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Understanding the Power of the Picture:

The Effect of Image Content on Emotional and Political Responses to Terrorism

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Abstract

Viewing images of terrorism can have a powerful impact on individuals' emotional and political responses, yet little is known about the psychological processes underlying these effects. We hypothesized that the content of terrorism images will shape viewers' appraisals of the event, which will elicit specific emotions and political attitudes. British citizens viewed photographs of the 2005 London bombings, either focusing on victims or terrorists. Exposure to images of victims increased appraisals of victim suffering, which predicted feelings of sympathy. Exposure to images of terrorists increased appraisals of terrorists as dangerous, which predicted fear; and of the attack as unjust, which predicted anger. Each emotion predicted support for a distinct counter-terrorism policy. Theoretical and practical implications are discussed.

Keywords: terrorism images; emotion; political attitudes; counter-terrorism policy

Understanding the Power of the Picture: The Effect of Image Content on Emotional and

Political Responses to Terrorism

Terrorism as we ordinarily understand it is innately media-*related…The September 11*[th]
attack wasn't just a direct hit on the twin towers and the Pentagon, the footage burned into
the collective psyche of everyone alive to see it. It was the antithesis of Neil Armstrong
stepping onto the surface of the moon.

—William Gibson (2004)

Acts of terrorism deliver political messages in a dramatic fashion—a goal that is

increasingly facilitated in the era of 24-hour news reporting. In an era of saturation coverage

in the print, television, and Internet media, people around the world are regularly exposed to

graphic images of terrorist acts. As a result, even those who are far removed from the physical

sites of terrorism can experience the powerful impact of these attacks.

Individuals who do not directly witness a terrorist attack tend to rely on the media to

provide information about such events (Chermak & Gruenwald, 2006; Nacos, 2003). Indeed,

research indicates that media reports are especially likely to impact public attitudes when

individuals have limited direct experience with the event in question (e.g., Slone, 2000;

Wanta & Hu, 1993). However, almost no research has examined how exposure to images of

terrorism might affect individual viewers. Important questions remain unaddressed: How do

images of differing content shape individuals' thoughts and emotions about the terrorist

attack? Similarly, how might individuals' thoughts and emotions in response to terrorism

images determine their support for various counter-terrorism policies?

The present research investigates the process by which different images of a terrorist

attack shape individuals' emotional and political responses to the event. Our approach

develops from, and extends, theoretical analyses of media frames (Tankard, 2001); we

propose that media images can represent different frames of terrorism, and that these different

perspectives will shape individuals' interpretations of the event. According to appraisal theory

(Frijda, 1989), such cognitive appraisals will then elicit specific emotional and political responses. In this way, the present research aims to delineate the psychological processes underlying the impact of terrorism images on viewers' responses. Below we review the literatures on media coverage of terrorism and appraisal theories of emotion, before outlining our hypotheses.

Frames of Terrorism in Media Coverage

A great deal of research has demonstrated that media coverage of terrorism—or indeed of any event—does not present a comprehensive review of objective facts (e.g., Barnett & Reynolds, 2009; Deprez & Raeymaeckers, 2010; Papacharissa & de Fatima Oliveira, 2008). Rather, media frames present a "central organizing idea for news content" (Tankard, 2001), which reflect particular journalistic and editorial choices (Thusu, 2006). As such, media coverage of terrorism can represent various points of view: terrorists who communicate their grievances and threats (e.g., Nacos, 2007; Weimann, 2008); politicians who reassure their constituents of the country's security (e.g., Hayes & Guardino, 2010; McLaughlin & Baker, 2010); or citizens who advocate particular opinions of their government's counter-terrorism efforts (e.g., Murray, Parry, Robinson, & Goddard, 2008).

Images are capable of communicating the details of an event in succinct and captivating ways, so much so that they have been termed "visual quotations" (Sontag, 2003). A photograph is especially likely to communicate a particular frame or perspective, as any two-dimensional still image is constrained in its ability to represent the individuals and objects involved in an event (Barnett & Reynolds, 2009). Thus, for instance, images of a terrorist attack may represent the physical and psychological suffering experienced by victims; the damage caused by the attack; the terrorists during the attack (e.g., publishing still images of security camera footage recorded during the event), the terrorists in the aftermath of the attack

(e.g., in custody or as victims); or government officials communicating support and instructions to the public (Nacos, 2007).

The Impact of Media Coverage *on Viewers' Understandings of Terrorism*

The different terrorism frames that are presented in the media have the capacity to shape the parameters of public debate (see Picard, 1993). For instance, news coverage can bestow legitimacy upon a particular view and ensure widespread dissemination of its ideas; such publicity and status then serves to attract additional support and resources to its cause (Chermak & Gruenewald, 2006; Weimann & Winn, 1994). Given the broad reach of the media, various theoretical accounts propose that media reports should influence the viewing public's views towards the event in question (e.g., Deprez & Raeymaeckers, 2010; McLaughlin & Baker, 2010). Research has shown that exposure to media coverage of terrorism increases anxiety and fear (Gadarian, 2010; Slone, 2000), and that these emotions at least partly determine viewers' attitudes toward terrorism (Gadarian, 2010).

The inclusion of images should enhance people's emotional reactions to media coverage of terrorism. Emotionally-valenced pictures tend to attract attention, even when they are seen only momentarily (e.g., Calvo & Lang, 2004). In addition, research has shown that exposure to images of terrorism can increase viewers' emotional responses to the attack. Americans who watched more television coverage of the September 11th attacks reported higher levels of fear and depression than those who watched less coverage (Huddy, Feldman, Lahav, & Taber, 2003). Other research has demonstrated that viewing photographs of terrorism can elicit emotional responses (e.g., Lerner, Gonzalez, Small, & Fischboff, 2003). For instance, British citizens who viewed newspaper images of a British kidnap victim in Iraq reported feeling more fear than those in a no photograph control condition (Iyer & Oldmeadow, 2006).

Beyond demonstrating this effect, however, research has not addressed the psychological process that underpins it. Little is known about when people sometimes

experience fear after viewing images of terrorism, and at other times experience anger or sympathy. Thus, our first aim is to investigate how images of terrorism come to elicit distinct emotional responses (Research Question 1). Identifying these underlying processes will help develop a comprehensive analysis of viewers' responses to images of terrorism, and will enrich theoretical perspectives on media frames more generally.

Understanding Emotional Responses to Images of Terrorism

Appraisal theories propose that emotions are based in particular cognitive interpretations of events, situations, and relationships (Ortony, Clore, & Collins, 1988; Frijda, 1986; Roseman, 2001). Research has linked specific combinations of appraisals to specific emotional experiences (e.g., Schmidt, Tinti, Levine, & Testa, 2010; Tong, Ellsworth, & Bishop, 2009). While some researchers question whether cognitive appraisals are necessary causes of emotion, they agree that patterns of appraisals at least covary with emotions, and thus can serve to differentiate between emotional experiences (e.g., Frijda & Zeelenberg, 2001; see also Clore & Ortony, 2008). Furthermore, research has shown that manipulating people's appraisals of an event can shape their reported emotional reactions (e.g. Roseman & Evdokas, 2004).

Theory and research on inter-personal emotions suggests a possible reciprocal relationship between appraisals and emotions. When emotions have been investigated in the context of intergroup conflict, however, the focus has been on identifying the predictors of differentiated emotional reactions. For instance, theoretical frameworks (e.g., Halperin, Sharvit, & Gross, 2011; Leach, Snider, & Iyer, 2002) have emphasized the role of cognitive appraisals in shaping distinct emotional responses to an intergroup conflict or injustice. Similarly, empirical work has demonstrated that (manipulated or measured) appraisals can elicit distinct emotions (e.g., Gross, 2008; Halperin, 2011; Iyer, Leach, & Crosby, 2003; Iyer,

Schmader, & Lickel, 2007). Building on this work, we focus on the role of appraisals in shaping emotional responses to images of terrorism.

Individuals' appraisals of an event or situation may be shaped by their dispositional characteristics (e.g., personality traits), and by features of the situation (Smith & Kirby, 2009). Such factors direct individuals' attention to particular features of the event or situation, which results in a particular interpretation of the context, and a specific set of meanings being created (Parkinson, 2009). Following from this view, we propose that the content of an image will direct viewers' attention to specific aspects of the event being represented, which should cue specific appraisals. These appraisals, in turn, should be associated with specific emotions.

We use the lens of appraisal theory to explicate the power of images to shape viewers' emotional responses to terrorism. While this appraisal process has been shown to shape emotional responses to news reports (see Jin, 2010), to our knowledge it has not been directly examined with images as the stimulus material, and certainly not in a politically charged context such as a terrorist attack. As such, the role of appraisals in shaping emotional responses to terrorism images is an empirical question that remains to be investigated.

The present research investigates responses to the types of images that are frequently used in media coverage: focusing on victims of the attack, and focusing on the perpetrators (see Nacos, 2007). Our analysis centres on these two types of images because of their wide and frequent use; such images are most likely to exert a broad impact on viewers and readers. We draw on appraisal theories to consider the appraisals and emotions that are likely to be elicited by each type of image.

Images that depict victims of terrorism should focus viewers' attention on the suffering that has been caused. Previous work has shown that awareness of others' suffering elicits feelings of sympathy, especially when the suffering is seen to be undeserved (Salovey & Rosenhan, 1989). This is because sympathy involves an increased sensitivity to, and

understanding of, the feelings of the other (Gruen & Mendelsohn, 1986). A focus on the

victim is less likely to produce other emotions such as fear or anger, because there is greater

emphasis on suffering, rather than the specific cause of this suffering (i.e., the terrorist as

perpetrator; Salovey & Rosenhan, 1989). Thus, we predict that images depicting victims of

terrorism should focus viewers' appraisals on the victims' undeserved suffering, and thus

should elicit feelings of sympathy (Hypothesis 1).

In contrast, images depicting terrorists should direct viewers' attention to the

perpetrators and their actions. On the one hand, a focus on terrorists could make salient their

ability to bring about death and destruction. The threat posed by terrorists should elicit

feelings of fear when individuals believe that they have little power to avoid or cope with the

anticipated negative outcomes (Frijda et al., 1989; Roseman et al., 1994; Smith, Haynes,

Lazarus, & Pope, 1993). Indeed, a recent study demonstrated that Polish citizens were more

likely to report feeling afraid when they focused on al Qaeda terrorists as dangerous criminals

(Kossowska, de Zavala, & Kubik, 2010). Thus, we propose individuals who see images of

terrorists and appraise the terrorists as dangerous and threatening should experience increased

feelings of fear (Hypothesis 2).

On the other hand, a focus on the terrorists could draw attention to the fact that their

actions constitute an illegitimate attack on innocent civilians. Anger is typically experienced

when people focus on the illegitimate harm caused by individuals, groups, or institutions

(Roseman et al., 1994; Smith et al., 1993). Previous research has shown that people

experience anger in response to national events such as the September 11th tragedy (Dumont,

Yzerbyt, Wigboldus, & Gordijn, 2003) or the war in Iraq (Iyer et al., 2007) when an agent is

identified as responsible for the suffering. Thus, viewing pictures of perpetrators is likely to

increase appraisals of injustice, and should increase feelings of anger (Hypothesis 3).

Political Implications of Emotional Responses to Terrorism Images

Understanding the psychological processes that determine individuals' emotional responses to terrorism images is important, because such emotions can have significant political implications. Research shows that emotions can shape individuals' voting behaviour (see Neuman, Marcus, Crigler, & Mackuen, 2006); support for political positions on issues of war and peace (e.g., Cheung-Blunden & Blunden, 2008; Halperin, 2011; Halperin, Russell, Dweck, & Gross, 2011; Reifen-Tagar, Federico, & Halperin, 2011; Sabucedo, Duran, Alzate, & Rodriguez, 2011); participation in collective action and social movements (see Goodwin, Jasper, & Polletta, 2001; van Zomeren & Iyer, 2009); and support for government programs (e.g., Iyer et al., 2003).

Previous work has investigated the implications of emotions in a range of socio-political contexts. To our knowledge, however, no research study has examined the independent effects of fear, anger, and sympathy in shaping support for different counter-terrorism policies. Thus, our second aim is to outline the political implications of fear, anger, and sympathy about terrorism (Research Question 2). Importantly, we also seek to map the indirect effect of image content on these political outcomes, via appraisals and emotions. That is, we assess the extent to which the image content manipulation impacts appraisals and emotion, which in turn will impact support for counter-terrorism policies.

Appraisal theorists posit that emotions are associated with specific "emotivational" goals that give rise to distinct attitudes and action intentions (Roseman et al., 1994; Frijda, 1986; Frijda et al., 1989). Thus, emotions provide the motivational "fuel" that link appraisals of a situation to specific responses. In the context of terrorism, fear and anger can predict individuals' support of specific counter-terrorism policies (Iyer & Oldmeadow, 2006; Lerner et al., 2003). Building on this work, we hypothesize specific political implications for each emotion.

Sympathy is conceptualized as a prosocial emotion, as it is associated with a desire to help those who are suffering (see Batson, 1998). Research has shown sympathy to predict support for government policies to help those harmed by injustice, such as African American victims of racial discrimination (Iyer et al., 2003) and Iraqi civilians who have suffered losses from Allied bombings during the war (Pagano & Huo, 2004). Following from this research, we propose that sympathy should predict support for government policies that will help victims of terrorism (Hypothesis 4).

Fear is typically associated with the goal of achieving safety in the face of threat (Roseman et al., 1994). Such self-protection may be achieved either by running away from the threat (i.e., flight; Roseman et al., 1994) or attempting to appease or mollify those responsible for the threat (Iyer & Oldmeadow, 2006; Frijda et al., 1989). Recent research (e.g., Spanovic, Lickel, Denson, & Petrovic, 2010; Iyer, Hornsey, Vanman, & Esposo, 2013) indicates that fearful individuals can be strategic in choosing a self-protective response. More specifically, Iyer et al. (2013) showed that fear about terrorism predicts support for aggression only when there are few direct costs for the ingroup. In the present paper, we propose that fear is based in participants' view of terrorists as strong perpetrators, which indicates a formidable adversary who has the power to aggress again. This appraisal suggests that aggression against terrorism is likely to result in additional attacks. Given this realistic threat posed by terrorists, we propose that fear should predict support for government efforts to appease terrorists, thus providing protection from future attacks (Hypothesis 5).

Anger motivates antagonistic movement towards a target (Frijda et al., 1989), such as challenging those responsible for a transgression or unfair situation (Roseman et al., 1994). When individuals feel angry about the illegitimate harm suffered by others, they are more likely to support the goal of taking action against those responsible for the harm (Gordijn, Yzerbyt, Wigboldus, & Dumont, 2006). Following from this research, we hypothesize that

anger should thus predict support for aggressive counter-terrorism policies that directly confront the threat of terrorism (Hypothesis 6).

Method

Design and Procedure

We presented British participants with photographs of the 2005 London bombings, with the content of the images systematically manipulated in a between-subjects design. Half the sample viewed photographs depicting the victims of the attack, and the other half viewed photographs depicting the terrorists. After viewing the images, participants completed measures of appraisals, emotions, and support for various counter-terrorism policies.

Participants

Participants were recruited via email to complete an online questionnaire. A snowball sampling technique was used; the initial invitation to participate was sent to a convenience sample, who were then asked to forward the email on to others. The final sample included 235 British adults (143 men, 92 women), whose ages ranged from 18 to 68 years ($M = 36.64$, SD $= 15.88$). Nearly half of the participants (48%, n $= 113$) lived in the London metropolitan area, another 85 (36%) lived in another major metropolitan area, while the remaining 37 (16%) lived in rural towns and cities. On a continuous measure of political orientation (1 = left wing, 7 = right wing), participants tended to be centre-left leaning ($M = 3.21$, SD $= 1.08$).

Materials and Measures

Participants first completed three items assessing perceived threat from terrorism ($\alpha =$ .85), for example: "I worry that Britain will be the target of future terrorist attacks." Next they read a summary of the July 7th 2005 London bombings, which was formatted to appear as if it had been downloaded from the BBC News website. The article summarized the events of the bombings and its aftermath, with equal emphasis given to the topic of perpetrators (describing their identities and links to Al-Qaeda, as well as their political demands) and

victims (describing the number of victims and the types of physical and psychological injuries they sustained).

After reading the article, participants were randomly assigned to one of two image content conditions to view photographs of this attack. Those in the terrorist condition viewed an image of the bombers extracted from security camera footage at one of the attack sites, as well as headshots of the individual bombers. Participants in the victim condition viewed two images of people wounded by the attacks, and two images of distressed victims and bystanders at the scenes. All photographs had been previously published in mainstream media outlets.

Six statements assessed participants' appraisals after viewing the photographs (1 = disagree strongly, 7 = agree strongly). Two items assessed appraisals of victim suffering (e.g. "I thought about those who needlessly suffered because of the attack"; r [234] = .93, p < .01), two items assessed appraisals of dangerous terrorists (e.g. "I thought about the damage caused by bombers and the possibility of future attacks"; r [234] = .82, p < .001), and two items assessed appraisals of injustice (e.g. "I thought about the unfairness of this attack"; r [234] = .81, p < .001).

Participants indicated the extent to which they felt various emotions while viewing the images (0 = not at all, 5 = extremely). Three items assessed fear (afraid, anxious, frightened; α = .94), three items measured sympathy (sympathetic, compassionate, empathetic; α = .89), and three items assessed anger (angry, outraged, furious; α = .86). We also included a measure of distress, in order to rule out the possibility that the images in one condition were more disturbing or emotionally moving than the images in the other. Three items assessed distress (worried, upset, anguished; α = .72).

Support for three government counter-terrorism policies was next assessed (1 = oppose strongly; 7 = support strongly). Three items described a policy to help victims by providing

assistance and support (α = .87). Four items depicted a policy to negotiate with terrorists and submit to their demands (α = .83), and four items characterized a policy of increased aggression in combating terrorism (α = .81).

Results

Experimental Effects

A multivariate analysis of variance (MANOVA) was conducted to assess the effects of the image content manipulation on participants' reported appraisals, emotions, and support for government policies. Perceived threat and political orientation were included as covariates to assess whether viewing the images had an effect over and above pre-existing beliefs about terrorism and general ideology. In all analyses reported below, neither perceived threat nor political ideology were significant predictors of the dependent variables.

Consistent with hypotheses, the manipulation had a significant effect on all three appraisals. Participants appraised more victim suffering in the victim photo condition (M = 5.24, SD = 1.38) than in the terrorist photo condition (M = 4.41, SD = 1.61), F (1,229) = 17.64, p < .001, partial η^2 = .07. Participants in the terrorist photo condition appraised significantly more injustice (M = 5.28, SD = 1.45) than did participants in the victim photo condition (M = 4.74, SD = 1.51), F (1,229) = 7.72, p = .006, partial η^2 = .03. Participants in the terrorist photo condition also appraised the terrorists as more dangerous and threatening (M = 5.32, SD = 1.59) than did participants in the victim photo condition (M = 4.68, SD = 1.64), F (1,229) = 9.07, p = .003, partial η^2 = .04.

The manipulation also significantly impacted participants' reported emotions in the expected ways. Participants in the victim photo condition reported higher levels of sympathy (M = 3.21, SD = 1.36) than did participants in the terrorist photo condition (M = 1.98, SD = 1.41), F (1,229) = 45.82, p < .001, partial η^2 = .17. In contrast, participants in the terrorist photo condition reported higher levels of fear (M = 3.36, SD = 1.45) than did participants in

the victim photo condition (M = 2.38, SD = 1.55), F (1,229) = 24.48, p < .001, partial η^2 =

.10. Lastly, participants in the terrorist photo condition reported significantly more anger (M =

5.18, SD = 1.32) than did participants in the victim photo condition (M = 4.62, SD = 1.35), F

(1,229) = 5.50 p = .019, partial η^2 = .03.

Participants reported similar levels of distress in the terrorist photo condition (M = 1.91,

SD = 1.14) and the victim photo condition (M = 1.98, SD = 1.23), F (1,231) = .157, p = .693,

partial η^2 = .001. This indicates that the photos did not differ in the extent to which they

aroused general negative emotion.

The image content manipulation also did not have a significant effect on individuals'

support for any of the government policies (all Fs < 1). Thus, participants in both conditions

reported equal levels of support for the help policy, the aggression policy, and the negotiation

policy.

Hypothesized Path Model

EQS software was used to test a path model assessing the hypothesized relationships

between variables. The image content manipulation was specified as the exogenous variable

that directly predicted the three appraisals. The appraisals, in turn, were specified to predict

sympathy, fear, and anger, which were specified to predict support for counter-terrorism

policies. Correlations were specified at each level of the model (i.e., between the three

appraisals, between the three emotions, and between support for the three policies). Table 1

presents all bivariate correlations between the variables.

This model provided excellent fit (Hu & Bentler, 1999): χ (12) = 18.51, p = .101; CFI

= .97, IFI = .98, GFI = .97, SRMR = .04, RMSEA = .05. All hypothesized relationships were

statistically reliable and in the expected directions, with a significant amount of variance

explained in each endogenous variable (see Figure 1). The image content manipulation

directly affected appraisals: viewing photos of victims increased appraisals of victim

suffering, whereas viewing photos of terrorists increased appraisals of dangerous terrorists and injustice. Consistent with hypotheses, these appraisals differentially predicted distinct emotions: appraisals of victim suffering predicted sympathy (Hypothesis 1), appraisals of dangerous terrorists predicted fear (Hypothesis 2), and appraised injustice predicted anger (Hypothesis 3). Also consistent with hypotheses, each emotion had distinct implications for support of government policies: sympathy predicted support for help to victims of terrorism (Hypothesis 4); anger predicted support for aggressive counter-terrorism policies (Hypothesis 5); and fear predicted support for negotiations with terrorists (Hypothesis 6).

Our series of hypotheses suggest that the image content manipulation exerts an indirect effect on emotional responses and support for government policy through appraisals. To investigate this idea, we conducted two tests of indirect effects in EQS. The indirect effect of the image content manipulation on emotions via appraisals was significant: $b = .368$, $p = .012$. The indirect effect of the image content manipulation on support for government policies via appraisals and emotions was also significant: $b = .186$, $p = .032$. Taken together, these results provide evidence for the indirect effects of the image content manipulation on the key outcome variables.

Alternative Path Models. To provide additional support for the hypothesized order of association between the variables, we tested two alternative models that are suggested by other theoretical frameworks. We first focused on the predictive relationship between appraisals and emotions. Although our hypothesized model is consistent with previous work showing appraisals to predict emotions (e.g., Gordijn et al., 2006; Iyer et al., 2007), an alternative perspective indicates that emotions can also shape appraisals (e.g., Frijda & Zeelenberg, 2001). Thus, the alternative model investigated the possibility that it is emotions that predict appraisals (manipulation $\rightarrow$ emotions $\rightarrow$ appraisals $\rightarrow$ policy support; see Figure 2a). This model did not meet conventional thresholds for adequate fit: χ^2 (12) = 24.87, p =

.020; CFI = .84, IFI = .82, GFI = .80, SRMR = .09, RMSEA = .11.

The second alternative model examined whether appraisals and emotions are inferred

from political attitudes (manipulation → policy support → appraisals → emotions; see Figure

2b), an order of association proposed by self-perception theory (e.g., Laird & Bresler, 1992).

In this view, appraisals and emotions do not offer the same explanatory power as they would

in our hypothesized model. This alternative model also did not meet conventional thresholds

for adequate fit: $\chi^{\Box}$ (12) = 29.55, p = .003; CFI = .81, IFI = .81, GFI = .79, SRMR = .08,

RMSEA = .10.

Discussion

Research from social psychology, communication, and media studies indicate that

viewing images of terrorism can have a powerful impact on individuals' emotional and

political responses. The present study sought to explain the psychological process by which

exposure to terrorism images can elicit distinct emotional responses. We proposed that the

content of terrorism images would shape viewers' appraisals of the event, which in turn will

shape their emotions (Research Question 1) and their support for counter-terrorism policies

(Research Question 2).

The present study employed an experimental design to investigate the impact of specific

terrorism images on viewers' perceptions, emotions, and political attitudes. Results indicate

that manipulating the content of photographs directly shapes individuals' appraisals and

emotions, independently of their pre-existing political orientation and beliefs about terrorism.

Specific appraisals predicted the emotional reactions of sympathy, fear, and anger, thus

providing support for our first three hypotheses. The hypothesized path model provided

excellent fit for the data, even when direct paths were not included from the manipulation to

the emotions or the support for different government policies. Additional tests also provided

evidence for the indirect effects of the image content manipulation on emotions via appraisals,

and on support for government policy via appraisals and emotions. This suggests that the appraisals fully explained the effect of image content on resulting emotional and political responses. To our knowledge, this study provides the first direct evidence for the process underlying individuals' differential emotional responses to images of terrorism.

The path model also demonstrates the distinct political implications of individuals' emotional responses to terrorism. Consistent with hypotheses, reported levels of sympathy, fear, and anger predicted support of specific counter-terrorism policies. This suggests that terrorism images have an indirect, yet potentially powerful, impact on citizens' political attitudes. In democratic societies, these shifts in public opinion could have important influences on a government's counter-terrorism policies.

Implications

Taken together, the results provide concrete evidence for the consequences of viewing distinct pictorial representations of terrorism. This nuanced approach extends conceptual analyses of visual images (e.g., Sontag, 2003), which have focused more generally on the broad power of photographs to present visually compelling material. In contrast, our analysis allows us to make informed predictions regarding the impact of specific image frames.

The present research also delineates the psychological processes underlying individuals' emotional and political responses to different frames of terrorism. This analysis reflects a substantive contribution to current theorising on media frames, which has tended to investigate the content of these frames (e.g. Tankard, 2001) and the factors that influence the development of specific frames (e.g., Thusu, 2006). Although scholars have proposed that specific media frames elicit distinct viewer responses (e.g., Deprez & Raeymaeckers, 2010; McLaughlin & Baker, 2010), empirical research has not systematically investigated this question. The present study offers a first step in filling this gap, by demonstrating the concrete implications of specific media frames.

In addition, the present research contributes to the growing psychological literature on responses to terrorism. Previous work on this topic has focused on stress and trauma-related responses in the aftermath of terrorism (e.g., Chu, Seery, Ence, Holman, & Silver, 2006; Somer, Ruvio, Sever, & Soref, 2007). Other work has investigated individuals' perceptions and emotions after a particular terrorist attack, such as 9/11 (Bergstrom & McCaul, 2004) or the London bombings (Bux & Coyne, 2009). The present study offers a more precise analysis of emotional and political responses to distinct framings of a single terrorist attack. In addition, we provide evidence for the psychological process that underlies these specific emotional responses. Our work thus helps develop a more nuanced understanding of how and why individuals might respond to the same terrorist attack in very different ways.

The results of the present study also offer some concrete practical implications. Understanding how specific frames may shape viewers' responses will help editors and publishers make more informed publication decisions with respect to the amount of coverage devoted to different perspectives. Knowledge of how terrorism frames shape citizens' attitudes towards terrorism is also crucial: In democratic societies, such shifts in public opinion could have important influences on a government's counter-terrorism policies. Given that images of terrorism may be easily used (and abused) to manipulate public opinion, identifying the process underlying this effect is an important step in better understanding this phenomenon.

Limitations and Future Directions

We investigated the consequences of viewing different terrorism images for viewers' appraisals and emotions, as well as their support for different government policies. Delineating the direct, and indirect, impact of different images is an important first step towards understanding the role played by images in shaping emotional and political responses to terrorism. While this represents a significant theoretical advance with important practical

applications, a number of additional questions remain to be addressed. For instance, we demonstrated that a single set of images (i.e., focusing on the perpetrator) can elicit two distinct appraisals (i.e., appraised injustice and appraised strong perpetrators) and two distinct emotions (i.e., anger and fear). However, the present study did not consider an explanation for this effect: how might the same image elicit distinct appraisals and emotions? Previous work in the emotions literature suggests that individuals' appraisals may be shaped by their dispositional characteristics (e.g., personality traits, political ideology) and other beliefs about the situation (Smith & Kirby, 2009). In the context of terrorism images, then, individuals' perceived threat from terrorism might influence the extent to which they perceive injustice (leading to anger) or dangerous perpetrators (leading to fear) when they encounter images of perpetrators. Future work should investigate the moderators that shape responses to the same image of terrorism.

In addition, future studies could investigate the impact of exposure to multiple frames of terrorism, either simultaneously or in succession. Saturation coverage in the aftermath of a terrorist attack all but guarantees that individuals will be exposed to different perspectives and analyses of the event. It will thus be useful to understand how individuals interpret multiple terrorism frames that are presented across a series of images, as well as the implications for their emotional actions and political attitudes.

An additional question concerns the extent to which individuals' responses to terrorism images are shaped by the presentation medium. Participants in the present study were exposed to photographs of a terrorist attack, but individuals may also view video images of terrorism on television and/or on the Internet. Research suggests that television images better capture visual attention and better convey emotional information than do still photographic images (e.g., Cho et al. 2003). It is possible that different factors may shape individuals' appraisals

about an event represented in print rather than video images. Future work should investigate this question.

Conclusions

The present study demonstrates the powerful impact of media images in shaping individuals' emotional and political responses to terrorism, as well as the psychological processes underlying these effects. Our findings will help develop a comprehensive approach to understanding viewers' responses to images of terrorism, and will thus expand the theoretical focus of current analysis of media frames. Given that images of terrorism may be easily used (and abused) to manipulate public opinion, it is also vital that media editors and policy-makers better understand the psychological processes underlying this phenomenon.

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Table 1

Bivariate Correlations between all variables

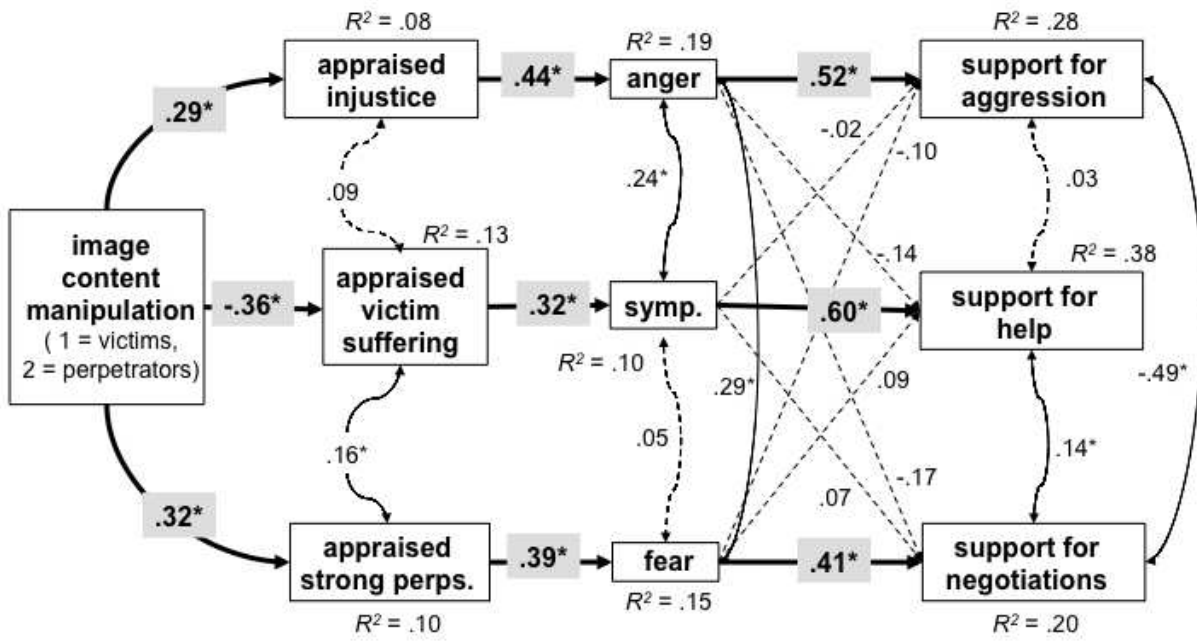|	1	2	3	4	5	6	7	8	9
Appraisals									
1. Victim Suffering	-								
2. Injustice	.10*	-							
3. Strong Perps.	.18**	.35**	-						
Emotions									
4. Sympathy	.58**	.05	.00	-					
5. Anger	.25**	.30**	.14*	.25**	-				
6. Fear	.23**	.03	.28**	.13*	.32**	-			
7. Distress	.34**	.15*	.25**	.27**	.49**	.44**	-		
Policy Support									
8. Help for Victims	.29**	.09	.16**	.38**	.23**	.16**	.15*	-	
9. Negotiations	.04	-.03	.12*	.02	-.14*	.28**	.02	.10*	-
10. Aggression	.03	.16**	-.08	-.05	.30**	.13*	.14*	.00	-.46**

* $p < .05$, ** $p < .01$

Figure 1. Hypothesized path model: Assessing relationships between experimental manipulation

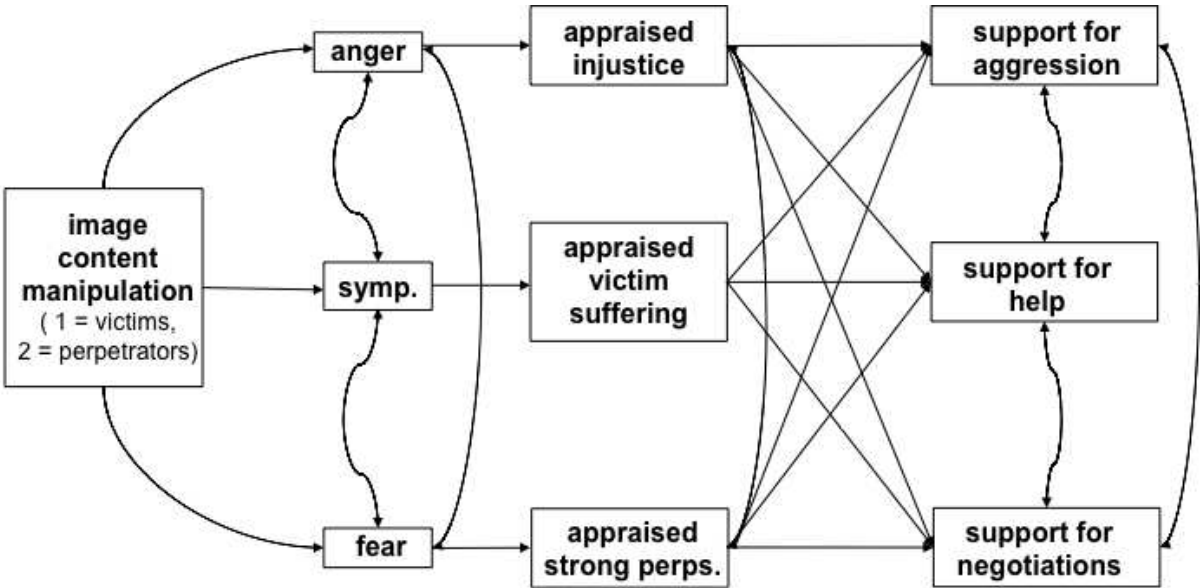of image content, appraisals, emotions, and support for counter-terrorism policies.

Figure 2a. Alternative path model #1: Assessing relationships between experimental manipulation

of image content, emotions, appraisals, and support for counter-terrorism policies.
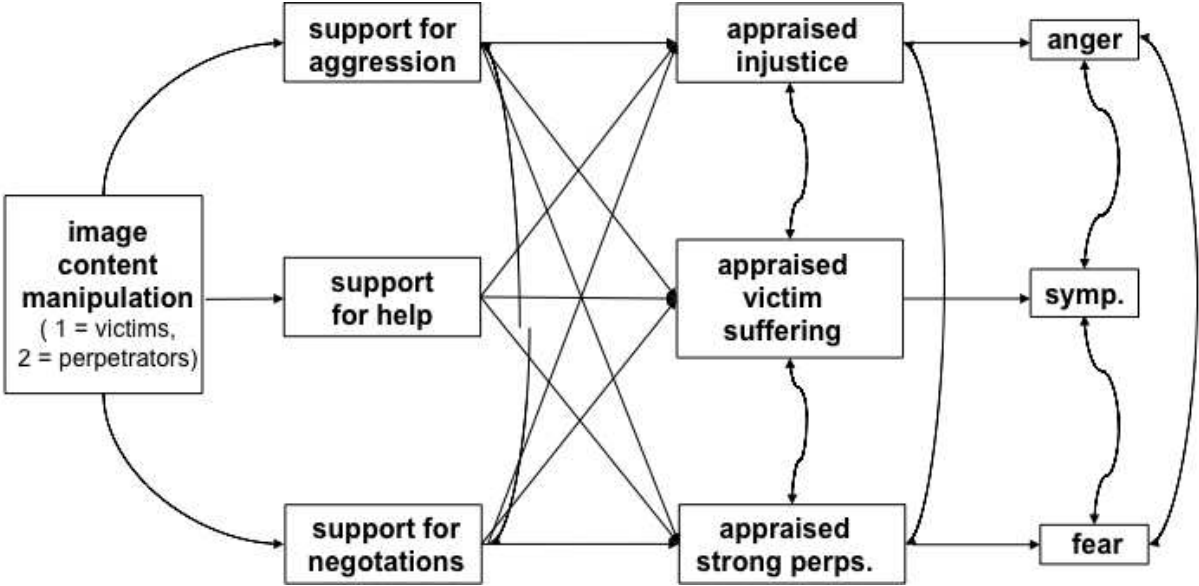
Figure 2b. Alternative path model #2: Assessing relationships between experimental manipulation

of image content, support for counter-terrorism policies, appraisals, and emotions