



## RESEARCH ARTICLE



# Death imagery in antipoaching advertising

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**Abstract**

In three studies, death imagery and regulatory focus are examined for their effects in wildlife protection campaigns. Images of death are found to lead to positive intentions to conserve wildlife through fear, but only when ads are prevention-focused rather than promotion-focused. In Study 1, participants who view an image of a dead elephant indicate feeling fear and stronger intentions to conserve wildlife. In Study 2, participants who view a prevention-focused ad depicting a dead rhino indicate stronger intentions to sign a wildlife conservation pledge, but the effect is attenuated when the ad is promotion-focused. Study 3 finds similar results using the image of a dead tiger. Theoretical insights and practical implications are discussed.

**KEYWORDS**

antipoaching advertising, death imagery, fear, regulatory focus, wildlife conservation behavior

## 1 | INTRODUCTION

Wildlife poachers slaughter an elephant every 15 min, a rhino every 7 h, to supply a worldwide market for medicines, food, cosmetics, furniture, and clothing derived from the flesh, horns, and bones of wildlife species. From 2011 to 2013, ivory traders butchered more than 100,000 African elephants (Convention on International Trade in Endangered Species of Wild Fauna and Flora, 2015). Over the past 40 years, poachers have massacred 95% of rhinos for their horns. The carnage is accelerating. In 2014, in South Africa alone, 1215 rhinos were plundered (WildAid, 2017). Only 3200 wild tigers survive across the Asian continent (United Nations Office on Drugs and Crime, 2016). These alarming examples indicate that an unprecedented global surge in illegal wildlife trade worth as much as \$23 billion annually, threatens the sustainability of almost every species (African Wildlife Foundation [AWF], 2015).

To mitigate the wildlife conservation crisis, environmental groups have conducted public campaigns urging better law enforcement and boycotts of wildlife goods (Glenn et al., 2019; Nelson & Verbyla, 1984; Salazar et al., 2019). For example, the World Wildlife Fund (WWF) raised public awareness about the illicit trade of wild animals by featuring stark images of lifeless rhinos and tigers with the headline, “Stop One, Stop Them All.” The AWF, Education for Nature Vietnam (ENV), and WildAid also ran a joint public service

advertising campaign, “The Sickening Truth,” that uses graphic images of a brutally destroyed rhino (WildAid, 2013).

Although wildlife conservation advertising uses death imagery as a strategy, researchers have not yet empirically investigated whether the portrayal of dead animals is persuasive. The current article fills the gap by investigating three unexamined questions: Do consumers respond more positively to ad messages that feature dead or live animals? Do images of dead animals evoke fear of wildlife extinction? Do responses vary depending on whether the ad copy emphasizes negative actions such as “prevent poaching,” or positive actions such as “promote wildlife”?

Building on and integrating two psychological theories—terror management theory (Greenberg et al., 1986) and regulatory focus theory (Higgins, 1997)—the current article proposes that when antipoaching advertisers use death imagery, they trigger fear which then promotes wildlife conservation behavior, but the effect depends on whether the ad message is framed with a prevention focus or a promotion focus.

Thoughts of death tend to evoke existential fear and threaten feelings of self-esteem, worthiness, and sustainability. To cope with the fear and regain a sense of meaning, people often adopt wider worldviews and prosocial behaviors (Jonas et al., 2002). Prevention-focused individuals are the most prone to agitation, fear, and anxiety in the face of death, while promotion-focused individuals are more

focused on getting ahead (Bosmans & Baumgartner, 2005; Higgins et al., 1997).

Consequently, the primary purpose of this study is to examine whether antipoaching campaigns that use death imagery will be effective for promoting wildlife conservation. Study 1 presents empirical evidence for the theoretical argument explaining why an image of a dead animal might cause message recipients to become more engaged in wildlife conservation. The study further identifies fear as a mediating emotion that accounts for the death imagery effect. Studies 2 and 3 test regulatory focus as a moderator and demonstrate that the death imagery effect emerges for prevention-focused messages but disappears for promotion-focused messages.

## 2 | CONCEPTUAL BACKGROUND

### 2.1 | Death-related thoughts and prosocial behaviors

Death-related thoughts about the “material end of the body and the social self” (Seale, 1998, p. 34) and about “separation from the realities of the world and loved ones or objects” (Bonsu & Belk, 2003, p. 41) significantly influence social judgments and behaviors (Bonsu & Belk, 2003; J. Hayes et al., 2010; Mandel & Smeesters, 2008).

Several antecedents determine the salience of death-related thoughts, and consequences vary depending on contexts (e.g., Bonsu & Belk, 2003; Fransen et al., 2008; J. Hayes et al., 2010). For example, people have increased thoughts of mortality after they are directly or indirectly exposed to natural disasters and terror attacks; reminders of mortality cause consumers, especially those who have low self-esteem, to increase their food consumption (Mandel & Smeesters, 2008), conspicuous consumption (Bonsu & Belk, 2003; Hirschman, 1990), bargain shopping (Hubler, 2001), and striving for material possessions (Price et al., 2000). In one study, researchers asked consumers to respond to death-related statements such as “the idea of never thinking again after I die frightens me.” Participants indicated that they were also more likely to purchase luxury rather than nonluxury brands (e.g., a Lexus over a Metro; Mandel & Heine, 1999).

Portrayals of death are ubiquitous throughout news stories, TV shows, and video games, so that consumers are constantly reminded that they are vulnerable to mass shootings, wildfires, car crashes, and cancers. Social marketers strategically utilize the fear of death. For example, public service advertisements often try to prevent unhealthy or antisocial behaviors by publishing gory, horrific images to trigger death-related thoughts and increase compliance with health and safety advice (Arndt et al., 2004; Rangan et al., 2015; Weber et al., 2011). For example, images of fatal car crashes are used to prevent drunken driving; pictures of emaciated AIDS sufferers are used to prevent unprotected sex; images of rotten lungs are used to prevent smoking.

A fundamental question arises: Will death imagery increase advertising effectiveness? The terror management literature

(Greenberg et al., 1986) indicates that death-related thoughts will generate defensive, restorative behaviors. Thus, death images would be particularly effective for a wildlife conservation campaign such as “stop wildlife trafficking,” focused on preventing negative consequences. In contrast, death images would be less effective in campaigns encouraging positive actions, such as “nurture wildlife habitat.” The effects should occur because existential concerns about death compel needs for establishing metaphysical meaning and world order (Mandel & Smeesters, 2008) by alleviating or avoiding threats (J. Hayes et al., 2010), enhancing self-esteem, and defending cultural worldviews (Das et al., 2014; Ferraro et al., 2005).

Accordingly, this study aims to test whether images of dead animals in antipoaching campaigns evoke death-related thoughts and whether viewers will then want to assure themselves that death is less dreadful because they are good people who have meaning and purpose in contributing to society. For example, when researchers interviewed people in front of a funeral home where they were saliently reminded of mortality, they indicated intentions to engage in culturally prescribed prosocial behaviors by donating to a charity of their choice. In contrast, when they were interviewed several blocks away from the funeral home, the effect disappeared (Jonas et al., 2002). Similarly, mortality salience made individuals donate more to a charity (Ferraro et al., 2005). In sum, terror management theory indicates that death reminders in wildlife conservation campaigns can activate altruistic worldviews and enhance adherence to prosocial cultural norms, such as wildlife well-being (Jonas et al., 2002).

Therefore, pictures of dead poaching victims may cause message recipients to try to cope with their existential fear through heightened behavioral intentions to boycott illegal wildlife products and to support antipoaching law enforcement.

**H1** *Dead (vs. live) animal imagery in antipoaching ads will elicit stronger wildlife conservation behaviors.*

Fear, a basic human emotion, is a natural response that prepares an organism to cope with actual or anticipated danger or threat (Bracha, 2004; LaTour & Rotfeld, 1997). The human awareness of mortality means that death is a constant, fundamental threat (Mandel & Smeesters, 2008). Consequently, many advertising campaigns use fear as a strongly persuasive technique (e.g., Boster & Mongeau, 1984; Dillard et al., 2017; Vermeir et al., 2017; Witte & Allen, 2000). In an experiment designed to test how death imagery can evoke fear that leads to behavioral intentions to donate to an art library, study participants viewed two advertisements: one illustrated with a painting of an airplane and the other illustrated with a painting of a skull. Indeed, the skull image evoked comparatively higher levels of fear and increased purchase intentions (Das et al., 2014). In prosocial domains, fear appeals elicit more donations to charities (Bennett, 2015), increase participation in community recycling (Burn & Oskamp, 1986), reduce drunken driving (King & Reid, 1990), and enhance message elaboration (Keller & Block, 1996; Tannenbaum et al., 2015).

Thus, wildlife conservation campaigns that use death imagery will cause message recipients to feel fear, which then opens them to persuasion regarding wildlife preservation:

**H2** *Fear will mediate the effect of death imagery on wildlife conservation behaviors.*

## 2.2 | The moderating role of regulatory focus

Humans intuitively follow basic drives to seek pleasure and avoid pain (Lewin, 1935), so that nurturance and security are basic human needs. Regulatory focus theory (Higgins, 1997) explains that promotion-focused individuals primarily strive to achieve nurturance through their accomplishments, hopes, and openness to change, while prevention-focused individuals primarily seek protection by focusing on responsibilities, duties, and stability (Aaker & Lee, 2001; Baas et al., 2008; Hagtvedt, 2011; Lee & Aaker, 2004). Both prevention and promotion focus will affect prosocial judgments and choices (Baek & Reid, 2013).

Most wildlife conservation campaigns are well aware that humans are the most destructive force and consequently use preventive appeals, such as “stop wildlife trafficking.” However, some campaigns take a more proactive approach and use promotion-focused appeals, such as “nurture wildlife habitats.” Do promotion- or prevention-focused messages paired with images of dead or live animals have different impacts on advertising effectiveness? Building on regulatory focus theory, prevention-focused mindsets may be the necessary psychological condition for death imagery to have positive effects (H1 and H2). That is, death appeals will be persuasive when a message activates a prevention focus, but not when it activates a promotion focus.

This conceptualization draws on two key points. First, death imagery signals that wildlife species are at risk and need protection and security. The death imagery might be most motivating for prevention-focused individuals, with their focus on needs to counter losses, so they would have enhanced behavioral intentions to act against wildlife crime. In contrast, promotion-focused individuals, driven by approach motivations, may process death imagery to a lesser degree.

The current theorization aligns with research showing that prevention-focused individuals tend to be risk averse, are vigilant against losses, and are thus sensitive to negative cues, whereas promotion-focused individuals tend to seek risk, are eager to attain gains, and are thus sensitive to positive cues (Aaker & Lee, 2001; Lee & Aaker, 2004; Lee & Higgins, 2009; Lerner & Keltner, 2001; Pham & Avnet, 2004). In addition, the focus of a message must align with the cues. For example, a study of grape juice advertisements showed that study participants were more receptive to ad messages that paired a prevention-focused message with a loss-framed tagline and paired a promotion-focused message with a gain-framed tagline; that is, the most persuasive ads highlighted prevention-focused disease prevention using the

loss-framed tagline “Don’t Miss Out on Getting Energized!” or highlighted promotion-focused energy enhancement benefits using the gain-framed message “Get Energized!” (Lee & Aaker, 2004).

Next, prevention-focused individuals are more likely to be affected by agitation, tension, fears, and worries (Adams et al., 2011; Baas et al., 2008; Hagtvedt, 2011; Higgins et al., 1997). When consumers have activated protection goals, agitation will guide their appraisals; when they have achievement goals, cheerfulness will guide their appraisals (Adams et al., 2011; Shah & Higgins, 2001). Indeed, after researchers manipulated affect by asking participants to write about a recently experienced event that made them feel cheerful, quiescent, dejected, or agitated, they were more persuaded by messages that matched the manipulated emotions with regulatory focus goals (Bosmans & Baumgartner, 2005).

In sum, fear-arousing messages are particularly persuasive for prevention-focused individuals because they are primed to avoid negative emotions (Tannenbaum et al., 2015). Consequently, the death imagery effect should operate in prevention-focused ad messages but not in promotion-focused ad messages.

**H3** *When an antipoaching ad uses prevention-focused messages, the image of dead (vs. live) animals will elicit stronger wildlife conservation behaviors. However, the effect will diminish when the ad uses promotion-focused messages.*

## 3 | STUDY 1

Study 1 examined whether the visual portrayal of a dead rather than live animal evokes stronger fear and behavioral responses. The study used a one-factor (life-or-death portrayal: dead vs. alive) between-subjects design.

### 3.1 | Method

#### 3.1.1 | Participants and procedure

Ninety-four adults (47.9% men; average age: 44.8) recruited from Amazon Mechanical Turk (MTurk) completed the study in exchange for a monetary payment. Participants met a 98% human intelligence task (HIT) approval rate.<sup>1</sup> Qualification criteria required 5000 approved HITs (Puzakova & Aggarwal, 2018).

Participants viewed and assessed one of two stimulus ads depicting the image of either a dead or live elephant (Appendix A). All stimulus ads used in the research were hypothetical and created by the first author. After viewing the ad, participants rated how extensively they felt fearful, afraid, and scared (1 = none of this feeling

<sup>1</sup>Researchers create single, self-contained tasks on Mechanical Turk to screen against robots. For example, “Identify the color of the car in the photo.”

and 7 = *a great deal of this feeling*) through a previously validated scale (Dillard & Shen, 2018). Averaging the three items produced a fear index ( $\alpha = 0.96$ ).

Next, participants indicated their agreement with each of the following statements on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*): "I am a committed advocate in support of rangers and others on the front lines of conservation"; "I am strongly committed to sharing my passion about stopping wildlife crime with my friends and family"; "I would never buy any illegal wildlife products, as I know that demand drives poaching"; and "I am willing to urge the US government to continue championing efforts to stop wildlife crime at home and abroad." Averaging the four items yielded an index for wildlife conservation intention ( $\alpha = 0.87$ ). Participants answered demographic questions regarding age, gender, ethnicity, education, and household income and an open-ended question: "What do you think was the purpose of this study?" A suspicion probe indicated that no participants correctly guessed the research hypothesis.

## 3.2 | Results

### 3.2.1 | Manipulation check

Participants in the dead animal condition perceived that the depicted elephant was dead; those in the live animal condition perceived that the depicted elephant was alive ( $M$  dead = 6.83 vs.  $M$  alive = 1.68;  $t = 23.84$ ;  $p < 0.001$ ), indicating a successful manipulation for indicating a live or dead animal.

### 3.2.2 | Fear and wildlife conservation intention

Two sets of independent samples  $t$  tests were performed to examine whether the portrayal of the dead rather than live animal was more effective in shaping fear and intentions to conserve wildlife. As H1 predicted, wildlife portrayal significantly affected fear ( $t = 2.48$ ;  $p < 0.05$ ). Specifically, participants who viewed the dead elephant reported more intense fear than those who viewed the live elephant ( $M$  dead = 3.78 vs.  $M$  alive = 2.76). Similarly,

wildlife portrayal significantly affected wildlife conservation intentions ( $t = 2.06$ ;  $p < 0.05$ ). Participants who viewed the dead elephant reported stronger wildlife conservation intentions than those who viewed the live elephant ( $M$  dead = 5.87 vs.  $M$  alive = 5.27).

### 3.2.3 | Mediation analysis

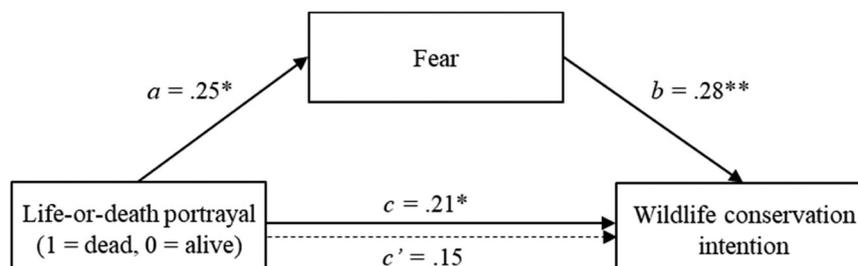
To test fear as a mediator of the effect of life-or-death portrayal on wildlife conservation intention, a mediation analysis was conducted using Model 4 of the PROCESS SPSS macro (A. F. Hayes, 2013) with 5000 bootstrapped resamples. Life-or-death portrayal through fear had a significant indirect effect because the bias-corrected 95% confidence interval (CI) did not contain zero (95% CI = 0.01 to 0.44). Figure 1 shows standardized path coefficients for the direct and total effects.

## 3.3 | Discussion

Study 1 results support contentions that the portrayal of a dead rather than live animal will elicit stronger wildlife conservation behaviors. The mediation analysis revealed fear as the underlying mechanism; indeed, the image of the dead animal evoked fear that then prompted more positive behavioral intentions to conserve wildlife. Study 2 then examined whether a promotion or prevention regulatory focus framing will change the effects.

## 4 | STUDY 2

Study 2 assessed the moderating role of regulatory focus in a controlled lab setting. Participants were randomly assigned to four conditions in a 2 (life-or-death portrayal: dead vs. alive)  $\times$  2 (regulatory focus: promotion vs. prevention) between-subjects design. Regulatory focus was manipulated by highlighting achievement or protection goals (Aaker & Lee, 2001; Baek & Reid, 2013; Bosmans & Baumgartner, 2005).



**FIGURE 1** Mediation model for Study 1. Path coefficients are standardized betas; Path  $c$  represents the total effect of life-or-death portrayal on wildlife conservation intention; Path  $c'$  represents the direct effect of life-or-death portrayal on wildlife conservation intention after controlling for fear; \* $p < 0.05$ , \*\* $p < 0.01$

## 4.1 | Method

### 4.1.1 | Participants and procedure

In exchange for course credit, 137 undergraduate students (64.7% men; average age: 19.7) from a Northeastern US university evaluated one of four stimulus ads depicting a dead or living rhino paired with promotion- or prevention-focused ad messages in a lab setting (Appendix B). All stimulus ads used in the research were hypothetical and created by the first author. After viewing the ad, participants read four pledge statements modified from Study 1, and then indicated their likelihood of signing the wildlife conservation pledge on a 3-item, 7-point scale anchored by *unlikely/likely*, *impossible/possible*, and *improbable/probable* (Baek & Yoon, 2017). The three items were averaged to form an index for intentions to sign the pledge ( $\alpha = 0.94$ ). Finally, participants answered demographic questions and an open-ended question: "What do you think was the purpose of this study?" No participants correctly guessed the hypothesis.

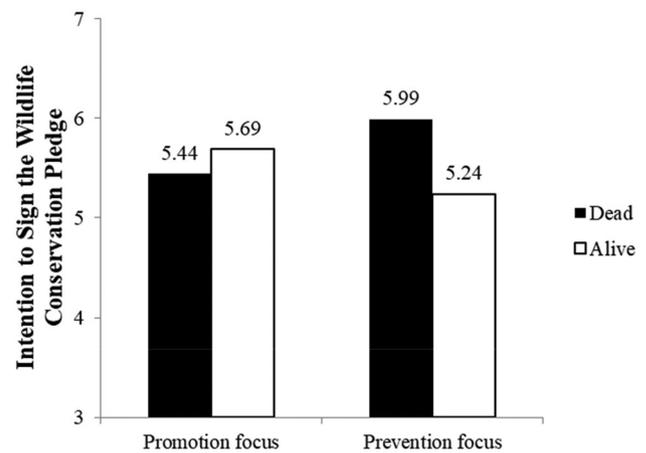
## 4.2 | Results

### 4.2.1 | Manipulation checks

Life-or-death portrayal and regulatory focus manipulations were successful. Specifically, participants in the dead animal condition indicated that the depicted rhino was dead and those in the live animal condition indicated that the rhino was alive ( $M$  dead = 6.72 vs.  $M$  alive = 1.61;  $t = 30.63$ ;  $p < 0.001$ ). For the regulatory focus manipulation, participants exposed to a promotion-framed message perceived that the ad message emphasized wildlife promotion to a greater degree than those exposed to a prevention-framed message ( $M$  promotion focus = 3.72 vs.  $M$  prevention focus = 2.90;  $t = 2.33$ ;  $p < 0.05$ ).

### 4.2.2 | Intention to sign the wildlife conservation pledge

A 2 (life-or-death portrayal: dead vs. alive)  $\times$  2 (regulatory focus: promotion vs. prevention) analysis of variance (ANOVA) revealed no main effects of the life-or-death portrayal ( $F(1, 133) = 1.11$ ;  $p = 0.29$ ) and the regulatory focus framing ( $F(1, 133) = 0.04$ ;  $p = 0.83$ ). Regarding the hypothesis, a significant two-way interaction effect emerged for intentions to sign the pledge ( $F(1, 133) = 4.28$ ;  $p < 0.05$ ). As Figure 2 shows, follow-up contrasts showed that when the ad was framed with a prevention focus, the dead animal image was more effective than the live animal image for increasing intentions to sign the pledge ( $M$  dead = 5.99 vs.  $M$  alive = 5.24;  $t = 2.07$ ;  $p < 0.05$ ). However, when the message was framed with a promotion focus, both images equally shaped intentions to sign the pledge ( $M$  dead = 5.44 vs.  $M$  alive = 5.69;  $t = 0.77$ ;  $p = 0.44$ ).



**FIGURE 2** Study 2 results: Effect of death imagery and regulatory focus framing on intention to sign the wildlife conservation pledge

## 4.3 | Discussion

Study 2 provided support for the prediction that the regulatory focus of message framing determines whether dead animal images will evoke the desired behavioral responses in antipoaching advertising. Specifically, prevention-focused messages paired with a dead rhino caused stronger intentions to sign the wildlife conservation pledge. However, the death-over-life effect was absent when the message was promotion-focused.

## 5 | STUDY 3

Study 3 integrated the mediation findings from Study 1 and the moderation findings from Study 2, but used a wild tiger image to simultaneously test the effect of the death appeal and regulatory focus framing on fear and behavioral intentions. The study used a 2 (life-or-death portrayal: dead vs. alive)  $\times$  2 (regulatory focus: promotion vs. prevention) between-subjects design.

### 5.1 | Method

#### 5.1.1 | Participants and procedure

In exchange for course credit, 157 undergraduate students (57.3% men; average age: 20.1) were recruited from a Northeastern US university. After participants arrived at the lab, they viewed one of four stimulus ads using images of a dead or live tiger (Appendix C). All stimulus ads used in the research were hypothetical and created by the first author. They then answered questions about their feelings of fear ( $\alpha = 0.93$ ) and the likelihood that they would sign the wildlife conservation pledge ( $\alpha = 0.93$ ). Finally, they completed demographic questions and an open-ended question: "What do you think was the purpose of this study?" No participants correctly guessed the research hypothesis.

## 5.2 | Results

### 5.2.1 | Manipulation checks

Life-or-death portrayal and regulatory focus manipulations were successful. Participants in the dead animal condition indicated that the tiger in the ad was dead; those in the live animal condition indicated that the tiger was alive ( $M$  dead = 5.83 vs.  $M$  alive = 1.62;  $t = 17.97$ ;  $p < 0.001$ ). For the regulatory focus manipulation, participants who viewed the promotion-framed message had stronger perceptions that the ad-emphasized wildlife promotion in comparison with those who viewed the prevention-framed message ( $M$  promotion focus = 3.19 vs.  $M$  prevention focus = 2.49;  $t = 2.42$ ;  $p < 0.05$ ).

### 5.2.2 | Fear

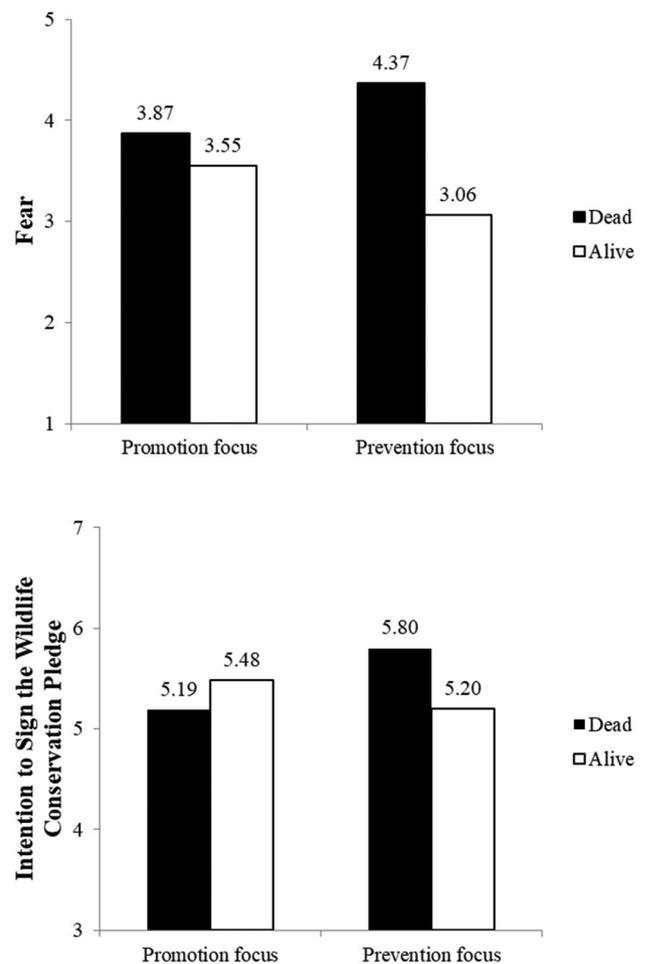
A 2 (life-or-death portrayal: dead vs. alive)  $\times$  2 (regulatory focus: promotion vs. prevention) ANOVA indicated a main effect of the life-or-death portrayal ( $F(1, 153) = 11.70$ ;  $p < 0.001$ ) but no main effect of regulatory focus ( $F(1, 153) = 0.00$ ;  $p = 0.98$ ). A significant two-way interaction effect on fear ( $F(1, 153) = 4.32$ ;  $p < 0.05$ ) emerged. As Figure 3 shows, follow-up contrasts revealed that when the ad message was framed with a prevention focus, the image of the dead tiger engendered stronger feelings of fear as compared with the image of the live tiger ( $M$  dead = 4.37 vs.  $M$  alive = 3.06;  $t = 4.13$ ;  $p < 0.001$ ). However, when the ad message was framed with a promotion focus, dead and live animal images showed no significant differences ( $M$  dead = 3.87 vs.  $M$  alive = 3.55;  $t = 0.90$ ;  $p = 0.37$ ).

### 5.2.3 | Intention to sign the wildlife conservation pledge

A 2 (life-or-death portrayal: dead vs. alive)  $\times$  2 (regulatory focus: promotion vs. prevention) ANOVA revealed no main effects of wildlife portrayal ( $F(1, 153) = 0.50$ ;  $p = 0.48$ ) and regulatory focus ( $F(1, 153) = 0.54$ ;  $p = 0.46$ ). A significant two-way interaction effect occurred for intentions to sign the wildlife conservation pledge ( $F(1, 153) = 4.26$ ;  $p < 0.05$ ). As Figure 3 shows, follow-up contrasts revealed that when the ad message was framed with a prevention focus, the image of the dead rather than live tiger engendered greater intentions to sign the pledge ( $M$  dead = 5.80 vs.  $M$  alive = 5.20;  $t = 2.12$ ;  $p < 0.05$ ). However, when the ad message was framed with promotion focus, both images were equally persuasive in shaping intentions to sign the pledge ( $M$  dead = 5.19 vs.  $M$  alive = 5.48;  $t = 0.89$ ;  $p = 0.38$ ).

### 5.2.4 | Moderated mediation

Fear was predicted to mediate the effect of the life-or-death portrayal on intentions to sign the pledge for the

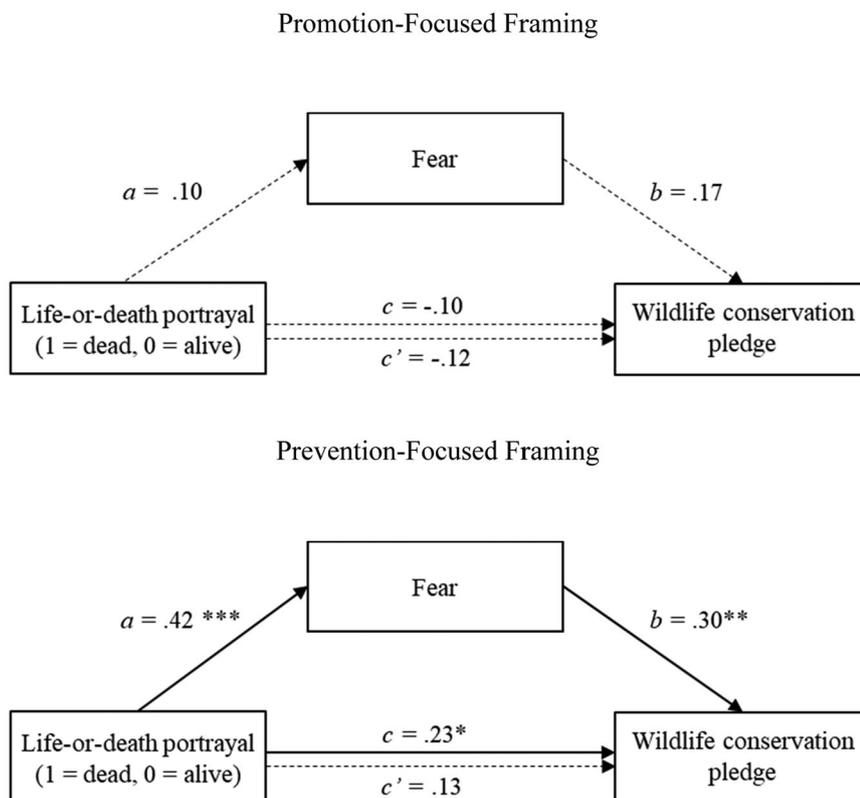


**FIGURE 3** Study 3 results: Effect of death imagery and regulatory focus framing on fear and intention to sign the wildlife conservation pledge

prevention-focused message but not the promotion-focused message. Figure 4 shows the results of a moderated mediation analysis with 5000 bootstrapped samples performed using Model 8 of the PROCESS SPSS macro (A. F. Hayes, 2013): Fear mediated the dead-versus-live animal image effect on intentions to sign the pledge among participants who viewed the prevention-focused framing (95% CI = 0.05 to 0.51) but not among those who viewed the promotion-focused framing (95% CI = -0.08 to 0.21).

## 5.3 | Discussion

Study 3 provided robust support for the conceptualization. When the ad message highlighted the prevention of wildlife crime, death (vs. life) appeals evoked more fear, which then caused participants to intend to sign the wildlife conservation pledge. However, when the ad message emphasized the active promotion of wildlife, the effect disappeared.



**FIGURE 4** Moderated mediation model for Study 3. Promotion-focused framing, prevention-focused framing; path coefficients are standardized betas; Path  $c$  represents the total effect of life-or-death portrayal on wildlife conservation pledge; Path  $c'$  represents the direct effect of life-or-death portrayal on wildlife conservation pledge after controlling for fear; \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

## 6 | GENERAL DISCUSSION

This article reports results of three studies examining whether death imagery is effective for wildlife conservation campaigns. Study 1 demonstrates that study participants tend to have stronger intentions to conserve wildlife when they view ads that depict dead animal imagery. Based on prior work, fear is proposed and confirmed to be the underlying mechanism that mediates the death-over-life effect, depending on whether the ad uses promotion- or prevention-focused framing. Specifically, in Studies 2 and 3, individuals exposed to prevention-focused messages coupled with an image of a dead animal indicated stronger intentions to sign the wildlife conservation pledge. However, the effect was attenuated for a promotion-focused ad. Furthermore, fear mediated the moderation, supporting earlier findings that emotions related to agitation, such as fear and anxiety, are more congruent with prevention rather than promotion focus (Adams et al., 2011). Thus, the data support the theorization that death imagery effect is a behavioral manifestation of fear arousal, but only if a prevention-focused mindset is activated.

This study has several implications. First, the findings contribute to the literature on effects of death-related media content (Das et al., 2014; Sheng et al., 2019; Venmahavong et al., 2019), which has indicated that death imagery in news stories or movies carries over to evaluations of subsequent advertising (Liu & Smeesters, 2010; Rangan et al., 2015; Venmahavong et al., 2019). However, researchers have not directly tested the effects of death images shown in advertising, but the current findings fill that gap and provide straightforward implications for marketing managers. That is, marketers

can strategically use death images to enhance persuasion and can be less concerned about the uncertain carryover effects of death images shown in main TV programs or movies.

Second, the research challenges a wide-held assumption that death imagery is a taboo in advertising because it violates societal norms (Manceau & Tissier-Desbordes, 2006; Sabri, 2017). Indeed, Hyundai produced a TV commercial meant to humorously highlight zero emissions technology: the actor tried to commit suicide by attaching a hose from the tailpipe to the inside carriage, but failed because the car produced insufficient carbon monoxide. The public found the ad so offensive that Hyundai publicly apologized, twice. Although the Hyundai episode upholds the common belief that marketers should avoid death imagery, the current research showcases an exception in which death imagery strengthens ad persuasiveness.

Third, the findings add to growing terror management literature, which usually indicates that death triggers negative emotions such as anxiety, but self-esteem buffers the negativity (Ferraro et al., 2005; Greenberg et al., 1986; Mandel & Smeesters, 2008; Pyszczynski et al., 2004). The current research incorporates another psychological construct into the relationship: prevention- and promotion-focused mindsets. As far as known, this study is the first to specify prevention focus as a psychological precondition that sets the stage for death appeals to become effective. Complementing earlier work showing that mortality salience influences self-regulation (Gailliot et al., 2006), the present research delineates how two distinct self-regulatory foci may boost or diminish the influence of death imagery, regardless of self-esteem levels. News stories, documentaries, and

social media assail consumers daily with shocking images of death and destruction. Consequently, advertisers need to know how those images will spill over to subsequent ads (Venmahavong et al., 2019). For example, when trophy hunters post selfies with dead animals on Instagram and Facebook, public outrage often erupts. Thus, marketers fear a public backlash and avoid using disturbing graphic images of endangered animals (Newman, 2013), but the current findings show that prevention-focused audiences will be receptive to death appeals.

Fourth, the research provides new insights into the reactance literature arguing that fear can cause psychological reactance in which consumers refuse to comply as a defense mechanism (Baek et al., 2015; Brown & Locker, 2009; Kim et al., 2017; Shen, 2011). On the contrary, the moderated mediation analysis reported in Study 3 shows that fear—as a mediating agent—magnifies the positive effect of death appeals. In line with emotional congruence research (Adams et al., 2011; Baek & Reid, 2013; Bosmans & Baumgartner, 2005; McKay-Nesbitt & Yoon, 2015; Shah & Higgins, 2001); the findings suggest that fear is a driving force behind the death imagery effect. Thus, perceived fear in antipoaching campaigns might be a proxy for advertising effectiveness. In that sense, wildlife campaigns could evoke fear, desires to cope with fear, and motivations to take immediate actions.

From a practical standpoint, this study has direct implications for organizations devoted to combating crimes against wildlife, both for profit and nonprofit. Google, Microsoft, Facebook, eBay, Pinterest, Instagram, and Alibaba have recently collaborated in eliminating illegal wildlife trading across their online platforms (Kennedy, 2018). Similarly, Leonardo DiCaprio and several other well-known celebrities circulated a petition to stop wildlife crime through their personal emails (Bonello, 2013). The results suggest that they should include graphic images of dead animals to increase participation.

Further research is needed to show when and how death appeals activate fear. In one study, young consumers were shown to be open to death in ads only if the images were appropriate and relevant; that is, they considered death images to be inappropriate for advertising products not typically associated with death such as toilet paper, but considered death images to be appropriate for products associated with death such as insurance; in contrast, seniors were more accepting of death as a valid part of an ad, regardless of the type of product being advertised (Caulfield et al., 2019). Such findings indicate that chronic factors such as age and situational factors such as message relevance may determine whether death imagery activates fear. Future research may clarify unconscious processing mechanisms at work.

In the studies reported here, participants were temporarily primed with situational regulatory foci by using promotion-focused ad copies encouraging eagerness or prevention-focused ad copies encouraging vigilance. Alternatively, regulatory focus traits can be measured as chronic predispositions (Higgins, 1997). Future research might conceptually replicate Studies 2 and 3 using participants with varying basic regulatory foci.

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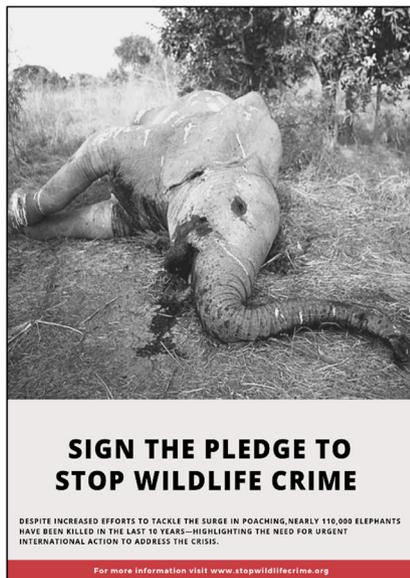
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## APPENDIX A

### Study 1. Dead animal image and live animal image.

Dead Animal Image



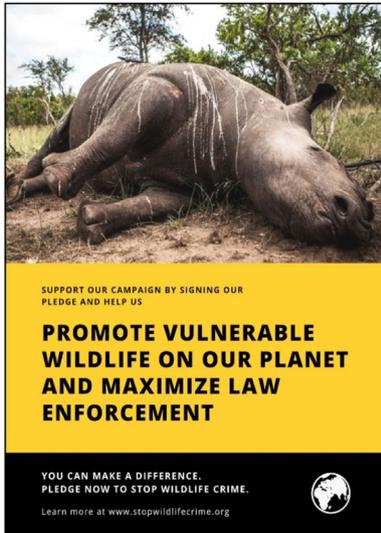
Live Animal Image



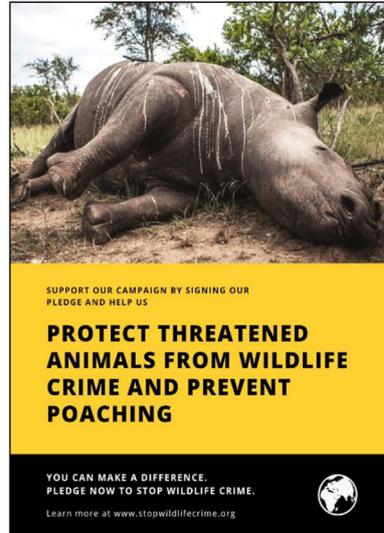
APPENDIX B

Study 2. Dead image with promotion-focused messages, dead image with prevention-focused messages, live image with promotion-focused messages, and live image with prevention-focused messages.

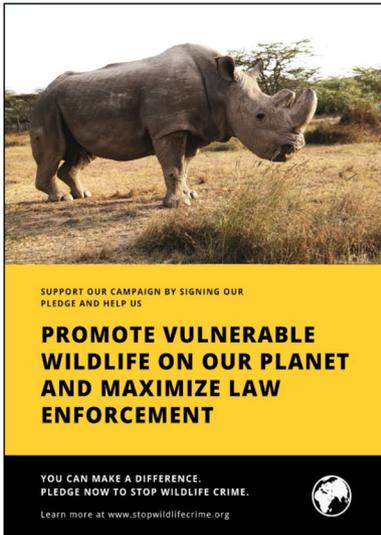
Dead Image with Promotion-Focused Messages



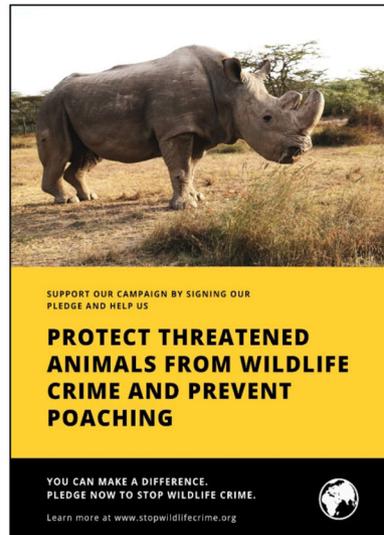
Dead Image with Prevention-Focused Messages



Live Image with Promotion-Focused Messages



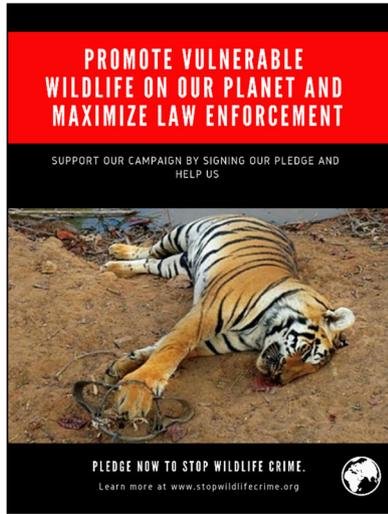
Live Image with Prevention-Focused Messages



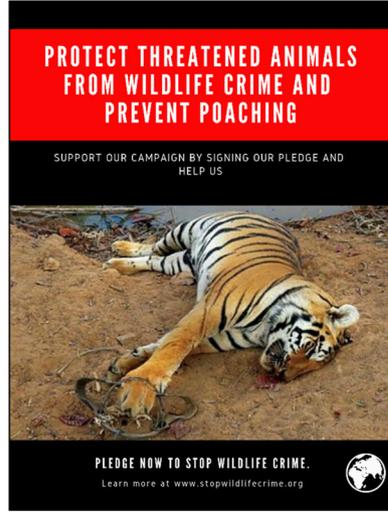
APPENDIX C

Study 3. Dead image with promotion-focused messages, dead image with prevention-focused messages, live image with promotion-focused messages, and live image with prevention-focused messages.

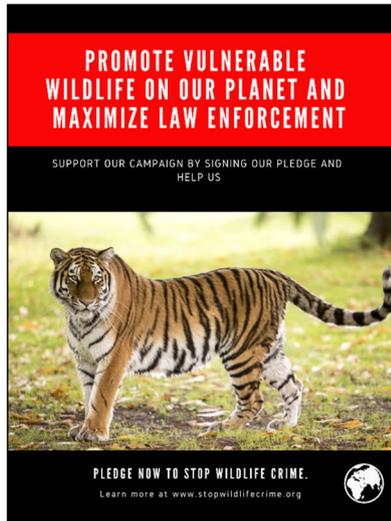
Dead Image with Promotion-Focused Messages



Dead Image with Prevention-Focused Messages



Live Image with Promotion-Focused Messages



Live Image with Prevention-Focused Messages

