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The Roles of Moral Anger, Empathy, and Self-Efficacy in
Persuading Prosocial Activism

Erin Lurae Willder

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Arts

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ABSTRACT

The Roles of Moral Anger, Empathy, and Self-Efficacy in Persuading Prosocial Activism

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This study examined how nonprofits can use video narratives to elicit young individuals' emotions and persuade them to support a cause; in particular this study analyzed variables of elicited moral anger, sense of self-efficacy, empathic connection, and prosocial persuasion. Undergraduate participants ($n = 160$) viewed a two-minute PSA depicting scenes of domestic violence escalation in a young married couple's apartment. Participants completed scale responses that demonstrated a positive correlation between message-induced state empathy and moral anger as well as a positive relationship between state empathy and activist tendencies. As in other studies framed by the anger activism model (AAM, high levels of anger and perceived self-efficacy predicted greater willingness to engage in prosocial support of a nonprofit cause, but only on two of three measures. The practical importance of understanding moral anger and how its induction applies to seeking help for distressed populations can apply in many messaging constructs, particularly when an organization seeks to remedy an injustice. Traditionally nonprofit organizations have used anger appeals to alert inactive publics to threats to universal moral ideals, but this practice also can be effective in socially conscious companies' persuasion efforts.

Keywords: moral anger, self-efficacy, empathy, prosocial, persuasion

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Introduction

On every screen, sooner or later, viewers are told stories that make them mad. Whether they appear in entertainment, on the news, or in documentaries or TED talks, such stories can give a glimpse into a reality that does not mesh with personal and societal ideals. Whether they are fictional or factual, such narratives grab attention and emotions, and both types are equally persuasive (Green & Brock, 2000). Nonprofit organizations (NPOs) that champion charitable causes occupy a uniquely valid position to use videos to tell persuasive stories that convey truths about inequality, decline, or injustices for which an active sense of morality will demand rectification.

With upcoming generations driving video-based media consumption, NPOs can no longer afford not to use video narratives to engage and persuade audiences. Video platforms are attracting more traffic than ever before, as confirmed most notably by YouTube traffic statistics. In 2019 YouTube ranked as the second most popular website after Google (Similarweb.com, 2019). The most consistent groups consuming YouTube content are young: 81% of 15- to 25-year-old internet users visited YouTube in the third quarter of 2019, followed by 71% of internet users ages 26-35 (Statista.com, 2019). The former group (generally known as “Generation Z”) now outnumber Millennials (United Nations, 2019) and are digital natives who are more likely than previous generations to use their powers for social good (Nonprofit Hub, 2015). Such trends are likely to continue, making nonprofit video creation crucial to future success.

Sharing persuasive stories to seek support and justice for served populations has never been easier, thanks to tools and resources such as YouTube’s Creator Academy. With the additional support of the YouTube Nonprofit Program, any charity can set up global campaigns and receive funding from donors far outside its traditional sphere of influence (Google for

Nonprofits, 2020). YouTube has established itself as a social networking site (SNS) in and of itself, but also because of its linkages with other SNSs. Traditionally called public service announcements (PSAs), such videos often use persuasive narratives to inform, correct misperceptions, and encourage action, as well as seek donations, restitution, and other prosocial solutions. While many PSAs have been sponsored by government entities, both nonprofit and for-profit organizations produce videos to support social and charitable causes. Videos are uniquely capable of sharing stories that both convey and elicit empathy and emotional responses.

Message processing matters. Viewer receptivity to appeals varies according to personalities and circumstances. While some viewers may be emotionally callous, resent the message, or be empathetic but dismissive, some viewers will feel capable and persuaded to support what they perceive as a worthy cause (Witte, 1992). Message processing does not have to occur only via cognition or affect; both processing pathways can and do work together to increase persuasion (Nabi, 1999). Messages that grab brain cells grab hearts too. There is evidence that narratives change the emotional, physiological, and motivational state of viewers (Barraza, Alexander, Beavin, Terris, & Zak, 2015; Barraza & Zak, 2009). Powerful hormones induced by persuasive messaging elicit bonding and stress instincts that increase propensity to give (Barraza & Zak, 2009).

Videos that elicit emotion on behalf of another person, group, or cause differ from direct appeals because their successful reception is affected by a receiver's willingness to care about others, which can be influenced by numerous personal factors. Such appeals, known as empathy appeals, portray a threat that motivates emotion and desire to help others, and the reception of such messages conflates issues of personal, other, and societal risk with efficacy connected with a proposed intervention (Roberto & Goodall, 2009). In other words, before acting at the behest of

a persuasive message, it is normal to consider any personal expense, social repercussions, or other secondary costs of intervening. For this reason, empathy appeals often portray transgression of a moral standard, imperative or ideal, bringing to the surface enough motivation and emotional commitment to result in positive action toward a goal of restoring what is considered right and good.

Persuasive empathy appeals include elements that are known to elicit concern and emotion; these typically include the presentation of a situation that is upsetting. One danger in message processing comes when the appraisal of a threat or thwarting obstacle overruns audience emotions or goes against the beliefs of an audience. Many emotions affect attitude and behavior change (Nabi, 1999), and in some cases the message can be rejected, or audience anger can be incited against the message itself, known respectively as “boomerang attitude change” or “reactance” (Dillard & Shen, 2005, p. 146). Pre-existing attitudes can be swayed, but in general audiences are more likely to process a message if it aligns with their attitudes and values, which is also known as message relevance. Persuasive stories often elicit emotions, some of which can be classified as goal-oriented emotions (Frijda, 1986) or moral emotions (Haidt, 2003).

Moral emotions play an important role in this regard, as they connect us to higher social ideals and establish common goals for humanity (Haidt, 2003). While fear appeals can and do work (Tannenbaum et al., 2015; Witte & Allen, 2000), fear alone doesn't motivate action (O'Neill & Nicholson-Cole, 2009). An inborn ideal or standard of equity and fairness drives many to try to restore both when the need arises, and the primary motivating emotion is anger. Moral anger, seen as a sibling of anger (Haidt, 2003), arises under such circumstances of moral indignation, and messages that elicit feelings that an ideal is being threatened or thwarted bring that moral anger to the surface. Moral emotion in general arises in an environment when people

care more about something outside themselves other than their own personal status (Haidt, 2003), and moral anger in particular predisposes a person to care enough to act on behalf of someone, even at great personal expense or risk (Fehr & Fischbacher, 2004; Leliveld, van Dijk, & van Beest, 2012; Roberto & Goodall, 2009).

But what if a person—especially a young person—feels incapable of helping? According to Bandura's (1977, 2001) theories, a sense of efficacy is vital in motivating action. Self-efficacy, or feeling personally capable, empowers people to act. Similarly, a desired response itself must be seen as adequate to solve a problem or contribute to restitution or punishment of a perceived inequality (response efficacy). The concept and importance of efficacy has been built into many other theories and models since Bandura's initial theory (1977), but one specifically employs efficacy and anger to predict outcomes of persuasive messaging designed to awaken activist inclinations. Connecting the motivational properties of anger with this empowering sense of efficacy, M. M. Turner (2007) developed the anger activation model (AAM), which defines categories of activist tendencies in terms of anger and efficacy. When an audience finds a message relevant and perceives that a proposed solution can be done and will work, a persuasive message is more likely to result in changes in attitudes, intentions, and behaviors.

Extant literature shows connections between empathy and self-efficacy induction as predictors of persuasion, but investigations that include moral anger are few. Moral anger occupies a position as one of the most prosocial and least self-oriented forms of moral emotion (Haidt, 2003), and its presence is known to incite action on behalf of unknown others. For this reason, this study adapts the AAM to examine intensity of *moral anger* and perception of *self-efficacy*, with an additional consideration of message-induced state empathy, as a package of three induced responses that can effect prosocial persuasion. Clues gleaned can help NPOs and

socially motivated companies more effectively design eye-opening appeals that help audiences feel for others, feel anger over moral injustices, and feel that their contributions can help solve social problems for less-fortunate others. Because the activists of the future are far more likely than older generations to expect video messaging, especially on YouTube and other SNSs, organizations must learn how to appeal to viewers' innate moral sense of justice with real-life video narratives. This ability to portray stories of injustice effectively, without triggering reactance or boomerang effects, will become increasingly crucial in giving audiences productive, achievable opportunities to not only provide support but to also actively recruit others to care about and champion important social causes.

Literature Review

The act of distributing appeals that defend and promote the well-being of others goes back millennia, but the advent of film recording and the invention of television brought empathy- and emotion-eliciting motion pictures to life. Charitable-cause videos combine audio and video to evoke emotion to seek support for causes meant to aid a third party, which can include an individual, a served population, the environment, protected species, or other social or political causes.

Persuasive Storytelling

Like for-profit businesses, charities and other NPOs have utilized traditional advertising techniques to conform or comply with a desired belief, attitude, or behavior. Social marketing through SNSs can be effective for nonprofits as they follow “proven techniques” using mass media, mediated and interpersonal communication, and marketing (placement, promotion, product, price) to reach target audiences (Evans, 2006). But marketing strategies for nonprofits must consider multiple audiences while both seeking resources (e.g., grants, volunteers) and using those resources to support a cause (e.g., campaigns), all while dealing with a public that still views nonprofit marketing as “undesirable, too expensive, and a waste of stakeholders’ money” (Helmig, Jegers, & Lapsley, 2004, p. 108). A survey of NPOs found that 82.4% did not have a particular target in mind other than previous donors, board members’ friends, or a purchased mailing list (Pope, Isely, & Asamoah-Tutu, 2009). Nonprofits must seek to understand specific audiences in order to persuade them to help (Evans, 2006).

During World War II, two organizations brought the practice of promoting causes into the film era: in 1938 an amateur actor launched Public Relationship Films Ltd. in England, and in 1941 in the United States, the War Advertising Council, now known as the Ad Council, was

set up as the U.S. entered the war. According to its own history, the Ad Council “created the category of public service advertising” and claims its “icons and slogans are woven into the very fabric of American culture” (n.d., para 6). These films are part of a category of advertising known as public service announcements (PSAs) or public service advertising. Countless other media organizations now promote government and nonprofit causes, and many of their messages address personal and public health issues such as drug addiction, drinking and driving, wearing seatbelts, and avoiding sexually transmitted diseases. Prominent examples are the *truth*[®] campaign and its sequel *Finish It*[®] campaign, which have included attention-grabbing PSAs that warn people about the dangers of smoking. Campaigns of this type often employ narratives that tell the story of what happens if the desired or prescribed actions are not taken.

Narrative Message Processing

Narratives are woven through every inch of the fabric of human existence: “One of the important ways we perceive our environment is by anticipating and telling ourselves mini-stories about that environment” (Branigan, 1992, p. 1) to the effect that storytelling is a strategy through which people interpret and understand the world. According to Fisher (1984), stories can be persuasive or aesthetic. Narratives can change beliefs through “an integrative melding of attention, imagery, and feelings” that is not based on judgments of realistic portrayals; fictional narratives are as persuasive as true stories (Green & Brock, 2000, p. 701). Changes in beliefs occur because of a number of factors, including the creation of story images that indicate connections to the receiver’s beliefs; a story that transports the receiver into another world; predispositions of the receiver that allow narrative transportation; the artistic or expectation-adherent attributes of a story script; and delivery of the story by an acceptable medium (Green & Brock, 2002). In their review of two decades of narrative transportation research, Van Laer, De

Ruyter, Visconti and Wetzels (2014) proposed an extended transportation-imagery model that builds on the work of Green and Brock (2000) and other research to bring together a multidisciplinary approach that provides “insights into the antecedents and consequences of narrative transportation” that showed effects related to the state of a receiver (e.g., female sex, attention, familiarity, etc.). Viewers who are transported by a narrative television program (drama, comedy, etc.) have been found to engage less with a nonprofit PSA when it airs during non-narrative (news, documentary) television content (Durkin & Wakefield, 2008), implying some emotional carryover effects. Busselle and Bilandzic (2009) found that story readers leverage a point of view to understand the story from within; they want to engage to experience “emotional engagement” and “narrative presence,” in which they locate themselves within the narrative, empathically mirroring a character’s experience.

Message content processing has been described using various models delineating systematic vs. heuristic (HSM; Chaiken, 1987; Chaiken & Eagly, 1989; Chaiken & Trope, 1999) or cognitive versus affective processing (Petty & Cacioppo, 1986), but other variables also play important roles in suatory (suasive and sensory) outcomes. Depending on factors such as the urgency of a message, available cognitive energy, and a sense of self- and/or response-efficacy, one may elect to deal with a situation, accept a problem but deny a need for action, or assume irrelevance and ignore it altogether (Witte, 1992, 1996). Various studies have shown that initial emotional responses can involve clusters of related emotion and occur automatically (Ekman, 1992; Lazarus, 1991; LeDoux, 2003) and therefore a wide range of message reception variables leads to differing effects (e.g., direct imitation or behavior activation). According to Goodwin, Jasper, and Polletta (2004), “Certain emotions (six, to be precise: fear, surprise, anger, disgust, joy, and sadness) seem to arise suddenly, without conscious cognitive processing, in an

involuntary fashion. . . . [by] quicker, more primitive neurological routes . . . [that] allow us to respond immediately” (p. 416). “They can also make us more alert and focused on the problem at hand and therefore more rather than less rational” (p. 416-417).

Better attempts at persuasion often attempt to influence decision-making by appealing to both cognitive and affective faculties (Nabi, 1999). Landmark emotion research has found that various discrete but mixed emotions often arise from communicated stimuli and acknowledge in particular the related emotions of anger, (anticipated) guilt, disgust, and regret (Dillard & Peck, 2000; Nabi, 1999, 2002). In their study of anti-cocaine narratives, Banerjee and Greene (2012) confirmed that “transportation is a fundamental outcome of narrative involvement in the process of persuasion, and influences cognitive and affective processes” (p. 577).

Neurology of Persuasion

In the field of neurology, persuasion has been linked to “mirror neuron” areas of the brain that activate empathic concern. Humans innately detect and imitate, often automatically, what they see in other people; people are “wired for empathy” as a functional adaptation that increases our evolutionary odds of survival (Jacoboni, 2009, p. 666). Empathy is “implemented by a simulation of the mental states of other people” (p. 667). According to Remley (2017), another expert on the brain’s role in persuasive rhetoric,

The general focus of persuasion is to change one’s attitude or beliefs about a given topic or issue or to elicit a stronger conviction in belief or attitude about that topic or issue.

While mirror neurons, for example, are involved in this process as well, that involvement has more to do with mirroring or sharing a perception (“shared emotion”) than with copying or imitating action. (p. 7)

In other words, mirroring another person does not mean automatically *acting* just as they do. Rhetoric is more likely to influence perceptions, and message design should take into account the neurological processes by which people engage (or don't engage) with images or messages. Perception is also subjective and is affected by an ability to identify with portrayed circumstances (Remley, 2017). "Empathy biases" influence biases within prosocial behavior, such that people demonstrate reduced empathy (neurologically and behaviorally) toward (ethnic) outgroups or individuals who are seen as competitors or threats (Lamm & Majdandžić, 2015, p. 21; Galinsky & Moskowitz, 2000). Emotional appeals' effectiveness varies by culture type (individualist vs. collectivist) and by message orientation (self- vs. other-referencing) that results in thoughts about the self or others (idiocentric vs. allocentric), and in an individualist culture like the United States, appeals relying on other-focused emotions resulted in more favorable attitudes (Aaker & Williams, 1998).

Neurological researchers have also found that becoming transported by dramatic narratives is linked to increased levels of cortisol (a stress hormone) and oxytocin (a bonding hormone) in the brain as well as increased feelings of empathy toward characters in a narrative (Barraza & Zak, 2009). Further, this study showed that higher levels of empathy motivated participants to give money to a stranger. Knowing that oxytocin and empathy were correlated led a related group of researchers to look specifically at PSAs, but this time they administered either synthetic oxytocin or a placebo to the participants. The presence of oxytocin increased donations by 56% (Lin, Grewal, Morin, Johnson, & Zak, 2013). This set of research works together to confirm that transporting narratives increase donations by increasing brain levels of certain hormones that often result in empathic action.

Empathy and Empathy Appeals

Definitions of empathy vary to some extent but share a common stance of *feeling with* another person, or feeling what another person feels. Campbell and Babrow (2004) defined empathy as “sharing the subjective experience of another person” (p. 160). Eisenberg and Strayer (1990) posited that “empathizing involves the vicarious sharing of affect” (p. 3), and others have described empathy as “other-oriented feelings of concern, compassion, and tenderness experienced as a result of witnessing another person’s suffering” (Batson, Fultz, & Schoenrode, 1987, p. 181). In terms of motivation, empathy has also been described as a precursor to action, or “the heightened awareness that another person is in danger or distress and includes an urge to take action to alleviate the other person’s plight” (Bagozzi & Moore, 1994, p. 58). This may mean taking upon oneself another person’s detection of a threat or risk. While depicted feelings that are felt empathically are “not always identical” to the feelings of those observing them, other-focused appeals, especially when experienced privately, can be very effective (Aaker & Williams, 1998, p. 259). Empathy, while not an emotion per se, enables one person to feel the emotions of another person and understand that person’s reality.

Empathy is often categorized in terms of *trait empathy* (general other-based concern) and *state empathy* (a temporary state induced by stimuli, such as a mediated message). The two are highly correlated, and they can even enable a victim to take the perspective of an offender, “adopt[ing] benevolent emotions and appraisals that supplant unforgiving emotions and cognitions” (vanOyen Witvliet, Luna, VanderStoep, Gonzalez, & Griffin, 2019, p. 1). Shen’s (2010) quasi-experimental PSA study found that message-induced state empathy increases persuasive effects and mitigates message rejection. There is a risk that a persuasive communication may meet with psychological reactance, or a rejection causing a “boomerang

effect” (Shen, 2010, p. 397) such that “empathy-inducing message features are essential when it comes to message design” (p. 413).

Empathy is also exhibited in the ways humans adopt cultivated beliefs by vicarious experiences via video and television. Over several decades, studies have shown that observational learning through modeled experiences can have a lasting effect on attitudes, emotions, and behavior associated with modeled experiences (Bandura 1986, 2001). Positive modeling of coping behaviors can encourage confident behavior (Bandura, 1977). Similarly, aggressive or violent modeling can and does elicit aggressive attitudes and behaviors, whether it occurs in person or as an imitation of filmed aggression (Bandura, 1969; Savitsky, Rogers, Izard, & Liebert, 1971), and this can and does extend to punitive behaviors. Bandura (1969) poignantly recounts ways that prisoners in Nazi concentration camps were equally or more aggressive and punitive toward new prisoners, not because they identified with the Nazi guards but because they automatically modeled the behaviors they had both witnessed and experienced themselves. Apparently these prisoners felt the way the guards felt (even deriding sympathetic foreign correspondents and altering their clothing to look more like guards), and they wanted the new prisoners to feel the way they felt previously.

Early research showed that both physiological and self-reported measures of emotions such as fear and anger are related to helping (Krebs, 1975). An empathy appeal creates a space where audience members place themselves in the role of the portrayed victim or sufferer, and it “transforms another’s distress into our distress” (Shelton & Rogers, 1981, p. 375). Empathy appeals “facilitate attitude change” with three important implications: (a) instructions on how to play a role to help others can arouse empathy; (b) these can “arouse and enhance persuasion in mass media communication in addition to face-to-face situations”; and (c) they can “elicit help

when the potential beneficiaries are not the ones depicted in the appeal, but symbolize the numerous others exposed to the same danger” (Shelton & Rogers, 1981, p. 375). Empathy appeals create a space where audience members place themselves in the role of the portrayed victim or sufferer, and empathy “transforms another’s distress into our distress” (p. 375). When it comes to persuading people to care about others and take action on their behalf, empathic anger arousal is a key predictor of success (Vitaglione & Barnett, 2003).

Emotions and Emotional Appeals

Fear-Appeal Context

Many empathy appeals are designed to elicit fear, and their prevalence continues to influence how anger appeals are created, analyzed, and measured. Fear has been defined as “an affective state protecting one against danger” (Rogers, 1975). Fear appeals attempt to arouse fear by emphasizing a threat or danger and harmful consequences that will occur if an individual does not adopt the message’s suggestions (Maddux & Rogers, 1983, p. 469). Algie and Rossiter (2010) define a fear appeal as “a means of persuasion that threatens the audience with a negative physical, psychological, or social consequence that is likely to occur if they engage in a particular behavior” (p. 264). For example, a standard health communications fear appeal might provide a threat by scaring audiences with shocking statistics on risks related to certain unhealthy behaviors (such as smoking), or by portraying missed benefits of not adopting a healthy behavior (lowering blood cholesterol). Fear appeals often contain “vivid language . . . , personalistic language (e.g., smokers like you . . .), or gory pictures (e.g., photographs of crash victims)” (Witte, 1992, p. 331). When a person vicariously feels fear for another person, it can be called altruistic fear (Warr, 1992).

Fear-appeal meta-analyses confirm that fear appeal messaging effectively changes attitudes, beliefs, and behaviors (Tannenbaum et al., 2015; Witte & Allen, 2000). Notably these analyses revealed increased effectiveness when messages contain efficacy components, including simple or one-time solutions, that were suggested or prescribed as solutions for problems. Tannenbaum et al. (2015) found that fear always evoked a response, but that response rates diminished after a certain level of fear depiction was reached. In some nonprofit contexts, fear-inducing messaging, icons, and imagery can “provoke unintended reactions” and should be replaced with less threatening representations of problems and/or solutions (O’Neill & Nicholson-Cole, 2009, p. 369). This study using a climate change fear appeal revealed that participants responded more positively to approaches that connected with everyday life, and in part they felt that fear appeals were “a good communications tool for ‘other people’” but not themselves (p. 370), demonstrating third-person effect. Others chose to ignore climate change appeals as an expression of “socially organized denial” that appears to be both protective and motivated by personal and social conflict of interest (Norgaard, 2006, p. 347). Fear avoidance can be motivated by a variety of factors.

Fear and anger “occur in the same situations, in response to the same threats, [and] anger can be helpful in reducing fear” (Ekman, 2007, p. 125). Threatening situations elicit fear, and thwarting situations arouse anger (Hunt, Cole, & Reis, 1958). According to the appraisal-tendency framework, the difference between fear and anger is that those experiencing fear have lower certainty and control (self-efficacy), resulting in pessimistic appraisals, while those experiencing anger tend to have a higher sense of certainty and control, resulting in more optimistic appraisals (Han, Lerner, & Keltner, 2007). An appraisal based on a sense of self-

efficacy to effect change can turn fear into anger, motivating people to remedy situations by removing barriers that threaten or thwart attainment of a goal.

Anger

Anger has been variously described as a combination of affect, cognition, and physiological arousal that occurs when expectations do not match reality, or a perception of a threat or risk combined with a perception of an adequate ability to deal with it. Lazarus (1991) conceptualized appraisals for anger in terms of two processes. The first or primary appraisal components include *goal relevance* and *goal incongruence*, as well as ego involvement, with the understanding that if an occurrence is relevant, not congruent with goals, and threatens one's self-identity or self-esteem, anger can result along with other emotions. On a secondary level, if a person blames an accountable person who did not control a situation, anger occurs; external anger results if the blame is toward another, and internal anger results if the blame is one's own. Anger includes a coping potential (unlike fear and anxiety) that involves attacking to seek safety and "future expectations" (p. 226), both of which overlap with Bandura's concept of self-efficacy (1977, 1982).

Moral Anger

Moral anger extends this description to motivate coping behaviors that include providing relief to another person or population that one sees as being at risk. Haidt (2003) identified moral emotions as a subset of emotions, describing how "moral roles and judgments 'must bear on the interest or welfare either of society as a whole or at least of persons other than the judge or agent' (Gewirth, 1984, p. 978)" (Haidt, 2003, p. 853). He further explained,

Some emotions are easily triggered by triumphs, tragedies, and transgressions that do not directly touch the self, whereas other emotions are not. The more an emotion tends to be

triggered by such disinterested [i.e., not self-interested] elicitors, the more it can be considered a prototypical moral emotion. (p. 854, clarification added)

Haidt maps moral emotions, graphing “disinterestedness of elicitors” (“self-interest” to “disinterest”) on an *x* axis and “pro-sociality of action tendency” on the *y* axis. The most prosocial, other-interested moral emotions located at the top right corner of the graph include moral anger, or righteous indignation, accompanied by guilt and compassion (Haidt, 2003, Figure 45.1, p. 854). Similarly, research by Montada and Schneider (1989) found that the presence of moral anger, or moral outrage, predicted participants’ likelihood of committing to prosocial behavior on behalf of disadvantaged others. Whereas there can be a dark side to anger, such as when “Anger is the most dangerous emotion” because “the motive is . . . to harm the target” (Ekman, 2007, p. 114), the sibling of anger—moral anger—can motivate prosocial action.

Lindebaum and Geddes (2016) proposed a definition of moral anger that incorporates pillars of moral emotion research:

(i) an aroused emotional state stemming from (ii) a primary appraisal of a moral standard violation that (iii) impacts more than oneself and (iv) prompts corrective behavior intended to improve the social condition, even in the face of significant personal risk. (p. 743)

The flexibility of this definition allows for both personal involvement in a standard violation and becoming a witness to one. It involves defending the honor of others or common decency, and does not apply to personal affronts independent of one or both of these. And while a perception of injustice is likely in such situations, it is not required. But most importantly, the goal and necessary behavior of moral anger must include attempts to correct any perceived incorrect

behavior to effect a social improvement (Lindebaum & Geddes, 2016). Moral emotions vary in intensity or degree and motivate people to engage in goal-oriented action tendencies (Frijda, 1986).

In the same year, O'Reilly, Aquino, and Skarlicki (2016) found that moral anger arises “to respond to perceived injustice out of a sense of duty, obligation, and moral virtue, and not only because of self-interest” (p. 172), and it motivates a range of reactions. They identify “deontic emotions” as emotions that people experience when they appraise a situation and feel someone has violated a moral standard. Further, they state the following:

We operationalize deontic emotions as moral anger, a suite of emotions that can include the discrete emotion of *anger*, and related emotions like being *upset* with, or experiencing *hostility* toward, the perpetrator. Anger is considered the most dominant discrete emotion within this suite. . . . We treat moral anger as an intense emotional state that follows from an initial, reflexive intuition of moral wrongness. (O'Reilly, Aquino, & Skarlicki, 2016, p. 172, emphasis added)

Their study uses measures of anger, being upset, and feeling hostile toward the source of a moral infraction, verbiage that was similarly used to measure moral anger in the current study.

Self-Efficacy

Bandura (1977) first described *self-efficacy* as a person's belief in or perception of his or her ability to perform successfully. He developed this theory with the intention that it would give psychologists a framework with which to help their patients change behavior more effectively. This confidence in one's personal ability to persist and perform, also called *self-efficacy expectancy*, is contrasted with *outcome expectancy*, which he defines as “a person's estimate that a given behavior will lead to certain outcomes” (Bandura, 1977, p.193). When an individual

persists in performing activities that only seem threatening, he or she will experience “performance accomplishments” (mastery experiences and expectations), “vicarious experience” (ability to mimic modeled behaviors), “verbal persuasion” (encouragement from others), and “emotional arousal” (stress management and emotion regulation), each of which develops through multiple sources of influence (Bandura, 1977, p. 195-198). Bandura expanded this initial theory, known as social learning theory (SLT), into social cognitive theory (SCT; Bandura, 1986), and this theory applies to and is cited in thousands of articles in various academic and practical disciplines. Being task-oriented and maintaining persistence to complete goals denotes high self-efficacy, while those with lower self-efficacy tend to be less capable, achieve less, and become even more likely to be bullied by peers (Kokkinos & Kipritsi, 2012), showing how higher perception of self-efficacy drives progress and equality. In appraising a persuasive message, cognitions automatically include perceptions of self-efficacy as various discrete emotions are experienced, including anger (Nabi, 1999). Responding with self-efficacy and anger results in careful message processing that relies on “both arguments and heuristics to make judgments, regardless of the target of the anger” (Nabi, 1999, p. 303).

Anger Activism

Zeelenberg, Nelissen, Breugelmans, and Pieters (2008) presented an emotions-based extension of the persuasion literature, asserting that “feeling is for doing”: an emotion (like anger) must “prove its worth by virtue of its correlation with an external criterion, such as behavior” (p. 120). They proposed that (a) “the emotional system” is the primary motivational system for goal-directed behavior,” (b) specific emotions serve specific functions in seeking specific goals, (c) emotions are not simply relevant in regard to valence, (d) “experiential qualities” of specific emotions result in known motivational functions, and (e) emotions can be

internal or environmentally induced when seeking a specific goal, and their impact depends on the extent to which they are perceived as relevant (p. 121). Feelings are more valuable when they move people to act, and no other emotion motivates activism as well as anger does. Messages eliciting anger and guilt often create a sense of discomfort that motivates relief via an action, such as donation (Merchant et al., 2010), or even activism (M. M. Turner, 2007).

Emotion plays a constructive role within social activism (Jasper, 1997, 1998), including the development of emotion-inducing content. Organizations must be able to define a social problem as an “injustice” rather than a “misfortune” that requests charitable support (R. H. Turner, 1969, p. 391). Humankind is accustomed to misfortune, and may feel upset or sad about, say, cancer taking the life of a young man, but “we do not conceive it as a deep injustice which provokes a sense of outrage against a system productive of such misfortunes” (p. 391). Activist organizations “work hard to create moral outrage and anger. . . . They must weave together a moral, cognitive, and emotional package of attitudes” (Snow, 2004, p. 365; Jasper, 1997, 1998). All of these aspects must be included in recruiting efforts to attract, engage, and retain activist group members:

Accordingly, social movements can be thought of as collectivities acting with some degree of organization and continuity outside of institutional or organizational channels for the purpose of challenging or defending extant authority, whether it is institutionally or culturally based, in the group, organization, society, culture, or world order of which they are a part. (Snow, Soule, & Kriesi, 2004, p. 11).

Activists “may seek to elicit and transform emotions in their followers and in their targets, and to appeal to common emotions to secure support for their cause” using “emotions

that are seen as inappropriate for particular groups” to get and hold audience attention (Snow, 2004, p. 423).

According to some research, anger elicits greater donations on behalf of others whether or not the receiver feels empathic concern (van Doorn, Zeelenberg, and Breugelmans, 2014), but Goodwin, Jasper, and Polletta (2004) explained the importance of activists possessing both empathy (compassion) and moral anger:

Without compassion, the transnational movements against slavery, sweatshops, the World Trade Organization, or the US war against Iraq would not have become so broad. If compassion is crucial to these movements, indignation is at the core of far more. It is a component of the moral shocks that often lead individuals to search out protest groups (422).

In her research with members of the activist group Amnesty International, Rodgers (2010) reports, “Anger and indignation alongside compassion, for example, are prime motivators of the culture of Amnesty. This sense of injustice unites employees and motivates them in their pursuits” (p. 279).

Moral anger elicits an agitation that viewers seek to alleviate through action, and that action can be manifest in motives of punishment and restorative justice that one can afford personally. A large-scale study by Verhaert and Van den Poel (2010) found that empathic concern greatly increases the likelihood of donation, and that a secondary response of personal distress from exposure to an appeal (aroused in high-empathy people) does not influence decisions to donate. Anger can sometimes lead to higher donations to charity when that donation will provide a direct “restorative function (i.e., compensates the suffering of women so that they

can start a new life)” compared to when the donation is intended to indirectly alleviate suffering (van Doorn, Zeelenberg, & Breugelmans, 2014).

Moral anger on behalf of another person can also translate into “altruistic punishment” (de Quervain, Fischbacher, Treyer, & Schellhammer, 2004). People punish others to restore balance after disadvantageous inequality (Bone & Raihani, 2015; Raihani & McAuliffe, 2012). In fact, punishment-based reciprocity can activate reward centers in the brain, implying “a common cognitive-affective-motivational network as the driving force for punishment, with only quantitative differences between first person and third person perspectives” (Strobel et al., 2011, p. 671). People are wired for equality and fairness, even when it means restoring justice for another person, population, or cause. One study compared high- and low-empathy participants and found that low-empathy participants were more likely to punish an offender, while highly empathic people were more willing to provide “altruistic compensation” to a victim, both at their own expense (Leliveld, van Dijk, & van Beest, 2012, p. 139). Fehr and Fischbacher (2004) also found that participants witnessing unfair domination chose to mete out punishment at their own expense.

Anger Activism Model

M. M. Turner’s (2007) anger activism model provides ways to understand how anger can persuade people to engage in activist causes. The level or intensity of angry feelings can indicate the likelihood that someone will systematically process a message, or that he or she will decide to act based on those cognitions (Ilakkuvan, Turner, Cantrell, Hair, & Vallone, 2017). By crossing self-efficacy with the anger component in a 2 x 2 format (see Table 1), the AAM includes four distinct groups, labeled according to their propensity for being activated when exposed to an anger appeal (M. M. Turner, 2007).

The group most likely to engage with persuasive anger appeals is known as the *activist* group, and it is characterized by individuals with both high levels of efficacy and high levels of anger. These individuals cognitively engage with a topic or cause, feel it is relevant, feel strongly aligned with it, and are most likely to engage in “higher commitment behaviors” such as promoting the cause to friends, joining a group, or planning an event (M. M. Turner, 2007, p. 117). An activist would be likely to be (or become) a leader in a cause and recruit others. Activist organizations are always looking for fresh recruits with such proclivities (Rodgers, 2010).

The *empowered* group comes second in terms of likelihood to serve or support others through charitable causes. These individuals perceive themselves to be capable of helping others, but they simply are not as angry as the activists. They may not feel that the topic is important or relevant. This lower level of anger keeps them from leading the charge, though they may commit at a lower level (Ilakkuvan, Turner, Cantrell, Hair, & Vallone, 2017). These individuals bring capability and balance to an organization, supporting the vision of hotter-headed leaders.

The *angry* group includes individuals who feel angry but do not feel confident that they can do anything to help. A risk here is that over-emotion unbalanced by a sense of self-efficacy can lead to message rejection or even anger against the message (Bandura, 1977; Witte, 1992). Anger alone does not motivate goal-oriented behavior; self-efficacy messaging and perception elements are also required, according to the AAM. Some of these individuals may be just one educational or empowering message away from believing in themselves “enough” to commit to taking action on behalf of the cause.

Finally, those who report low levels of anger and low levels of self-efficacy are the *disinterested* category. For these individuals there is little or no sense of personal relevance or understanding of susceptibility, severity, or frequency of a threat. Even if a disinterested

individual feels aligned with a topic, he or she is unlikely to cognitively engage with the topic or take any positive action to support it (Ilakkuvan, Turner, Cantrell, Hair, & Vallone, 2017). A person in this category likely will view a persuasive message with much lower identification with the issue, sense of its importance, or emotional response than the other groups.

AAM Studies

A small number of studies employing the AAM have examined various ways that intensity of anger and perception of self-efficacy affect and effect persuasion, and in the last few years the model has attracted more use from researchers. One dissertation study looked at anger, efficacy, and identity within activist groups (Kim, 2009), and later this research was published as an article (Kim & Cameron, 2015) on “public perceptions of expected emotional coping of activist organizations based on perceived identity discrepancies, anger and efficacy levels in the context of crisis management” (p. 139). Another study tested the model on applications such as health communications like the *truth*[®] campaign (Ilakkuvan, Turner, Cantrell, Hair, & Vallone, 2017) and crisis communications. A meta-analysis of anger and persuasion (Walter, Tukachinsky, Pelled, & Nabi, 2018) analyzed the effectiveness of the AAM compared to three other theoretical models, concluding that a more complete understanding of anger and persuasion can be helped by considering the AAM in conjunction with the cognitive functional model (CFM, Nabi, 1999). The AAM’s focus on anger intensity proves useful, within a message and across multiple messages, while the shared inclusion of efficacy measures in the CFM and AAM are augmented by CFM’s focus on assurance, giving a “constructive outlet for aroused anger” (Walter, Tukachinsky, Pelled, & Nabi, 2018, p. 16).

Because empathy enables a person to feel with an unknown other, this study will look at whether high-empathy participants are more likely to report high levels of anger, as well as if

high-empathy individuals are more likely to fall into the activist group than the disinterested group (exhibiting a triple combination of high empathy, high anger, and high self-efficacy).

High-empathy individuals may be primed for activism, should a moral anger trigger containing a self-efficacy message be presented.

RQ1: Is there a positive relationship between empathy and anger?

RQ2: Are those high in empathy significantly more likely to be in the AAM activist group than the disinterested group?

H1: There will be a statistically significant difference in AAM groups as they relate to contributing to a domestic abuse nonprofit, such that those high in both moral anger and self-efficacy (activist group) will be more willing to volunteer and donate compared to those low in both moral anger and self-efficacy (disinterested group).

Methods

Participants

To establish topic relevance and character identification with the persuasive message, PSA actors were chosen who appeared young enough to be considered similar to the sample of undergraduate participants. The sample was large enough to establish AAM group reliability, engaging $N = 212$ university student volunteers recruited from introductory-level communications classes that generally contain students of varied majors or no declared major. Of this sample, valid experiment participants ($n = 160$) viewed a domestic violence PSA and the rest ($n = 52$) were part of a control group. Funding was available to pay each participant \$10 cash. A time slot was chosen by each participant with a maximum duration of 30 minutes. Data were collected in a timely manner over a period of two weeks in April 2019, with participants having signed up approximately one to two weeks before data collection began.

Open-ended optional responses at the end of the survey provided a few further insights into some participant backgrounds that are incomplete and do not figure into the results analysis, but are nonetheless interesting to note. In answering an optional question, “If you are comfortable sharing, do you have any experiences with domestic violence that you would like to share?” many respondents reported no personal exposure of any kind, while a few responses implied experience with domestic abuse within immediate or extended family or by observing or reporting conflict after neighbor or community exposure. In addition, a few respondents admitted to not being able to identify at all with the PSA message because of inexperience with any form of domestic conflict. None of these optional qualitative responses will be analyzed because they were incomplete; however, they do offer some clues about results and potential avenues for future research.

Research Design

The relationship between empathy and persuasion has been examined thoroughly, but this study adds the dimensions of moral anger and self-efficacy in relation to empathy (as a message-induced state), as well as the effect of these response combinations on persuasion. An experiment using a narrative domestic violence PSA was designed to elicit moral anger. Specifically, this experiment was designed to see if a portrayal of domestic violence as a relevant threat in young marriages would induce undergraduate-age participants to feel angry, feel capable of helping others, or feel motivated to provide prosocial support to victims of abuse in general.

A university communications biometrics laboratory provided space for the experiment, which was conducted by lab assistants. A PSA showing a domestic violence narrative was used for the purpose of analyzing the stated factors; this video was designed to evoke strong emotion and intentions. Results were measured by a post-PSA Qualtrics survey and analyzed using IBM SPSS Statistics, Version 26. The anger activism model (AAM) provides a framework for the collection of data that identifies groups of participants. For the purposes of this study, only the AAM groups classified as “disinterested” and “activist” are examined, but with two specifications. While the AAM theoretically combines measures of self-efficacy and response efficacy into one variable, measurement of perceived response efficacy was not practical in the context of this study. In addition, the topic and tenor of the PSA were designed to elicit a more specific form of anger, moral anger (i.e., anger on behalf of an unknown third party, typically accompanied by empathic response). For these reasons, the study looks at the relationship between empathy and moral anger, as well as discrepancies in empathy and prosocial intentions between activist and disinterested AAM groups, as defined by participants’ reported levels of moral anger and self-efficacy.

Several aspects of the PSA message were designed to make sure the participants would find the portrayed threat relevant, severe, unjust, and clearly not aligned with social and moral standards for proper behavior. In the video, two main scenes portray a young man verbally and physically assaulting his wife. Cues in the PSA that suggest the couple is roughly in their late twenties include the characters' physical appearances, quality and style of apartment furnishings, the husband playing a video game, absence of children and reference to future parenthood, and the naivete of the wife's character. These tactics were employed to increase undergraduate participants' identification with the characters. Participants' sense of self-efficacy is also drawn out by secondary identification with the character of a similarly aged female friend next door who overhears the husband's angry outbursts.

Procedure

Participants were recruited using a classroom announcement, a flyer, and a signup sheet circulated in undergraduate courses. Participants were offered \$10 cash in exchange for a time commitment of 20-30 minutes. A participant waiting area was set up outside the communications biometrics lab entrance, where an experiment assistant with a check-in clipboard and cash waited with each participant until it was his or her turn to go in. The lab assistant conducting the research came out to usher in the next participant as the previous participant left.

Seated at a computer, each participant viewed two phases (control participants) or three phases (valid participants) of the experiment on the monitor. No data was collected outside the lab. First, participants listened to a classical music recording. Second, those not in the control group watched the domestic violence PSA described above. Third, participants answered a Qualtrics survey to report on their attitudes, emotions, and intentions during and after the PSA or music (control).

The video content used for this study portrayed a domestic violence scenario. After chatting in the apartment hallway with next-door neighbors, a young married couple experiences conflict. The husband accuses his wife of being interested in the male neighbor (the husband), saying that she only wants to go on a double date with the other couple to spend time with the husband. Clearly registering shock and denial, the wife assures her husband that she has no feelings for the man next door. In a later scene, the wife is shown walking toward the door, announcing that she is going out with her friend and will be back in a while, and the husband blocks her exit. When she tells him that she is leaving regardless of his dissent, he tells her that she does not have permission to go anywhere. The scene intensifies as the husband bullies his wife backward down a hallway. She again resists his attempt to control her, and he hits her, pushes her into their bedroom, and slams the door, behind which sounds of anger and distress can be heard. After a cut to black, a closeup shot shows the wife with grotesque facial injuries. Slow, fuzzy camera focusing portrays her attempts to regain consciousness, abandoned by her abusive husband.

After a brief closing scene and a message showing contact information for the local shelter for women and children, the participants were asked to provide responses while still seated at the computer. The lab assistant gave each participant an identification number to enter into the survey for tracking purposes. The lab assistant remained in the room but faced another direction and remained outside each participant's peripheral vision as he or she completed the survey.

Measures

The post-PSA survey asked participants to self-report on what they experienced, including anger toward the abuser and the situation in general; perceptions of self-efficacy in

relation to helping a person experiencing abuse (adapted from Witte, 1996); and measures of message-induced state empathy (adapted from Shen, 2010). They were also asked about ways they would be likely to support the domestic violence shelter for women and children located in the same city as the experiment. The statements and questions used to measure moral anger, self-efficacy, empathy, and prosocial persuasion are listed in Appendix A.

Moral anger measures were adopted from O'Reilly, Aquino, and Skarlicki (2016), which asks respondents to rate their levels of anger, feeling upset, or feeling of hostility ($\alpha = .70$). These measures used a 5-point scale ranging from "Does not describe my feelings" (1) to "Clearly describes my feelings" (5). The question format repeated a three-question pattern applied to both the situation in the video and the abuser in the video. Three questions asked if the participant felt (1) angry about the situation or angry toward the abuser, (2) upset about the situation or angry toward the abuser, or (3) hostile toward the situation or angry toward the abuser. The statements are listed in Table 2. While the measure was worded as "anger" (per the source measures) rather than "moral anger," the direction of that anger toward an unknown fourth party on behalf of an unknown third party, with no self-interest involved, classifies that anger as a moral emotion according to Haidt's (2003) definition.

This study's self-efficacy measures were adapted from Witte et al. (1996); while these measures of self-efficacy are linked to emotion, they are not emotion-specific.¹ These statements reliably measure the viewer's perception of his or her ability to help an unknown other ($\alpha = .76$). Self-efficacy data were used to identify AAM "activist" and "disinterested" groups (see Table 1), but due to study limitations they do not take into account perceived response efficacy levels. A

¹ Witte's extended parallel process model (EPPM, 1996) can also apply to emotions beyond fear (Lewis, Watson, & White, 2013).

sample self-efficacy question is “I am able to reach out to a victim of domestic abuse.” A total of six statements were assessed using 5-point scale responses ranging from “strongly agree” to “strongly disagree.” The complete list of statements appears in Table 3. The range of statements was designed to assess various angles of self-efficacy perception to gain a holistic view of participant attitudes.

The empathy measures employed were based on Shen’s (2010) message-induced state empathy scale ($\alpha = .81$). This scale applies particularly to message processing and is more effective for this study than (older) empathy measures that were developed for purposes other than application to persuasive messaging. Accordingly, this study’s empathy assessment statements addressed affective, cognitive, and associative aspects of empathy. A sample statement in the affective category is “I can feel the victim’s emotions.” In the cognitive category, statements concern thought processes such as, “I can understand what the victim was going through in the message.” Third, statements assessing associative empathy include aspects of identification such as “I can relate to what the victim was going through in the message.” Responses to the twelve statements were combined into one variable for analysis. The statements are listed in Table 4. By addressing these three areas of empathic concern, these twelve statements assess and condense into one variable a participant’s willingness to feel with, understand, and identify with an unknown other person.

Persuasion, for the purposes of this study, was operationally defined as intentions to donate money, volunteer at an event, or receive information about the domestic violence shelter. Data were collected via three questions that included 7-point scale responses ranging from “extremely unlikely” to “extremely likely.” By keeping these data points separate, specific types of prosocial persuasion became clearer. The questions are listed in Table 5. Their presentation in

inverted order of personal expense (from financial donation to simply receiving information) measures willingness to donate money before fatigue could ensue in response to a list of requested interventions. Likewise, by keeping the measures simple and few, participants were less likely to feel burdened by requests for help.

Two qualitative optional responses were included at the end of the survey. The first asked simply if the respondent had experienced any form of or connection to domestic abuse. The second asked if there was anything else the respondent would like to say. These incomplete results will not figure into the analysis, but inclusion of such “why” information can shed light on unexpected quantitative results, particularly in regard to rejection of or reactance to a message. Future research might benefit from making such responses mandatory for the purpose of validating quantitative data with concrete details.

As expected, some measures had to be re-coded to reflect values of “high” and “low” in order to define and contrast the AAM activist and disinterested groups. Because variables included multiple responses, percentages of thirds (33%) were used to identify low, medium, and high levels of a certain variable. This made it difficult to label “high” level as, for example, a 4 or a 5 on a scale of 5. The identification of a group was based on statistical results allocating a certain number of participants to each group.

Results

Responses collected from the post-experiment survey were analyzed using IBM SPSS Statistics, Version 26. The data set was tested for reliability using Cronbach's alpha with results of empathy, $\alpha = .81$; moral anger, $\alpha = .70$; and self-efficacy, $\alpha = .76$. Participant responses were sorted into high, medium, and low categories for each variable, which were then re-coded to reflect these value classifications (3, 2, 1). Bivariate Pearson correlations and *t*-tests were used in the analysis as outlined below.

RQ1: Empathy and Moral Anger

To examine whether there was a statistically significant relationship between empathy and moral anger, a bivariate Pearson correlation was conducted. Message-induced state empathy showed significant positive correlation with high anger, $t(158) = .35, p < .001$ in regard to anger toward the situation. Responses regarding moral anger toward the abuser showed a stronger relationship to state empathy at $t(158) = .39, p < .001$. Using Cohen's (1988) guidelines, both effect sizes are moderate.

RQ2: Empathy in the Activist vs. Disinterested Groups

Empathy has repeatedly been shown to be positively related to prosocial attitudes and behaviors, and this research question determines how empathy influences or aligns with activist tendencies, contrasted with the low anger/low self-efficacy group of disinterested participants. Components required for the calculation of this interaction included (a) a variable that encompasses all 12 measures of Shen's (2010) state empathy scale (2010), as used in RQ1, and (b) moral anger and self-efficacy levels combined to calculate and identify the activist group (high anger/high efficacy; $n = 24$) and disinterested group (low anger/low efficacy; $n = 16$). According to the AAM (M. M. Turner, 2007), interaction effects of intensity of anger and

efficacy can predict levels of activism, delineated into four groups defined by audience responses to a persuasive message. For the purposes of this study, only the activist and disinterested groups were contrasted. All three variable levels (moral anger, self-efficacy, and empathy) were computed by identifying the top, middle, and bottom thirds of responses (33% segments), which were then re-coded with values of high (3), medium (2), and low (1) for the purpose of having large enough groups for analysis. The inclusion of empathy denotes an attempt to understand whether message-induced empathic concern plays a greater role in activists than in disinterested group members.

An independent samples *t*-test was run to assess differences between activist and disinterested groups in regard to empathy. The mean for the activist group ($M = 3.93, SD = .60$) is significantly higher in empathy than that of the disinterested group ($M = 3.21, SD = .31$), with $t(36) = -4.92, p < .001$. Participants who reported both high moral anger and high self-efficacy (activist group; $n = 24$) were more likely to report high levels of empathy than those reporting low anger and low self-efficacy (disinterested group; $n = 16$).

H1: Prosocial Intentions: Activists vs. Disinterested

The AAM activist group was significantly more likely to engage in two of the three tested prosocial intentions compared to the disinterested group. The first question about prosocial intentions was, “In the next month, what is the likelihood that you would be willing to donate to this cause?” Responses were tracked using a 7-point scale from “extremely unlikely” (1) to “extremely likely” (7) (see Table 5). When a *t*-test was computed, the intentions of activist ($M = 5.17, SD = 1.57$) and disinterested groups ($M = 4.63, SD = 1.31$) were found to not differ significantly, with $t(38) = -1.14, p = .263$. Both groups of participants reported a similar unwillingness to donate money to the shelter.

To examine whether the activist group ($n = 24$) would exhibit a higher willingness to volunteer at an event than the disinterested group ($n = 16$), an independent samples t -test was used. The question posed was “If the [local women’s shelter] were to contact you in the next 30 days to volunteer at one of their community events, what is the likelihood that you would help?” Responses to volunteer for the shelter for women and children resulted in significant differences on a 7-point scale, from “extremely unlikely” (1) to “extremely likely” (7). Disinterested group members ($M = 4.63$, $SD = 1.36$) were less likely to express an interest in volunteering compared to the activist group ($M = 6.08$, $SD = .83$), with $t(22) = -3.84$, $p < .001$.

Finally, a t -test computed activist ($n = 24$) versus disinterested group ($n = 16$) willingness to receive information about the shelter for women and children, which also showed a significant difference. Activists ($M = 5.67$, $SD = 1.05$) who were willing to receive information from the nonprofit featured at the end of the video were $t(38) = -3.74$, $p < .001$ with equality of variances assumed. Disinterested group members ($M = 4.25$, $SD = 1.34$) were less likely to say that they would be interested in learning more about the cause or its needs

Discussion, Limitations, and Future Research

In addressing the two research questions, this study identified a clear connection between empathy and moral anger, as well as empathy and activist inclinations (as defined by the AAM). An effective persuasive message must help the viewer empathically identify with characters (Shen, 2010). Topic relevance and message relevance also intertwine as one phase of message acceptance, in which the viewer can see and feel that the portrayed issue matters (M. M. Turner, 2007). Persuasive efforts seeking to win new activists need to carefully consider how the protagonist is portrayed; in narrative empathy appeals this character is usually the person or group that is unjustly acted upon. This research suggests that effective message design needs to consider the target audience and mirror onto the main character at least some characteristics of an empathic, emotion-driven activist: The “victim” character must not be a passive receiver of the injustice, but personify a story arc of trying to overcome that adversity. Watching a dynamic but disadvantaged main character will fire up the mirror neurons of potential activists, increasing character identification and convincing them that this type of person deserves aid, can be helped by their efforts, and will use it constructively, implying both self-efficacy and response efficacy (Bandura, 1977; Witte, 1992; M. M. Turner, 2007). Narrative messages activate the type of audience that is modeled in the main character because empathic activist response depends on the strength of message relevance and character identification.

The point of educating empathic audiences about injustices should at least partially include awakening them to act. Because audiences are surrounded by misfortunes and know that their cognitions, emotions, energy, and other resources are limited, they must pick and choose how to exert effort to effect change (R. H. Turner, 1969). That aspect of this research emerged in H1, which was supported by positive response on the two nonmonetary measures of persuasion,

but donation was universally unsupported among this undergraduate sample. This sample's generation label (technically Generation Z) matters less than the age and stage of their lives, which is idealistic in its support of causes but less financially capable of giving—at this time. The results here suggest a potential age-based continuum of activism: Younger audiences may begin by pledging hearts, hands, and social media activism, which can grow into financial support if the cause remains relevant and important to them. Future longitudinal research could shed more light on how such a continuum of giving might be fostered by a range of media messaging targeted to age-based audiences.

Intensity of moral anger predicted activist tendencies, showing that this extension of the AAM from “anger” to “moral anger” on behalf of a third party is valid. Significant planning must accompany efforts to publicize morally offensive injustices without triggering reactance and boomerang effects. The anger activism model provides a framework for identifying ways to empower (with self-efficacy message components) or incite (with anger-inducing message components) latent activists. Instilling a sense of self-efficacy in angry publics helps convert them into capable activists, while alerting high self-efficacy audiences to moral injustices can awaken moral anger that moves them to serve and seek justice. Combining these with empathy for a threefold message response—empathic concern for others, strong moral anger at their distress, and a personal sense of self-efficacy to effect change—predicts activist tendencies.

Although our target audience and video character age ranges were similar, including younger adults on both ends for character identification purposes, generalization of data from an undergraduate sample may be seen as problematic. A wider range of participant age could have exposed differences in giving intentions. Another limitation in the research design was asking for an intention to donate a future sum rather than handing participants ten one-dollar bills and

asking for an immediate donation. It is possible that postponing the hypothetical request for a donation allowed undergraduate participants to own the cash they had just earned and consider their probability of donating future income, of which they may expect very little.

Future research could also yield insights into whether cultivation effects interact in a combination of (a) no personal exposure to actual violence, and (b) consistent exposure to simulated violent media, to see if reductions occur in empathic response and, by extension, prosocial intentions. With no baseline measurement of participant media tolerance, this experiment relied on self-reports and short-term attitude change. Such insights could provide valuable message design instruction as media consumption continues to skyrocket.

References

- Aaker, J. L., & Williams, P. (1998). Empathy versus pride: The influence of emotional appeals across cultures. *Journal of Consumer Research*, 25(3), 241-261.
- Ad Council. (n.d.). *About us*. Website. <https://www.adcouncil.org/About-Us>
- Algie, J., & Rossiter, J. R. (2010). Fear patterns: A new approach to designing road safety advertisements. *Journal of Prevention & Intervention in the Community*, 38(4), 264-279.
doi:10.1080/10852352.2010.509019
- Allahyari, R.A. (2001). The felt politics of charity: Serving “the ambassadors of God” and saving “the sinking classes”. In Goodwin, J, Jasper, J. M., & Polletta, F. (Eds.) *Passionate politics: Emotions and social movements* (195–211). Chicago: University of Chicago Press.
- Bagozzi, R. P., & Moore, D. J. (1994). Public service advertisements: Emotions and empathy guide prosocial behavior. *Journal of Marketing*, 58(1), 56-70.
- Bandura, A. (1969). Social-learning theory of identificatory processes. *Handbook of Socialization Theory and Research*, 213, 262.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52(1), 1-26.

- Banerjee, S. C., & Greene, K. (2012). Role of transportation in the persuasion process: Cognitive and affective responses to antidrug narratives. *Journal of Health Communication, 17*(5), 564-581.
- Barraza, J. A., Alexander, V., Beavin, L. E., Terris, E. T., & Zak, P. J. (2015). The heart of the story: Peripheral physiology during narrative exposure predicts charitable giving. *Biological Psychology, 105*, 138-143.
- Barraza, J., & Zak, P. (2009). Empathy toward strangers triggers oxytocin release and subsequent generosity. *Annals of the New York Academy of Sciences, 1167*(1), 182-189.
- Batson, C.D., Fultz, J., & Schoenrode, P.A. (1987). Adults' emotional reactions to the distress of others. In N. Eisenberg & J. Strayer (Eds.), *Empathy and its development*. (163-184). New York, NY: Cambridge University Press.
- Bone, J. E., & Raihani, N. J. (2015). Human punishment is motivated by both a desire for revenge and a desire for equality. *Evolution and Human Behavior, 36*(4), 323-330.
- Branigan, E. (1992). *Narrative comprehension and film*. Routledge.
<https://doi.org/10.4324/9781315003108>
- Busselle, R., & Bilandzic, H. (2009). Measuring narrative engagement. *Media Psychology, 12*(4), 321-347.
- Campbell, R. G., & Babrow, A. S. (2004). The role of empathy in responses to persuasive risk communication: Overcoming resistance to HIV prevention messages. *Health Communication, 16*(2), 159-182.
- Chaiken, S. (1987). The heuristic model of persuasion. In *Social Influence: The Ontario Symposium, 5*, 3-39.

- Chaiken, S., & Eagly, A. H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman & J.A. Bargh (Eds.). *Unintended thought* (212-252). Guilford Press.
- Chaiken, S., & Trope, Y. (Eds.). (1999). *Dual-process theories in social psychology*. Guilford Press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*, (2nd ed.). Erlbaum.
- De Quervain, D. J., Fischbacher, U., Treyer, V., & Schellhammer, M. (2004). The neural basis of altruistic punishment. *Science*, *305*(5688), 1254.
- Dillard, J. P., & Peck, E. (2000). Affect and persuasion emotional responses to public service announcements. *Communication Research*, *27*, 461-495.
- Dillard, J. P., & Shen, L. (2005). On the nature of reactance and its role in persuasive health communication. *Communication Monographs*, *72*(2), 144-168.
- Durkin, S., & Wakefield, M. (2008). Interrupting a narrative transportation experience: Program placement effects on responses to antismoking advertising. *Journal of Health Communication*, *13*(7), 667-680.
- Eisenberg, N., & Strayer, J. (Eds.). (1990). *Empathy and its development*. CUP Archive.
- Ekman, P. (1992). An argument for basic emotions. *Cognition & Emotion*, *6*(3-4), 169-200.
- Ekman, P. (2007). *Emotions revealed: Recognizing faces and feelings to improve communication and emotional life*. Henry Holt.
- Evans, W. D. (2006). How social marketing works in health care. *British Medical Journal*, *332*(7551), 1207.
- Fehr, E., & Fischbacher, U. (2004). Third party punishment and social norms. *Evolution and Human Behavior*, *25*, 63-87.

- Fisher, W. (1984). Narration as human communication paradigm: The case of public moral argument. *Communication Monographs*, 51, 1–22.
- Frijda, N. H. (1986). *The emotions*. Cambridge University Press.
- Galinsky, A. D., & Moskowitz, G. B. (2000). Perspective-taking: decreasing stereotype expression, stereotype accessibility, and in-group favoritism. *Journal of Personality and Social Psychology*, 78(4), 708.
- Gewirth, A. (1984). Ethics. In the *Encyclopedia Britannica 15th Edition* (Vol. 6, pp. 976-998). Encyclopedia Britannica.
- Goodwin, J., Jasper, J. M., & Polletta, F. (2004). Emotional dimensions of social movements. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.). *The Blackwell Companion to Social Movements* (413-432). John Wiley & Sons. doi/10.1002/9780470999103.ch18
- Google for Nonprofits. (n.d.). Engage your supporters using video with the YouTube Nonprofit Program. <https://www.google.com/nonprofits/offerings/youtube-nonprofit-program/>
- Green, M. C., & Brock, T. C. (2000). The role of transportation in the persuasiveness of public narratives. *Journal of Personality and Social Psychology*, 79(5), 701-721.
- Green, M. C., & Brock, T. C. (2002). In the mind's eye: Transportation-imagery model of narrative persuasion. In Brock, T. C., Strange, J. J., & Green, M. C. (Eds.) *Narrative impact : Social and cognitive foundations*. Psychology Press.
- Haidt, Jonathan (2003). The moral emotions. In R. Davidson, K. Scherer, & H. Goldsmith (Eds.). *Handbook of Affective Sciences*. Oxford University Press.
- Han, S., Lerner, J.S., & Keltner, D. (2007). Feelings and consumer decision making: The appraisal-tendency framework. *Journal of Consumer Psychology*, 17(3), 158-168.

- Helmig, B., Jegers, M., & Lapsley, I. (2004). Challenges in managing nonprofit organizations: A research overview. *Voluntas: International Journal of Voluntary and Nonprofit Organizations*, 15(2), 101-116.
- Hunt, J. M., Cole, M. W., & Reis, E. E. S. (1958). Situational cues distinguishing anger, fear, and sorrow. *American Journal of Psychology* 71, 136-151.
- Iacoboni, M. (2009). Imitation, empathy, and mirror neurons. *Annual Review of Psychology*, 60, 653-670.
- Ilakkuvan, V., Turner, M. M., Cantrell, J., Hair, E., & Vallone, D. (2017). The relationship between advertising-induced anger and self-efficacy on persuasive outcomes. *Family & Community Health*, 40(1), 72-80.
- Jasper, J. M. (1997). *The art of moral protest: Culture, biography, and creativity in social movements*. University of Chicago Press.
- Jasper, J. M. (1998). The emotions of protest: Affective and reactive emotions in and around social movements. *Sociological Forum* 13(3), 397-424.
- Kim, J. (2009). *Anger, efficacy, and identity in activism: public perceptions of threat appraisal, attitudes, and behavioral intention*. Dissertation.
mospace.umsystem.edu/xmlui/bitstream/handle/10355/9676/research.pdf?sequence=3
- Kim, J., & Cameron, G. T. (2015). When groups in glass houses throw stones: Public expectations of how activist groups respond to identity threats. *The Social Science Journal*, 52(2), 131-140.
- Kokkinos, C. M., & Kipritsi, E. (2012). The relationship between bullying, victimization, trait emotional intelligence, self-efficacy and empathy among preadolescents. *Social Psychology of Education*, 15(1), 41-58.

- Krebs, D. (1975). Empathy and altruism. *Journal of Personality and Social Psychology*, 32(6), 1134.
- Lamm, C., & Majdandžić, J. (2015). The role of shared neural activations, mirror neurons, and morality in empathy—A critical comment. *Neuroscience Research*, 90, 15-24.
- Lang, A. (2017). Limited capacity model of motivated mediated message processing (LC4MP). *The International Encyclopedia of Media Effects*, 1-9.
- Lazarus, R. S. (1991). *Emotion and adaptation*. Oxford University Press.
- LeDoux, J. (2003). The emotional brain, fear, and the amygdala. *Cellular and Molecular Neurobiology*, 23(4-5), 727-738.
- Leliveld, M. C., van Dijk, E., & van Beest, I. (2012). Punishing and compensating others at your own expense: The role of empathic concern on reactions to distributive injustice. *European Journal of Social Psychology*, 42(2), 135-140.
- Lewis, I., Watson, B., & White, K. M. (2013). Extending the explanatory utility of the EPPM beyond fear-based persuasion. *Health Communication*, 28(1), 84-98.
- Lin, P. Y., Grewal, N. S., Morin, C., Johnson, W. D., & Zak, P. J. (2013). Oxytocin increases the influence of public service advertisements. *PloS One*, 8(2).
- Lindebaum, D., & Geddes, D. (2016). The place and role of (moral) anger in organizational behavior studies. *Journal of Organizational Behavior*, 37(5), 738-757.
- Maddux, J. E., & Gosselin, J. T. (2011). Self-efficacy. In M. Leary and J. Tangney (Eds.). *Handbook of Self and Identity*. (2nd ed.). Guilford.
- Maddux, J. E., & Rogers, R. W. (1983). *Protection motivation and self-efficacy: A revised theory of fear appeals and attitude change*. [https://doi.org/10.1016/0022-1031\(83\)90023-9](https://doi.org/10.1016/0022-1031(83)90023-9)

- Merchant, A., Ford, J. B., & Sargeant, A. (2010). Charitable organizations' storytelling influence on donors' emotions and intentions. *Journal of Business Research* 63, 754-762.
- Montada, L., & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. *Social Justice Research*, 3(4), 313-344.
- Nabi, R. L. (1999). A cognitive-functional model for the effects of discrete negative emotions on information processing, attitude change, and recall. *Communication Theory*, 9(3), 292-320.
- Nabi, R. (2002). Anger, fear, uncertainty, and attitudes: A test of the cognitive-functional model. *Communication Monographs*, 69(3), 204-216.
- Norgaard, K. M. (2006). "We don't really want to know" environmental justice and socially organized denial of global warming in Norway. *Organization & Environment*, 19(3), 347-370.
- O'Neill, S., & Nicholson-Cole, S. (2009). "Fear won't do it": promoting positive engagement with climate change through visual and iconic representations. *Science Communication*, 30(3), 355-379.
- O'Reilly, J., Aquino, K., & Skarlicki, D. (2016). The lives of others: Third parties' responses to others' injustice. *Journal of Applied Psychology*, 101(2), 171.
- Petty, R. E., & Cacioppo, J. T. (1986). Message elaboration versus peripheral cues. In R. E. Petty (Ed.). *Communication and Persuasion* (141-172). Springer.
- Pope, J. A., Isely, E. S., & Asamoah-Tutu, F. (2009). Developing a marketing strategy for nonprofit organizations: An exploratory study. *Journal of Nonprofit & Public Sector Marketing*, 21(2), 184-201.

- Raihani, N. J., & McAuliffe, K. (2012). Human punishment is motivated by inequity aversion, not a desire for reciprocity. *Biology Letters*, *8*(5), 802-804.
- Remley, D. (2017). *The Neuroscience of Multimodal Persuasive Messages: Persuading the Brain*. Taylor & Francis.
- Roberto, A. J., & Goodall, C. E. (2009). Using the extended parallel process model to explain physicians' decisions to test their patients for kidney disease. *Journal of Health Communication*, *14*(4), 400-412. <https://doi.org/10.1080/10810730902873935>
- Rodgers, K. (2010). "Anger is why we're all here": Mobilizing and managing emotions in a professional activist organization. *Social Movement Studies*, *9*(3), 273-291.
- Rogers, R. W. (1975). A protection motivation theory of fear appeals and attitude change. *Journal of Psychology*, *91*(1), 93-114. <https://doi.org/10.1080/00223980.1975.9915803>
- Savitsky, J. C., Rogers, R. W., Izard, C. E., & Liebert, R. M. (1971). Role of frustration and anger in the imitation of filmed aggression against a human victim. *Psychological reports*, *29*(3), 807-810.
- Shelton, M. L., & Rogers, R. W. (1981). Fear-arousing and empathy-arousing appeals to help: The pathos of persuasion. *Journal of Applied Social Psychology*, *11*(4), 366-378.
- Shen, L. (2010). Mitigating psychological reactance: The role of message-induced empathy in persuasion. *Human Communication Research*, *10*, 397-422.
- SimilarWeb. 2019, December 1. Top websites ranking: Top sites ranking for all categories in the world. <https://www.similarweb.com/top-websites>
- Statista. 2019, October 10. Percentage of U.S. internet users who use YouTube as of 3rd quarter 2019, by age group. www.statista.com/statistics/296227/us-youtube-reach-age-gender/

- Snow, D. A., Soule, S. A., & Kriesi, H. (2004). Mapping the Terrain. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.). *The Blackwell companion to social movements* (3-16). John Wiley & Sons. <https://onlinelibrary.wiley.com/doi/pdf/10.1002/9780470999103.ch1>
- Snow, D. A. (2004). Framing processes, ideology, and discursive fields. In D. A. Snow, S. A. Soule, & H. Kriesi (Eds.). *The Blackwell companion to social movements* (380-412). John Wiley & Sons. <https://doi.org/10.1002/9780470999103.ch17>
- Strobel, A., Zimmermann, J., Schmitz, A., Reuter, M., Lis, S., Windmann, S., & Kirsch, P. (2011). Beyond revenge: neural and genetic bases of altruistic punishment. *Neuroimage*, *54*(1), 671-680.
- Tannenbaum, M. B., Hepler, J., Zimmerman, R. S., Saul, L., Jacobs, S., Wilson, K., & Albarracín, D. (2015). Appealing to fear: A meta-analysis of fear appeal effectiveness and theories. *Psychological Bulletin*, *141*(6), 1178.
- Turner, M. M. (2007). Using emotion in risk communication: The anger activism model. *Public Relations Review*, *33*(2), 114-119.
- Turner, R. H. (1969). The theme of contemporary social movements. *The British Journal of Sociology*, *20*(4), 390-405.
- United Nations. (2019). World population prospects 2019. population.un.org/wpp/Graphs/DemographicProfiles/Pyramid/900
- van Doorn, J., Zeelenberg, M., & Breugelmans, S. M. (2014). Anger and prosocial behavior. *Emotion Review*, *6*(3), 261-268.
- Van Laer, T., De Ruyter, K., Visconti, L. M., & Wetzels, M. (2014). The extended transportation-imagery model: A meta-analysis of the antecedents and consequences of consumers' narrative transportation. *Journal of Consumer Research*, *40*(5), 797-817.

vanOyen Witvliet, C., Root Luna, L. M., VanderStoep, J. L., Gonzalez, T., & Griffin, G. D.

(2019). Granting forgiveness: State and trait evidence for genetic and gender indirect effects through empathy. *The Journal of Positive Psychology*, 1-10.

Verhaert, G., & Van den Poel, D. (2010). Predicting decisions to donate and generosity in real-life: the added value of including measures of empathy. In S. C. Beckmann, T. Ringberg, & T. Ritter (Eds.). *Proceedings of the 39th Annual Conference of European Marketing Academy* (209-209). Copenhagen Business School.

Vitaglione, G. D., & Barnett, M. A. (2003). Assessing a new dimension of empathy: Empathic anger as a predictor of helping and punishing desires. *Motivation and Emotion*, 27(4), 301-325.

Walter, N., Tukachinsky, R., Pelled, A., & Nabi, R. (2019). Meta-analysis of anger and persuasion: An empirical integration of four models. *Journal of Communication*, 69(1), 73-93.

Warr, M. (1992). Altruistic fear of victimization in households. *Social Science Quarterly*, 73(4), 723-736.

Witte, K. (1992). Putting the fear back into fear appeals: The extended parallel process model. *Communications Monographs*, 59(4), 329-349.

Witte, K. (1996). Fear as motivator, fear as inhibitor: Using the extended parallel process model to explain fear appeal successes and failures. In P. A. Anderson & L. K. Guerrero (Eds.). *Handbook of Communication and Emotion* (423-450). Academic Press.

<https://doi.org/10.1016/B978-012057770-5/50018-7>

Witte, K., & Allen, M. (2000). A meta-analysis of fear appeals: Implications for effective public health campaigns. *Health Education & Behavior*, 27(5), 591-615.

Zeelenberg, M., Nelissen, R. M., Breugelmans, S. M., & Pieters, R. (2008). On emotion specificity in decision making: Why feeling is for doing. *Judgment and Decision Making*, 3(1), 18.

Appendix A: Tables

Table 1

Anger Activism Model (M. M. Turner, 2007)

	Low levels of anger	High levels of anger
High levels of efficacy	Empowered	Activist
Low levels of efficacy	Disinterested	Angry

Note: The anger activism model simplifies activism potential to interaction effects between two variables: intensity of anger and sense of efficacy. This study contrasted the high anger/high efficacy activist group with the low anger/low efficacy disinterested group.

Table 2

Empathy Measures (Shen, 2010)

Dimensions	Items
Affective Empathy	<p>The victim's emotions are genuine.</p> <p>I experienced the same emotions as the victim when watching the message.</p> <p>I was in a similar state as the victim when watching the message.</p> <p>I can feel the victim's emotions.</p>
Cognitive Empathy	<p>I can see the victim's point of view.</p> <p>I recognize the victim's situation.</p> <p>I can understand what the victim was going through in the message.</p> <p>The victim's reactions to the situation are understandable.</p>
Associative Empathy	<p>When watching the message, I was fully absorbed.</p> <p>I can relate to what the victim was going through in the message.</p> <p>I can identify with the situation described in the message.</p> <p>I can identify with the victim in the message.</p>

Note: The 12 statements above assess three dimensions of empathic response: affective, cognitive, and associative (identification). These statements were developed specifically to measure empathic response to persuasive messages on a 7-point scale. Message-induced state empathy increases acceptance of a persuasive message.

Table 3

Moral Anger Measures (O'Reilly, Aquino, & Skarlicki, 2016)

Dimensions	Items
Moral anger	Angry about the situation Upset about the situation Hostile toward the situation Angry toward the abuser Upset toward the abuser Hostile toward the abuser

Note: The question preceding these responses asked, “To what extent do the following emotions represent how you felt while viewing the video?” Statements were measured using a 5-point scale: “does not describe my feelings” (1), “slightly described my feelings” (2), “moderately describes my feelings” (3), “mostly describes my feelings” (4), “clearly describes my feelings” (5). The word variance (angry, upset, hostile) captures specific aspects of anger: a general state, uneasiness and concern, and a more aggressive response state that might predispose a person to act restoratively (O'Reilly, Aquino, & Skarlicki, 2016).

Table 4

Self-Efficacy Measures (Based on Witte et al., 1996)

Dimensions	Items
Self-efficacy	<p>I am able to reach out to a victim of domestic abuse.</p> <p>Reaching out to a victim of domestic abuse will be easy for me.</p> <p>It is NOT difficult for me to reach out to a victim of domestic abuse.</p> <p>I am able to call the proper authorities for help if I witness domestic abuse.</p> <p>I am able to take the victim of domestic abuse to a help center.</p> <p>If you were in a similar situation as the neighbors in the video, how likely would you be to reach out and contact the police?</p>

Note: These statements, originally designed to assess self-efficacy levels in regard to fear appeals, have only been adapted in regard to the PSA topic. An elicited sense of self-efficacy may be influenced by emotions, but the general goal of the question seeks to understand to what extent cognitive ability judgments precede persuasion.

Table 5

Persuasion Measures

Dimension	Items
Giving Intentions	In the next month, what is the likelihood that you would be willing to donate to this cause? (7-point scale, extremely unlikely to extremely likely)
	If the [local women's shelter] were to contact you in the next 30 days to volunteer at one of their community events, what is the likelihood that you would help? (7-point scale, extremely unlikely to extremely likely)
	How interested would you be in receiving more information about the Utah County Center for Women and Children in Crisis? (7-point scale, extremely uninterested to extremely interested)

Note: Simple questions about three different types of prosocial engagement were employed to determine whether participants were persuaded to help a local shelter for women and children.