 2(4), 215-220.
- Xie, F., T., Donthu, N., Lohita, R., & Osmonbekov, T. (2004). Emotional appeal and incentive offering in banner advertisements. *Journal of Interactive Advertising*, 4(2), 15.
- Yaveroglu, I., & Donthu, N. (2008). Advertising repetition placement issues in on-line environment. *Journal of Advertising*, 37(2), 31-43.
- Yi, Y. (1990a). Cognitive and affective priming effects of the context for print advertisements. *Journal of Advertising*, 19(2), 40-48.
- Yi, Y. (1990b). The effects of contextual priming in print advertisements. *Journal of Consumer Research*, 17, 215-222.
- Yi, Y. (1993). Contextual priming effects in print advertisements: The moderating role of prior knowledge. *Journal of Advertising*, 22(1), 1-11.

APPENDIX – A BANNER PSAs


- **Celebrity with emotional appeal**




AIDS is a Killer Disease
There is no vaccine and there is no cure
Talk about AIDS before it hits your home

GLOBAL 
HEALTH
ASSOCIATION


- **Expert with emotional appeal**




AIDS is a Killer Disease
There is no vaccine and there is no cure
Talk about AIDS before it hits your home

GLOBAL 
HEALTH
ASSOCIATION


- **Typical Person with emotional appeal**




AIDS is a Killer Disease
There is no vaccine and there is no cure
Talk about AIDS before it hits your home

GLOBAL 
HEALTH
ASSOCIATION

- **Celebrity with rational appeal**



AIDS is a Killer Disease
There is no vaccine and there is no cure
Get tested for HIV today

GLOBAL 
HEALTH
ASSOCIATION

- **Expert with rational appeal**



AIDS is a Killer Disease
There is no vaccine and there is no cure
Get tested for HIV today

GLOBAL 
HEALTH
ASSOCIATION

- **Typical Person with rational appeal**



AIDS is a Killer Disease
There is no vaccine and there is no cure
Get tested for HIV today

GLOBAL 
HEALTH
ASSOCIATION

APPENDIX – B

CONSENT FORM

Louisiana State University
Consent to Participate in a Research Study
Adult Participants
Social Behavioral Form

Title of Study: The Effectiveness of endorser and appeal in a website banner PSA
Principal Investigator: Arti Kulkarni
Rank: Student
LSU Department: Mass Communication
Email Address: akulka2@lsu.edu
Funding Source: n/a
Study contact telephone number: 225-456-0333
Study contact email: akulka2@lsu.edu

What are some general things you should know about research studies?

You are being asked to take part in a research study. To join the study is voluntary. You may refuse to join, or you may withdraw your consent to be in the study, for any reason, without penalty.

Details about this study are discussed below. It is important that you understand this information so that you can make an informed choice about being in this research study.

You will be given a copy of this consent form. You should ask the researchers named above any questions you have about this study at any time.

What is the purpose of this study?

The purpose of this research study is to examine college students' website browsing habits.

Where will the study be conducted?

This research study will be conducted on Louisiana State University campus.

How many people will take part in this study?

Undergraduates who are 18+ years of age enrolled in the mass communication classes will participate in this research study. Thus, any vulnerable population (e.g., children under the age of 18, mentally impaired persons, pregnant women, prisoners, and the aged) will not be in the study.

If you decide to be in this study, you will be one of approximately 160 people in this study.

How long will your part in this study last?

The study will take 30 minutes to complete. There will be NO follow-up. Remember that there are other ways to obtain your course credit in addition to study participation.

What will happen if you take part in the study?

In this study you will browse an AIDS awareness website, it includes all parts of website such as banner advertisements. Then, you will be asked to provide anonymous evaluations about that website. The survey itself will last approximately 5 to 10 minutes to complete.

What are the possible benefits from being in this study?

Research is designed to benefit society by gaining new knowledge. You may also expect to benefit by participating in this study by receiving credit for your participation requirement.

What are the possible risks or discomforts involved from being in this study?

There are no known risks in participating in this study. However, there may be uncommon or previously unknown risks. You should report any problems to the researcher.

How will your privacy be protected?

Your name will only appear on this informed consent form and in the records for verifying your participation. Your responses will only be associated with a code number that we assign, but that number is not and will not be connected in any way with your name. Thus, there will be no way to identify which responses are yours. The data will only be accessible to the researchers, and will be stored separately from consent forms and anything that might identify you. All data collected from this study will be kept on a password-protected computer and paper forms will be kept in a locked cabinet behind a locked door. Data from this study may be kept for seven years, in keeping with the requirements of academic journals, after which time the data may be destroyed. In any presentations, written reports, or publications, no one will be identifiable and only group results will be presented.

Although every effort will be made to keep research records private, there may be times when federal or state law requires the disclosure of such records, including personal information. This is very unlikely, but if disclosure is ever required, LSU will take steps allowable by law to protect the privacy of personal information. In some cases, your information in this research study could be reviewed by representatives of the University, research sponsors, or government agencies for purposes such as quality control or safety.

Will you receive anything for being in this study?

You will receive extra credit for participating in this study. However, your participation is completely voluntary. You may skip any questions or discontinue participation at any time with no penalties.

Will it cost you anything to be in this study?

There will be no costs for being in the study. You may choose not to be in the study or to stop being in the study before it is over at any time. This will not affect your class standing or grades at LSU. You will not be offered or receive any special consideration if you take part in this research.

What if you have questions about this study?

You have the right to ask, and have answered, any question you may have about this research. If you have questions, or concerns, you should contact the researchers listed on the first page of this form.

What if you have questions about your rights as a research participant?

All research on human volunteers is reviewed by a committee that works to protect your rights and welfare. If you have questions or concerns about your rights as a research subject you may contact, anonymously if you wish, the Institutional Review Board at 225-578-8692 or by email to IRB@lsu.edu.

Participant's Agreement:

“The study has been discussed with me and all my questions have been answered. I may direct additional questions regarding study specifics to the investigators. If I have questions about subjects' rights or other concerns, I can contact Robert C. Mathews, Chairman, LSU Institutional Review Board, (225)578-8692, irb@lsu.edu, www.lsu.edu/irb. I agree to participate in the study described above and acknowledge the researchers' obligation to provide me with a copy of this consent form if signed by me.”

Signature of Research Participant

Date

Printed Name of Research Participant

APPENDIX – C

QUESTIONNAIRE

1. How long do you think you browsed the website? _____
2. What was the theme of the website you just browsed? Can you name it?
 - a. No, I can *NOT*.
 - b. Yes (please, specify)_____
3. Have you ever browsed *a website* of this type of theme *at least once before*?
 - a. Yes
 - b. No
4. How often is that you visit this type of website?
 - a. Never
 - b. Less than once a month
 - c. Once a month
 - d. Two or three times a month
 - e. Once a week
 - f. Two or three times a week
 - g. Everyday
5. Please rate the website you just browsed based on the following attributes. Answer on a scale of 1 to 7, where 1 is strongly disagree and 7 is strongly agree. The website was...

	<i>Neutral</i>							
	3	2	1	0	1	2	3	
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Not Informative
Useful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Useless
Socially Relevant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Socially Irrelevant

6. If you had to choose, which of the following themes best describes your internet surfing choices? *Check all that apply.*
 - a. Gaming
 - b. Movies
 - c. Social Networking
 - d. News

- e. Music
- f. Television
- g. Business
- h. Job
- i. Others _____

7. How many days per week do you visit the following types of websites?

	Never	Less than once a month	Once a month	Two or three times a month	Once a week	Two or three times a week	Everyday
Gaming	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Movies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Social Networking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
News	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Music	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Television	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Did you see any banner advertisements on the website?

- a. Yes
- b. No

9. There were banner ads on the website. Can you remember the types of the products/services promoted on the banner? List *ALL* that you can remember.

- a. No
- b. Yes (Please, specify)_____

10. Do you remember the organization name on the banner advertisement (e.g., brand, service organizations)? List *ALL* that you can remember.

- a. No

b. Yes (Please, specify)_____

11. Were there any human models in the advertisement?

- a. No
- b. Yes (Specify the number)_____

12. Do you remember occupation of the person in the banner advertisement?

- a. Doctor
- b. Some Person
- c. Animated Character
- d. Celebrity

13. The banner ad included a message, can you remember any words or sentences from the advertisement? List *ALL* that you can remember.

Please do **NOT** return to the questions to change or correct your answers. This is **NOT** a test.

14. There were several banners on the website. Please, select the types of products/services advertised while you were browsing the website.

Product/Service Type	<i>Yes</i> , I saw the banner(s) of this product/service type	<i>No</i> , I did NOT see the banner(s) of this product/service type	<i>Don't know/Don't remember</i>
Automobile	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Athletic shoes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Service Announcement (PSA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sports drink	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. Please, select the specific organization promoted in the banner advertisement on the website.

Organization	<i>Yes</i> , I saw the banner(s) of this product/service type	<i>No</i> , I did NOT see the banner(s) of this product/service type	<i>Don't know/Don't remember</i>

US-AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Global Health Association(GHA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radical Technologies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Kenstar	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

16. Please, select specific people featured in the banner advertisements on the website.
Endorser

	<i>Yes, I saw the banner(s) of this product/service type</i>	<i>No, I did NOT see the banner(s) of this product/service type</i>	<i>Don't know/ Don't remember</i>
Animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Angelina Jolie	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Animated Character	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unidentifiable person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. Please, select specific message included in the banner advertisement on the website.

Message	<i>Yes, I saw the banner(s) of this product/service type</i>	<i>No, I did NOT see the banner(s) of this product/service type</i>	<i>Don't know/ Don't remember</i>
"AIDS is a killer....Talk about AIDS before it hits your home."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
HIV/AIDS.....Keep the promise."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"AIDS is a killer.....Get tested for HIV today."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
"Watch out for needles."	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions ask you to evaluate public service announcement (PSA), organization, and the endorser that appeared on the website.

18. Please rate the **GHA- PSA** that was featured on the website using following scales: (1 = *strongly disagree* and 7 = *strongly agree*)

	<i>Strongly Disagree</i>						<i>Strongly Agree</i>
	1	2	3	4	5	6	7
Persuasive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Appealing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Easy to forget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Effective	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Believable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Original	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledgeable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustworthy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

19. If you were planning to support **GHA**, how likely is it that you would consider donating the money to this organization? Please, rate your opinions on the following scales: (0 = *neutral*, 1 = *slightly*, 2 = *quite*, and 3 = *extremely*)

	<i>Neutral</i>							
	3	2	1	0	1	2	3	
Unlikely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Likely
Impossible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Possible
Improbable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Probable

20. Please rate the endorser(s) of the PSA on the following scales: (1 = *strongly disagree* and 7 = *strongly agree*)

	<i>Strongly Disagree</i>	2	3	4	5	6	<i>Strongly Agree</i>
	1						7
Appealing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Trustworthy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Persuasive	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Believable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reliable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Credible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledgeable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Likeable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competent	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Expert	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following questions relate to your personal opinion on the societal concerns

21. Based on the banner advertisement you saw on the website you just browsed, rate the following statements. Please use a scale of 1 to 7, where 1 is strongly disagree, and 7 is strongly agree

	<i>Strongly Disagree</i> 1	2	3	4	5	6	<i>Strongly Agree</i> 7
I will be personally concerned about the chance of getting AIDS.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I'm afraid by the spread of AIDS in our nation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I do not think much about AIDS.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AIDS is an issue that I always considered personally important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I will most likely get a blood test done for HIV infection within next six months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

22. After watching the banner advertisement, how will your friends react? Please use a scale of 1 to 7, where 1 is strongly disagree and 7 is strongly agree.

	<i>Strongly Disagree</i> 1	2	3	4	5	6	<i>Strongly Agree</i> 7
My friends will be personally concerned about the chance of getting AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My friends will be afraid due the spread of AIDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

in our nation.							
My friends do not think much about AIDS.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The AIDS issue is a topic my friends consider personally important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
My friends will likely get a blood test done for HIV infection within next six months	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. How much will this banner influence you? Please use a scale of 1 to 7, where 1 is not much, and 7 is very much

1						7
Not Much	2	3	4	5	6	Very Much

24. How much will this banner influence your friend or others? Please use a scale of 1 to 7, where 1 is not much and 7 is very much

1						7
Not Much	2	3	4	5	6	Very Much

25. How important is AIDS as an issue for you? Please use a scale of 1 to 7, where 1 is least important and 7 is very important.

1						7
Least important	2	3	4	5	6	Very important

26. In your opinion, how important is AIDS to the society? Please use a scale of 1 to 7, where 1 is least important and 7 is very important.

1						7
Least important	2	3	4	5	6	Very important

27. List out main important problems which the country is facing today?

The following questions relate to your person details and habits.

28. On an average, how many minutes each day do you use the following media?

- | | |
|--|---------------|
| a. Other daily newspapers (e.g., The Advocate) | _____ minutes |
| b. Magazine | _____ minutes |
| c. Television | _____ minutes |
| d. Radio | _____ minutes |
| e. Internet | _____ minutes |

29. How old are you? _____

30. Are you :

- a. Female
- b. Male

31. What is your Race?

- a. White
- b. Caucasian
- c. Black
- d. Hispanic
- e. Asian
- f. Other

32. Are you a :

- a. Freshman
- b. Sophomore
- c. Junior
- d. Senior
- e. Graduate student
- f. Other (_____)

VITA

Arti Kulkarni, a resident of Hyderabad, India, completed her Master of Communication Studies with media research as a specialization at University of Pune, Maharashtra in 2004. Her interest in marketing and advertising research encouraged her to pursue a career as a survey analyst in a marketing research firm, MarketTools Research Private Ltd., Hyderabad. After three years of work experience, Arti was enrolled in the master's program of the Manship School of Mass Communication at Louisiana State University in 2007.

During her time at Manship School, Arti explored various research concepts in relation to advertising and marketing. Her first individual research project was on female sexuality in magazine advertisements. In order to complete master's degree, Arti explored the impact of endorser and message appeal on the success of an online AIDS Public Service Announcement. In the future, Arti looks forward to work, for a professional advertising firm as a media planner or buyer. However, her career options are also open in contributing as a successful advertising researcher.