DO EFFICACY CUES MODERATE THE PERSUASIVE EFFECTS OF GUILT AND SHAME APPEALS?

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ABSTRACT

Studies investigating guilt appeals have reported mixed results, highlighting the need for further exploration into the nuances of guilt and shame in persuasive communication. Previous research by Boudewyns, Turner, and Paquin (2013) experimentally differentiated guilt appeals from shame appeals, providing critical evidence that the previous inconclusive evidence of guilt appeals may be due to those appeals being infused with shame. o enhance the understanding of guilt and shame appeals and the conditions under which they are effective, we conducted two pilot tests and a controlled experiment. These studies examined the moderating effect of efficacy on shame and guilt appeals to affect perceived manipulative intent, message effectiveness, intention, and counterarguing. Although the data did not support the hypotheses, the descriptive trend aligned with predictions. Implications from the findings are discussed, offering insights for future research on emotional appeals in persuasion. We caution readers in over-interpreting this data due to conclusive evidence of “dirty” data; data that was completed by farmers and bots.

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Introduction

Guilt has been studied in the context of social influence for more than 60 years, with historical roots in the compliance-gaining literature (Darlington & Macker, 1966; Wallace & Sadalla, 1966) which suggests a transgression-compliance hypothesis (O'Keefe, 2000). Individuals experiencing guilt characteristically want to alter their actions as they want to make amends for what they have done (that caused the guilt). Findings from these compliance-gaining experiments showed that participants in the guilt conditions had increased compliance (relative to a control), which was typically operationalized as helping behavior (Darlington & Macker, 1966; Freedman Wallington & Bless, 1967; Wallace & Sadalla, 1966). Studies like these sparked the question: Can we intentionally create guilt through advertisements or persuasive messages to compel change? These "guilt appeals" urge people to take the persuaders' recommendations as remedies for their internal unrest (i.e., guilt) by making salient the audience's moral standards (Izard, 1977; Lazarus, 1991; O'Keefe, 2000). The effectiveness of guilt appeals, though, is complex. In fact, Turner and Rains' meta-analysis of guilt appeal effects (2020) found an overall effect of zero for guilt appeals; leading them to suggest that the effects are completely moderated by other factors.

Extant evidence supports their suggestion. For example, Basil (2008) argued that receivers must feel able to perform the recommendation for the guilt appeal to be optimally effective. Self-efficacy judgments influence choice of activities and evaluation of environmental settings (Bandura, 1982). Basil (2008) suggested that a low level of efficacy can result in maladaptive responses such as reactance and counterarguing, (also see Boudewyns, Turner & Paquin., 2013).

Another moderator may be the unintentional emotions sparked by the appeal. Emotional

appeals do not necessarily arouse only the intended emotion (Dillard & Nabi, 2006). Research on emotional appeals indicates that it is highly unlikely that only one emotion is induced (Boudewyns et al., 2013). Guilt appeals, for example, may unintentionally induce feelings of shame (Boudewyns et al., 2013), regret (Turner & Underhill, 2012**)**, or anger (Rains & Turner, 2007). Unfortunately, unintentionally causing shame or anger can leave message receivers feeling manipulated. Boudewyns et al. (2013) put this hypothesis to the test in a simple experiment where participants were exposed to either a shame-free guilt appeal or a shame appeal; their data supported the prediction. The shame appeal led to stronger feelings of manipulation than the shame-free guilt appeal.

There was minimal explicit testing of this sort of hypothesis on shame-free guilt. Moreover, Boudewyns and her team did not manipulate efficacy cues in their messages, and they did not measure perceived effectiveness of the message or behavioral intentions. This is the inspiration for this study. Several studies have shown that efficacy beliefs moderate the impacts of emotional appeals (Turner, 2007; Turner et al, 2019, Witte, 1992). Yet, this moderating effect has not been studied with shame and it has not been systematically studied with guilt appeals. Therefore, we argue that efficacy may be a key coping resource when people are presented with shame or guilt messaging. The purpose of this study is to replicate and extend Boudewyns et al. (2013) by experimentally examining the moderating effect of efficacy components in guilt and shame appeals. This study will also assess perceived message effectiveness and intentions as a function of those inductions. We will use the same inductions as Boudewyns et al. (2013).

Literature Review

Guilt and Guilt Appeals

Guilt is a discrete emotion that has its roots both in natural (evolutionary) and social processes in which moral and ethical principles are learned (Izard, 1977). From this viewpoint, scholars believe that the cognitive component of conscience is the key for feeling responsibility and guilt (Izard, 1977). Appraisal theorists argue that people feeling guilt appraise themselves as responsible for and in control of a negative or goal incongruent behavior (Lazarus 1991, Lerner & Keltner, 2000). In other words, people feeling guilt make an internal attribution that a moral failure was caused by their own controllable behavior (Lewis, 1971; Tangney & Dearing, 2002). Importantly, feeling guilty motivates people to act to minimize the felt guilt (Izard, 1977), suggesting that guilt can be channeled in constructive ways (Huhmann & Brotherton, 1997). For instance, guilt can facilitate helping behavior (Boster et al., 1999), avoiding risky behavior (Dearing, Stuewig, & Tangney, 2005), and charitable giving (Basil, 2008).

Guilt appeals are strategic messages that explicitly communicate the appraisals of guilt: A (goal incongruent) problem is (or will be) caused by the audience, they are responsible, in control and they can fix it (see O'Keefe, 2000). Assuming the guilt appeal is successful at sparking guilt in the audience, when guilt arises, the guilt-cognition orientation will increase motivation to minimize experiential guilt (Izard, 1977). That motivation is often turned into attitude change and behavioral action that reduces guilt—often an altruistic or helpful behavior, but it might also be the behavior advocated for in the appeal. Some of the first studies conducted on the effects of guilt appeals were in commercial advertising where

scholars developed guilt appeals to propel working mothers' behaviors like intention to buy microwave dinners (Pinto & Priest, 1991), bread (Pinto & Worobetz, 1992), and dental floss (Coulter & Pinto, 1995). These studies typically examined the effects of high, moderate and low intensity guilt appeals on consumers' purchase intention, attitudes, and attributions to brands. The results consistently suggested that guilt appeals are most effective when they are moderate in intensity, relative to low intensity or high intensity guilt appeals, in other words the effect was a curvilinear inverse-U shape.

Yet, Lindsey (2005) investigated the effect of guilt appeals in helping an unknown other by signing up for the bone marrow registry. The data showed no evidence for inverse U. In the context of emergency preparedness, Turner and Underhill (2012) also found a linear effect for guilt appeals such that the high-intensity guilt appeal led to stronger feelings of guilt (relative to the low or moderate guilt appeal), positive attitudes, and risk perceptions. Notably, the intense guilt appeal also aroused the highest level of angry feelings toward the source of the message. Noting that there appeared to be different findings in commercial and pro-social settings, Turner et al. (2018) systematically varied that factor in a controlled experiment. They found that source motive (profit versus pro-social) and intensity of the guilt appeal interact to affect persuasion; when the source motive was pro-social, guilt appeals had a linear and positive impact on self-reported persuasiveness. In addition to the moderator of sponsor motive, there can be 'by-products' of guilt appeals affecting the (non)effectiveness of persuasive messages. In previous research, reactance and anger aroused by high-intensity guilt appeals are the main explanation for the malfunction of guilt appeals (Coulter & Pinto, 1995; Pinto & Priest, 1991; Bessarabova et al., 2015). Based on the evidence of previous

research, it is reasonable to suggest that guilt appeals can be effective persuasive devices, but when and how they work varies.

In searching for underlying explanations for the confusing effects of guilt, Boudewyns et al. (2013) predicted that language usage in prior guilt appeal research might have led to unintended results. They argued that use of the word “you” or any linguistic technique that implied that a person might be at fault (i.e., personality) versus a behavioral misstep (i.e., not personality) would cause shame in addition to guilt. They proposed that shame leads to anger and feelings of manipulation, but shame-free guilt should not. Boudewyns et al. (2013) tested the effects of shame-free guilt appeals relative to shame appeals on feelings of guilt, shame, anger and manipulative intent. Participants were randomly assigned to see one of two public service announcements about testing for sexually transmitted infections. The shame appeal placed a focus on the internal attributes of the audience while the shame-free guilt appeal focused on the audience’s behavior. Specifically, the messages used language like “Who [What] would give their partner an STD”. Shame appeals and guilt appeals differed in the “Who” (focus on person) and “What” (focus on behavior). The sentence was followed by multiple choices; for the shame appeal, the focus was on individual personality (e.g., “An immature person”, see Appendix B). In the guilt appeal, the focus was on behavior. Indeed, their data indicated that the shame-free guilt appeal caused guilt, but only minimal levels of shame, anger or perceived manipulation relative to the shame appeal. This study empirically supported Lewis’s (1971, 1972) differentiation of shame and guilt in an experiment setting; and it suggested that induction of shame is a key factor that leads to unintended outcomes in persuasion. This study found when messages focus on the individual, increased shame will be

elicited relative to when messages focus on behavior (i.e., a shame-free guilt appeal). Their data showed that the shame appeal caused feelings of anger and perceived manipulation relative to shame-free guilt. Notably, both messages caused feelings of guilt. This data implies that guilt appeals have a linear impact on persuasive outcomes and are unlikely to cause feelings of anger and manipulation —if they do not communicate shame. Moreover, these data indicate that shame appeals are ineffective and incite negative responses.

However, efficacy was not manipulated in this study. It is theoretically possible that when there are no efficacy cues in the message, shame elicited will be stronger than when efficacy cues are included, which will influence the effect of emotional appeals on persuasive outcomes and may cause maladaptive responses. In other words, the question of "Can efficacy mitigate the impact of shame appeals?" remains unanswered.

Guilt versus Shame

Shame is the consequence of an evaluation of failure regarding individual standards when a *global* evaluation of the self is made (Lewis, 1992). Shame shares similar characteristics to guilt in some respects, making people feel inadequate, self-contempt and regret (Tangney & Dearing, 2002; Izard, 1977), though differential emotions theory (Izard, 1977) and appraisal theories (Lerner & Keltner, 2000) suggest they are distinct emotions. The central theme of guilt is the violation or transgression of certain moral standards that are considered relatively stable while shame is a more personal feeling which arises when individual misconduct is made public (Izard, 1977) and the person attributes it at the person-level (relative to the behavior-level). Attribution theorist Lewis (1971) argued that shame is different from guilt because of the focus of the self instead of the behavior or other objects. To reduce the

pressure of shame, as a coping strategy with the least cost, individuals may engage in maladaptive responses such as externalizing the problem, which elicits anger towards an external source (Boudewyns et al., 2013; Tangney & Dearing, 2002; Lewis, 1971, 1992). Is it possible that efficacy cues, which are focused on recommended behaviors, can reduce the maladaptive responses to shame, and, at the same time, increase the effectiveness of guilt appeals?

Efficacy as a Moderator

Rogers and Mewborn (1976) discussed efficacy in the Protection Motivation Theory (PMT). They outlined how efficacy (self-efficacy and response efficacy) plays a critical role in determining individuals' motivations to protect themselves from threats. Witte (1992) emphasized that effective fear appeals require individuals to believe they can perform the recommended behavior (self-efficacy) and that the behavior will effectively mitigate the threat (response efficacy). Efficacy also interacts with the effectiveness of anger appeals by increasing people's ability to deliberately process the message and differentiate between high- and low-quality arguments (Turner et al., 2019).

Efficacy was discussed as a key variable in Bandura's (1982) social cognitive theory. Bandura mainly focused on self-efficacy, defined as one's confidence in their ability to engage in a behavior. Witte (1992) discussed efficacy as a combination of both self and response efficacy. Perceived self-efficacy is individuals' belief in their ability to engage in the appropriate course of action, serving as one of the most important coping resources when there are strong emotions that impact people's cognitive patterns (Bandura, 1982). Response efficacy refers to individuals' beliefs about whether the recommended action is effective on tackling the

problem (Rosenstock, 1974). Together, these components form the overall construct of efficacy, which is critical for understanding how individuals respond to health messages (Witte, 1992). Bandura (1998) pointed out that stronger efficacy beliefs is associated with better health behaviors, such as regular exercise, proper nutrition, and adherence to medical regimens.

In the context of guilt and shame appeals, raising the efficacy level in receivers is recommended and suggested to be effective in decreasing the possibility of eliciting 'by-products' such as shame and other maladaptive responses. Efficacy cues are cues int eh message that aim to increase message receivers' belief that they can confidently engage in the behavoir (e.g., "you can do this", "x behavior is simple") and/or the behavior is effective (e.g. x will mitigate this issue"). In line with this reasoning, Basil (2008) tested the mediating model where efficacy mediates the relationship between message and maladaptive responses and found that the mediating effect is significant but relatively small in magnitude. The low efficacy group was presented with the message "Your $200 will help these children", the high efficacy group read "Your $2 will help these children". In this manipulation, self-efficacy level was differentiated by the monetary capability indicated by a separate message presented before the emotional stimuli. Response efficacy was not varied but was communicated with the phrase "will help". Basil's data showed a statistically significant effect that increase of self-efficacy level facilitate the elicitation of guilt in individuals. Similarly, in their study on anger appeals, Turner et al. (2019) successfully manipulated efficacy by replacing "little" by "a lot" in "There is little we can do about it".

Though efficacy was suggested to be critical for increasing effectiveness of some emotional appeals in persuasion, it has not been consistently or often experimentally manipulated as a

message component in guilt appeals. Basil (2008) suggested that low efficacy produces maladaptive responses which is reactance to what is recommended by the message sender, but it is unclear what the receivers react to or what exactly makes them react. An individual may externalize the focus onto a transgressor, whether real or imagined, in response to feeling ashamed (Lewis, 1992). Therefore, it is reasonable to suspect that it could be shame activating their egoistic protective behaviors, which then leads to maladaptive responses (Basil, 2008; Boudewyns et al., 2013). Here, it is claimed that efficacy gives individuals a sense of being able to carry out the desired behavior successfully (Bandura, 1986). Moreover, Basil (2008) found that efficacy was important to elicit guilt, though the impact of mediation was less as efficacy was found to be directly associated with guilt in the proposed model as well. It was found that both empathy and efficacy increase guilt and behavior intention directly (Basil, 2008). Moreover, Lewis et al. (2010) identified that response efficacy is a key cognitive construct influencing the effectiveness of not only fear-based messages but also other emotion-based messages.

Perceived Manipulative Intent (PMI) in communication and persuasion is defined as the audience's belief that a communicator's message is designed to influence their attitudes, beliefs, or behaviors for the communicator's benefit rather than mutual benefit. This perception can undermine the effectiveness of the message, leading to resistance and reduced trust in the communicator (Campbell, 1995). Campbell (1995) highlighted that attention-getting advertising tactics often lead consumers to infer manipulative intent, triggering defensive mechanisms such as skepticism and psychological reactance. These perceptions can significantly impact the overall effectiveness of persuasive communication.

Perceived Message Effectiveness (PME) in communication and persuasion refers to the audience's assessment of how convincing, credible, and persuasive a message is. PME can significantly influence how individuals respond to the message, including their attitudes, beliefs, and behaviors. Dillard, Shen, and Vail (2007) emphasize that PME is shaped by factors such as message clarity, relevance, and emotional appeal. High PME is associated with greater persuasion, increased attitude change, and stronger behavioral intentions (Fishbein & Cappella, 2006).

Intention refers to an individual's motivation or plan to perform a specific behavior. It is a key predictor of behavior, as outlined in the Theory of Planned Behavior (Ajzen, 1991). Intentions are influenced by attitudes, perceived norms, and perceived behavioral control. Strong intentions are generally linked to a higher likelihood of performing the behavior, making them essential for designing effective persuasive messages (Sheeran, 2002).

Given a clear direct effect between efficacy and guilt, there are still unanswered questions: does including efficacy cues in guilt appeals decrease felt shame or guilt, perceived manipulative intent (PMI), and anger and does it increase recommended behavior intent? Therefore, the current proposal hypothesizes as following:

H1: Messages that focus blame and responsibility on the person, hereforth called a shame appeal, will be more likely to increase feelings of shame relative to appeals that focus on behavior (hereforth called the guilt appeal).

H2: Efficacy cues will cause stronger efficacy beliefs than will messages with no cues.

H3: Emotional appeal type (shame vs. guilt) will interact with efficacy cues to affect persuasive outcomes. Guilt appeals with an efficacy cue will be associated with (a) lower perceived

manipulative intention, (b) levels of counterarguing, (c) more perceived message effectiveness and (d) intentions relative to guilt appeals with no efficacy cues.

RQ1: Will shame appeals that include efficacy cues be more effective (i.e., less manipulative intention, counterarguing, more perceived message effectiveness and intentions) than shame appeals with no efficacy cues?

Pilot Study 1

Purpose

The purpose of pilot study 1 was to generate and test the effectiveness of efficacy cues(s) to potentially be embedded in the emotional appeals, noting that Boudewyns et al. (2013) did not manipulate efficacy cues. We used the shame and guilt appeals employed in Boudewyns et al. (2013), but we also wanted to (re)assess the emotional appeals' abilities to spark guilt and shame. To compare and select among different efficacy cues, Artificial Intelligence (AI) I was used to generate 5 versions of efficacy cues. Using Chat GPT, I provided the following instructions "Please generate self-efficacy message to be used in a STD testing PSA". After minor editing to make the AI-generated messages to be in line with Bandura's (1986) definition, these 5 efficacy messages were embedded into the shame and guilt appeals respectively (see Boudewyns et al., 2013) and served as experimental manipulations. Finally, we examined the data for messages that increased efficacy and did not interact with the emotional appeals to affect perceived efficacy.

Recruitment and Participants

Participants were recruited from Amazon Mturk. Initially, 300 participants completed the 5-minute experimental study. Participants were eliminated from the final analysis if they (a) failed the attention check, or (b) failed the embedded captcha. After eliminating bad data, there were 65 participants (see Table 1). Out of these 65 participants, 25 were female (38.5%) and 40 were male (61.5%). Their age ranged from 24 to 56 (M = 30.81, SD =5.59), mostly white 62 (95.4 %). There are people with multiple ethnicity. Participants were compensated with 1 dollar.

Table 1: Demographics of participants in pilot 1.

		Frequency	Percent
Gender	Female	25	38.5
	Male	40	61.5
Ethnicity	Caucasian/White	62	95.4
	Black or African American	3	4.6
	Native American or American Indian	5	7.7
	Asian/Pacific Islander	4	6.2
	Middle Eastern or North African	3	4.6
Age	M	30.71	
	SD	4.94	

Design and Procedures

This pilot study was a post-test only experimental design. A 2 (shame vs. guilt) x 6 (5 differing efficacy cues and no efficacy cue) randomized, between subjects experiment was conducted. The same guilt and shame appeals used in Boudewyns et al (2013) were used here. We also added 5 different versions of efficacy messages to the shame and guilt appeal, leading to 12 conditions (see Appendix A). These messages were designed with the intent to provide cues indicating the participants can (or have the power to) engage in the recommended behavior(s).

Measures

Felt Shame and Guilt. The items were adopted from Tangney and Dearing's State Shame and Guilt Scale (SSGS) as the same subset used in Boudewyns et al. (2013). The items were rated on an 8-point Likert scale ranging from 0 (Not feeling this way at all) to 7(Feeling this way very much). The shame items were: "Thinking of the message I looked at, I felt

embarrassed." "I feel ashamed;" and, "I feel like I am bad person;" (Cronbach's α = .81, *M* = 16.45, *SD* = 4.79). The guilt items were: "I feel tension about something I have done;" "I cannot stop thinking about something I have done;" "I feel guilty;" and "I felt regret." (Cronbach's α = .94, *M* = 26.90, *SD* = 9.14).

Self-Efficacy and Response-Efficacy. Four items for self-efficacy, adapted from Turner et al. (2006), assessed efficacy ("I am confident that I can help solve the issue", "I have the ability to get tested for STDs.", "I am able to do the recommended behavior." and, "I am confident that I can fix the health issue presented in the poster.") on a 7-point scale (1 = strongly disagree, 7 = strongly agree; Cronbach's α= .71 *M* = 22.28, *SD* = 2.96). Four items for response-efficacy: "Getting tested for STDs helps reduce the spread of STDs.", "STD tests can tell me if I have contracted an STD.", "Getting tested for STDs shows respect to one's partner(s)." and, "Getting tested for STDs works.". On a 7-point scale (1 = strongly disagree, 7 = strongly agree; Cronbach's α= .72 *M* = 22.53, *SD* = 2.98)

Pilot 1 Results

Independent *t*-tests were conducted to assess whether shame appeal induced more shame than the guilt appeal. Unfortunately, the difference was not statistically significant t (63) = -.52, $p > .05$, but the pattern showed that people who were in shame condition felt slightly more shame (M=5.60, SD = 1.75) than those who were in guilt condition (M=5.39, SD = 1.49). See Table 2. To find out which efficacy message produced more efficacy, a one-way analysis of variance [ANOVA]) was conducted. The results of the univariate ANOVA showed that there was not a statistically significant difference among the effects of different efficacy messages on efficacy $F (5, 58) = .67, p > .05$.

Table 2: Perceived efficacy as a function of the various messages.

1-5 message type	Mean	Std. Deviation	N
No efficacy	5.73	.71	12
#1	5.71	1.01	6
#2	5.00	.59	5
#3	5.50	.72	15
#4	5.55	.84	15
#5	5.69	.57	12
Total	5.57	.74	65

This pilot study was informative but failed to give us strong inductions for the main experiment. We reevaluated the efficacy induction and took pieces of the various manipulations that had the highest means on the outcome variable of efficacy. We also added response efficacy cues and added them into the messages. Also, a sentence in the middle of the shame posters was edited to make sure it did not lower the shame level. Specifically, the sentence that originally said "…that doesn't mean you are a bad person" was changed to "…that doesn't mean you can't get tested now" (See Appendix B). Also, to strengthen the efficacy message component and make it more salient, font size of efficacy components was made larger.

Pilot Study 2

Recruitment and Participants

Participants were recruited using the Mturk platform. Participants (N=100) completed the 5-minute experimental study. I excluded participants from the final analysis according to the same standard as pilot 1.

Given the amount of bad data in pilot 1, we increased the number of checks on the data. Again, participants were eliminated if they failed the attention check or the embedded captcha. In this pilot we also included another question where participants were asked if the poster included recommended actions, and if so, what were they. Participants who failed to report the correct recommended action in the poster (which is get testing for STD in the poster) were eliminated. And, we added an open-ended question to the captcha block: "A dog is to a puppy as a cat is to a _____." All participants who failed the captcha, the dog/puppy question, had repeated IP addresses, or had unintelligible responses to the open-ended question were eliminated. The hope was that we could achieve cleaner data. Unfortunately, this data set was rife with bots and "farmers" (workers who are employed on large server "farms" and complete surveys for a living). After eliminating bad data 48 participants were used in the final analysis (See Table 3). Participants were compensated with 1 dollar.

Table 3: Demographic breakdown for Pilot 2.

		Frequency	Percent
Gender	Not Answered	1	2.1
	Female	18	37.5
	Male	29	60.7
Ethnicity	Caucasian/White	47	97.9
	Others	1	2.1
Age	M	31.04	
	SD	6.11	

Design and Procedures

This pilot study was a post-test only experimental design. A 2 (shame vs. guilt) x 2 (efficacy cues vs. no efficacy cue) between subjects' experiment was conducted. Here, participants again were randomly assigned to view 1 poster. The posters were based on Boudewyns et al. (2013), but with more robust efficacy cues (see Appendix B).

Measures

Felt Shame and Guilt. The items were adopted from Tangney and Dearing's State Shame and Guilt Scale (SSGS) as the same subset used in Boudewyns et al. (2013). item was rated on an 8-point Likert scale ranging from 0 = Not feeling this way at all to 7 = Feeling this way very much. The shame items were: "Thinking of the message I looked at, I felt embarrassed." "I feel ashamed;" and, "I feel like I am bad person;" (Cronbach's α = .80, *M* = 17.31, *SD* = 4.73). The guilt items were: "I feel tension about something I have done;" "I cannot stop thinking about something I have done;" "I feel guilty;" and "I felt regret." (Cronbach's α = .87, *M* = 27.32, *SD* = 7.33).

Self-Efficacy and Response-Efficacy. Four items for self-efficacy, adapted from Turner et al. (2006), assessed efficacy ("I am confident that I can help solve the issue", "I have the ability to get tested for STDs.", "I am able to do the recommended behavior." and, "I am confident that I can fix the health issue presented in the poster.") on a 7-point scale (1 = strongly disagree, 7 = strongly agree; Cronbach's α= .70 *M* = 22.48, *SD* = 9.07). Four items for response-efficacy: "Getting tested for STDs helps reduce the spread of STDs.", "STD tests can tell me if I have contracted an STD.", "Getting tested for STDs shows respect to one's partner(s)." and, "Getting tested for STDs works.". On a 7-point scale (1 = strongly disagree, 7 = strongly agree;

Cronbach's α= .75 *M* = 22.12, *SD* = 9.34)

Pilot 2 Results

A univariate ANOVA was conducted to examine whether guilt appeals, and shame appeals interact with efficacy to affect outcomes.

Manipulation Checks.

First, the guilt and shame appeals did not elicit statistically more guilt and shame respectively in this pilot study, though the descriptive statistics revealed a pattern that the shame appeal elicited more shame (M = 5.67, SD = 1.82) than guilt appeals do (M = 5.07, SD = 2.20) t_{guilt} (46) = -.96, p > .05; t_{shame} (46) = -1.03, p > .05. Messages with efficacy cues caused more efficacy than those without efficacy cues t (42) = -2.10, p < .05, which indicated that the efficacy manipulation was successful in pilot 2 (Table 4)

Discussion of Pilot Studies

The purpose of pilot 1 was to select the strongest efficacy cues among 5 AI-generated efficacy information and preliminarily test the induction of emotions. The messages were reconstructed according to the descriptive patterns found in pilot 1. Changes included combining strong self-efficacy cues, adding response efficacy cues, and adjusting the font size and layout of the posters. Pilot 2 tested the reconstructed messages from pilot 1.

Table 4: Efficacy as a function of the inductions in Pilot 2.

Efficacy Condition	N	Mean	Std. Deviation
No Efficacy Cues	27	5.44	.88
Efficacy Cues	17	5.98	.71

Note: 4 participants are missing from efficacy measures

In the pilot study, except for the efficacy manipulation, no significant findings were observed; however, the descriptive data trends were in the predicted direction. To account for potential data exclusion due to quality concerns, we proactively increased the sample size. Additionally, we added one more question to the CAPTCHA block to filter out poor-quality data, such as responses from data farms or high-level AI, which had no substantial effect on overall data quality.

Main Study

Turner and Rains' (2021) meta-analysis found a moderate effect of guilt appeals on felt guilt (r=.24) and a small effect of guilt appeals on attitudes/intentions (r=.02); these findings were used to determine sample size. Based on an a-priori power analysis (Gpower), assuming a moderate effect size, an alpha of *.05 and power at .80,* we need a minimum of 25 participants per condition; and assuming a small effect size (with an alpha of .05 and power at .80), we need approximately 200 participants per condition. Given that Turner and Rains were not able to examine moderating variables, we assume this is partially responsible for the small effect size. Thus, we split the difference and collected 100 participants per condition. In practice, 150 participants were collected per condition on Mturk in case large amount of bad data needed to be deleted. Participants were adults (aged 18 and older) who are non-monogamously sexually active in the last 12 months. Data were collected through the Mturk platform and participants were paid $1.00 for participating. Only participants who passed attention checks were used in the data analyses (with the same procedures as pilot 2). After clearing bad data (bots, farmers, non-compliant answers), 92 participants were used in the final analysis.

Procedure and Design

The main experiment was a 2 (guilt, shame) X 2 (efficacy cues, no efficacy cues) + irrelevant neutral message/control group. Independent groups design with participants randomly assigned to one of five conditions.

Participants were instructed: "We are interested in health Public Service Announcements (PSAs) and how they are perceived by the target audience. We have randomly selected PSAs that have been geared toward your demographic. We are interested in your reaction to this ad.

Take a look at the ad below and read through it carefully. When you are done reading the entire ad, take a moment to think about your overall evaluation about what the ad says." (Boudewyns et al., 2013). Then participants were asked questions about the interested dependent measures.

Stimuli

Messages in each condition were identical in content, length, and format with the exception of whether efficacy components were included. To elicit shame and guilt, the appeals developed by Boudewyns et al. (2013) were adopted. The messages were identical to those used in the second pilot study. The efficacy cues were "Taking charge of your sexual health is a personal responsibility and a powerful act of care for yourself and your partners. By knowing your status, you are caring about the well-being of your sexual partners. It can make a significant difference in halting transmission of STDs.". At the bottom of the poster, the strong efficacy cue condition also included the words "Self-assured and responsible, that's you. Get tested for peace of mind.". The weak efficacy cue conditions will use the Boudewyns et al. stimuli exactly as presented in the paper. Stimuli can be found in Appendix C.

Instrumentation

Where applicable, the scales used by Boudewyns et al. (2013) were used.

Felt Shame and Guilt. The items were adopted from Tangney and Dearing's State Shame and Guilt Scale (SSGS) as the same subset used in Boudewyns et al. (2013). Items were rated on an 8-point Likert scale ranging from 0 = Not feeling this way at all to 7 = Feeling this way very strongly. The shame items were: "I want to sink into the floor and disappear;" "I feel ashamed;" I feel like I am bad person;" and "I feel embarrassed" (Cronbach's $\alpha = .88$, $M =$

15.36, *SD* = 6.23). The guilt items were: “I feel tension about something I have done;” “I cannot stop thinking about something I have done;” “I feel guilty;” and “I feel bad about something I have done” (Cronbach’s α = .95, *M* = 25.38, *SD* = 10.51).

Counterarguing. Three items were used to measure counterargue (Silvia, 2006). “Were you criticizing the poster while you were looking at it?”, “While looking at the poster, were you thinking of points that went against it?”, and “While looking at the poster, were you feeling skeptical of it?”. Items were rated on a 7-point scale ranging from 0=not at all to 7=very much. (Cronbach’s α = .92, *M* = 15.18, *SD* = 4.88).

Perceived Manipulative Intent. Perceived manipulative intent (PMI) was measured using two 7-point Likert type scale items adopted from those used by Cotte, Coulter, and Moore (2005). The two items were “I was annoyed by this message because the creator of the message seemed to be trying to inappropriately manage or control the audience” and “The creator of this ad tried to manipulate me in ways I did not like”. Calculation of Cronbach’s α requires minimum of 3 items, therefore correlation was calculated for PMI (*r* = .76, *p* < .01, *M* = 9.62, *SD* = 3.45). Higher values indicated higher perceived manipulative intent.

Perceived Message Effectiveness (PME). It was measured by 6 items two scale combined (Banas et al., 2012; Turner et al., 2018) “The reasons for getting STD testing presented in the message are believable” and “The reasons for getting STD testing provided in the message are convincing” were rated on a 7-point scale ranging from 1= “Strongly Disagree” to 7= “Strongly Agree”. Four items were rated on a 7-point scale of four items under the question “Overall I think the poster is” ranging from “Bad to Good”, “Unfavorable to Favorable”, “Unpleasant to Plesant”, and “Negative to Positive” (Cronbach’s α = .86, *M* = 35.08, *SD* = 5.46).

Self-Efficacy and Response-Efficacy. Four items for self-efficacy, adapted from Turner et al. (2006), assessed efficacy ("I am confident that I can help solve the issue", "I have the ability to get tested for STDs.", "I am able to do the recommended behavior." and, "I am confident that I can fix the health issue presented in the poster.") on a 7-point scale (1 = strongly disagree, 7 = strongly agree; Cronbach's α= .78 M = 22.85, SD = 3.71. Four items for response-efficacy: "Getting tested for STDs helps reduce the spread of STDs.", "STD tests can tell me if I have contracted an STD.", "Getting tested for STDs shows respect to one's partner(s)." and, "Getting tested for STDs works.". On a 7-point scale (1 = strongly disagree, 7 = strongly agree; Cronbach's α= .85 *M* = 23.01, *SD* = 3.57). The mean of the sum of response and self-efficacy was used.

Sexual Activity. Sexual activity was used as an inclusion criterion to ensure participants would find these messages relevant to their lives. The questions are "For the last 12 months have you been in a committed, monogamous relationship?", "Have you been sexually active in the past 12 months?", and "Have you had unprotected sex (without condom) in the past 12 months?". They were adopted from Boudewyns et al. (2013) and presented at the beginning of the survey. The survey concluded that participants' profiles were deemed irrelevant to the study. To prevent participants from discerning the study's primary focus, these filter questions were interspersed among other unrelated health questions such as "Have you received the most recent flu vaccine?" and "Do you drink more than 1 liter (or around 34 ounces) of water per day?".

Results

First, to test the first hypothesis we examined whether messages that focus blame and responsibility on the person cause more shame (it was expected that both messages would create statistically equal levels of guilt) independent *t*-tests were conducted. Unfortunately, shame appeals (focus on self) did not cause statistically more shame than guilt appeals (focus on behavior) t (52) = -1.17, p>.05, though the descriptive data revealed shame appeals cause more shame (M = 5.80, SD = 1.73) than guilt appeals do (M = 5.26, SD = 1.68).

Simultaneously, shame appeals generated higher levels of guilt (M = 5.84, SD = 1.76) compared to guilt appeals (M = 5.20, SD = 1.87); nevertheless, this difference did not reach statistical significance, t (51) = -1.30, p > .05.

Table 5: Perceived Manipulative Intent of a function of the inductions.

Emotional Appeal	PMI	Mean	Std. Deviation	N
Guilt	No efficacy	4.61	1.64	14
	Efficacy	4.58	1.53	13
	Total	4.59	1.56	27
Shame	No efficacy	5.42	1.48	13
	Efficacy	4.96	1.66	14
	Total	5.19	1.56	27
Control	Control	4.70	1.93	38
	Total	4.70	1.93	38
Total	No efficacy	5.00	1.59	27
	Efficacy	4.78	1.58	27
	Control	4.70	1.93	38
	Total	4.81	1.72	92

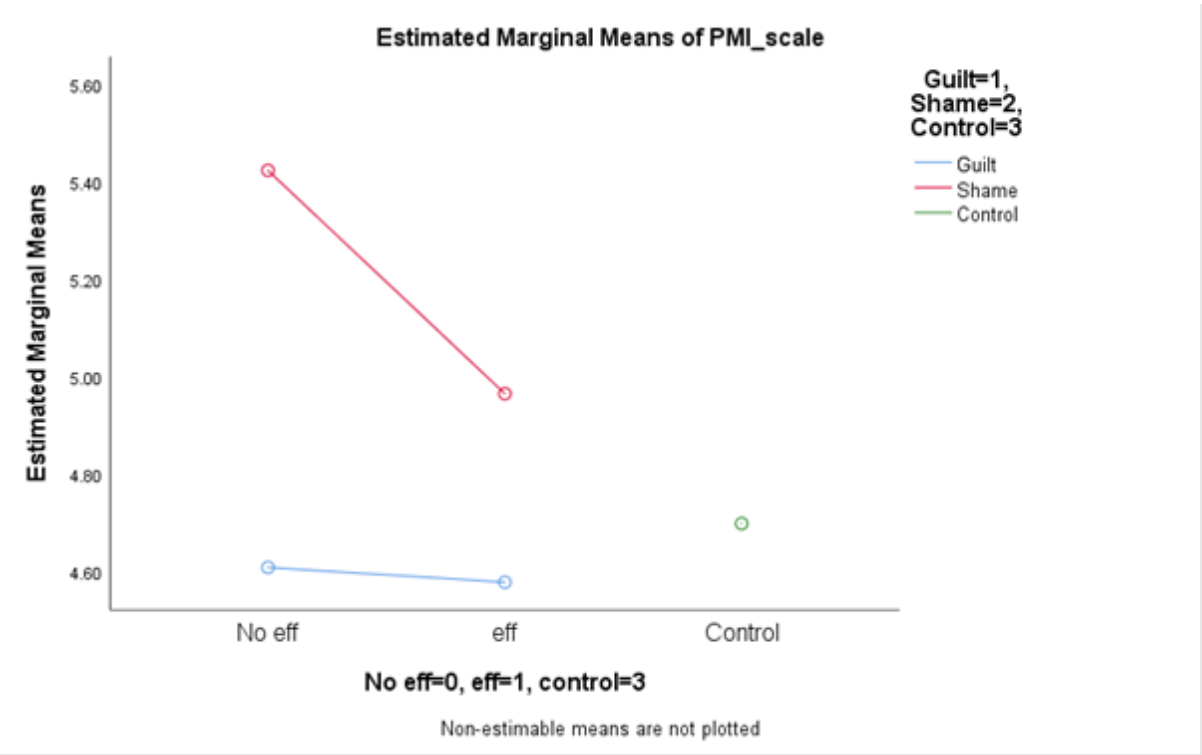
Second, we examined whether efficacy cues cause efficacy. The result of one-way ANOVA shows no statistically significant difference among groups F (2, 88) = 1.87, p > .05. The control group, who viewed an obesity-related poster felt the highest level of efficacy among the three groups ($M_{control}$ = 5.91 SD = .75, $M_{efficacy}$ = 5.69 SD = .94, $M_{no\text{-}efficacy}$ = 5.50 SD

= .91)

H3 predicted that emotional appeal type (shame vs. guilt) will interact with efficacy cues to affect persuasive outcomes. Guilt appeals with an efficacy cue will be associated with (a) lower perceived manipulative intention. Univariate analysis was conducted to test the second hypothesis.

With regard to PMI there were no statistically significant main effects or interaction effects for the emotion or efficacy inductions: $F_{PMI\text{-}efficacy\ type}$ (1, 87) = .267, $p > .05$; $F_{PMI\text{-}emotional\ appeal}$ (1, 87) = 1.62, p > .05; $F_{interaction}$ = (1, 87) = .205, p > .05. Yet, the descriptive statistics showed that shame appeals with efficacy cues do elicit less PMI than those without ($M_{\text{PMI-guilt-no efficacy}}$ = 4.61 *SD* = 1.64, $M_{\text{PMI-guilt-efficacy}}$ = 4.58 *SD* = 1.53, $M_{\text{PMI-shame-no efficacy}}$ = 5.42 *SD* = 1.48, $M_{\text{PMI-shame-efficacy}}$ = 4.96 *SD* = 1.66 (See Table 5 and Figure 1).

Figure 1: Estimated Marginal Means of PMI by Condition.



We further inquired into counterarguing in responding to emotional appeals with/without

efficacy cues (H3b), unfortunately there is no statistically significant relationship found, $F_{efficacy\ type}$ (1, 87) = .67, $p > .05$; $F_{emotional\ appeal}$ = (1, 87) = 1.41 $p > .05$; $F_{interaction}$ (1, 87) = .10, $p > .05$.

The descriptive statistics show that shame appeals that contain efficacy cues cause lower counterarguing (M = 5.21 SD = 1.55) than those do not (M = 5.43 SD = 1.49) (See Table 6 and Figure 2).

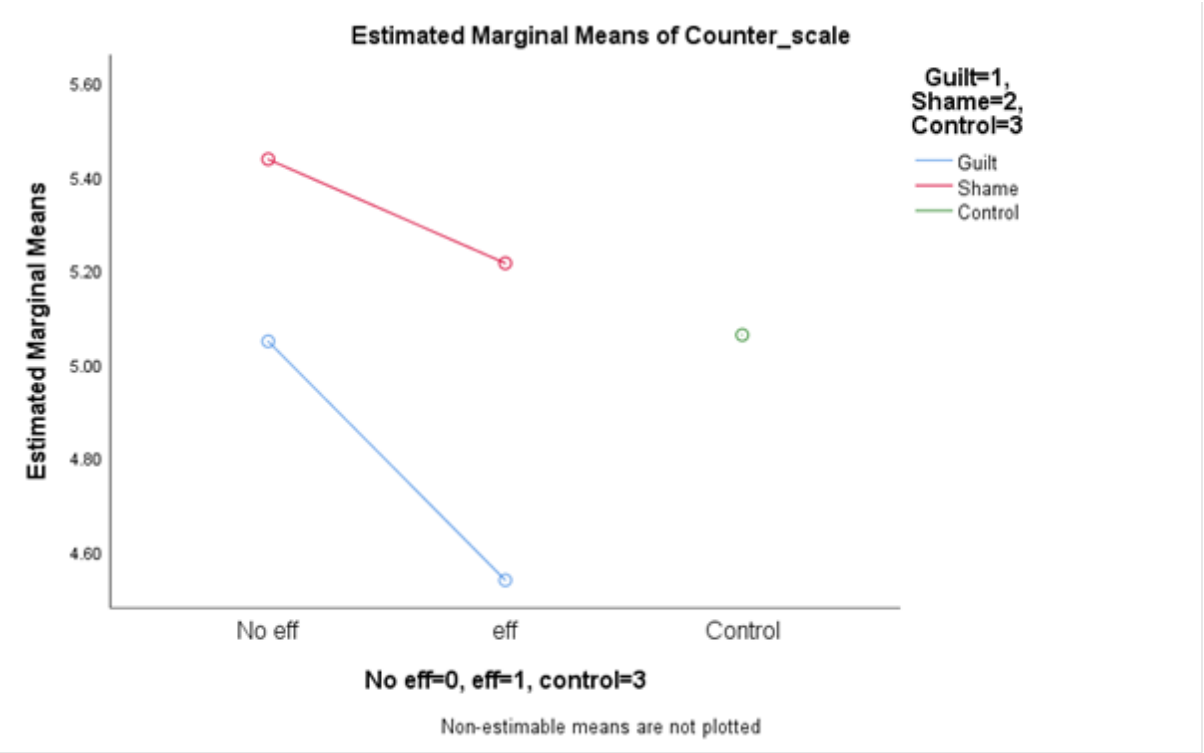
Subsequently, we assessed message effectiveness related to the interaction of efficacy components and emotional appeals. No statistically significant relationship found $F_{efficacy\ type}$ = (1, 87) = .00, $p > .05$; $F_{emotional\ appeal}$ (1, 87) = 2.26, $p > .05$; $F_{interaction}$ (1, 87) = .29, $p > .05$. (See Table 7 and Figure 4).

Finally, we investigated whether efficacy components interact with emotional appeals to impact intention.

Table 6: Counterarguing as a function of the experimental inductions.

		Mean	Std. Deviation	N
No efficacy	Guilt	5.05	1.43	14
	Shame	5.44	1.49	13
	Total	5.23	1.45	27
Efficacy	Guilt	4.54	1.73	13
	Shame	5.21	1.55	14
	Total	4.89	1.64	27
Control	Control	5.06	1.76	38
	Total	5.06	1.76	38
Total	Guilt	4.80	1.57	27
	Shame	5.32	1.50	27
	Control	5.06	1.76	38
	Total	5.06	1.63	92

Figure 2: Estimated Marginal Means of Counterarguing by Condition.



Unfortunately, no statistically significant relationship identified $F_{efficacy\ type}$ = (1, 87) = .40, $p > .05$; $F_{emotional\ appeal}$ (1, 87) =3.84, $p > .05$; $F_{interaction}$ (1, 87) = .19, $p > .05$. (See Table 8 and Figure 5)

Table 7: Perceived message effectiveness as a function of the inductions.

		Mean	Std. Deviation	N
No efficacy	Guilt	5.60	1.08	14
	Shame	5.83	.63	13
	Total	5.71	.89	27
Efficacy	Guilt	5.46	1.09	13
	Shame	5.96	.69	14
	Total	5.72	.92	27
Control	Control	6.03	.91	38
	Total	6.03	.91	38
Total	Guilt	5.53	1.07	27
	Shame	5.90	.65	27
	Control	6.03	.91	38
	Total	5.85	.91	92

Figure 4: Estimated Marginal Means of PME by Condition.

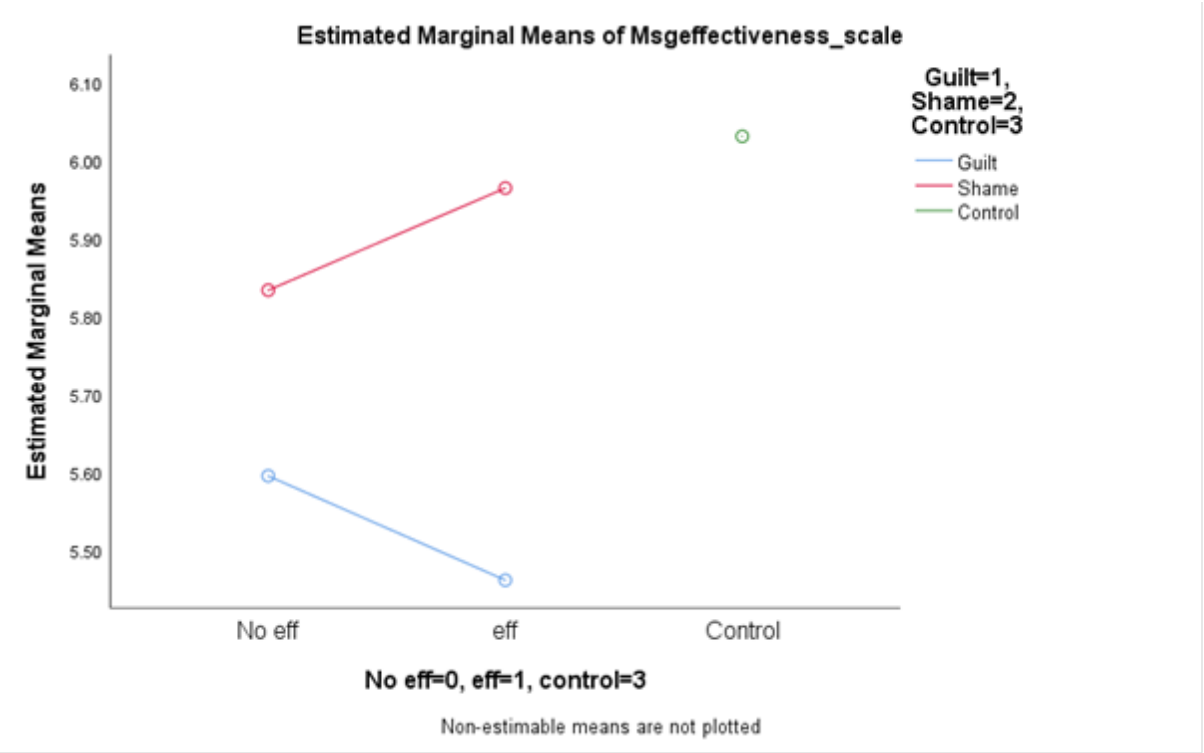


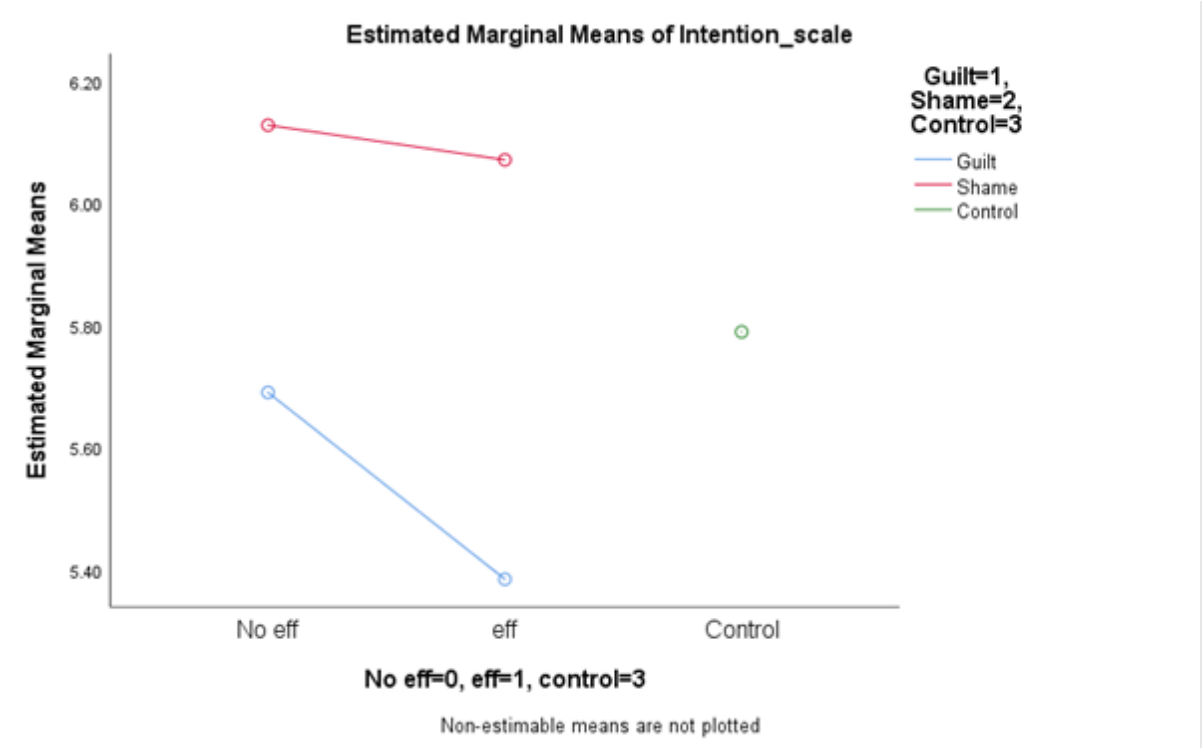
Table 8: Intention as a function of the inductions.

		Mean	Std. Deviation	N
No efficacy	Guilt	5.69	1.12	14
	Shame	6.13	.67	13
	Total	5.90	.94	27
Efficacy	Guilt	5.38	1.12	13
	Shame	6.07	.62	14
	Total	5.74	.94	27
Control	Control	5.79	1.22	38
	Total	5.79	1.22	38
Total	Guilt	5.54	1.11	27
	Shame	6.10	.63	27
	Control	5.79	1.21	38
	Total	5.81	1.06	92

Discussion

The purpose of this study was threefold. First, we wanted to replicate the conditions included in the original Boudewyns et al. (2013) experiment and assess replicability. Second, we wanted to assess if efficacy cues would moderate the effects of guilt and shame appeals and particularly see if efficacy mitigates the deleterious effects of shame appeals. Third, we wanted to extend Boudewyns et al.'s research by including a control group and adding additional persuasion-related outcome variables like intention.

Figure 5: Estimated Marginal Means of Intention by Condition.



This study helps lay additional groundwork in understanding if guilt is ineffective when the appeal is infused with shame-related language, therefore untangling the differences between shame and guilt appeals. Lay people often use guilt and shame as synonyms. This is problematic since the two distinct emotions were aroused in different psychological processes and had significantly different behavioral consequences (Tangney, Stuewig & Mashek, 2007;

Tracy, Robins, & Tangney, 2007). Boudewyns et al. (2013) made the seminal effort to distinguish shame and shame-free guilt in experimental persuasion research. The linguistic differentiation of focus on “self (who)” and “behavior (what)” was found to be one of the key factors that determine whether the elicited emotion was shame or guilt. Moreover, negative outcomes such as perceived manipulative intent and felt anger was revealed to be associated with shame (Boudewyns et al., 2013).

Given the importance of the differentiation of shame and guilt in various persuasion settings (Tangney, Stuewig & Mashek, 2007; Tracy, Robins, & Tangney, 2007), questions like “Is there any other factors determining the induction of shame or guilt?” and “What other outcomes there could be when shame is elicited?” remained unanswered. Therefore, the purpose of the current study is to replicate the findings of Boudewyns et al. (2013) and examine whether the lack efficacy cues cause more shame and other outcome constructs when shame is inducted.

To the author’s knowledge, the study may be one of the early studies that tested the moderating effect of efficacy cues within shame messages. Basil (2008) revealed that efficacy cues mediate the relationship between persuasive messages and outcomes. In Basil’s (2008) efficacy was manipulated by indicating the financial capability for the participants, which did not manipulate efficacy in a persuasive message. Zhuang and Bresnahan (2016) explored the effects of relational closeness, targets of harm, and nationality on influencing the induction of shame and guilt by persuasive messages. The study provided an interpersonal and intercultural way of understanding the factors affecting guilt and shame elicitation, but it did not focus on the driving forces that differing the induction of shame or guilt (Zhuang &

Bresnahan, 2016).

The descriptive data demonstrated the patterns that efficacy cues play an important role in affecting the induction of shame, guilt, and lowering levels of other negative outcomes such as perceived manipulative intent and counterarguing. However, except for the efficacy manipulation check in pilot 2, the current study did not find statistical significance in other predictions.

A plausible explanation could be lack of power due to mountainous data deletion in the data cleaning process. For example, the intended number of participants for analysis is 500 (100 per condition) for the main study, however, 92 people left in total after elimination of bad data. Many responses passed all the captcha questions and attention check perfectly but have overlapping answers for the open-ended questions. For example, when they are asked about what behaviors were recommended in the poster, irrelevant answers such as “they should be tested, and possibly treated, for the STD. After your partner is treated, don't have sex for 2 weeks to make sure you don't give the same infection back to each other.” showed up multiple times with the exact same upper case, lower case and spacing for every letter, every case.

Limitations

This study has flaws. First, the topic could be an issue. Since the study is attempting to replicate Boudewyns et al. (2013), it did not test the hypotheses with other topics and contexts. In future endeavors, other topics such as climate issue, plastic bag usage, or police violence are expected to be explored to examine possible variation in the emotion and efficacy induction.

Although Boudewyns et al. (2013) proposed an insightful method for differentiating shame and guilt appeals linguistically, experimentally manipulating shame remains challenging. One reason for this difficulty is that making the subtle distinctions between shame and guilt messages salient to laypeople, as opposed to emotion theorists, is inherently challenging. Furthermore, manipulating efficacy is complicated by the fact that the descriptive data indicated participants were already highly efficacious ($M > 5$) prior to receiving the messages. Addressing this issue across various topics could be a valuable direction for future research.

The most worrisome flaw is the extent of poor data quality. The data was collected from Amazon Mturk. While the participants past approval rate was set above 90%, there were still deletions exceeding half of the data collected from the first pilot to the main study. Within the process of cleaning the raw data, many participants passed all the captcha and attention check questions, however, they could not correctly answer the question regarding recommended behavior in the poster. For example, one repeated answer was: “Shame-Free Guilt Appeals: Testing the Emotional and Cognitive Effects of Shame and Guilt Appeals” which is the title of Boudewyns et al. (2013). We encourage extreme caution when interpreting these findings and believe that replication with a new data source is mandatory. We used Mturk because of our own success with the platform as well as its affordability (Buhrmester et al., 2011). After

the first pilot test and the amount of poor data quality, we assumed that the issue was our own use of poor attention checks. Pilot 2 confirmed there would be many bots and farmers. Therefore, we decided to triple the amount of data collection needed in the main study to achieve the proper amount of “good” data. But we later learned that when researchers fail to pay a large number of Mturkers their score will decrease. Thus, at each new turn, fewer “good” Mturkers will sign up for their studies. As such, by the main study we had few real participants. This is the main flaw of this thesis.

Summary

The current study sought to replicate and extend the findings of Boudewyns et al. (2013) by investigating the impact of efficacy cues on the induction of shame and guilt in persuasive messages. Despite the challenges inherent in differentiating between shame and guilt linguistically and experimentally, this study underscores the importance of these distinctions in various persuasion settings. Although the descriptive data suggested efficacy cues could influence the induction of shame and guilt, the statistical significance of these findings was not robust, likely due to data limitations and participant attrition. Future research should explore these effects across a broader range of topics and contexts to better understand the nuanced role of efficacy cues in emotional persuasion. Additionally, addressing the methodological challenges in measuring shame and ensuring data quality from sources like Amazon MTurk are critical for advancing this line of inquiry.

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APPENDIX A: MESSAGES USED IN PILOT 1

Your health is in your hands, Get tested stay confident ---- Efficacy #1

Confidence in your choices starts with getting tested ---- Efficacy #2

Self-assured and responsible- that's you. Get tested for peace of mind --- Efficacy #3

Test, know, stay in control. You've got this --- Efficacy #4

You've got the power to take charge of you health. Get tested, stay safe. --- Efficacy #5

Figure 6: Group 1 saw Efficacy#1 x Shame (Below).

Figure 7: Group 2 saw Efficacy#2 x Shame (Below).

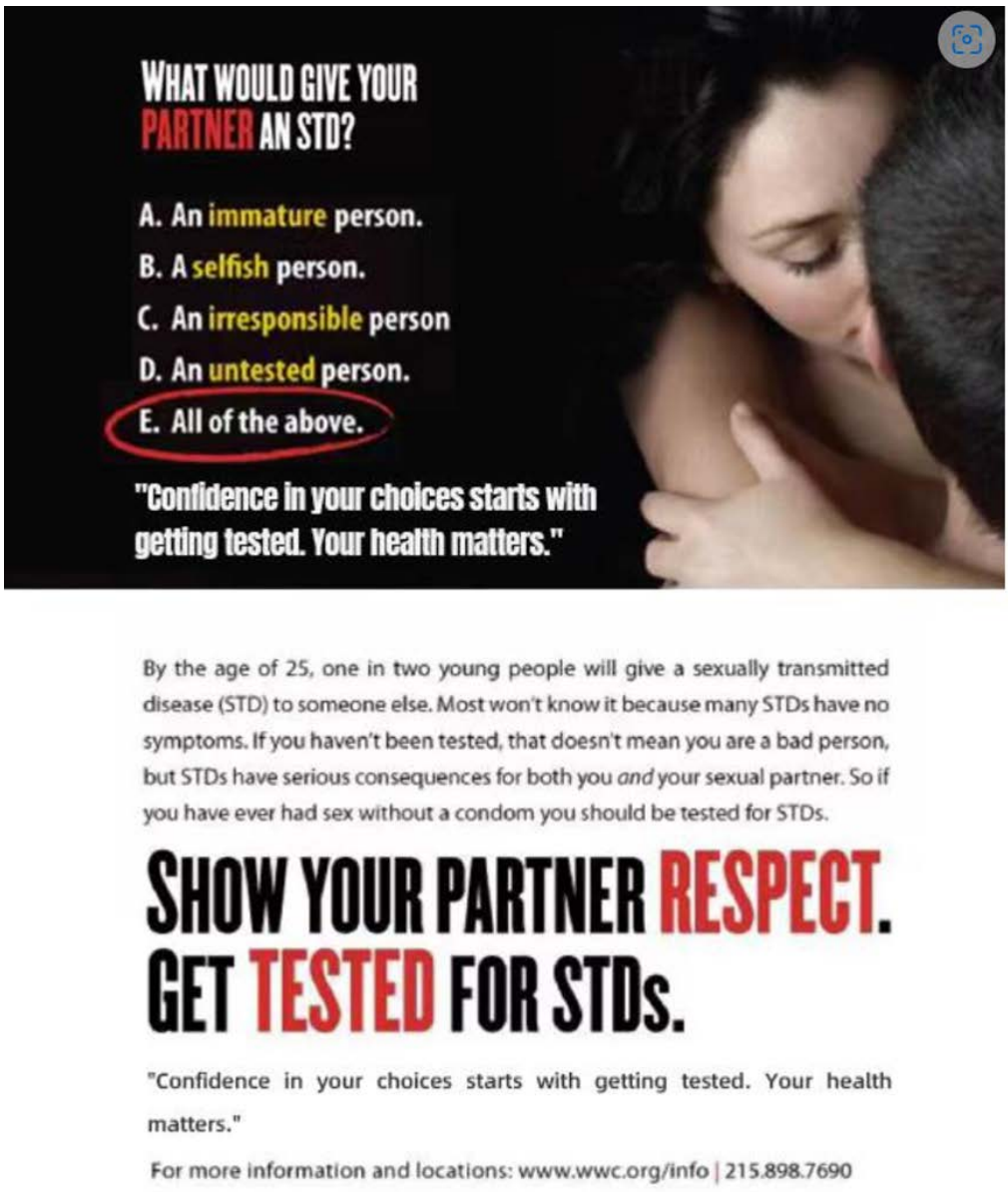

Figure 8: Group 3 saw Efficacy#3 x Shame (Below).

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

"Self-assured and responsible - that's you. Get tested for peace of mind."

For more information and locations: www.wwc.org/info | 215.898.7690

Figure 9: Group 4 saw Efficacy#4 x Shame (Below).

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

"Test, know, and stay in control. You've got this!"

For more information and locations: www.wwc.org/info | 215.898.7690

Figure 10: Group 5 saw Efficacy#5 x Shame (Below).

Figure 11: Group 6 saw Efficacy#5 x Guilt (Below).

Figure 12: Group 7 saw Efficacy#1 x Guilt (Below).

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

"Your health is in your hands. Get tested, stay confident."
For more information and locations: www.wwc.org/info | 215.898.7690

Figure 13: Group 8 saw Efficacy#2 x Guilt (Below).

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

"Confidence in your choices starts with getting tested. Your health matters."

For more information and locations: www.wwc.org/info | 215.898.7690

Figure 14: Group9 saw Efficacy#3 x Guilt (Below).

Figure 15: Group10 saw Efficacy#4 x Guilt (Below).

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SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

"Test, know, and stay in control. You've got this!"

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Figure 16: Group 11 saw Guilt (Boudewyns et al, 2013) (Below).

Figure 17: Group12 saw Shame (Boudewyns et al, 2013) (Below).

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APPENDIX B: MESSAGES USED IN PILOT 2

Figure 18: Shame X Efficacy.

Figure 19: Guilt X Efficacy.

Figure 20: Shame X No Efficacy.

Figure 21: Guilt X No Efficacy.

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT. GET TESTED FOR STDs.

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APPENDIX C: MESSAGES USED IN MAIN STUDY

Figure 22: Shame X Efficacy.

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you can't get tested now, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

Self-assured and responsible - that's you. Get tested for peace of mind.

For more information and locations: www.wwc.org/info | 215.898.7690

Figure 23: Guilt X Efficacy.

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person , but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

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Figure 24: Guilt X No Efficacy.

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you are a bad person , but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

SHOW YOUR PARTNER RESPECT.
GET TESTED FOR STDs.

For more information and locations: www.wwc.org/info 215.898.7690

Figure 25: Shame X No Efficacy.

By the age of 25, one in two young people will give a sexually transmitted disease (STD) to someone else. Most won't know it because many STDs have no symptoms. If you haven't been tested, that doesn't mean you can't get tested now, but STDs have serious consequences for both you *and* your sexual partner. So if you have ever had sex without a condom you should be tested for STDs.

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GET TESTED FOR STDs.

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Figure 26: Control Group.