Producing More Persuasive Anti-Violence Messages for College Students:
Testing the Effects of Framing, Information Sources, and Positive/Negative Fact Appeal

Abstract: College students, between the ages of about 18 and 24, are the group of people who are most often exposed to situations involving diverse types of violence. They have greater access to alcohol and drugs and are under far less parental supervision than younger age groups; reports have shown that frequent involvement in several types of violent behaviors can seriously damage college students physically and psychologically. However, despite the high rate of violence among college students, there has not been enough discussion about how we can produce more effective anti-violence messages targeting college students. This research provides some useful insights into this issue by testing the possible effects of three anti-violence message conditions: gain/loss framing, different information sources, and negative/positive fact appeal. The results reveal that college students in this study find more appeal in anti-violence messages conveyed by a traditional public service announcement (PSA) than in a TV news report. The results also reveal that people pay more attention to messages that use negative fact appeal (e.g., “there are many people losing a lot of precious things because of their violent behaviors”) than to those that use positive fact appeal (e.g., “there are many people gaining a lot of precious things by avoiding violent behaviors”). An interaction effect between information sources and positive/negative fact appeal was also detected.

Keywords: anti-violence; framing; information source; public service announcements
Even though encounters with violent behavior could happen to almost anybody in our society, young adults, including college students, are more often exposed to violent behaviors in their daily lives (e.g., bar fighting, binge drinking, drunk driving, substance use) than other age groups (Brener, Simon, Krug, and Lowry 1999; Grossman and Markowitz 1999). College students, approximately between the ages of 18 and 24, often experience drinking and smoking legally for the first time in their lives, but they have much less parental supervision than previous generations have had (ScienceDaily 2008). Drinking and substance use are considered to be very important factors that can encourage violent behavior and lead to serious consequences (Powell, Ciecierski, Chaloupka, and Wechsler 2002). Therefore, college students, who are comparatively less experienced in drinking and substance use (i.e., health risk behaviors), could easily become involved in violent situations either as victims or as aggressors (Brener, Simon, Krug, and Lowry 2009; Carr 2005). Immaturity, lack of experience, and insufficient parental supervision generally lead to college students being more frequently involved in violent situations and suffering the undesired results of such situations (Tjaden and Thoennes 2000). According to a report, young adults in the U.S. between the ages of 18 and 24 were involved in approximately 479,000 violent crimes caused by diverse health risk behaviors annually (Carr 2005).

Actually, the overall rates of violence and crime in the U.S. have been dropping over the last few years (NY Daily News.com. 2009; National Adolescent Health Information Center 2007). According to the United States Crime Rates 1960-2009 report, the over U.S. crime rate has been declining over the past 10 years. In the case of New York City, the crime rate for the first three months of 2009 was the lowest in more than 40 years. However, violence among young adults has not decreased as much as that of other age groups (National Adolescent Health Information Center 2007). Needless to say, those young adults are ultimately victims who lose their health, jobs, or educational opportunities through their involvement in violent behavior, even though only a few are directly responsible for crimes (Cottrell and Chile 2008).

In reaction to this situation, several parties in society have tried to prevent or reduce the involvement of college students in violent behavior by using several methods including community movements, education programs/workshops, and public service announcements (PSAs) (Nation’s Health 1997). PSAs have been planned and produced by several organizations, including the Ad Council (www.adcouncil.org), the Centers for Disease Control and Prevention (CDC), many local organizations, and colleges and universities (Takaki 1999). Furthermore, anti-violent behavior among young people is one of the topics that the Ad Council is required to address in its PSAs every year, along with other major topics (e.g., safety, education, children, and community issues) (Melillo 2005). Whether via TV, magazines, or the Internet (e.g., the Anti-Violence Project, www.avp.org), anti-violent behavior messages have regularly been conveyed to various audiences through PSAs (Klijin 2003). However, despite the prevalence of violent behavior among college students and the need for more discussion about how to produce more effective messages to communicate with college students regarding anti-violent behavior, there have not been enough academic studies dealing with these issues (Melillo 2005; Takaki 1999). For example, there has been a lack of investigation into what types of advertising appeal and which message styles are more persuasive in anti-violent behavior PSAs aimed at college students (Hyman and Perone 1998; Smith, White, and Holland 2003). Since U.S. society has heavily relied on the use of PSAs as a major tool for promoting anti-violent behavior messages.
among college students, there is a clear need for more discussion about more persuasive messages in PSAs targeting college students (Melillo 2005).

This exploratory experiment attempts to provide some useful insights into how we can create more persuasive anti-violence messages for college students by testing three different conceptual conditions used by several communication researchers (e.g., Orth, Koenig, and Firbasova 2005): gain/loss framing, different information source, and negative/positive fact appeal.¹ Several health risk behaviors (e.g., binge drinking, drunk driving, substance use) will be used as important causal factors for violence among college students, since those behaviors often result in violence (U.S. Department of Health & Human Services 2005). The main effects of each behavior and the interaction effects will be examined using a 2*2*2* experimental method among college students between the ages of 18 and 24. Suggestions for practitioners who plan and produce anti-violence PSAs will be provided, along with recommendations for academic researchers regarding topics that are worth considering for future studies.

Review of Prior Literature

Even though the prevalence of violent behaviors among young adults including college students (generally between 18 and 24 years old) has been an important issue for a long time (Malamuth, Sockloskie, Koss, and Tanaka 1991; Rickgarn 1989), several reports have indicated that there has been a notable increase in the rate of violent behavior among college students in the last decade (Carr 2005). As the consumption of alcohol among college students has consistently increased (U.S. Department of Health & Human Services 2005), the reported incidents of violent behavior involving young people have become more widespread and serious (Carr 2005). There are many different forms of violent behaviors that occur inside and outside of college campuses. They range from the most violent—mass shooting at the Northern Illinois University in 2008 and the massacre at Virginia Tech in 2007—to the more common—bar fighting, dating violence, binge drinking, drunk driving, unprotected sex, and peer violence, which are often not officially reported (Brener, Simon, Krug, and Lowry 2009). Some data clearly show how violent behavior is a regular part of a college student’s life. As an example, one report indicated that 1 out of every 14 young male adults, including college students in the U.S., has been physically assaulted or raped by an intimate partner in situations where some health risk behaviors (e.g. drinking, smoking) are involved (Tjaden and Thoennes 2000). Simple assault cases accounted for about two-thirds of college student violent crimes (63%), while rape/sexual assault cases accounted for around 6%. Many violent incidents occur within a peer group as those involved are going through their everyday activities (U.S. Department of Health & Human Services 2005). Violent acts commonly happen as a result of drinking and substance use and can easily result in mental damage or physical harm, including loss of life (Carr 2005). In response to this, many parties, including the Ad Council, the CDC, local governments, colleges and universities, and various other organizations across the United States, have made efforts to reduce violent behavior among college students and other young adults (Farrell and Meyer 1997).

Among the strategies used to reduce violent behavior among college students, PSAs have been a popular method (Melillo 2005; Nation’s Health 1997). In addition to the Ad Council,

¹ A version of this article was presented in August 2010 at the Association for Education in Journalism and Mass Communication’s annual meeting held in Los Angeles, California.
which is the major organization that produces and airs PSAs in the United States, several other parties have planned and created anti-violence PSAs. On average, the Ad Council runs a total of approximately 50 PSAs in a year, covering various topics, and has a budget of around $1 million (Melillo 2005). Among the topics, anti-violence has been one of the most significant issues regularly addressed by its PSAs. Those PSAs, plus many other PSAs from non-profit organizations, are part of a considerable effort to communicate with diverse groups in society regarding social issues, including the prevention of violent behavior and health-risk behavior (e.g., binge drinking, drunk driving, smoking) (Lang, Chung, Lee, Schwartz, and Shin 2005). To make PSAs more effective, discussion about how to make more appealing PSAs targeting specific audiences should be conducted more often (Nation’s Health 1997; Smith, White, and Holland 2003).

In addition, universities have regularly produced their own PSAs about violence on campus (Carr 2005) in response to an increase in violent behavior in the vicinity of college campuses involving young adults, both college students and non-students (Cottrell and Chile 2008). Anti-violence PSAs aimed at college students have been produced emphasizing various health-risk issues, such as binge drinking, substance usage, drunken driving, dating safety, and anger management, since these issues have been connected to violent incidents in many cases (Carr 2005). For example, about 85% of violent acts are directly related to alcohol and other drug use (Carr 2005). Therefore, college students have been exposed to PSAs that deal with health-risk behaviors and violence through TV, magazines, newspapers, websites, radio, billboard, and mobile devices (Silverman 2003).

Researchers have conducted a number of studies about PSAs and their effects, yet the topic of anti-violence PSAs aimed at college students has not been a major issue in the literature (Palmgreen, Donohew, Lorch, Hoyle, and Stephenson 2001). Lang and her colleagues (2007) found, through their experimental study, that the use of emotional content in PSAs increased the participants’ intention to understand the main messages contained in the PSAs. The researchers also found that fast-paced production techniques also significantly increased the attention paid to PSAs by younger subjects across several topics. In another study, researchers argued that specific styles of verbal/written messages in anti-drug PSAs more strongly impacted audiences than other message styles (Cappella, Fishbein, Barrett, and Zhao 2005). They conducted an experiment using several different conditions that could possibly be applied to anti-drug PSAs that target different groups of people. The researchers tested the possible effects of the conditions and the individuals’ characteristics, such as “behavioral outcome beliefs,” “subjective norms,” and “self-efficacy.” The researchers found that subjective norms and self-efficacy significantly influenced the strength of participants’ agreement with the PSAs’ anti-drug messages (2005).

**Research Questions and Hypothesis**

In order to investigate which message styles in anti-violence PSAs are most attractive to college students, this study applied a conceptual framework with three types of messages: *gain/loss framing* (Homer and Yoon 1992; Orth, Koenig, and Firbasova 2005), *different information sources* (Petty and Cacioppo 1981; Greer 2003), and *negative/positive fact appeals* (Fiedler, Nickel, Asbeck, and Pagel 2003). This framework has been used often in previous studies dealing with people’s responses to different types of advertising messages (Shapiro, MacInnis, and Park 2002).
Gain/Loss Framing and People’s Attitudes toward Advertising Messages

People’s attitude towards, and their future actions regarding, a product, service, or brand are influenced not only by the actual information that they receive, but also by the way the information is presented (Puto 1987; Orth, Koenig, and Firbasova 2007). Framing is one of the concepts popularly used by advertising and marketing researchers in order to figure out the variations in the effects of specific types of messages that are conveyed to people in different ways (Smith 1996). Message framing has been operationalized either by 1) emphasizing positive attributes (i.e., gain framing) of a product/brand or by 2) emphasizing negative attributes of a product/brand (i.e., loss framing) (Gaeth et al., 1990; Woodside and Singer 1994). In other words, gain framing is informing the audience of possible benefits they may receive if they accept the messages in an advertisement. On the other hand, loss framing is informing the audience about the negative effects they may suffer if they don’t follow the messages conveyed in the advertisement (Levin and Gaeth 1988).

Message framing focuses on the role of people’s emotional changes (i.e., feelings, affections, and moods) and their rational aspects (i.e., logic and facts) (Kahneman, Daniel, and Tversky 1979). However, even though the information or message itself (e.g., competitive price, miles per gallon, and quality of the product) is very important in how people think about the product/service/brand featured in the advertisement, the message style and the type of message conveyed could be equally critical, perhaps even more critical, to the audience’s attitude toward the advertising (Block and Keller 1995; Zhang and Buda 1999). The emotions people may feel about an advertisement, based upon the style of the message, could be positive (e.g., love, humor, pride, and joy) or negative (e.g., fear, guilt, and shame). These emotions affect not only people’s attitude toward the advertising, but also their future actions regarding the product/service/brand or other issues (Batra and Ray 1986; Holbrook and Batra 1987).

Some researchers have indicated that the effects of positive framing on people’s attitudes toward advertising messages could be stronger than those of negative framing if the information conveyed is considered credible by the audience (Braun et al. 1997). For example, studies, including Homer and Yoon (1992), have found that people’s attitudes toward advertising messages (i.e., affective responses) become more positive when the advertisement applies positive framing and contains credible information about the benefits the audience may receive if they accept the message (Orth, Koenig, and Firbasova 2007; Levin and Gath 1988; Maheswaran and Meyers-Levy 1989; Jayanti 2001). On the other hand, some other studies have found that the effect of negative framing is stronger than that of positive framing (e.g., Kahneman, Daniel, and Tversky 1979).

Therefore, since the results of the studies discussing framing are inconsistent, this study formulates a research question instead of a hypothesis in order to figure out which framing (positive or negative) is more persuasive for anti-violence PSAs targeted at college students.

Research Question 1:
Will college students (18-24 years old) who are exposed to an anti-violence PSA that applies gain framing have a more positive attitude toward the PSA than those who are exposed to an anti-violence PSA that applies loss framing?

Different Information Sources and People’s Attitudes toward Advertising Messages

When people are exposed to a particular message, they generally try to figure out where the message actually comes from (information source) before they accept or reject it (Petty and
Cacioppo 1981). The audiences’ examination process regarding the source of the message (e.g., “Who is telling the story?”, “Where did I get this story from?”) is a very important part of the overall process through which they form a specific attitude toward the message and decide whether or not to take any future action based upon the message (Andrews and Shimp 1990). In other words, how people regard a specific information source (i.e., where the people get the message from, who they hear the message from) could play an important role in their attitudes toward the message received from that source, (e.g., positive, negative, believable, trustworthy) and their further decisions regarding the issues in the message, even though the message itself (e.g., anti-drunk driving) is the same (Sundar 1999).

Regarding people’s different perceptions about messages conveyed through advertisements and news reports, it has been argued that people generally give more credibility to messages that originate from regular news programs than dramatized in advertising (Greer 2003). Even though people’s overall attitude toward advertising could be different depending on numerous factors, such as gender, age, income, education, ethnicity, and personality (Shavitt et al. 1998), people generally show a more positive attitude toward messages they receive from news programs (e.g., “a CNN report indicated that drunk driving could have as high a fatality rate as cancer”) compared to messages which have been dramatized and conveyed through advertising (Greer 2003; Shavitt, Lowrey, and Haefner 1998; Lafferty and Goldsmith 1999).

However, there have been some mixed notions regarding people’s reactions to the messages from advertisements and TV news programs depending on several factors, such as the kinds of issues, the types of media, and the characteristics of the audience (Burak and Damico 1999; Rajagopal 2009; Yu and Cude (2009). Therefore, based upon the notions above, this study formulates a research question instead of a hypothesis regarding the more effective information source in conveying the message of anti-violence to college students.

Research Question 2:
Will college students (18-24 years old) in this study who are exposed to an anti-violence message through a TV news program (e.g., “a CNN report indicated that the prevalence of violent behaviors among college students in the U.S. has become serious”) have a more positive attitude toward the message than those who are exposed to the same message through a PSA?

Negative/Positive Fact Appeal and People’s Attitude toward Advertising Messages
In addition to the message framing (gain or loss) and information source, positive or negative fact appeal also has been investigated in studies that look at the effect of advertising style on perception of the message (Fiedler et al. 2003; Shapiro et al. 2002). While gain and loss expressions have already been mentioned in this study through previous research questions, there are differences between framing and positive/negative fact appeal, which is the subject of the next research question. Framing is about showing the benefits the audience could receive or miss out on, depending on their acceptance or rejection of the message contained within the advertisement. On the other hand, positive/negative fact appeal, in advertising research, refers to manipulation of the individual’s feeling by providing circumstantial information regarding the environmental situations in which the viewers are regarding the issue or product (Sar 2005). For example, to manipulate an individual’s feeling using positive or negative fact appeal regarding the danger of obesity, the message would emphasize that obesity can cause as many health
problems as cancer or cardiovascular disease. However, even though the message that obesity can cause numerous health issues is the same, the application of negative fact appeal will be different if the message emphasizes the trend that many people are making efforts to lose weight, and they are actually benefitting from losing their weight (e.g., “Cheer up. You can do it as well!”).

Some studies (e.g., Batra and Stayman 1990; Shapiro et al. 2002) indicated that it is comparatively easy to produce a cognitive effect (e.g., recall/memorize) among people if advertisers use messages with negative fact appeal (e.g., only providing the fact that obesity causes numerous health issues). According to the Affect-As-Information Model (Schwarz 1990), using negative fact appeal generally stimulates people to focus more on the particular facts and information being presented, rather than receiving emotional motivations to change their behaviors (1990). On the other hand, the people who are exposed to messages with positive fact appeal are more easily influenced by affective processing, such as their attitude toward the advertising message, rather than the cognitive effect (Sar 2005; Al-Jarboa 1997). Generally, people will be positively influenced by messages produced in a positive fact appeal manner (Batra and Stayman 1990; Shapiro et al. 2002).

Therefore, people are likely to show more positive perspectives/attitudes about the advertising and the messages conveyed when the description of the situation is comparatively benign and positive (Schwarz 1990).

Hypothesis:
College students (18-24 years old) in this study who are exposed to an anti-violence PSA that applies positive fact appeal will have a more positive attitude compared to the participants who are exposed to an anti-violence PSA that applies negative fact appeal.

Possible Congruence Effects of Framing, Information Sources, and Positive/Negative Fact Appeal on College Students Attitudes toward Anti-Violence PSAs

There have been several studies indicating that congruence among elements in an advertisement could strengthen the effect on the audiences’ attitudes toward the advertisement (Kover and James 1993; Heckler and Childers 1992). The elements in advertising that have been found to produce significant differences in the congruence of the audiences’ attitudes include products and message styles (Loef, Antonides, and Van Raaj 2001), products and culture (Cheron and Pau 2009), and multiple visual components (Heckler and Childers 1992). Regarding the congruence of message types in advertising, which is one of the major interests in this study, Ang, Lee, and Leong (2007) applied three concepts (novelty, meaningfulness, and connectedness) to the advertising message in order to check for any congruence effect, causing the audience to show different recall abilities and attitudes depending on the combination of the message types. However, even though there have been some studies related to congruence in terms of message types, it seems unreasonable to use the congruence framework as the basis for making a hypothesis in this study regarding possible interaction effects among the variables (gain/loss framing, different information source, and positive/negative fact appeal). This is because the congruence theory has not been applied to the specific concepts used in one single study yet. Therefore, the possible interaction effects or possible congruence effects among the three conditions are investigated through the following research question.
Research Question 3: Are there any interaction or congruence effects caused by different combination(s) of the three conditions (gain/loss framing, different information sources, and positive/negative fact appeal) on college students’ attitudes toward anti-violence PSAs?

Method

This study used a 2*2*2 factorial experiment. The author recruited 160 participants, so that 20 people could be randomly assigned to each of the eight groups. College students (18-24 years old), who are the major target of the anti-violence PSAs, were recruited as participants. All of them were enrolled in a journalism school at a university in the southeastern United States. The participants who were randomly assigned to each cell came to a media effects lab and participated in the experiment, which took about 20 minutes. Before they began to participate, they were asked to sign a consent form in which there were brief descriptions of this study (e.g., “this study is about your opinions regarding anti-violence messages from public service announcements or from a TV news report”). Guided by the researcher, the participants spent at least three minutes looking over the anti-violence PSA or TV news report. After about three or four minutes, they were asked to fill out the questions on the next page. They were asked about their opinions regarding the anti-violence PSA or TV news report they were exposed to previously.

Production of Stimulus Materials and Manipulation Check

A local advertising professional was hired to produce eight different stimulus materials (anti-violence PSAs and news programs) for use in the experiments (2*2*2). The researcher asked the professional to apply simple designs in order to reduce, as far as possible, any effects other than those being tested. Since the professional lacked understanding of the concepts in this study (gain/loss framing, different information sources, and positive/negative fact appeal), the researcher had several meetings with the professional in order to come up with ideas for the advertisements. First, a few common elements for the stimulants were decided upon: a picture of members of the target peer group (college students), a logo of ‘No violent behaviors,’ the basic headlines/key messages being communicated, and some supplemental visual factors. Using those basic elements, eight stimulants were produced, with variations according to the conditions that were being investigated (e.g., a PSA using loss framing with a positive fact appeal or a TV news report using gain framing with a negative fact appeal).

Using rough drafts of the eight stimulants, a manipulation check, which is a procedure for checking if the participants would recognize each condition correctly (gain/loss framing, different information sources, and positive/negative fact appeal), was conducted. A total of 40 young adults (5 per group; 24 females and 16 males) were recruited for the manipulation check process. They were asked to judge how successfully the conditions for each of the eight stimulus materials (e.g., a PSA with gain framing and positive fact appeal for stimulant 4, a TV news report with gain framing and negative fact appeal for stimulant 6, etc.) were applied. A series of paired-samples t-tests were performed to check the mean difference of the participants’ answers in regard to framing (gain or loss), information source (PSA or TV news report), and positive/negative fact appeal. Since the difference between PSAs and TV news report was very obvious, the t-test for the variable was not conducted. As a result of the manipulation check procedure, there were significant differences in all the pairs (1. Framing/gain or loss: M = 4.6 vs 1.7, SD = .50 vs .80 , t = 13.71 , p<.05; 2. Positive/negative fact appeal: M = 4.6 vs 1.75, SD =
1.80 vs 1.41, \( t = 12.89, p<.05 \). It was found that most participants in the manipulation check agreed that the conditions were correctly applied in the different stimulus materials.

Picture 1 and 2
Some Examples of Stimulus Materials Used in the Experiment
Questionnaire for the Participants

For specific questions, a scale called “emotional quotient scale” developed by Wells (1964) was used after slight modifications (in order to make it relevant to this study) to examine the participants’ attitudes toward different types of anti-violence message. The major reason for using this scale is that it examines people’s “global” emotional reactions toward stimulants, making it is possible for researchers to figure out not only general attitudes toward a specific ad or news program but also various aspects influencing the audiences’ overall attitudes (Bearden and Netemeyer 1999, pp. 280-281). The scale consisted of a total of 12 statements, including “This message is appealing to me”, “I would probably skip this message if I saw it in a magazine/newspaper/TV/etc.”, and “I am tired of this kind of message” (Table 1). The statements were provided to the participants, and they were asked to check one of five options, depending on their level of agreement with each statement (1: Strongly disagree, 2: Disagree, 3: Neither Agree nor Disagree, 4: Agree, 5: Strongly agree).

<table>
<thead>
<tr>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>This anti-violence message is very appealing to me.</td>
</tr>
<tr>
<td>I would probably skip this anti-violence message if I saw it in a</td>
</tr>
<tr>
<td>magazine/newspaper/TV/etc.</td>
</tr>
<tr>
<td>This is a heart-warming anti-violence message.</td>
</tr>
<tr>
<td>This anti-violence message makes me want to accept the message it</td>
</tr>
<tr>
<td>features.</td>
</tr>
<tr>
<td>This anti-violence message has little interest for me.</td>
</tr>
<tr>
<td>I dislike this anti-violence message.</td>
</tr>
<tr>
<td>This anti-violence message makes me feel good.</td>
</tr>
<tr>
<td>This is a wonderful anti-violence message.</td>
</tr>
<tr>
<td>This is the kind of anti-violence message you forget easily.</td>
</tr>
<tr>
<td>This is a fascinating anti-violence message.</td>
</tr>
<tr>
<td>I’m tired of this kind of anti-violence message.</td>
</tr>
<tr>
<td>This anti-violence message leaves me cold.</td>
</tr>
</tbody>
</table>

Results

Demographics of the Participants and Internal Consistency of Dependent Variables

Initially, a total of 188 college students enrolled in an introduction to journalism class were contacted to participate in the present study. Of those, 163 students agreed to participate in the experiment, but the researcher only hired 160 students who sent an agreement e-mail first, in order to assign the same number of subjects to each of eight groups. There were 92 female students and 68 male students among the final 160 participants. About 75% of students were freshmen and sophomores (123 students). Regarding the reliability of the scale used to measure dependent variables, Cronbach alpha was checked. Since an acceptable reliability of .879 was determined from the test, the researcher moved on to further analysis.

The three conditions (gain/loss framing, different information sources, and negative/positive mood) and college students’ attitudes toward the messages in anti-violence PSAs

In order to answer the research questions and to test the hypothesis, a single 2*2*2 three-way factorial analysis of variance (ANOVA) was conducted. The results from the test were reported in Tables 2. First, the analyses detected the effects of the three different conditions applied during the study. As seen in Table 2, two out of the three conditions significantly
influenced the college students’ attitudes toward the anti-violence messages. The use of gain or loss framing was not a significant factor impacting their attitudes toward the messages. On the other hand, the use of a different information source (i.e., either a PSA or a TV news report) significantly influenced their attitudes toward the anti-violence messages. The last condition, mood (negative or positive), also significantly influenced their attitudes toward the anti-violence messages. The directions in which these changes in attitude occurred were detected by looking at the average means of the participants’ answers. First, regarding the source of information, it was found that the college students in this study showed more positive attitudes toward the anti-violence messages when the messages were dramatized and conveyed through PSAs than when they heard the same messages from a TV news report. This meant that using regular TV news programs to communicate with college students regarding anti-violence issues was not as effective an idea as the author expected. The college students who were exposed to an anti-violence message dramatized through a PSA showed a more positive attitude toward the message ($p < .01$).

Next, regarding the effect of a positive/negative mood on the college students’ attitudes toward anti-violence messages, most of the participants were more willing to accept the anti-violence messages positively when they heard that many people were suffering from the tragic consequences of violence (negative mood), than when the messages emphasized the fact that people were benefiting from the avoidance of violent behaviors in their daily lives (positive mood). Based upon the results indicated above, it was found that the hypothesis regarding positive/negative mood was supported.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Framing * Source of Messages/Information Source</td>
<td>.251</td>
<td>1</td>
<td>.251</td>
<td>1.399</td>
<td>n.s</td>
</tr>
<tr>
<td>Framing * Mood</td>
<td>.775</td>
<td>1</td>
<td>.775</td>
<td>4.404</td>
<td>.037*</td>
</tr>
<tr>
<td>Mood Combinations of the Conditions</td>
<td>1.431</td>
<td>1</td>
<td>1.431</td>
<td>8.335</td>
<td>.004**</td>
</tr>
</tbody>
</table>

Table 2: Main Effects and Interaction Effects of the Conditions on Attitudes toward Anti-Violence Messages (ANOVA)

ANOVA = analysis of variance  
*p < .05, **p < .01
Possible interaction effects caused by different combination(s) of the three conditions on the college students’ attitude toward anti-violence messages

Possible interaction effects caused by the three different conditions (framing, information source, and mood) were detected through the ANOVA test as well. Four combinations were made to check if there was any interaction effect. These combinations were as follows: framing and information source, framing and mood, information source and mood, and all three together. As indicated in the Table 2, only the final combination significantly influenced the attitudes of college students toward anti-violence messages. When the three conditions were altered at the same time, the attitudes of the participants toward the messages changed significantly. It was found that the participants had the most positive attitude toward the anti-violence messages when they were conveyed using a PSA with gain framing and negative mood.

Discussion

What are the Best Message Formats for Anti-Violence PSAs Targeting College Students?

Having applied three different conditions (framing, information source, and mood), this study provides some important clues about what message styles may be more effective for communicating with college students regarding anti-violence issues. According to the results, it was found that most college students accepted the anti-violence messages more positively when the messages were produced with gain framing and negative mood applied at the same time. In other words, if a message was produced in the style below,

“Now, a lot of people are losing many precious things such as health, jobs, and educational opportunities by resorting to several types of violence. Don’t be one of them. If you avoid violence no matter what, you will get more than you expect!”

the young adults felt more attracted to the message and showed a comparatively positive attitude in comparison to other types of anti-violence messages. It was also found that many college students accepted the anti-violence messages more positively when the messages were from PSAs rather than from TV news programs. This result is somewhat inconsistent with some studies dealing with the overall trend of advertising avoidance and decreasing credibility of advertising content among consumers (e.g., Kim and Pasadeos 2006). These researchers have indicated that the current generation of consumers, both young and old, generally loses interest in advertising more easily than previous generations (Cho and Cheon 2004; Shavitt, Lowrey, and Haefner 1998). Even though there may be numerous other variables that could alter people’s attitudes, such as types of media, involvement of the products advertised, and the individual’s personal characteristics such as self-concept or materialistic views (Kwak, Zinkhan and DeLorme 2006), it has been argued that the current generation of consumers generally has less trust in and reliance on advertising when compared to regular media programs (Greer 2003). Some studies actually used college students in order to investigate the group’s attitudes toward different types of advertising and different levels of acceptance of the message contained in the advertisements (Burak and Damico 1999; Rajagopal 2009). For example, Yu and Cude (2009) reported that current college students have little trust in the messages they receive from advertising via several different types of media, including TV, magazines, and mobile media.

Then, how can the results in the present study be translated? According to the results, the college students in this study preferred the PSAs over regular news programs as a media vehicle
for anti-violence messages. A closer look at this preference for PSAs is necessary. It is possible that the college students might have conducted another examination of the message source, such as by determining if this was a regular advertisement from a company or a PSA, which would generally include common positive values helpful for improving our daily lives. In other words, the college students may have positive feelings toward PSAs, since those are assumed to convey socially beneficial messages. The image they had regarding PSAs might have been better, not only compared with news programs, but also compared with regular ads. If this is the case, letting college students know more clearly and quickly that the advertising conveying the anti-violence message is a PSA, as opposed to any other type of media format, is essential. For example, inserting a verbal notification, similar to those used in political advertising, such as “this is a public service announcement for an anti-violence movement” at the beginning of the PSA would be one idea for producing better PSAs in order to attract more positive attention from college students. The results of this study also provide support for the idea that society needs to rely more on PSAs to communicate messages with college students. PSAs that have been effectively planned and customized for college students could be a very useful tool for spreading several common positive messages among college students, such as anti-substance use, safe sex, and anti-drunk driving messages.

Is a negative approach still an effective method for public communication?

Different from framing conditions (gain or loss), it was found that using negative mood (e.g., “Did you know that about 790,000 people are suffering from the consequences of their violent behaviors?”) significantly influenced the college students’ attitude toward the anti-violence messages contained in the PSAs. This suggests that a PSA will be more effective if it provides information about how many people have experienced detrimental consequences as a result of their violent behavior. In other words, the use of messages intended to make audiences aware that they could suffer negative consequences could be very effective in the context of anti-violence PSAs.

Threat or fear appeals have been one of the most frequently used and discussed negative emotional appeals in advertising (Brooker 1981; Cochrane and Quester 2005). To stimulate people’s emotional instability, many advertisers have applied fear approaches for a diverse range of products, from health-related products (e.g., medications and weight-loss goods) to many other products (LaTour, Snipes and Bliss 1996; Quinn, Meenaghan, and Brannick 1992), including insurance and household items such as anti-bacterial sanitizers and detergents. In addition, fear appeals have been widely used in numerous PSAs related to societal issues such as smoking, drunk driving, and violent behavior. In those cases, the PSAs generally tried to generate the fear of negative outcomes associated with these behaviors (LaTour, Snipes, and Bliss 1996). However, despite the popular usage of fear appeals, there have not been consistent results in terms of the actual effects of these appeals. As Cochrane and Quester (2005) indicated, many researchers have produced inconsistent findings about the use of fear appeals when they have applied their studies to a diverse range of situations. The results varied depending on the situational variables they altered, such as people’s involvement with diverse issues and products (Burnett and Wilkes 1980); the audiences’ demographic characteristics, including age, income and education levels (Arthur and Quester 2004; Burnett and Wilkes 1980); and the culture of which the audience members are part (Cochrane and Quester 2005). Therefore, several researchers have pointed out that studies into the possible effects of fear appeals need to be
undertaken using specific contexts rather than a one-size-fits-all approach (Tanner, Hunt, and Eppright 1991; Eagley and Chaiken 1993; Cochrane and Quester 2005).

Even though some research has speculated that college students might ignore or avoid fear appeals regarding violent or risky behavior (Janis 1967; Quinn, Meenaghan, and Brannick 1992), the findings of this study show the usefulness of this approach, at least in terms of the anti-violence PSAs. Therefore, planners of PSAs, including the Ad Council and many universities, should focus more on informing college students about how many people in society have damaged their lives and suffered as a result of their reckless, violent, and risky behaviors. Examples of other people’s mistakes and advice on how to avoid those mistakes could be effective content for such PSAs.

**Limitations and Recommendations**

Even though the three conditions examined here (*framing, message source, and mood*) were chosen from the previous literature as the most likely to provide critical information relating to effective messages for anti-violence PSAs, there are many more potential conditions worth considering. Future studies should consider discussing some of these other conditions in order to produce more persuasive messages in PSAs. For example, the effects of different endorsers or emotional/rational approaches could be investigated. Since the issue of anti-violence has not been a popular topic so far in regard to the study of PSAs, the use of specific anti-violence contexts in future research would be beneficial.

Another possible limitation of anti-violence message studies is with regard to how we can correctly define the term violence. In the present study, the researcher provided one of the most common definitions in the consent form participants signed before filling out the questionnaire. However, further refinement of the definition might still be necessary. For example, during the experiment, the researcher was asked by some of the participants if violent behaviors included verbal abuse, which they might experience more often than other types of violence in their daily lives. The researcher had to limit violent behaviors to the physical variety since he had already conducted the experiments for the other four conditions at the time he was asked. But, it is possible that some of the participants actually considered verbal abuse as one of the forms of violent behaviors they experienced. Therefore, providing a clearer definition of violence to the participants based upon the specific context of the research is needed.
References


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