MODELING THE EFFECTS OF FEAR, GUILT AND SHAME IN ANTI-ALCOHOL PERSUASIVE COMMUNICATION

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ABSTRACT

To model and measure the effects of fear, shame, and guilt on the persuasiveness of anti-alcohol messages among young people, the authors experimentally test three distinct messages that focus on each of these three negative emotions using a total sample of more than 1000 students. All three messages have a positive impact on persuasion, and shame is particularly effective in advertising directed at young people. Personal variables, such as affect intensity and self-efficacy, help explain the persuasiveness of messages, but contrary to previous research, self-esteem does not play a key role because it affects neither perceived susceptibility nor perceived self-efficacy. Fear, shame, or guilt in anti-alcohol persuasive communication help people to engage in adaptive behaviors through which they seek to control the level of potential danger to which they are exposed.

Key Words: Threat, Fear, Guilt, Shame, Fear Appeal, Persuasion, Anti-alcohol messages

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1. Introduction

Emotions refer to motivational states that underlie behaviors and interactions with an environment; that is, they are not simply reactions to event evaluations but rather include action tendencies as well (Frijda, 1986). This motivational characteristic of emotions has prompted advertisers to use emotional stimuli for persuasion and in the case of health communication, various advertising campaigns, such as those for road safety or drug, tobacco, and alcohol abuse prevention, attempt to stimulate the emotional reactions of viewers (Kapferer, 1978).

To study the effects of negative emotions—particularly fear, shame, and guilt—within the framework of health communication, this study focuses on the use of these negative emotional appeals in advertising that targets an audience of young adults to prevent the physical and psychosocial risks linked to alcohol abuse. Therefore, this research attempts to demonstrate that even though the use of fear appeals is widespread in social welfare communications, shame and guilt also may lead to persuasion because of their adaptive roles. In other words, fear is not the only emotion that initiates negative emotional responses, or “emotional response[s] to a threat that expresses, or at least implies, some sort of danger” (Tanner et al., 1991, p.36). Despite this definition of negative emotions as responses to threats, which relate closely to fear, this study posits that guilt and shame also may lead to similar results. In addition, a negative emotional response significantly influences individual behavior and causes people to look for means to overcome the threat and deal with the potential danger associated with it (Chapman, 1992). These effects should emerge in response to all three negative emotions addressed herein. The remainder of this article presents hypotheses based on existing persuasion models that deal with fear appeals, describes the research methodology, and finally provides the results and their interpretations.

2. Theoretical Foundations and Research Hypotheses

Fear represents a negatively valenced emotion that accompanies a high level of arousal in response to a threat perceived as significant and personally relevant (Easterling and Leventhal, 1989; Witte, 1992). Messages that highlight fear appeals appear in a variety of domains, including road safety, prevention of drug, tobacco, and alcohol abuse, and the prevention of AIDS. Since Janis and Feshbach’s (1953) pioneering study of dental hygiene communications, research on fear-based persuasion indicates contrasting results that reveal either strong positive effects (Arthur and Quester, 2004; Bennett, 1996) or little or no effects (Krisher et al., 1973; Schoenbachler and Whittler, 1996) on persuasion. Three theoretical models that correspond to three time periods attempt to explain the role of fear in persuasion (Dillard, 1994): (1) fear drive models (Janis and Feshbach, 1953; McGuire, 1968), (2) parallel process models (Leventhal, 1970), and (3) expectancy value theories (Rogers, 1983; Sutton, 1982; Tanner et al., 1991). On the basis of these theories, Witte (1992) proposes an empirically verified, extended parallel process model that shows that a fear appeal leads to two cognitive evaluation processes. First, the message receiver evaluates the threat. Second, if that evaluation leads to a perception of a moderate to important threat, the person activates a sense of fear (Easterling and Leventhal, 1989). The person thus senses a motivation to evaluate the efficacy of the threat, and a high level of efficacy (response or self-efficacy) means the success of the fear appeal. However, a low threat level provides no motivation for the person to process the message or evaluate its efficacy, so no reaction (or persuasion) occurs. By replicating this model in the context of fear appeals, this study contrasts the applications of the model to both guilt and shame appeals in the context of social persuasion.

Several studies show that in the context of fear appeals, stronger threat perceptions activate more fear (Block and Keller, 1995; Gallopel and Valette-Florence, 2002; LaTour and Pitts, 1989). To confirm the existence of such relationships between threats and fear, this research proposes the following hypotheses:

*H1a: In fear appeals, a perception of the severity of the threat has a positive impact on the level of activation of fear-based emotions.*

*H2a: In fear appeals, perceptions of susceptibility to the threat have a positive impact on the level of activation of fear-based emotions.*

The cognitive processes at work during threat evaluations provide the origin for negative emotions (Lazarus, 1991). Therefore, the relationships between the constructs in H1a and H1b also should apply to guilt and shame appeals.

*H1b: In guilt appeals, a perception of the severity of the threat has a positive impact on the level of activation of guilt-based emotions.*
H2b: In guilt appeals, perceptions of susceptibility to the threat have a positive impact on the level of activation of guilt-based emotions.

Although guilt is a public emotion linked to individual conscience and shame is a public emotion linked to exposure to others (Tangney, 1995), it remains difficult to distinguish between them. Both represent self-conscious emotions (Lewis, 1993) and imply a self-evaluative process. When it emerges as guilt, shame becomes a useful emotion that reminds people of social norms and therefore implies adaptive behaviors, because it motivates people to respect their internal ideals (Lazarus, 1991) and conform to social norms (Scheff, 1988). Therefore,

H1c: In shame appeals, a perception of the severity of the threat has a positive impact on the level of activation of shame-based emotions.

H2c: In shame appeals, perceptions of susceptibility to the threat have a positive impact on the level of activation of shame-based emotions.

A high level of fear may be efficient (persuasive) only if the communication also offers a solution to the viewer, which enables that viewer to deal with the threat in the message (Witte, 1992). Self-efficacy, or a person’s belief that he or she can implement the recommended solution, also influences solution adoption (Block and Keller, 1997; Snipes et al., 1999). Therefore, similar processes should apply in the case of both guilt and shame appeals.

H3: In highly threatening messages, the perceived efficacy of the recommended solution has a positive impact on persuasion.

H4: In highly threatening messages, the perceived ability to adopt the recommended solution has a positive impact on persuasion.

Since Janis and Feshbach’s (1953) study, conflicting results summarize the impact of fear on persuasion, though a majority seems to confirm the positive and monotonic relationship between fear and persuasion (Arthur and Quester, 2004; LaTour and Rotfeld, 1997). Fear facilitates the persuasion process because it attracts attention and prompts receivers to memorize the message (Rogers, 1983). In turn,

H5a: In fear appeals, the intensity of the fear activated by the message has a positive impact on persuasion.

Most studies that establish a positive effect of negative emotions on persuasion investigate fear appeals; similarly, advertisers rarely attempt to influence consumers through other negative emotions, such as guilt or shame (Lascu, 1991). However, because guilt and shame represent negative affective states that act as moral voices to guide people’s social activity (Einstein and Lanning, 1998), this study suggests parallel hypotheses.

H5b: In guilt appeals, the intensity of the guilt activated by the message has a positive impact on persuasion.

H5c: In shame appeals, the intensity of the shame activated by the message has a positive impact on persuasion.

Furthermore, individual variables appear in various models that link negative emotions to persuasion and may explain some conflicting results. For example, people with high self-esteem who engage in risky behaviors often use cognitive strategies to protect themselves from recognizing their susceptibility to the negative consequences of their behavior (Bennett, 1996; Gerrard et al., 2000). To maintain their high self-esteem when confronted with threatening information about alcohol abuse, people with high self-esteem likely try to minimize their perceptions of the threat level and their susceptibility to those threats. With lower self-esteem, people probably perceive more threat.

H6: In response to a threatening message, self-esteem intensity has a negative impact on the level of perceived severity of the threat.

H7: In response to a threatening message, self-esteem intensity has a negative impact on the level of perceived susceptibility to the threat.

Schaninger and Sciglimpaglia (1981) also suggest that a person’s self-esteem influences his or her responses to emotional messages, because self-esteem influences decision making confidence. Bennett (1996) also establishes that when fear levels rise, persons with less self-esteem experience a particularly great attitude change provoked by the fear-based messages. Therefore,

H8: In response to a threatening message, self-esteem intensity has a positive impact on the level of perceived self-efficacy.

As Aaker and Stayman (1989) show, some people exposed to emotionally intense messages react with great intensity. This individual characteristic, named affect intensity refers specifically to “a stable and consistent tendency … to react more strongly than others to emotion-provoking stimulation, regardless of what specific emotions are evoked” (Larsen, 1984, p. 2). Moore et al. (1995) demonstrate that persons with higher affect intensity exhibit more intense emotional and attitudinal responses to emotional ads, though they reveal no more intense emotional responses to non-emotional messages. Therefore, higher affect intensity creates stronger negative emotions (e.g., fear, guilt, shame), and because negative emotions develop along with perceptions of threat intensity and susceptibility to threat,

H9: In response to a threatening message, affect intensity magnitude has a positive impact on the perceived severity of the threat.

H10: In response to a threatening message, affect intensity magnitude has a positive impact on perceived susceptibility to the threat.

The conceptual model in Figure 1 shows relationships among the constructs described by the set of hypotheses.
3. Research Methodology

In many countries, significant problems associated with alcohol abuse have strong connections to social consumption by non-dependent drinkers, especially young adults. To study the effects of fear, guilt, and shame appeals within this context, this research uses a sample of young adults, aged between 18 and 25 years.

Stimuli

Four advertising messages (see appendix A) use fear (one message), guilt (one message), and shame (two messages, one for each gender) scenarios and attempt to generate perceptions of severe threats, high threat susceptibility, high solution efficacy, and high self-efficacy (Witte, 1992).

Measurements

All items use seven-point Likert-type scales (1 = fully disagree, 7 = fully agree). Witte (1992) provides the basis for the measures of perceived threat severity (three items), perceived threat susceptibility (two items), perceived response efficacy (three items), and perceived self-efficacy (one item). To measure fear, this study uses five items (frightened, tense, nervous, anxious, and uncomfortable) (adapted from Block and Keller, 1995; Gallopel and Valette-Florence, 2002; Laroche et al., 2001); the guilt measure consists of three items (remorseful, blamable, and guilty) adapted from Cotte et al. (2005) and Izard (1977); and shame comprises four items (confusion, embarrassment, shame, and humiliation) adapted from Rolland and De Fruyt (2003). The other measurements come from existing scales, as follows: persuasion (six items, Block and Keller, 1997), self-esteem (Rosenberg [1965], without reverse items, in line with Wong et al.’s [2003] recommendation), and affect intensity (Geuens and De Pelsmacker, 2002; Larsen, 1984).

Sample and preliminary tests

Students from different French universities responded to an online questionnaire and provided 1082 usable questionnaires (391, 401, and 290 for the fear, guilt, and shame scenarios, respectively). Exploratory and confirmatory factor analyses verify the scale unidimensionality, convergent and discriminant validity of the scales, and scale reliability. The results of the CFA shown in Appendix B stem from a bootstrap (1000 iterations) procedure that addresses problems of normality.

Manipulation check

The study manipulation of emotions is satisfactory; because the levels of fear, guilt, and shame are higher for their corresponding scenarios (see Appendix C). Within each scenario, the fear scenario leads to more fear than guilt or shame, the guilt scenario leads to more guilt than fear or shame, and the shame scenario implies more shame than fear or guilt (Appendix D).

4. Research Results
A structural multigroup approach indicates the differences among the three emotional situations (fear, guilt, and shame). The comparison of a model with free structural parameters and a model with structural parameters constrained to 1 indicates a significant difference (Δχ²(32) = 119.59, p < .001), which makes it necessary to identify the structural parameters that differ across conditions. Comparisons of the χ² of the free models, constrained models, and pairwise constrained models for each structural relation in the model reveal the most constrained model in the case of non-significant differences and the least constrained model otherwise. The retained models furnish estimates for each structural parameter and each scenario (see Figure 2).

In all scenarios, affect intensity has a positive impact on perceived severity of the threat, in support of H9, and perceived susceptibility to the threat, in support of H10. When the solution has greater perceived efficacy, the communication is more persuasive, in support of H3. Similarly, perceived self-efficacy has a positive impact on persuasion, in support of H4.

However, no significant effect emerges regarding the influence of self-esteem on perceived susceptibility (H7 is rejected) or perceived self-efficacy (H8 is rejected), nor does self-esteem influence the perceived severity of the threat in the shame scenario. However, in the fear and guilt scenarios, self-esteem has a positive influence on perceived severity, in contrast with H6.

Also in the fear scenario, the perceived severity of and susceptibility to the threat influences the level of fear activated, in support of H1a and H2a, and fear has a positive impact on persuasion, in support of H5a. Consequently, fear mediates perceptions of the threat and persuasion. In contrast, all relationships pertaining to guilt and shame are insignificant (severity → shame, severity → guilt, susceptibility → shame, susceptibility → guilt, shame → persuasion, guilt → persuasion). Perceptions of threat (whether severity and susceptibility) simply may not translate into sufficient shame or guilt to influence persuasion.

In the case of the guilt scenario, perceived threat severity has a positive impact on fear and guilt only (H1b is accepted). However, perceived susceptibility to the threat does not influence fear, shame or guilt (H2b is rejected). Guilt has a positive impact on persuasion, in support of H5b, which may stem from the significant impact of perceived severity on guilt (i.e., H1b). Moreover, the significant impact of fear on persuasion may relate to the significant effect of perceived severity on fear, which may compensate for the lack of an impact of susceptibility on fear. That is, the guilt scenario might imply fear as well as guilt, such that people feel frightened because they feel guilty (Ghingold, 1981), and their fear and guilt emotions overlap. As hypothesized, guilt has a significant impact on persuasion, in support of H5b, but because perceptions of threat do not imply shame in this scenario, shame does not affect persuasion.

Finally, in the shame scenario, perceptions of severity and susceptibility to the threat affect shame, which in turn influences persuasion, in support of H1c, H2c, and H5c. Perceptions of the severity of the threat imply fear, and perceived susceptibility implies guilt; these effects likely explain the impacts of fear and guilt on persuasion.

5. Discussion and Conclusion

For all scenarios, affect intensity influences both perceived severity and perceived susceptibility to the threat, which confirms Moore et al.'s (1994) findings that cognitive responses (perceptions of threat) mediate the relationships between affect intensity and emotional responses. Although the impact of perceived susceptibility on guilt is insignificant (for the guilt scenario), negative emotions appear to play a mediating role between threat perceptions and persuasion, which supports the importance of negative emotions and the conceptualization that a threat leads to negative emotions (fear, guilt, shame) that in turn determine behavior (Arthur and Quester, 2004). In addition, negative emotions appear interdependent, such that the guilt scenario generates fear, and the shame scenario produces both other negative emotions. Persuasion therefore results from all of these effects. These processes confirm previous demonstrations, such as Dillard and Anderson's (2004) finding that surprise, anger, sadness, and irritation, in addition to fear, occur after exposure to a frightening message. In a shame scenario, persuasion occurs because all three emotions get activated, in support of Lazarus's (1991) propositions about the role of shame. Shame motivates social behaviors and leads to conformance to social norms. However, in contrast with Bennett (1998), who argues that guilt messages can be persuasive unless shame is not activated, the
FIGURE 2: Results of hypotheses testing
results of this study show that a threatening message that implies fear, guilt, and shame together might be the most persuasive. This result requires further research support, both theoretical and empirical. However, these findings confirm the role of fear in messages designed to prevent alcohol abuse and demonstrate the impact of other emotions on persuasion, which might help advertisers in their search for persuasive strategies.

Furthermore, the results confirm the importance of efficacy perceptions for acceptance of the message and persuasion. The findings therefore support the work of various authors who indicate the importance of perceived efficacy in fear-based appeals (Block and Keller, 1997; Hale and Dillard, 1995; Witte, 1992).

This research suffers from several limitations. First, students are not necessarily representative of the population of young adults who engage in alcohol abuse. Second, this study measures emotions through a questionnaire, which may overestimate emotional states or make it difficult for respondents to express their affective states (Derbaix and Poncin, 2005). Therefore, further research should investigate other populations and employ additional measurement instruments.

Other future research directions might consider whether sensation seeking (Zuckerman et al., 1964) influences message evaluation when those messages provoke negative emotions (Donohew et al., 1990). Palmgreen et al. (2003) recommend prevention messages with high sensation values because the target audience generally looks for strong sensations and new, complex, emotionally intense stimuli. Sensation seeking therefore may moderate the relationship between negative emotions and persuasion, such that greater sensation seeking increases the impact of negative emotions on persuasion. Other individual variables also might influence the relationship between negative emotions and persuasion, such as risk aversion, authoritarianism, or introversion. Therefore, research into the role and use of guilt and shame in public sector communication, particularly ads directed at the prevention of substance abuse or promotion of health-related behaviors, should continue. Even though the findings in this study require more theoretical and empirical support, this research strongly suggests the effectiveness of shame appeals in anti-alcohol campaigns directed at young adults.

References


Appendix A. Ads used as stimuli for the experiment

<table>
<thead>
<tr>
<th>Fear ad</th>
<th>Guilt Ad</th>
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| ![](image1)  
Live what Julie undergoes is really frightening!  
However, this could have been avoided easily.  
Stop drinking before driving.  
Shame ad (for men) | ![](image2)  
If we were Nicolas, we would really feel guilty!  
However, he could have avoided this easily.  
Stop drinking before driving.  
Shame ad (for women) |
| ![](image3)  
If we were Nicolas, we would really be ashamed of ourselves!  
However, he could have avoided that easily.  
During a party, never drink more than three glasses of alcohol. | ![](image4)  
If we were Julie, we would really be ashamed of ourselves!  
However, she could have avoided that easily.  
During a party, never drink more than two glasses of alcohol. |
Appendix B. Reliability and validity of measurement scales

<table>
<thead>
<tr>
<th></th>
<th>Cronbach α</th>
<th>Jöreskog ρ</th>
<th>RHO vc</th>
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* Non significant correlations
** One-item Measure
*** Values below diagonal represent the shared variance between variables

Appendix C. Comparison of the levels of emotions across scenarios

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<th>Ad</th>
<th>Shame</th>
<th>Guilt</th>
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<tr>
<td></td>
<td>Fear (4.62)*</td>
<td>Shame (2.68)</td>
<td>Guilt (3.42)</td>
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<td>Fear’s level</td>
<td>Δμ = 1.94, df = 679, t = 19.46, p &lt; .001</td>
<td>Δμ = 0.74, df = 689, t = 7.46, p &lt; .001</td>
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<tr>
<td>Shame</td>
<td>Δμ = 4.37, df = 514.40, t = 4.25, p &lt; .001</td>
<td>Δμ = 0.36, df = 554.92, t = 3.401, p = .001</td>
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<tr>
<td>Guilt</td>
<td>Δμ = 0.03, df = 679, t = 0.03, p = 0.973</td>
<td>Δμ = 1.65, df = 691.34, t = 15.67, p &lt; .001</td>
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* Mean calculated based on raw factor scores
Appendix D. Comparison of the levels of emotions within each scenario

<table>
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<tr>
<th>Emotion’s level</th>
<th>Shame (4.60)</th>
<th>Guilt (2.12)</th>
<th>Fear (4.60)*</th>
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<td>Guilt (2.12)</td>
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<td>Guilt (2.77)</td>
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* Mean calculated based on raw factor scores