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RUNNING HEAD: Responses to terrorist persuasion appeals

Fight and flight: Evidence of aggressive capitulation in the face of fear messages from  
terrorists

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### Abstract

In an era of digital technology and the Internet, terrorists can communicate their threats directly to citizens of Western countries. Yet no research has examined whether these messages change individuals' attitudes and behaviour, or the psychological processes underlying these effects. Two studies (conducted in 2008 and 2010) examined how American, Australian, and British participants responded to messages from Osama bin Laden that threatened violence if troops were not withdrawn from Afghanistan. Heightened fear in response to the message resulted in what we call "aggressive capitulation," characterized by two different group-protection responses: (1) submission to terrorist demands in the face of threats made against one's country, and (2) support for increased efforts to combat the source of the threat, but expressed in abstract terms that do not leave one's country vulnerable. Fear predicted influence over and above other variables relevant to persuasion. Theoretical and practical implications are discussed.

Keywords: fear, terrorism, political attitudes, persuasion

Over the past decade, incidents of terrorism have dominated news coverage and analysis, whether or not such attacks were thwarted by law enforcement. To the extent that citizens access such events through their domestic mainstream media, journalists, editors, and politicians can maintain some control over how the public thinks and feels about terrorism (Morris, Kern, & Judd, 2003). Research shows that exposure to media coverage of terrorism can significantly influence individuals' emotions and attitudes about this topic (e.g., Shoshani & Slone, 2008).

In the era of digital technology and the Internet, however, terrorists also have an opportunity to communicate their side of the story. By recording their grievances and demands and distributing the content through multiple channels, terrorists are assured a worldwide audience for their messages. For instance, Osama bin Laden used an October 2010 audio recording to threaten France with "killings and kidnappings" unless the French withdrew their nearly 4,000 troops from the international military mission in Afghanistan (de la Baume, 2010). Although the demands presented in these appeals can only be addressed by government officials, the threat of violence and harm is communicated to the broader public in a calculated effort to instil widespread fear and panic (Sandler, 2010).

Surprisingly, we know relatively little about how citizens of Western countries respond to terrorist messages. If terrorists do persuade the average person to support their demands, what are the psychological mechanisms that underlie this effect? This question is particularly relevant to democratic societies where a government's counter-terrorism policies are both scrutinised, and shaped by, public debate. Understanding the psychological factors that determine these individual responses is essential if we are to develop a comprehensive analysis of global conflicts and their resolution.

Contemporary analyses of terrorism have paid little attention to the influence of enemy messages in the context of war, as work has focused on other questions. For instance,

researchers have developed political and economic analyses of societies within which terrorism develops (Reid & Chen, 2007) or attacks occur (Sandler, 2010). Other work has investigated media framings of terrorism from a societal level of analysis (Morris et al., 2003). Psychological research has focused on individuals' responses to terrorists and their attacks, such as perceived threat (Sadler, Lineberger, & Park, 2006) and emotions (Giner-Sorolla & Maitner, 2013; Iyer, Webster, Hornsey, & Vanman, in press; Lerner, Gonzalez, Small, & Fischhoff, 2003; Skitka, Bauman, Aramovich, & Morgan, 2006). The present research contributes a novel analysis of responses to direct persuasion attempts from terrorists.

We presented citizens of Western countries with a persuasion attempt by Osama bin Laden and assessed their responses in 2008 (with Australian participants) and in 2010 (with participants from the United States, the United Kingdom, and Australia). At the time of data collection, at least five years had passed since the last major terrorist attacks in the UK and the US. This context allowed us to assess individuals' responses to the communicated threat in a way that was relatively unaffected by their (recalled) responses to the clear and present danger presented by prior attacks.

Terrorist messages were still likely to elicit emotional responses during this period of relative calm, as the general threat of terrorism is salient even in the absence of direct attacks. Western governments continue to wage a war on terror on two fronts: in overseas military conflicts fought in Afghanistan and Iraq, and in domestic efforts to identify and monitor terrorist activity on home soil. In addition, public opinion polls at the time of data collection indicate that terrorism was considered to be an important issue at the time of data collection (i.e., 2008 in Australia; 2010 in the US, UK, and Australia). For instance, a 2010 Gallup Poll found that 70% of American respondents worried "a great deal" or "a fair amount" about the possibility of future terrorist attacks in the US (Gallup, 2010).

Taken together, then, this context represents a generalized threat of terrorism, against which we investigated responses to terrorist messages that promise targeted high-impact attacks. Below we review the literature on persuasion and consider how emotions may influence the extent to which terrorist messages are persuasive. We then develop our hypotheses about the effects of fear and anger in explaining group-protective responses to terrorist messages, specifically attitudes towards government counter-terrorism efforts.

### **Understanding Responses to Terrorist Persuasion**

Terrorist attacks have been cast as a method of psychological warfare (Schmid, 2005), as they evoke powerful negative emotions such as fear and anger (Lerner et al., 2003; Skitka et al., 2006). This analysis may be extended to the context of terrorist messages: it seems likely that such messages will also elicit strong emotions among individuals who are exposed to them. Research indicates that emotions motivate people to support specific goals and engage in distinct actions (Frijda, Kuipers, & ter Shure, 1989). The present research thus investigates the role of emotions in shaping individuals' responses to a terrorist message.

The literatures on propaganda and wartime persuasion have not examined emotions as a central predictor of individuals' responses (see Jowett & O'Donnell, 2012). Rather, early research (e.g., Hovland, Janis, & Kelly, 1953) focused on other types of factors, including message characteristics (e.g., strength of argument); source characteristics (e.g., credibility); the medium (e.g., radio or print); and audience characteristics (e.g., ideology). Although one study did document American citizens' emotional responses to a Nazi propaganda film (Bruner & Fowler, 1941), the analysis did not delineate how such emotional responses may have contributed to respondents' acceptance or rejection of the film's message.

More generally, the persuasion literature's relevance to terrorist appeals is rather oblique. Since Hovland and colleagues' classic work on wartime propaganda (Hovland et al., 1953), subsequent empirical work has focused on broader and relatively benign topics, such

as changes to university policy or reactions to local events (see Crano & Prislin, 2006).

Although such issues may be relevant to the undergraduate students sampled in this research, they are far removed from the direct and salient threats posed by a communication from a known terrorist. This research has also paid almost no attention to the role of emotion in shaping responses to persuasion.

In foregrounding affect, terrorist messages have close parallels to fear appeals in health communication, where persuasion also relies on the threatened negative consequences of ignoring the recommendations communicated in the message (de Hoog, Stroebe, & de Wit, 2007). Although fear appeals may provide relevant clues about responses to terrorist persuasion attempts, attempts at this type of generalization are limited by some important differences between the two contexts. Specifically, we propose that terrorist messages are uniquely positioned in the magnitude and certainty of the threats they communicate. In addition, terrorist messages are communicated by individuals who are outside the audience's trusted ingroup.

Taken together, then, individuals' responses to terrorist messages are not easily explained by the literatures on propaganda, persuasion, or health communication. The extent to which terrorist appeals are successful, and the processes underlying these effects, reflect open empirical questions. We next consider how emotional responses may shape individuals' acceptance of terrorist persuasion attempts.

### **Emotional Responses to Terrorist Persuasion**

We focus on two emotions—fear and anger—that are relevant to the context of terrorism (Lerner et al., 2003; Skitka et al., 2006) and intergroup aggression more generally (Halperin, Russell, Dweck, & Gross, 2011; Spanovic, Lickel, Denson, & Petrovic, 2010).

**Fear.** Fear is typically experienced in the face of threatened harm or negative consequences from a powerful source (Frijda et al., 1989). As terrorist messages

communicate the negative consequences of failing to comply with a set of demands, fear of this harm is likely to play an important role in determining the audience's responses. Fear is also associated with efforts to seek protection from the threatening agent. Research on interpersonal emotions suggests that individuals may use two different protection strategies: moving away from the threat in an effort to escape to safety, and capitulating to the threat in an effort at appeasement (Frijda et al., 1989). At the intergroup level as well, fear is conceptualized as a "flight" emotion where little effort is made to challenge the threatening agent. For example, fear inhibits collective action to improve group status (Miller, Cronin, Garcia, & Branscombe, 2009) and increases intentions to move away from a threatening outgroup (Mackie, Devos, & Smith, 2000).

According to this perspective, a terrorist persuasion attempt that induces fear should motivate group-protection responses in its audience. As such, these messages may well be successful in persuading its audience to submit to the communicated demands. For example, when reading a message from bin Laden that calls for a withdrawal of Western troops from Afghanistan, fear of the threatened negative consequences of non-compliance is likely to increase individuals' opposition to the war in Afghanistan.

Another literature suggests, however, that fear is not associated with such passive actions. Experimental evidence indicates that individuals who experience fear may opt for a "fight" response when escape from a threat is not possible (Cesario, Plaks, Hagiwara, Navarrete, & Higgins, 2010). In the context of societies experiencing intractable conflict, fear can lead to defensive aggression in an effort to minimize or avoid potential harm from threatening outgroups (Bar-Tal, 2001). There is some empirical support for this view: in the context of an ongoing conflict, fear predicted Serbian support for economic, social, and military aggression against Kosovo Albanians (Spanovic et al., 2010). This suggests that

individuals reading bin Laden's message could seek to protect themselves from the threat of terrorism by defying the persuasion attempt and supporting the war in Afghanistan.

These conflicting literatures point to the difficulty in anticipating how people might respond to frightening terrorist messages that threaten harm to their country. Which group-protection strategy will individuals endorse after reading a persuasion appeal from bin Laden—agreement that Western troops should pull out of Afghanistan (appeasement), or standing firm in keeping Western troops in Afghanistan (defensive aggression)? We propose that fear could motivate individuals' support for flight and fight as simultaneous protective strategies. We refer to this pattern as "aggressive capitulation", whereby individuals may submit to the terrorist's specific demands while simultaneously hardening attitudes against the source of the threat in an abstract way that does not leave the group vulnerable to harm.

If non-compliance with the terrorist demands is likely to result in harm for the group, fear should increase support for appeasement as it is the most effective protective strategy. In the context of bin Laden's call for withdrawal of troops from Afghanistan, fear should decrease individuals' support for their own country being involved in the war. However, if non-compliance were possible without having to suffer the negative consequences threatened by the message, individuals may be willing to support defensive aggression to challenge the threat of terrorism. Thus, fear in response to bin Laden's message should increase individuals' support for the Afghanistan war in general, where no mention is made of one's own country being involved. Such defensive aggression would keep one's country safe from the threatened harm, because it is not directly involved in defying the terrorists' demands.

**Anger.** Anger is typically directed at an agent believed to be responsible for a transgression (Frijda et al., 1989). Experiences of anger may be further differentiated by a secondary appraisal of the specific agent responsible for the injustice (Lazarus, 1991). In the

context of terrorist persuasion attempts, individuals may feel anger at terrorists who are threatening them with (illegitimate) harm.

Anger is a high-arousal emotion that activates the approach motivation system (Carver & Harmon-Jones, 2009). People who feel angry want to strike out at a target in order to challenge its unfair behavior. Anger at terrorists is likely to predict resistance to their persuasion attempt, in an effort to directly challenge their threats of aggression. This anger should thus be associated with increased support for the Afghanistan war, both in general and with respect to one's own country's involvement.

### **Overview of Present Research**

Australian undergraduates (Study 1) and community samples of American, Australian, and British adults (Study 2) read a speech by bin Laden that threatened continued violence to Western countries if their troops were not withdrawn from Afghanistan. All data were collected in 2008 and 2010, prior to the announcement of bin Laden's death. After reading the speech, participants indicated their support for two types of counter-terrorism responses.

First, we measured participants' support for their own country's involvement in the Afghanistan war, as well as their willingness to participate in anti-war activism to protest this involvement. Fear should predict agreement with bin Laden's demands on these measures (i.e., decreased support for own country's involvement in the war and increased willingness to protest this involvement), as individuals should seek to protect their country from terrorist attacks (Hypothesis 1).

Second, we measured support for the Afghanistan war in general, with no mention of participants' own countries. We expected fear to predict rejection of the persuasion attempt on this measure (i.e., increased support for the general war), because it is a strategy to cripple bin Laden's terrorist organization (Hypothesis 2). However, this defensive aggression is only feasible as long as the group is not seen as directly involved – only then is the group directly

protected from the retaliatory harm threatened in the message. In sum, we predicted that fear would predict a pattern of “aggressive capitulation”: support for aggression toward the source of the message when it can be expressed in abstract ways that do not leave the group vulnerable to harm, but capitulation on the specific demands made within the message.

We also examined the role of anger in predicting responses to the persuasion attempt. We expected that anger directed at terrorists should predict resistance to the persuasion attempt, as expressed by increased support for the Afghanistan war and decreased willingness to participate in anti-war activism (Hypothesis 3).

### **Study 1**

Our focus is on the role of fear and anger in shaping responses to a terrorist persuasion attempt. However, research on information processing has shown that people’s evaluation of a source can influence their response to the message (Crano & Prislin, 2006). Following from this analysis, a terrorist such as bin Laden is likely to be denigrated as a malevolent and untrustworthy enemy source, and the message thus may be rejected without further consideration. To account for this possibility, we assessed participants’ evaluations of the message source (on dimensions of competence and warmth; Fiske, Cuddy, Glick, & Zu, 2002) in order to examine their independent predictive effects.

### **Method**

**Participants and Procedure.**<sup>1</sup> One hundred and six first-year undergraduates at an Australian university participated in this study in 2008. The sample included 28 men and 78 women, whose ages ranged from 17 to 48 years ( $M = 20.09$ ,  $SD = 3.60$ ). Most ( $n = 87$ ) had been born in Australia. The 19 participants who had been born overseas were retained in the sample because they were permanent residents of Australia, having lived in the country for between 6 and 26 years ( $M = 14.16$ ,  $SD = 4.62$ ). Thus, all participants were expected to consider Australia to be their primary national identity.

**Speech transcript.** Participants were given an abridged transcript of a recent speech by bin Laden. The speech used a fear-based appeal to demand that the United States and its allies to withdraw their troops from Afghanistan. Four main points were made: (1) the original the invasion was unjust; (2) Afghan “freedom fighters” will never give up their resistance; (3) continued military involvement will result in massive losses for the allied troops; and (4) terrorists will continue to target civilians in the allied countries until all troops are withdrawn.

### **Measures.**

**Perceptions of the source.** Participants evaluated bin Laden on various traits using a 7-point response scale (1 = not at all, 7 = very much). Three items assessed perceptions of competence (intelligent, competent, skilful;  $\alpha = .83$ ) and Three assessed perceptions of honesty (trustworthy, sincere, and honest;  $\alpha = .75$ ).

**Emotional responses.** Using a 6-point scale (1 = not at all, 6 = extremely), participants indicated the extent to which the speech made them feel various emotions. Four items measured fear ( $\alpha = .92$ ): scared, anxious, worried, and nervous. A single item assessed anger at terrorists. An exploratory factor analysis was conducted using Maximum Likelihood extraction and Oblimin rotation. Two distinct factors emerged: fear (explaining 41% of the variance), and anger at terrorists (explaining 28% of the variance). Each item loaded onto its expected factor only; minimum loadings ranged from .62 to .82.

**Support for policy responses.** Seven items were developed to assess participants' support for various policy responses to terrorism. Since we were interested in the extent to which their views shifted after reading the speech, the 9-point response scale indexed their attitude change after reading the speech:  $-4 =$  much less now than before reading the speech,  $0 =$  no change,  $+4 =$  much more now than before reading the speech.

An exploratory factor analysis was conducted on these seven items using Maximum Likelihood extraction and Oblimin rotation. Three distinct factors emerged, which could be interpreted as *support for own country's involvement in Afghanistan war* (explaining 41.13% of the variance), support for Afghanistan war in general (explaining 22.87% of the variance), and *activism to protest own country's involvement in the war* (explaining 9.00% of the variance). Each item loaded onto its expected factor only, with minimum loadings ranging from .58 to .70.

Three items assessed participants' *support for their country's involvement in the Afghanistan war* ( $\alpha = .96$ ). Sample items include: "To what extent do you think Australian political leaders should support the war in Afghanistan?" and "To what extent do you support the idea of Australians helping the US in the war in Afghanistan?"

Two items ( $r [105] = .55, p < .001$ ) measured participants' willingness to communicate their anti-war attitudes in a public way: "To what extent would you attend protests against Australian public leaders supporting the war in Afghanistan?" and "To what extent do you feel a sense of responsibility to convince the Australian government to end Australia's involvement in the war in Afghanistan?"

Two items ( $r [106] = .66, p < .001$ ) assessed the extent to which participants supported the war in Afghanistan in general: "To what extent do you support the war in Afghanistan?" and "To what extent do you think the war in Afghanistan is unjust?" (reverse-scored).

## Results

**Predictors of Attitude Change.** A series of hierarchical regression analyses was conducted with each policy response as the criterion variable. Evaluations of the source (i.e., perceived competence and honesty) were entered as predictors in Step 1. Emotional responses to the persuasion attempt were entered as predictors in the second step, including

fear and anger at terrorists. Bivariate correlations between all variables are presented in Table 1, and statistics for the regression analyses are presented in Table 2.

***Support for own country's involvement in Afghanistan.*** Support for this response was predicted only by fear (see Table 2). As predicted in Hypothesis 1, the more afraid participants reported feeling after reading the speech, the less likely they were to support their country being involved in the Afghanistan war.

***Willingness to participate in activism to protest own country's involvement in the war.*** Only fear significantly predicted participants' increased willingness to participate in activism to protest their own government's involvement in the Afghanistan war (see Table 2). Consistent with Hypothesis 1, the more participants reported feeling fear, the more likely they were to engage in protest activities.

***Support for Afghanistan war in general.*** Only fear emerged as a predictor of increased support for the war in Afghanistan (see Table 2). As predicted in Hypothesis 2, participants were more likely to support the Afghanistan war when they reported feeling afraid after reading the speech.

***Overall Levels of Influence.*** In addition to examining the predictors of influence, our data allowed us to explore the effectiveness of the message in shifting attitudes and protest intentions. A series of one-sample t-tests was conducted on each of the three policy responses to examine whether participants reported changes after reading the persuasion attempt (see Table 1 for descriptive statistics). Recall that the response scale ranged from -4 (much less now than before reading the speech) to 0 (no change) to +4 (much more now than before reading the speech).

Participants reported significantly less support for their own country's involvement in the Afghanistan war after reading the speech,  $t(105) = -6.04, p < .001$ . Similarly, they supported the general war in Afghanistan significantly less after reading the speech,  $t(105) =$

-7.47,  $p < .001$ . They also reported being significantly more willing to engage in anti-war activism after reading the speech,  $t(105) = 4.11$ ,  $p < .001$ . These results indicate that participants were influenced by the message in bin Laden's speech; as he advocated, they were less supportive of the war and were willing to take action to advocate these beliefs.

## **Discussion**

In this first examination of responses to terrorist persuasion, we presented Australian undergraduate students with the transcript of a speech by Osama bin Laden calling for Western countries to withdraw troops from Afghanistan. The main focus of the study was on the extent to which emotional reactions to the message predicted influence. As such, we aim to make a novel theoretical point about how enemy fear appeals can manifest themselves in the context of intergroup conflicts.

As expected, fear had distinct effects on participants' support for different counter-terrorism responses, a pattern we term "aggressive capitulation." Consistent with Hypothesis 1, fear predicted a shift in views consistent with the demands of the speech: lower levels of support for one's own country being involved in the Afghanistan war, as well as increased willingness to participate in anti-war activism. Participants seem to have engaged in a protection strategy aimed at mollifying the enemy, which provides support for the conceptualization of fear as a "flight" emotion.

Fear also predicted support for the Afghanistan war in general, a view that directly challenges the message in the persuasion attempt. This provides support for Hypothesis 2, and is consistent with previous work showing that fear can motivate defensive aggression (Spanovic et al. 2010). In this case, however, it appears that individuals are willing to confront a terrorist enemy only when they have limited exposure to the negative consequences of non-compliance. Supporting the Afghanistan war "in general" allows

participants to strike at the threat of terrorism without their own country suffering the negative consequences of terrorist retribution.

Contrary to Hypothesis 3, anger at terrorists did not independently influence support for any policy response. This is inconsistent with previous studies, which have shown anger to predict a desire for confrontation with terrorists (e.g. Sadler et al., 2006; Skitka et al., 2006). Given that our result was unexpected, we sought to replicate it in a second study before addressing possible explanations.

Evaluations of bin Laden as the source of the message did not independently predict changes in support for any of the policy responses. Thus, there was no evidence that individuals rejected the message simply because they disliked the messenger. Taken together, the results indicate that individuals pay attention to the content of terrorist messages, and that they are emotionally affected by them. Their emotional response, in turn, has important implications for the extent to which individuals report being persuaded by the message.

Additional analyses indicated that participants were, in fact, persuaded to agree with the positions taken by bin Laden. After reading the transcript, participants reported less support for the Afghanistan war (in general and with respect to their country's involvement), as well as increased willingness to participate in activism to protest their country's involvement in the war. This suggests that threats communicated by terrorists can be effective in convincing Australian undergraduate students to support their demands.

Three important limitations of this study should be acknowledged. First, participants were residents of Australia, which has never experienced a large-scale terrorist attack on home soil. Although Australia was one of only four countries to commit troops to Iraq in advance of U.N. endorsement—and although Australia continues to have troops fighting in Afghanistan—the threat of terrorism from al-Qaeda may have seemed less relevant than it would be in some other countries. Second, all Study 1 participants were undergraduate

students. Given that university students are young, predominantly female, and unfamiliar with political issues, our results may not be generalizable to the rest of the population. Third, our analysis predicting likelihood of persuasion did not control for the full range of variables that we know should impact persuasion. We conducted a second study to address these limitations.

## **Study 2**

Study 2 was conducted in 2010, building on the first study in three important ways. First, we recruited participants from two additional countries that have had direct experience with terrorist attacks and threats—the United States and the United Kingdom. Second, we sought to increase the generalizability of our findings by recruiting community samples of adults. Third, we included a broader range of control variables in testing the predictors of responses to terrorist persuasion attempts. For example, we assessed background characteristics that are likely to shape political views (i.e., gender, age, ethnicity, and political party affiliation). We also assessed three aspects of personality and ideology that may influence responses to terrorist persuasion attempts: need for cognition, national identification, and psychological reactance.

Need for cognition determines the extent to which individuals engage with the argument being presented in a persuasive appeal, and has been shown to be an important determinant of persuasion (Cacioppo, Petty, & Morris, 1983). National identification (or psychological attachment to one's country) is also relevant because terrorist persuasion takes place in a clear intergroup context, where the terrorist represents a clear outgroup enemy. Previous research indicates that higher identifiers are more likely to endorse aggression towards an outgroup (Stenstrom, Lickel, Denson, & Miller, 2008). A third important factor is psychological reactance (Brehm, 1966): when people think that a message is deliberately intended to be manipulative or is inhibiting their freedom, it can trigger attitude change in the

opposite direction to that intended. Reactance may be especially likely to occur in the context of terrorist persuasion, where the source is an outgroup enemy.

Lastly, the success of a persuasion attempt is influenced by evaluations of argument strength and peripheral characteristics such as the message source (Crano & Prislin, 2006). Thus, in the present study, we measure the extent to which participants engage in systematic processing (focusing on characteristics of the argument) and heuristic processing (focusing on peripheral characteristics such as source).

## **Method**

**Procedure.** A market research company was hired to recruit participants from the general populations of the United States, the United Kingdom, and Australia. The recruitment parameters specified adults over the age of 21, approximately equal numbers of men and women, and a spread of political party affiliations representative of the general population in each country. Individuals were invited to participate in an online study described as examining people's attitudes toward social issues. Following the standard policy of the market research company, participants were given credits in exchange for participation, which they could collect and cash in to receive gift certificates and merchandise.

### **Participants.**

**American sample.** One hundred and thirteen residents of the United States (67 men and 44 women; 2 did not specify) took part in the study, whose ages ranged from 21 to 78 years ( $M = 53.34$ ,  $SD = 13.26$ ). The majority of participants were of White Caucasian ethnicity (80.5%) and nearly all held American citizenship (99%). To assess general political orientation, participants were asked to name the party they voted for in the last national election. In this sample, 43% reported voting for the Democrats (left-leaning) and 45% reported voting for the Republicans (right-leaning). The remaining 12% reported voting for an Independent candidate.

Australian sample. One hundred and ten Australian residents (59 men, 50 women, 1 undeclared) completed the questionnaire. Their ages ranged from 23 to 72 years ( $M = 48.49$ ,  $SD = 12.82$ ). The majority of participants were of White Caucasian ethnicity (98%) and most were Australian citizens (93%). With respect to political orientation, 30% reported voting for the Labor Party (center-left), 48% reported voting for the Liberal Party (center-right), and 22% reported voting for another party (e.g., the Greens, a far-left party, or One Nation, a far-right party).

British sample. One hundred and nine residents of the United Kingdom (58 men, 50 women, 1 undeclared) completed the questionnaire, whose ages ranged from 23 to 83 years ( $M = 49.85$ ,  $SD = 13.01$ ). The majority of participants were of White Caucasian ethnicity (95.4%) and nearly all held British citizenship (97.2%). With respect to political party preferences in the last election, 34% reported voting for the Labour Party (center-left), 21% reported voting for the Conservative Party (center-right), 15% reported voting for the Greens, 9% reported voting for the British National Party (far-right), and 21% did not specify which party they voted for.

**Individual Difference Measures.** Before reading the speech by bin Laden, participants first completed a number of items assessing general ideology and personality traits.

Responses were provided on a 7-point scale ranging from 1 (not at all) to 7 (very much).

National identification. Four items (adapted from Doosje, Ellemers, & Spears, 1995) assessed the extent to which participants felt a psychological connection to their country (USA  $\alpha = .86$ , Australia  $\alpha = .88$ , UK  $\alpha = .91$ ). Sample items include, “I see myself as an [American/Australian/British person]” and “I feel strong ties with [Australians/Americans/British people].”

Need for cognition. Five items (Cacioppo, Petty, & Kao, 1984) assessed participants' general willingness to expend cognitive resources (USA  $\alpha = .59$ , Australia  $\alpha = .55$ , UK  $\alpha =$

.68). Sample items include “I would prefer complex to simple problems” and “I only think as hard as I have to” (reverse-scored).

Psychological reactance. Four items were adapted from Lindsay (2005) to measure the extent to which participants experienced reactance after reading the speech (USA  $\alpha = .89$ , Australia  $\alpha = .90$ , UK  $\alpha = .94$ ). Participants rated the extent to which they experienced discomfort, dislike, and irritation in response to being told about how to think about the war in Afghanistan.

**Biographical information and speech transcript.** After completing the general measures of ideology and personality traits, participants read a brief biography of Osama bin Laden, which identified him as the founding leader of al-Qaeda and a terrorist. They then read excerpts from the speech transcript used in Study 1. The key points communicating the fear-based appeal were retained.

### **Responses to the Speech.**

Cognitive processing. After reading the speech transcript, participants were asked to complete a thought-listing exercise (see Giner-Sorolla & Chaiken, 1997; Petty, Briñol, & Tormala, 2002) designed to assess the extent to which they were focusing on the message (i.e., systematic processing) and the source (i.e., heuristic processing). Participants were instructed to list up to five thoughts that they had while reading the information about Bin Laden’s background and the transcript of his speech. A systematic processing score was calculated for each participant by dividing the number of thoughts they generated about the message by their total number of thoughts. Similarly, a heuristic processing score was calculated by dividing the number of thoughts generated about the source of the message by the total number of thoughts produced. Higher scores indicated greater systematic or heuristic processing.

Emotional responses. Using a 6-point scale (1 = not at all, 6 = extremely), participants indicated the extent to which they felt various emotions after reading the speech. As in Study 1, four items measured fear (USA  $\alpha = .91$ , Australia  $\alpha = .93$ , UK  $\alpha = .93$ ): scared, anxious, worried, and nervous. A single item again assessed anger at terrorists.

Support for policy responses. As in Study 1, participants indicated their support for various counter-terrorism policy responses using a response scale that indexed change relative to pre-speech beliefs ( $-4 =$  much less now than before reading the speech,  $0 =$  no change,  $+4 =$  much more now than before reading the speech). The measures developed in Study 1 were again used here: *support for own country's involvement in Afghanistan* (3 items; USA  $\alpha = .93$ , Australia  $\alpha = .98$ , UK  $\alpha = .94$ ), willingness to participate in activism to *protest own country's involvement in the war* (2 items; USA  $r[109] = .55$ ,  $p < .001$ ; Australia  $r[109] = .50$ ,  $p < .001$ ; UK  $r[106] = .57$ ,  $p < .001$ ), and support for Afghanistan war in general (2 items; USA  $r[108] = .45$ ,  $p < .001$ ; Australia  $r[109] = .48$ ,  $p < .001$ ; UK  $r[106] = .53$ ,  $p < .001$ ).

## Results

**Preliminary Analyses.** We first examined whether there were mean differences on any of the measures between the three countries. Descriptive statistics for each national sample are presented in Table 3. Overall, the samples reported similar means on most variables, with four exceptions. The British respondents reported lower national identification compared to the American and Australian samples. Compared to the Australian and British respondents, American respondents were more supportive of the Afghanistan war in general, and with respect to their own country's involvement. Relative to the Australians and the British, the Americans were also less willing to participate in activism to protest their country's involvement in the Afghanistan war.

**Predictors of Attitude Change.** Examination of the patterns of correlations between variables found no significant differences between the three countries. As such, the data from the three countries were combined to examine the predictors of support for the various policy responses.<sup>2</sup> Table 4 presents bivariate correlations between all variables.

As in Study 1, a series of hierarchical regression analyses was conducted with each policy response as the criterion variable. Participants' background characteristics—including gender, age, ethnicity, and vote in most recent federal elections—were entered at Step 1. Additional control variables were entered in Step 2, including national identification, need for cognition, reactance, and cognitive processing (systematic and heuristic). Lastly, emotional responses to the persuasion attempt were entered as predictors in Step 3, including fear and anger at terrorists. Statistics for all analyses are presented in Table 5.

*Support for own country in Afghanistan.* Participants' support for their own country's involvement in the Afghanistan war was predicted by three variables (see Table 5). First, gender and vote in recent election were significant predictors, such that men and conservative voters were significantly more likely to support their country's involvement in the Afghanistan war. In addition, fear was a significant predictor of decreased support. Consistent with Hypothesis 1, higher levels of fear predicted lower levels of support for participants' own country's involvement in the Afghanistan war.

*Willingness to participate in activism to protest own country's involvement in the war.* Only fear was a significant predictor of participants' willingness to participate in activism to protest their own government's involvement in the Afghanistan war (see Table 5). Providing support for Hypothesis 1, the more fear participants reported feeling, the more likely they were to engage in such protest activities.

*Support for Afghanistan war in general.* Gender and recent vote were significant predictors, such that men and those who voted for conservative candidates in the last election

were more likely to support the war in Afghanistan (see Table 5). In addition, fear was a predictor of increased support: as stated in Hypothesis 2, the more fear participants reported feeling in response to the persuasion attempt, the more likely they were to support the war in Afghanistan.

**Overall Levels of Influence.** A secondary question was to examine the overall extent to which the message was successful (or otherwise) in changing attitudes and behavioural intentions. A series of one-sample t-tests was conducted on each of the three policy responses to examine whether participants reported changes after reading the persuasion attempt. Each analysis was conducted separately for each country. Table 4 presents all descriptive statistics. Recall that the response scale ranged from  $-4$  (much less now than before reading the speech) to  $0$  (no change) to  $+4$  (much more now than before reading the speech).

Overall, the American participants appeared to be reacting against the message delivered in the speech. Respondents from the USA reported significantly more support for their country's involvement in the Afghanistan war after reading the speech than before,  $t(112) = 8.04, p < .001$ . Similarly, they reported significantly more support for the Afghanistan war in general,  $t(113) = 7.13, p < .001$ . These respondents also reported a significantly lower willingness to participate in anti-war activism activities,  $t(112) = -5.91, p < .001$ . In contrast, the message had no statistically reliable effect on attitudes and behavioural intentions among the Australian and the British participants (all  $p$ 's  $> .24$ ).

## Discussion

As in Study 1, there was evidence that fear and anger played distinct roles in explaining community samples' acceptance of, or resistance to, bin Laden's demand for troop withdrawal from Afghanistan. Consistent with Hypothesis 1, fear predicted lower levels of support for participants' own countries being involved in the Afghanistan war, as well as increased willingness to participate in activism to advocate this position. These attitudes and

action intentions reflect an increased agreement with the views expressed in the persuasion attempt and suggest an effort to accommodate bin Laden's demands. As stated in Hypothesis 2, fear also predicted higher levels of support for the Afghanistan war in general. Thus, there was again support for our view that fear motivates individuals to employ defensive aggression strategies that minimize the threat of terrorism while also limiting exposure to the negative consequences of non-compliance. In this way, fear may predict acquiescence to a terrorist, as well as efforts to challenge the broader threat of terrorism (i.e., "aggressive capitulation").

As in Study 1, anger at terrorists played no independent role in predicting attitude change (contrary to Hypothesis 3). Thus, we replicated the finding that anger in response to terrorist persuasion attempts has different political implications compared to anger about terrorism more generally (e.g., Sadler et al., 2006; Skitka et al., 2006). The difference in these patterns of findings may be explained by the distinct contexts assessed in the two lines of research. Previous research has directed participants to think about past terrorist attacks, which may make anger at those responsible for causing this illegitimate harm (i.e., terrorists) especially likely to shape attitudes and behavior. In contrast, the materials used in the present studies described future attacks, which may make other emotions more relevant in predicting political attitudes and behaviour. For instance, the threat of future attacks may make fear of loss especially potent in predicting support for the Afghanistan war and anti-war protest intentions. Indeed, recent work from the health communication literature indicates that anger is a weak predictor of persuasion when the message is framed in terms of loss (Gerend & Maner, 2011). Another possibility is that the threat of future attacks may make anger at those responsible for preventing this illegitimate harm (i.e., one's own government) especially potent.

Overall, there was no evidence that these participants were persuaded to adopt the views endorsed in the speech. British and Australian respondents reported no change in their support for counter-terrorism policies after reading the speech, nor did they report any change in their willingness to participate in anti-war activism. The American participants appeared to be reacting against the persuasion attempt; after reading the speech transcript, Americans reported being more supportive of the Afghanistan war, and less willing to participate in anti-war activism. This is in contrast to Study 1, where participants did report a shift in views consistent with the terrorist message. We return to this issue in the General Discussion.

### **General Discussion**

Terrorists regularly release messages threatening harm unless specific demands are met. Audiences around the world may gain direct access to such persuasion attempts on the Internet, or may encounter them in reports from mainstream media outlets. The present research examined Western citizens' responses to a terrorist message that is quite clearly separated from specific attacks: data collection occurred at least five years since the last major terrorist attack in each country. Thus, we were able to assess responses to the communicated threat that were relatively unaffected by individuals' (recalled) responses to prior attacks.

We have provided the first demonstration that emotions shape the extent to which Western citizens are persuaded by a message from an infamous terrorist like Osama bin Laden. More specifically, participants' fear was associated with submission to bin Laden's demand for troop withdrawal (i.e., decreased support for one's own country being involved in the Afghanistan war), but was also associated with rejection of this demand (i.e., increased support for the general Afghanistan war).

The present research provides the first empirical evidence for the role of fear in simultaneously predicting endorsement of both acquiescence and defensive aggression

strategy, a pattern we term “aggressive capitulation.” Our analysis explains this apparent contradiction by focusing on the different purposes served by these two protective strategies. Capitulation to terrorists’ specific demands (i.e., opposing one’s country’s involvement in the Afghanistan war) may serve to protect one’s country in the immediate future, whereas rejection of the broader general message (i.e., supporting the general Afghanistan war) signals defensive aggression to undermine their threats in the longer term. However, this defensive aggression strategy was supported only when its cost was minimal. Thus, we propose that additional factors such as perceived cost may shape the relationship between fear and responses to terrorist persuasion.

Our findings highlight the importance of emotion as a predictor of persuasion, beyond the effect of other standard predictors (e.g., evaluation of the argument or source). Fear also predicted support for counter-terrorism policies after controlling for background variables such as gender, age, ethnicity, and political party affiliation. The present research thus contributes to a growing literature highlighting the important role played by emotions in intergroup conflict (Bar-Tal, 2001; Halperin et al., 2011).

The present studies also indicate that individuals may be strategic in their responses to terrorist persuasion attempts, as they appeared to resist the demands only when it was safe for their group. This suggests that a cost-benefit analysis may at least partly underlie support of government policy, a view consistent with the resource mobilization framework of collective action (Klandermans & Oegema, 1987). The result is also consistent with the “free-rider” effect, whereby individuals desire a public good (i.e. security from terrorism) but are unwilling to shoulder the costs of contributing to the outcome. More generally, then, complex decision-making processes may be at work when individuals determine how they wish to respond to instances of intergroup conflict.

Using these results, governments and policy scholars may better understand and interpret poll results in the aftermath of terrorist messages. Our findings may also help inform interventions. For instance, policy makers who understand the factors that shape citizens' policy attitudes are better positioned to develop effective counter-terrorism education initiatives.

### **Limitations and Future Directions**

Our two studies revealed nearly identical results in showing fear to be an important predictor of persuasion. However, there was less consistency in the extent to which participants reported being persuaded by bin Laden's message. Australian undergraduate students (Study 1) reported increased agreement with the positions outlined in the message, but such persuasion was not evident among the community samples in Study 2. One explanation for these differences may be the gender composition of the samples. Study 2 showed gender to be a significant predictor of support for the Afghanistan war, with men being more likely to support the war than were women. Study 1 participants were mostly women (74%) whereas the samples in Study 2 included a more even gender split (US = 41% women; Australia = 46% women; UK = 47% women). A second explanation may be the relative youth and political inexperience of the student sample in Study 1, compared to the adult samples recruited for Study 2. Future work should establish the reliability of these differences in agreement levels, and investigate their underlying causes.

A potential limitation of the present research concerns the breadth of the dependent variables that were measured. Both studies examined the impact of terrorist persuasion on individuals' political attitudes (i.e., support for various counter-terrorism measures) and willingness to participate in protest action. Other relevant measures of citizenship behaviours were not included, such as voting preferences. Such behaviours are important should certainly be assessed in future research. However, we note that political attitudes and specific

protest intentions are good predictors of more general citizenship behaviours, such as voting and discussing the issue with others (see Krosnick, Visser, & Harder, 2010).

Another aspect of the present research that requires some attention is the measurement of the dependent variables. We investigated the short-term impact of terrorist persuasion by using a response scale designed to index change in one session. We chose this approach because it was sufficient to examine the factors that predict individuals' responses to terrorist persuasion. Indeed, one advantage is that it enabled us to assess participants' responses to the persuasion attempt without drawing direct attention to their initial attitudes at the start of the study. A second advantage is that it facilitated the efficient use of large national samples to address our research question. We acknowledge, however, that this approach limits our ability to draw firm conclusions regarding causality. As such, the present findings represent a first step towards understanding Western citizens' responses to terrorist persuasion.

Additional empirical studies are needed to provide converging evidence for our analysis. For instance, longitudinal research could examine whether terrorist messages exert a powerful influence over a period of time, using pre and post measures of attitude change.

Another question concerns the extent to which our findings are specific to the context in which we conducted this research: communications from an infamous terrorist delivered more than 5 years after the most recent successful terrorist attack. What if a terrorist message were delivered within a few months after a terrorist attack? Or if such demands and threats were made by a lesser-known terrorist? In both cases, we suspect that the content and tone of the message would be interpreted quite differently, with important implications for emotional and political responses. Future work should investigate this further.

Lastly, future research might examine the medium in which terrorist persuasion attempts are delivered. Participants in our studies read a translated transcript of a speech by Osama bin Laden as it was presented in newspapers and on the Internet. However, it is also

possible to access audio or video recordings of these on the Internet or on television programs. It is likely that the specific medium would shape individuals' emotional responses (see Cho, Boyle, Keum, Shevy, McLeod, Shah, & Pan, 2003). On the one hand, hearing or viewing the delivery of a terrorist persuasion attempt may make the threat more salient, which would then elicit more intense emotional responses. On the other hand, reading a transcript of this terrorist message may provide more of an opportunity to reflect and analyse the content of the message, and may then result in more considered responses. Future work should explore these possibilities.

More generally, the presentation of a terrorist message within the context of a research study is also likely to shape participants' responses. This poses an interesting challenge for researchers: how might we assess responses to terrorism in an unobtrusive manner, while still maintaining ethical standards? The methodological issues involved in studying terrorism have started to be considered (e.g., Mintz & Brule, 2009), but clearly more work could be done.

## **Conclusions**

The present research demonstrates that citizens of Western countries may be persuaded to agree with positions outlined by enemy terrorists. Our findings also show the strategic ways in which such agreement is expressed. Elucidating the role of emotions in this process can help us understand how people experience such persuasion attempts in the context of intergroup conflict. The findings also identify (some) determinants of political attitudes and behaviour that could influence government policy, and may aid in the development of effective counter-terrorism education strategies.

## References

- Bar-Tal, D. (2001). Why does fear override hope in societies engulfed by intractable conflict, as it does in Israeli society? *Political Psychology*, 22, 601-627.
- Brehm, J. (1966). *A theory of psychological reactance*. NY: Academic Press.
- Bruner, J.S., & Fowler, G. (1941). The strategy of terror. *Journal of Abnormal and Social Psychology*, 36, 561-574.
- Cacioppo, J.T., Petty, R.E., & Morris, K.J (1983). Effects of need for cognition on message evaluation, recall, and persuasion. *Journal of Personality and Social Psychology*, 45, 805-818.
- Cacioppo, J.T., Petty, R.E., & Kao, C.F. (1984). The efficient measurement of need for cognition. *Journal of Personality Assessment*, 48, 306-307.
- Carver, C.S., & Harmon-Jones, E. (2009). Anger is an approach-related affect: Evidence and implications. *Psychological Bulletin*, 135, 183-204.
- Cesario, J., Plaks, J.E., Hagiwara, N., Navarrete, C.D., & Higgins, E.T. (2010). The ecology of automaticity: How situational contingencies shape action semantics and social behavior. *Psychological Science*, 21, 1311-1317.
- Cho, J., Boyle, M.P, Keum, H., Shevy, M.D., McLeod, D.M., Shah, D.V., & Pan, Z. (2003). Media, terrorism, and emotionality: Emotional differences in media content and public reactions to the September 11<sup>th</sup> terrorist attacks. *Journal of Broadcasting & Electronic Media*, 47, 309-327.
- Crano, W.D., & Prislin, R. (2006). Attitudes and persuasion. *Annual Review of Psychology*, 27, 345-374.
- De Hoog, N., Stroebe, W., & De Wit, J.B.F. (2007). The impact of vulnerability and severity of a health risk on processing and acceptance of fear-arousing communications: A meta-analysis. *Review of General Psychology*, 11, 258-285.

De la Baume, M. (2010, October 27). New bin Laden tape threatens France. *New York Times*.

Retrieved from [http://www.nytimes.com/2010/10/28/world/europe/28osama.html?\\_r=1&scp=2&sq=Osama%20bin%20Laden&st=cse](http://www.nytimes.com/2010/10/28/world/europe/28osama.html?_r=1&scp=2&sq=Osama%20bin%20Laden&st=cse).

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology*, 31, 410-436.

Fiske, S.T., Cuddy, A.J.C., Glick, P.S., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902.

Frijda, N.H., T. Kuipers, & E. ter Shure. 1989. Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology* 57: 212-243.

Gallup Poll (2013, 9 May). Terrorism in the United States. Retrieved from

<http://www.gallup.com/poll/4909/Terrorism-United-States.aspx>

Gerend, M.A., & Maner, J.K. (2011). Fear, anger, fruits, and veggies: Interactive effects of emotion and message framing on health behavior. *Health Psychology*, 30, 420-423.

Giner-Sorolla, R., & S. Chaiken. (1997). Selective use of heuristic and systematic processing under defense motivation. *Personality and Social Psychology Bulletin* 23: 84-97.

Giner-Sorolla, R., & Maitner, A. T. (2013). Angry at the unjust, scared of the powerful: Emotional responses to terrorist threat. *Personality and Social Psychology Bulletin*, 39, 1069-1082.

Halperin, E., A.G. Russell, C.S. Dweck, and J.J. Gross. 2011. Anger, hatred, and the quest for peace: Anger can be constructive in the absence of peace. *Journal of Conflict Resolution* 55: 274-291.

Hovland, C.I., Janis, I.L., & Kelly, H.H. (1953). *Communication and persuasion*. New Haven: Yale University Press.

- Iyer, A., Webster, J., Hornsey, M.J., & Vanman, E.J. (in press). Understanding the power of the picture: The effect of image content on emotional and political responses to terrorism. *Journal of Applied Social Psychology*.
- Jowett, G.S., & O'Donnell, V. (2012). *Propaganda & persuasion*. Thousand Oaks, CA: Sage.
- Klandermans, B., & Oegema, D. (1987). Potentials, networks, motivations, and barriers: Steps towards participations in social movements. *American Sociological Review*, 52, 519–531.
- Krosnick, J. A., Visser, P. S., & Harder, J. (2010). The psychological underpinnings of political behaviour. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of Social Psychology*, Vol. 2 (5<sup>th</sup> ed.) (pp. 1288-1342). Hoboken, NJ: John Wiley & Sons.
- Lazarus, R.S. (1991). *Emotion and adaptation*. New York: Oxford University Press.
- Lerner, J.S., Gonzalez, R.M., Small, D.A., & Fischhoff, B. (2003). Effects of fear and anger on perceived risks of terrorism: A national field experiment. *Psychological Science*, 14, 144-150.
- Mackie, D.M., Devos, T., & Smith, E.R. (2000). Intergroup emotions: Explaining offensive action tendencies in an intergroup context. *Journal of Personality and Social Psychology*, 79, 602-616.
- Miller, D.A., Cronin, T., Garcia, A.L., & N.R. Branscombe, N.R., (2009). The relative impact of anger and efficacy on collective action is affected by feelings of fear. *Group Processes & Intergroup Relations*, 12, 445-462.
- Mintz, A., & Brule, D. (2009). Methodological issues in studying suicide terrorism. *Political Psychology*, 30, 365-371.

- Petty, R.E., Briñol, P., & Tomala, Z.L. (2002). Thought confidence as a determinant of persuasion: The self-validation hypothesis. *Journal of Personality and Social Psychology*, 82, 722-741.
- Reid, E.F., & Chen, H. (2007). Mapping the contemporary terrorism research domain. *International Journal of Human-Computer Studies*, 656, 42-56.
- Sadler, M.S., Lineberger, M., Correll, J., & Park, B. (2006). Emotions, attributions, and policy endorsement in response to the September 11<sup>th</sup> terrorist attacks. *Basic and Applied Social Psychology*, 27, 249-258.
- Sandler, T. (2010). Terrorism and policy: An introduction. *Journal of Conflict Resolution*, 54, 203-213.
- Schmid, A. (2005). Terrorism as psychological warfare. *Democracy and Security*, 1, 137-146.
- Shoshani, A., & Slone, M. (2008). The drama of media coverage of terrorism: Emotional and attitudinal impact on the audience. *Studies in Conflict & Terrorism*, 31, 627-640.
- Skitka, L.J., Bauman, C.W., Aramovich, N. P., & Morgan, G.S. (2006). Confrontational and preventative policy responses to terrorism: Anger wants a fight and fear wants “them” to go away. *Basic and Applied Social Psychology*, 28, 375-384.
- Spanovic, M., Lickel, B., Denson, T.F., & Petrovic, B. (2010). Fear and anger as predictors of motivation for intergroup aggression: Evidence from Serbia and Republika Srpska. *Group Processes & Intergroup Relations*, 13, 725-739.
- Stenstrom, D.M., Lickel, B., Denson, T.F., & Miller, N. (2008). The roles of ingroup identification and outgroup entitativity in intergroup retribution. *Personality and Social Psychology Bulletin*, 34, 1570-1582.

## Footnotes

<sup>1</sup>Study 1 originally included two experimental manipulations: vulnerability to terrorist attack (low vs. high) and response context (public vs. private). There were no significant (independent or interactive) effects of these factors on the key measures. Associations between variables were also similar in all conditions. All analyses are thus reported for the entire sample.

<sup>2</sup>Analyses conducted separately for each sample revealed identical sets of significant predictors, and virtually identical regression coefficients. Including country as a predictor in the regression analyses does not alter the results.

**TABLE 1**

Descriptive Statistics and Bivariate Correlations: Study 1

Measure	Mean (SD)	Bivariate Correlations						
		1	2	3	4	5	6	7
1. bin Laden: Competence	5.29 (1.14)							
2. bin Laden: Honesty	3.33 (1.25)	<b>.47*</b>						
3. Fear	1.54 (1.22)	.07	-.18					
4. Anger at terrorists	3.83 (1.36)	<b>.22*</b>	-.15	.09				
5. Support own nation in Afghanistan war	-0.82 (1.39)	-.13	-.16	<b>-.36*</b>	.01			
6. Protest own nation in Afghanistan war	0.43 (1.07)	.03	.04	<b>.25*</b>	-.04	<b>-.24*</b>		
7. Support for general Afghanistan war	-0.33 (1.27)	.17	-.03	<b>.22*</b>	<b>.19*</b>	<b>.36*</b>	<b>-.37*</b>	

Note. \*  $p < .05$  All scores are positively worded such that higher scores represent higher levels of the construct as labelled.

**TABLE 2**

Hierarchical Multiple Regression Analyses Predicting Support for Policy Responses: Study 1

	Support own country in Afghanistan war		Protest own country in Afghanistan war		Support general Afghanistan war	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
<b>STEP 1: Controls</b>	<b>.03</b>		<b>.00</b>		<b>.04</b>	
Bin Laden: Competence		-.05		-.01		-.06
Bin Laden: Honesty		-.15		.05		-.17
<b>STEP 2: Emotions</b>	<b>.16*</b>		<b>.26**</b>		<b>.10*</b>	
Fear		<b>-.24*</b>		<b>.31**</b>		<b>.23*</b>
Anger at terrorists		.03		-.16		.14
<b>Total R<sup>2</sup></b>	<b>.16*</b>		<b>.26**</b>		<b>.14*</b>	

Note: \*p &lt; .05 \*\*p &lt; .01

**TABLE 3.**  
Descriptive statistics by country, Study 2.

Measure	Mean (Standard Deviation)		
	USA	Australia	UK
National Identification	6.25 <sub>a</sub> (0.87)	6.11 <sub>a</sub> (1.22)	5.49 <sub>b</sub> (1.37)
Need for Cognition	4.41 <sub>a</sub> (0.93)	4.27 <sub>a</sub> (1.04)	4.22 <sub>a</sub> (0.99)
Reactance	4.66 <sub>a</sub> (1.89)	4.78 <sub>a</sub> (2.02)	4.81 <sub>a</sub> (1.81)
Systematic Processing	0.38 <sub>a</sub> (0.34)	0.36 <sub>a</sub> (0.34)	0.34 <sub>a</sub> (0.37)
Heuristic Processing	0.51 <sub>a</sub> (0.35)	0.48 <sub>a</sub> (0.37)	0.52 <sub>a</sub> (0.39)
Fear	3.32 <sub>a</sub> (1.40)	3.20 <sub>a</sub> (1.57)	3.23 <sub>a</sub> (1.50)
Anger at Terrorists	5.54 <sub>a</sub> (0.86)	5.35 <sub>a</sub> (1.16)	5.36 <sub>a</sub> (1.17)
Support Country in Afgh. War	1.64 <sub>a</sub> (2.04)	0.00 <sub>b</sub> (2.67)	-0.13 <sub>b</sub> (2.34)
Protest Country in Afgh. War	-1.45 <sub>a</sub> (2.04)	0.06 <sub>b</sub> (2.26)	-0.49 <sub>b</sub> (1.91)
Support General Afgh. War	1.40 <sub>a</sub> (1.95)	-0.24 <sub>b</sub> (2.07)	0.06 <sub>b</sub> (2.03)

Note. Means that do not share the same subscript are significantly different at  $p < .05$ .  
All scores are positively worded such that higher scores represent higher levels of the construct as labelled

**TABLE 4.**

Overall Descriptive Statistics and Bivariate Correlations, Study 2

Measure	Mean (SD)	Bivariate Correlations								
		1	2	3	4	5	6	7	8	9
01. National Identification <sup>a</sup>	5.91 (1.25)	-								
02. Need for Cognition <sup>a</sup>	4.28 (0.97)	.09	-							
03. Reactance <sup>a</sup>	4.73 (1.87)	<b>.12*</b>	-.11	-						
04. Systematic Processing <sup>b</sup>	0.36 (0.35)	.03	-.01	-.03	-					
05. Heuristic Processing <sup>b</sup>	0.50 (0.36)	.07	-.03	.06	<b>-.70**</b>	-				
06. General Fear <sup>c</sup>	3.23 (1.50)	<b>.20**</b>	<b>-.12*</b>	<b>.26**</b>	.07	.01	-			
07. Anger at Terrorists <sup>c</sup>	5.33 (1.17)	<b>.40**</b>	.02	<b>.19**</b>	-.03	.11	<b>.31**</b>	-		
08. Supp. Country in Afgh. War <sup>d</sup>	0.48 (2.48)	<b>.27**</b>	.01	.01	-.10	<b>.19**</b>	<b>-.28**</b>	<b>.12*</b>	-	
09. Protest Country in Afgh. War <sup>d</sup>	-0.55 (2.15)	-.07	-.02	.10	.05	-.06	<b>.33**</b>	-.08	<b>-.46**</b>	-
10. Support Gen'l Afgh. War <sup>d</sup>	0.40 (2.08)	<b>.20**</b>	.04	.00	-.09	<b>.18**</b>	<b>.33**</b>	-.03	<b>.80**</b>	<b>-.60**</b>

NOTE. \*  $p < .05$ , \*\*  $p < .01$ <sup>a</sup>Scores ranged from 1 to 7; higher numbers indicate greater agreement.<sup>b</sup>Scores ranged from 0 to 1; higher numbers indicate higher levels of systematic or heuristic processing.<sup>c</sup>Scores ranged from 0 to 6; higher numbers indicate increased emotion.<sup>d</sup>Scores ranged from -4 to +4; positive numbers indicate greater agreement after reading speech.

**TABLE 5**  
Hierarchical Multiple Regression Analyses Predicting Support for Policy Responses, Study 2

	Support own country in Afghanistan war		Protest own country in Afghanistan war		Support general Afghanistan war	
	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$	$\Delta R^2$	$\beta$
<b>STEP 1: Background Variables</b>	<b>.11**</b>		<b>.05**</b>		<b>.13**</b>	
Gender (female = 0, male = 1)		<b>-.19**</b>		.07		<b>-.21**</b>
Age		.01		-.10		.05
Ethnicity		.04		-.06		.02
Recent Vote (right-wing = 0, left-wing = 1)		<b>-.20**</b>		.10		<b>-.19**</b>
<b>STEP 2: Controls</b>	<b>.07**</b>		<b>.01</b>		<b>.04</b>	
National Identification		.05		.02		.00
Need for Cognition		-.01		.00		.02
Reactance		-.05		.08		-.02
Systematic Processing		-.01		.05		-.01
Heuristic Processing		.00		.05		.04
<b>STEP 3: Emotions</b>	<b>.14**</b>		<b>.14**</b>		<b>.14**</b>	
Fear		<b>-.23**</b>		<b>.28**</b>		<b>.27**</b>
Anger at terrorists		.07		-.11		.04
<b>Total R<sup>2</sup></b>	<b>.30**</b>		<b>.21**</b>		<b>.30*</b>	

\*p < .05, \*\*p < .01