

How Does Ingroup Directed Anger Promote Collective Action?

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## Abstract

The current research investigated the implications of ingroup transgressions on identity threat, ingroup directed anger, and collective action about ingroup transgressions. It also considered the moderating role played by national identification. In four studies, participants' group identity was threatened with the presentation of an ingroup transgression (description of US abuse at Guantanamo Bay). Participants were then given the opportunity to engage in various forms of collective action such as writing a letter to their congressmen and donating money to an organization working to close Guantanamo Bay. In all three studies where the manipulation was successful, ingroup directed anger fully mediated the relationship between identity threat and collective action, supporting the hypothesis that ingroup directed anger is an important emotional driver of collective action in response to ingroup transgressions. These studies also demonstrated that conventional attachment with its high levels of glorification is a significant impediment to ingroup directed anger and collective action. On the other hand, critical attachment, attachment without glorification, can actually be an important variable in promoting collective action and does not impede the experience of ingroup directed anger. In sum, these studies demonstrate that anger about ingroup transgressions can be a powerful motivator of collective action to correct these transgressions, but national identification can both help and hinder this process.

*Keywords: ingroup directed anger, collective action, national identification, ingroup transgressions.*

### How Does Ingroup Directed Anger Promote Collective Action?

Improving intergroup relations has always been central to social psychology, and reducing stereotypes, prejudice, and discrimination has often been the dominant strategy (Wright, 2009). However, the study of collective action provides another way psychology can contribute to improving intergroup relations (Wright, 2009). Collective action has been defined as any action taken by a group member as a representative of the group as a whole (Wright, Taylor, & Moghaddam, 1990). In addition, traditional definitions stipulate that collective action is aimed at improving the status of the ingroup (Wright, 2009), which limits collective action to actions by low-status groups to improve their status. Recently, researchers have expanded the definition of collective action to include action by members of a privileged group to improve the treatment of a lower status group or confront actions of their own group that harm other groups (Wright, 2009). Understanding why members of a high status group become willing to engage in collective action is particularly important because a high status group has inherently more power to produce meaningful social change (Mallet, Hunstinger, Sinclair, & Swim, 2008; Sidanius & Pratto, 1999; Smith & Tyler, 1996).

Because early research focused on collective action to improve the status of one's own disadvantaged group it primarily considered action that aimed to change an existing social inequality (Iyer, Schamder, & Lickel, 2007). However, research has begun to consider what motivates citizens of democratic nations to protest perceived transgressions of their national group against an outgroup (Leidner, Castano, Zaiser, & Giner-Sorolla, 2010; Iyer, et al., 2007). This research focused on the specific context of collective action about ingroup transgressions. Iyer, et al. (2007) showed that ingroup transgressions threaten the positive identity of the ingroup, which leads to ingroup critical emotions and collective action intentions. Other researchers have

also investigated the role of national identification in the experience of ingroup critical emotions, particularly guilt (Roccas Klar, & Lavitan, 2006; Doosje, Brnscombe, Spears, & Manstead, 1999), and the motivation to restore justice after ingroup transgressions (Leidner, et al., 2010).

The current research aims to expand on this body of literature in two main ways. First, we measure collective action directly instead of collective action intentions. Most research has examined collective action intentions, not actual collective action because of the obvious difficulties quantifying collective action in a laboratory setting. Second, while ingroup directed anger has emerged as the key emotion driving collective action about ingroup transgressions (Van Zomeren, et al., 2011; Iyer, et al., 2007), there is little research examining the effect of national identification on the experience of ingroup directed anger. Thus, this research examines the effects of various types of national identification on anger and collective action about an ingroup transgression.

### **Ingroup Transgressions and National Identity Threat**

People derive part of their self-concept, their social identity, from the identity of the groups to which they belong and are thus motivated to maintain a positive and distinct ingroup identity (Tajfel & Turner, 1979). Ingroup transgressions, actions undertaken by the ingroup that are perceived as detrimental or illegitimate, threaten this positive group identity (Branscombe, Ellemers, Spears, & Doosje, 1999). Examples include US abuse of prisoners at Abu Ghraib and Guantanamo Bay, or acts of group level discrimination. While ingroup transgressions are inherently threatening to positive group identity, attribution of the transgression's cause can determine how threatening (Rabinovich & Morton, 2010; Iyer, et al., 2007).

If an ingroup transgression is attributed to situational factors it is less likely to be threatening to the groups identity (Iyer, et al., 2007). Situational attribution leads the perception

of an isolated event that is unlikely to be repeated (Gold & Weiner, 2000) and thus does not reflect the group's character. This is in keeping with the general attribution literature that people prefer to make external attributions for failures or mistakes in order to help preserve their positive identity (McFarland & Ross, 1982; Miller & Ross, 1975). The same self-serving bias is evident in group-members attributions about their ingroup (Maass, Ceccarelli, & Rudin, 1996; Taylor & Jaggi, 1974), and situational attributions are one way that group members justify or rationalize ingroup transgressions (Roccas, et al., 2006; Doosje & Branscombe, 2003).

Stable internal attributions make ingroup transgressions more threatening to group identity (Iyer, et al., 2007). They imply that similar transgressions could occur in the future (Gold & Weiner, 2000) and reflect the group's character (Liu, Karasawa, & Weiner, 1992). Stable internal attributions about ingroup transgressions have been shown to elicit more perceived threat to the group's image, as well as ingroup directed anger and shame (Iyer, et al., 2007). In addition, Rabinovich and Morton (2010) demonstrated that outgroup criticism of the ingroup containing stable internal attributions elicited more action than external attributions. In sum, research has shown that ingroup transgressions threaten a group's positive identity, particularly when attributed to stable internal characteristics of the group.

### **Ingroup Transgressions, Emotions, and Collective Action**

Prior research also investigated the effect of ingroup transgressions on group critical emotions such as collective guilt, shame, and ingroup directed anger. Until recently this literature focused on collective guilt as an emotion that might drive collective action about ingroup transgressions. Collective guilt is guilt experienced for deeds that one did not directly commit, but because one is associated with the perpetrators by virtue of group membership (Wohl & Branscombe, 2008; Roccas, Klar, & Livitan, 2006, Doosje, et al., 1999). Collective guilt can be

experienced when people perceive that their group committed wrongs against another group (Branscombe & Miron, 2004). Several studies have demonstrated that collective guilt predicts support for compensatory action (Gunn & Wilson, 2011; Doosje et al., 1999), and leads to a desire to repair harm done by their group (Lickel et al., 2005; Doosje et al., 1999). However, recent research suggests that collective guilt is not the best motivator of collective action, because guilt is a passive and self-reflective emotion (Frijda, 1993; Roseman et al., 1994), and therefore may not drive people to action.

Since collective guilt is not a highly active emotion, research examined other emotions with higher action-tendencies such as shame and anger. Action tendencies are rooted in the functionalist approach to emotion, which conceives of emotions as states that prepare the body to engage in situationally relevant behaviors (Lazarus, 1991). Both collective guilt and shame are elicited by appraisals of responsibility for wrongs committed by the group (Johns, Schmader, & Lickel, 2005, Lazarus, 1991), but shame, unlike guilt, is associated with appraisal of identity threat (Piff, Martinez, & Keltner, 2012; Lickel, et al., 2005; Niedenthal, Tangney, & Gavanski, 1994), and higher action tendencies than guilt (Tangney, Wagner, Fletcher, Gramzow, 1992; Lazarus, 1991). Specifically, shame leads to action tendencies to withdraw from or hide the shame-inducing situation. As a result, shame has been successfully linked to collective action tendencies to withdraw from a situation where an ingroup transgression occurred (e.g. supporting U.S. withdrawal from Iraq), but it does not usually predict other forms of collective action (Iyer, et al., 2007; Lickel, et al., 2006).

Anger is also a highly active emotion, and should also be elicited by ingroup transgressions. Researchers have identified the obstruction of a goal as one of the key appraisals that lead to anger (Berkowitz, 2010; Kuppens, et al., 2003; Ellsworth & Tong, 2003; Ellsworth &

Smith, 1998; Lazarus, 1991). Further, some researchers have specified that this goal obstruction must result in a slight or injury to one's self and identity to elicit anger (Hutcherson & Gross, 2011; Batson, Chao, & Givens, 2009; Lazarus, 1991). Some researchers have also argued that appraisals of moral violations and unfairness can also lead to anger (Halperin & Gross, 2011; Kuppens et al., 2003; Rozin, Lowery, Imada, & Haidt, 1999, Montada & Schneider, 1989), while others argue that this "moral outrage" does not occur unless the self or identity is threatened in some way (O'Mara, Jackson, Batson, & Gaertner, 2011; Batson, et al., 2009; Batson, et al., 2007). However, because ingroup transgressions are both violations of moral standards and threatening to one's identity they are likely to induce anger.

Anger also has a high action tendency, and has been characterized as an approach, emotion (Frijda, 1993; Lazarus, 1991). Specifically, anger has an antagonistic action tendency, and motivates people to move against the target of their anger (Kuppens, Van Mechelen, Smits, & De Boeck, 2003; Frijda, 1993; Lazarus, 1991; Ellsworth & Smith, 1988). This action tendency can take many forms: desiring to attack the anger target (Berkowitz, 2010), expressing opposition to others (Kuppens et al., 2003), and correcting the behavior of the anger target (Halperin, Russell, Dweck, & Gross, 2011). Since anger has a high action tendency, researchers theorized that it might be a better motivator of collective action about ingroup transgressions.

Indeed, numerous studies have shown that ingroup directed anger is the primary emotion involved in driving collective action about ingroup transgressions. Collective guilt does not independently predict compensatory actions when controlling for ingroup directed anger (Iyer, et al., 2007; Leach, Iyer, & Pederson, 2006; Iyer, 2004). Iyer (2004) found that collective guilt predicted compensatory action tendencies, but ingroup directed anger was a reliably stronger predictor of both compensatory and confrontational action tendencies. Leach, Iyer, and Pederson

(2006) found similar results, except that collective guilt did not predict any action tendencies when ingroup directed anger was in the model. In addition, Iyer et al. (2007) demonstrated that ingroup directed anger was a predictor of not only compensatory action intentions, but also action intentions to confront responsible parties, and withdraw from the harmful situation, while shame only predicted withdrawal action intentions, and guilt did not predict any action tendencies. Together, these studies indicate that ingroup directed anger is the primary emotion involved in motivating collective action about ingroup transgressions.

### **Identification, Emotions and Collective Action**

While research has shown that ingroup directed anger is the key emotional driver of collective action, more research is needed to understand how national identification might moderate when ingroup-directed anger leads to collective action. Earlier research examined the relationship of national identification with collective guilt and found a somewhat paradoxical relationship (Roccas, et al., 2006, Doosje, Branscombe, Spears, & Manstead, 1998). Because collective guilt is based on feeling responsible for negative actions of the ingroup (that one did not personally commit), some identification with the ingroup is necessary in order to feel this “guilt by association” (Branscombe et al., 2002; Doosje et al., 1998). However, strong identification with the ingroup also makes recognition of their ingroup’s negative actions less likely because of one’s need to maintain a positive group identity (Branscombe et al., 2002; Tajfel & Turner, 1979). This led to inconsistent results, where sometimes high identifiers displayed more guilt and other times low identifiers displayed more guilt.

Roccas, et al. (2006) resolved this paradox by using a two-dimensional conceptualization of national identification. They combined a number of earlier perspectives on bimodal identification (Adorno, Frankel-Brunswik, Levinson, & Sanford, 1950; Kosterman &



Feshbach, 1989; Staub, 1997; Triandis and Gelfand; 1998) to formulate a new two-dimensional model of national identification: attachment and glorification. Attachment refers to identification that involves defining oneself by one's group membership and extending one's self-concept to include the group. On the other hand, glorification is based on the belief that one's group is superior to others. Because glorification emphasizes the group's superiority, high glorifiers often employ defensive strategies, such as dehumanization of the outgroup and exonerating cognitions, to avoid recognizing ingroup transgressions (Leidner, et al., 2010; Roccas, et al., 2006)

These dimensions co-occur and are often highly correlated. Thus, Roccas, et al. (2006) termed high levels of attachment with concurrent high levels of glorification, conventional attachment, since this was the most common form of attachment. On the other hand, high attachment but low glorification was termed critical attachment because people who displayed this type of identification were committed to the group but willing to criticize it in order to correct its faults. Almost all participants who displayed low attachment usually also displayed low glorification, although there were a few cases of high glorification with low attachment.

This bimodal conceptualization of national identification helped resolve the paradox of collective guilt. Roccas, et al. (2006), demonstrated that glorification was negatively correlated with collective guilt, while attachment was not. Further, through an experimental manipulation they induced conventional attachment in one group and critical attachment in the other. The critical attachment group exhibited significantly more collective guilt than the conventional attachment group. While it is reasonable to assume that national identification would have a similar relationship with ingroup directed anger and collective action, this may not be the case.

Identification with the ingroup is not as important for ingroup directed anger as for collective guilt. The experience of collective guilt, as guilt by association, necessitates

attachment with the group. It is less clear if ingroup directed anger is predicated on attachment with the ingroup. Theorists who see self-involvement as a requirement for anger would argue that attachment is required to feel threatened and thus angered by group transgressions. Others would argue that it is possible to feel moral outrage over group transgressions even if attachment is low. While attachment's relationship with ingroup directed anger may differ from its relationship with collective guilt, there is no theoretical reason why the glorification would have different relationships with these variables. The defensive mechanisms triggered by glorification should prevent the experience of ingroup directed anger along with guilt. So while it is likely that people with conventional attachment (high attachment and glorification) would not experience ingroup directed anger in response to ingroup transgressions, it is unclear whether people with low (low attachment and glorification) or critical attachment (high attachment and low glorification) will experience more ingroup directed anger.

It is likely that identification's effect on collective action would follow the same pattern as its effect on ingroup directed anger. Conventional attachers will not engage in collective action because they would not be angered by ingroup transgressions. If low attachers feel more ingroup directed anger they will engage in more collective action, but if critical attachers feel more ingroup directed anger then they will engage in more collective action. However, it is possible that those with critical attachment might be more motivated to engage in action regardless of which group displays more ingroup directed anger. Because those with critical attachment are highly attached to the group, they may be more motivated to correct ingroup transgressions that threaten their positive group identity.

Therefore in the following studies, we examine the relationships between identity-threatening ingroup transgressions, ingroup directed anger, and collective action about ingroup

transgressions. We also consider the role played by conventional, critical, and low attachment in determining these relationships.

### Study 1

The first study examined these relationships in the context of American abuses at the Guantanamo Bay Detention Center. This context was chosen to maximize the realism of the study, as policy regarding Guantanamo is still debated in the United States. After completing the scales measuring attachment and glorification, participants read a short news article describing abuse of prisoners at Guantanamo by American soldiers. The article either made an external attribution for these actions (e.g. they were necessitated by the war on terror) termed the low threat condition or an internal attribution (they reflected American's moral degeneracy and lack of respect for others) termed the high threat condition. After reading the article, participants completed scales measuring ingroup directed anger, and other group-based emotions and appraisals. Next, participants were given the opportunity to engage in collective action by completing an optional survey about Guantanamo that would be provided to their congressmen, writing a letter to their congressmen, and providing their email to organizations working to close Guantanamo and provide legal rights to the detainees there.

First, it was hypothesized that participants in the high identity threat condition would feel more ingroup directed anger and engage in more collective action. In addition, based on the research indicating that anger is the primary emotional motivator of collective action, it was hypothesized that anger would mediate the relationship between the identity threat condition and collective action. Concerning the role of national identification, it was hypothesized that participants with conventional attachment (high attachment and glorification) would feel less ingroup directed anger and thus engage in less collective action. While it was less clear whether

participants with critical attachment (high attachment and low glorification) or low attachment (low attachment and low glorification) would feel different levels of ingroup directed anger, it was hypothesized that participants with critical attachment would engage in more collective action because they might be more motivated to restore the groups positive identity. Lastly, because conventional attachment should prevent the experience of ingroup directed anger, it was hypothesized that identification type might moderate the relationship between identity threat and ingroup directed anger. While all participants should feel low levels of ingroup directed anger in the low threat condition, in the high threat condition only participants with critical and low attachment should feel higher levels of ingroup directed anger.

## **Method**

### **Participants**

Through Amazon's Mechanical Turk (MTurk) 183 (104 women, 79 men,  $M_{age} = 36.49$  years) American residents were recruited to participate in this study. Participants were paid 50 cents for completing the study. Buhrmester, Kwang, and Gosling (2011) and Johnson and Borden (2012) have both demonstrated the reliability of data collected with MTurk. 14 participants were excluded because they did not pay sufficient attention to the study (indicated by the fact that spent less than 30 seconds reading the manipulation article and answered a number of questions they were asked to leave blank) from analysis. This left a sample of 169 participants (80 men, 89 women,  $M_{age} = 37.99$  years, 84.6 % White, 6.7 % African American, and 8.7% other). While a moderate amount of the sample was excluded from analysis, this is not uncommon for online studies (Gosling, Vazire, Srivastava & John, 2004).

### **Procedure**

Participants first completed the Ten-Item PANAS, followed by a scale measuring national identification. They were then randomly assigned to read either a high or low identity threat news article. After reading the article, they completed scales measuring ingroup directed anger, various appraisals, shame, and guilt. Participants were then given the opportunity to participate in various forms of collective action. Lastly, participants completed the Ten-Item PANAS again, followed by a quiz checking their comprehension of the article and a demographics questionnaire. Participants were then debriefed.

### **Materials and Measures**

**Ten-Item Positive and Negative Affect Schedule.** This shortened version of the Positive and Negative Affect Schedule (see Appendix A) was developed by Mackinnon, Jorm, Christensen, Korten, Jacomb, and Rodgers (1999) and consists of five positive words (*alert, inspired, determined, attentive, and active*) and five negative words (*upset, hostile, ashamed, nervous, and afraid*). Participants were asked to rate the degree to which they felt each emotion at that moment on a 5-point Likert scale ranging from “very slightly or not at all” to “extremely.” Both the positive (Cronbach’s  $\alpha = .83$ ) and negative (Cronbach’s  $\alpha = .90$ ) affect scales displayed good reliability in this sample.

**Group Identification Scale.** This scale was adapted from a measure used by Roccas, et al. (2006) used to measure national identification in an Israeli sample. This scale was kept the same except that words like “Israeli” and “Israel” were changed to “American” and “America;” this adapted version of the scale has also been used by Leidner, et al. (2010) (see Appendix B). Roccas, et al. (2006) broke down group identification into two subtypes: attachment and glorification. Eight items measured attachment to the national group (Cronbach’s  $\alpha = .93$ ) and eight items measured glorification of the national group (Cronbach’s  $\alpha = .87$ ). Participants

indicated their agreement with each of the items on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree.” Sample items for attachment are “Being American is an important part of my identity” and “I am strongly committed to my nation.” Sample items for glorification are “America is better than other nations in all respects” and “One of the important things that we have to teach children is to respect our national leaders.”

For analysis, participants were divided into groups based on the pattern of attachment and glorification they displayed. Roccas, et al. (2006) conceptualized the notions of critical attachment (high levels of attachment with low levels of glorification) and conventional attachment (high levels of both attachment and glorification) and demonstrated their differential effects on group critical emotions. So participants were divided into three groups: critical attachment, conventional attachment and low attachment. A conceptual approach was taken in creating these groups; participants were grouped based on whether, on average, they agreed or disagreed with the items measuring attachment and glorification. This approach was used instead of a median split because often the median of glorification was near 3 (slightly disagree). This meant that some participants would have been classified as high in glorification even though they tended to disagree with items measuring glorification if a median split was used. As a result, participants were placed in the critical attachment group if on average they agreed with the items measuring attachment ( $M_{attachment} > 4$ ) but on average they did not agree with items measuring glorification ( $M_{glorification} \leq 4$ ). They were placed in the conventional attachment group if on average they agreed with the items measuring both attachment ( $M_{attachment} > 4$ ) and glorification ( $M_{glorification} > 4$ ). On the other hand, participants were placed in the low attachment group if on average they did not agree with both the items measuring attachment ( $M_{attachment} \leq 4$ ) and glorification ( $M_{glorification} \leq 4$ ). According to theory, which predicts that it is unlikely for

participants to display glorification without attachment, only one participant was high in glorification but low in attachment and thus did not fit any of these three categories. As a result this person was not included in the analyses involving these identification groups. Descriptive statistics regarding these groups can be found in Table 1.

**Identity Threat Manipulation.** Participants read a 650 word article about Guantanamo Bay Detention Center and examples of physical abuse of prisoners committed by American soldiers (see Appendix C). The first section of the article was created from excerpts from a report published by the Center for Constitutional Rights (2006) about the abuses that have occurred at Guantanamo. It described how inmates at Guantanamo have been detained indefinitely without legal rights, as well as the types of abuse that have occurred at Guantanamo (physical, psychological, etc.), it also described a the unnecessary beating of a prisoner as an example of physical abuse. The second section was designed to threaten participants' group identity based on the methods of Iyer, et al. (2007). This paragraph highlighted the negative responses of Europeans to Guantanamo Bay. In the high identity threat condition, Europeans attributed the abuse at Guantanamo to Americans unjust and imperialist character, saying "Americans have committed many atrocities during their war on terror, and the abuses in Guantanamo are just another example of this. The abuse in Guantanamo and other American policies reveal the imperialistic and unjust character of Americans." In the low identity threat condition, Europeans attributed the abuses that occurred at Guantanamo to the effects of the war on terror and distinguished between American actions and character, saying "Americans have committed many wrong and harmful actions during their war on terror, the prison in Guantanamo Bay is just another example of this. Its unfortunate that Americans have been forced to commit these actions because of war, but I think Americans are generally good people. In the end, it is just their

actions in this war that are unjust." Europeans were chosen to deliver this criticism because research has shown that internal versus external attributions only make a difference when made by an outgroup (Rabinovich & Morton, 2010). Unlike prior research (Iyer, et al., 2007), we did not use the outgroup that the ingroup transgressed against to deliver the criticism. We felt that due to the high prevalence of negative stereotypes and prejudice towards Arab-Muslims (Park, Felix, & Lee, 2007; Sheridan & North, 2004; Inayat, 2002), criticism from this group, especially defending inmates at Guantanamo might not be threatening.

**Ingroup Directed Anger Scale.** This measure was designed to assess ingroup directed anger about abuses at Guantanamo (see Appendix D). The first four items simply assessed general anger about the issue asking participants to rate the degree to which they feel "hostile," "upset," "angry," and "contempt" about the violence committed against prisoners at Guantanamo. Next, items taken from Piff, et al. (2012) were used to assess ingroup directed anger. Participants were asked to rate the degree to which they feel "hostile," "upset," "angry," and "contempt" towards Americans and then at the U.S. government while reading the article on a scale of 0 (not at all) to 7 (extremely). Overall, answers to all the anger questions were averaged to form a total anger score, which showed good reliability (Cronbach's  $\alpha = .91$ ).

**Appraisals Scale.** This scale was developed to assess the appraisals associated with the group-based emotions measured (see Appendix E). Participants indicated their agreement with items on a 7-point Likert scale ranging from "strongly disagree" to "strongly agree." The first six items (e.g. While reading the article, I felt that the violence committed against prisoners in Guantanamo makes Americans look bad) served as a manipulation check to ensure that the two articles produced differing levels of identity threat (Cronbach's  $\alpha = .85$ ). Then three questions assessed appraisals of moral violation (Cronbach's  $\alpha = .92$ ), e.g. "While reading the article, I felt



that the violence committed against prisoners in Guantanamo were a violation of American moral standards.” Next, three questions assessed appraisals of goal obstruction (Cronbach’s  $\alpha = .89$ ), e.g. “While reading the article, I felt that the violence committed against prisoners in Guantanamo were counterproductive to achieving American goals in the Middle East.”

**Collective Shame Scale.** This scale was adapted from Branscombe, Slugoski, and Kappen’s (2004) Collective Shame Scale (see Appendix F). While the Branscombe, et al. (2004) scale is phrased in general terms (e.g. I feel ashamed for my group’s harmful actions towards other groups), the statements were adapted to be specific to the context under study (e.g. I feel ashamed of the violence committed against prisoners in Guantanamo by Americans). Participants indicated their agreement with five items on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree. This scale displayed good reliability (Cronbach’s  $\alpha = .96$ ).

**Collective Guilt Scale.** This scale was adapted from Branscombe, Slugoski, and Kappen’s (2004) Collective Guilt Scale (see Appendix G). Similarly to scale measuring guilt, this scale is phrased in general terms (e.g. I feel regret for my group’s harmful actions towards other groups), so again the statements were adapted to be specific to the context under study (e.g. I feel regret for Americans’ harmful actions towards victims of drone strikes). Participants indicated their agreement with five items on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree” (Cronbach’s  $\alpha = .92$ ).

**Collective Action Intentions.** This scale measured participants’ intentions to engage in collective action to address issues related to Guantanamo Bay (see Appendix H). Based on the methods of Iyer, et al. (2007), participants were presented with descriptions of four groups formed by Americans to advocate different political solutions to the problems caused by Guantanamo Bay. The compensation group was described as calling “for the U.S. to provide

monetary compensation to the inmates who were unjustly imprisoned or abused for the harm done to them.” The confrontation group was described as working to “group to identify those responsible for the abuses that occurred in Guantanamo and to directly ensure they are appropriately punished for their actions” The withdrawal group was described as advocating “closing the Guantanamo Bay Detention Center, releasing inmates who have not been charged and transferring the others to federal prisons.” Lastly, the corrective group was described as working “to ensure that the inmates in Guantanamo receive the proper legal counsel. This group works to ensure that each inmates case is heard in court, that each receives a fair trial, and that any abuses they suffered are addressed by the legal system.”

After reading each description, participants were asked to indicate how willing they would be “to engage in various activities to support this group and its strategy.” They were presented with eight political activities ranging from lower cost (e.g., “wear a button” and “sign a petition”) to higher cost (e.g., “attend a rally” and “volunteer”; Brady, 1993). Thus, three measures were developed to assess participants’ willingness to participate in action to support compensation (eight items, Cronbach’s  $\alpha = .75$ ), confrontation (eight items, Cronbach’s  $\alpha = .76$ ), correction (eight items, Cronbach’s  $\alpha = .83$ ), and withdrawal (eight items, Cronbach’s  $\alpha = .82$ ).

**Collective Action.** Participants were given the option to engage in collective action by completing an optional part of the study. Participants were told that because of the political nature of the study, the researchers wanted to present some data to US Congressmen in the hope that it would affect the policy decisions they make. They were then told that this section of the survey was completely optional and given the option to skip to the next section of the survey or to complete the optional portion. First, participants were asked to report whether they supported closing Guantanamo. Then they were given the opportunity to write a letter to their congressmen

expressing their views on the issue. Lastly, they were given the option of providing their email to an organization (Human Rights Watch) working to close Guantanamo. Next, they were given the opportunity to complete the same three types of action regarding the issue of whether Guantanamo detainees should be granted full legal rights.

For analysis, collective action was scored by giving each participant one point for every each piece of the collective action survey they completed. In other words, they were given one point for choosing to complete the optional survey, one point for providing their opinion about whether Guantanamo should be closed, one point if they wrote a letter to their congressmen, and one point if they provided their email address. This created possible scores ranging from 0 to 7; Table 2 displays the frequencies for each of these possible scores.

**Comprehension Check.** This was a brief quiz to ensure participants paid attention to the article they read (see Appendix I). Five multiple-choice questions asked about the content of the article. Lastly, participants were given the two different versions of the last paragraph and asked to select which one they read.

**Demographic Questionnaire.** Participants completed a brief demographic questionnaire (see Appendix J). Items included gender, age, education, ethnicity, employment, political ideology, and political party affiliation.

## Results

### Preliminary Analyses

**Manipulation Check.** The manipulation produced marginal differences in the expected direction. It is possible that differences in attribution alone were not enough to produce the desired difference in identity threat. A one tailed independent sample t-test revealed that participants in the high threat condition felt only marginally more identity threat than participants

in the low identity threat condition,  $t(168) = 1.44, p = .089, d = 0.20$ . Descriptive statistics for all study variables by condition are displayed in Table 3.

**Mood Check.** Prior to the manipulation, there were no significant differences in mood measured by the PANAS between the conditions.

### **Anger And Identification**

A 2 (Identity Threat Condition: Low, High)  $\times$  3 (Identification Type: Low Attachment, Conventional Attachment, Critical Attachment) ANOVA was conducted on anger about abuse at Guantanamo Bay. There was a marginally significant main effect of condition, such that participants in the high identity threat condition felt more anger ( $M = 5.44, SD = 1.55$ ) than participants in the low threat condition ( $M = 5.01, SD = 1.66$ ),  $F(1, 168) = 3.01, p = .085, d = 0.27$ . There was also a main effect of identification type,  $F(1, 168) = 10.17, p > .001$ . Independent  $t$ -tests were conducted to examine pairwise differences. There was no significant difference between participants with low attachment ( $M = 5.55, SD = 1.50, n = 54$ ) and participants with critical attachment ( $M = 5.81, SD = 1.96, n = 40$ ). As predicted, participants with conventional attachment ( $M = 4.66, SD = 1.88, n = 75$ ) displayed significantly less anger than both low attachment,  $t(127) = 2.97, p = .004, d = 0.52$ , and critical attachment participants,  $t(113) = 3.75, p > .001, d = 0.60$ . However, these main effects were qualified by a marginally significant interaction between condition and identification type (see Figure 1),  $F(2, 168) = 2.65, p = .074$ . Follow up  $t$ -tests revealed that it was only in the low threat condition that participants with conventional attachment ( $M = 4.06, SD = 1.78, n = 35$ ) displayed less anger than participants with critical attachment ( $M = 5.75, SD = 1.01, n = 25$ ),  $t(57) = 4.21, p > .001, d = 1.16$ , or low attachment ( $M = 5.55, SD = 1.39, n = 28$ ),  $t(61) = 4.21, p = .001, d = 0.93$ . There were no significant differences in the high threat condition.

### **Collective Action And Identification**

A 2 (Identity Threat Condition: Low, High)  $\times$  3 (Identification Type: Low Attachment, Conventional Attachment, Critical Attachment) ANOVA was conducted on collective action. There was not a significant main effect of condition. However, there was a main effect of identification type on collective action,  $F(2, 168) = 3.67, p = .028$  (see Figure 2). Independent  $t$ -tests were conducted to examine pairwise differences. There was no significant difference between participants with low attachment ( $M = 2.87, SD = 2.37, n = 53$ ) and participants with critical attachment ( $M = 3.23, SD = 2.77, n = 39$ ). However, participants with conventional attachment ( $M = 2.15, SD = 2.35, n = 75$ ) engaged in significantly less collective action than participants with critical attachment,  $t(112) = 2.19, p > .031, d = 0.42$ , and marginally significantly less collective action than participants with low attachment,  $t(126) = 1.703, p = .091, d = 0.31$ .

### **Moderated Mediation Analysis**

Because the identity threat condition had a significant effect on both ingroup directed anger and collective action and there was an interaction between identification type and identity threat on anger, a moderated mediation model was tested. Specifically, we tested whether ingroup directed anger mediated the relationship between identity threat and collective action, and whether this mediating role was moderated by identification type. First, the mediating role of ingroup directed anger was tested using the Hayes's (2012) PROCESS bootstrapping command with 10,000 iterations (model 4) to test the indirect effect of identity threat on collective action through ingroup directed anger. This mediation model was not significant; there was no indirect effect of identity threat through ingroup directed anger,  $\beta = .27, CI's [-0.26, .59]$ . Because, the mediation model was not significant, we did not proceed with the moderated mediation analysis.

### Discussion

The study's results partially confirmed the hypotheses regarding identity threat. Participants in the high threat condition felt only marginally more ingroup directed anger than participants in the low threat condition. This is likely due to the manipulation's marginal success in inducing identity threat; the high threat condition felt only marginally more identity threat. This could also explain why there were not the expected condition differences in collective action. Since the condition differences in identity threat and ingroup directed anger were small, they may not have led to differences in collective action. In addition, this could also explain why the expected mediation of identity threat and ingroup directed anger did not occur. The second study aimed to address these problems by increasing the difference between the high and low threat conditions.

Similarly, our hypotheses regarding national identification were only partially supported. While national identification did moderate the relationship between identity threat and ingroup directed anger, it was not in the expected pattern. While participants with critical and low attachment did feel more ingroup directed anger overall than participants with conventional attachment, this was qualified by a marginally significant interaction that indicated conventional attachment only led to less ingroup directed anger in the low threat condition.

While unexpected, this interaction is still consistent with theory given the lack of a large difference between the two conditions. Because participants in the low threat condition reported almost as much identity threat as the high threat condition, it seems that participants still found the low threat article threatening despite the external attributions made for the transgressions described. Therefore, participants with low or critical attachment were equally angered by the two articles. However, attribution made a difference for participants with conventional

attachment. Since situational attributions are one of the strategies high glorifiers use to dismiss ingroup transgressions (Roccas, et al., 2006), providing a situational attribution enabled conventional attachers, who are high in glorification, to use this strategy more easily. On the other hand, in the high threat condition the internal attribution may have prevented the use of this defensive strategy and thus conventional attachers were angered by the ingroup transgression.

However, participants with conventional attachment engaged in the least amount of collective action, supporting our hypotheses. Those with critical attachment engaged in significantly more collective action than those with conventional attachment, however this difference was only marginally significant for those with low attachment. Moving forward, we wanted to focus on the distinction between critical and conventional attachment. Most participants (69%) fit into these two categories, and it is likely that most Americans are attached to their national identity. Among those who are attached, it is only those who are critically attached who are willing to engage in collective action. However, because attachment and glorification are highly correlated (Leidner, et al., 2010; Roccas, et al., 2006), critical attachment is uncommon, only 20% of our sample was critically attached. Therefore, we wanted to investigate if it was possible to induce critical attachment, similar to Roccas et al. (2006) who developed a method to induce critical attachment to promote collective guilt. In addition, identification type seemed to be the key determinant of collective action, compared to identity threat and ingroup directed anger (although the identity threat manipulation was not fully successful). Therefore, we decided to manipulate identification type in study 2

## Study 2

In the second study, we attempted to further understand the role of critical attachment in ingroup directed anger and collective action about ingroup transgressions by directly inducing critical attachment and conventional attachment similar to the approach of Roccas, et al. (2006). In addition, we improved the identity threat manipulation in order to better understand the relationship between identity threat, ingroup directed anger, and collective action. It was hypothesized that with this improved identity threat manipulation, the high identity threat condition would be higher in both ingroup directed anger and collective action and that ingroup directed anger would mediate the relationship between identity threat and collective action.

In addition, it was hypothesized that the identification condition would moderate the effect of identity on ingroup directed anger. It was expected that the critical attachment group would display more ingroup directed anger than the conventional attachment group in the high threat condition, but this difference would be less pronounced in the low threat condition. If this predicted interaction with identity threat occurs, then we also predict that identification type will moderate ingroup directed anger's mediation of identity threat and collective action. Further, it was hypothesized that those in the critical attachment condition will engage in significantly more collective action than the conventional attachment condition.

## **Method**

### **Participants**

Through Amazon's Mechanical Turk (MTurk) 167 American residents were recruited to participate in this study. Participants were paid 50 cents for completing the study. Twenty one participants were excluded because they did not take the study seriously (indicated by the fact that spent less than 30 seconds reading the manipulation article and answered a number of questions they were asked to leave blank) from analysis. In addition, 11 participants were



excluded because they had participated in the first study. This left a sample of 134 participants (65 men, 69 women,  $M_{age} = 37.13$  years, 102 Caucasian, 12 African American, 20 other). While a fair amount of the sample was excluded from analysis, this is common for samples from online studies (Gosling, et al., 2004).

### **Procedure**

Participants first completed the Ten-Item PANAS. They were then assigned to either the conventional attachment or critical attachment conditions. After completing this manipulation participants completed the attachment and glorification scales. They were then randomly assigned to read either the high or low identity threat article. After reading the article, they completed the scale measuring ingroup directed anger. Participants were then given the opportunity to participate in various forms of collective action. Last, participants completed the scale measuring various appraisals and then the Ten-Item PANAS again, followed by the comprehension check quiz and demographics. Participants were then debriefed.

### **Materials and Measures**

**Group Identification Manipulation.** This study attempted to induce critical attachment by manipulating participant's level of attachment and glorification. In developing a method of inducing critical attachment, we relied heavily on the methods of Roccas, et al. (2006), who induced conventional attachment and critical attachment by asking participants to describe the characteristics of their actual national group or their ideal national group (based on the distinctions between actual and ideal selves developed by Higgins, 1989). In the conventional attachment condition, participants were asked to list attributes of their national group as it is (i.e. "Please briefly describe the attributes of Israel that prompt you to agree with the following sentence: 'I love Israel and viewing myself as Israeli is important to me.'"). On the other hand,

participants in the critical attachment condition were asked to list attributes of their national group as it they ideally would like it to be (i.e. “Please briefly describe the attributes you would like to find in Israel in order to agree with the following sentence: ‘I love Israel and viewing myself as Israeli is important to me.’”).

Before reusing this manipulation in this study, it was adapted to refer to American and Americans and then piloted with 40 MTurk participants to check if it worked in the American context. The manipulation did not work; an independent samples *t*-test found no significant difference in glorification between the conventional attachment group ( $M = 4.39, SD = 1.06, n = 20$ ) and the critical attachment group ( $M = 4.02, SD = 1.08, n = 19$ ),  $t = 1.087, p = .284$ .

Therefore, another manipulation designed to induce critical attachment was developed and piloted (see Appendix K). One of the main features of critical attachment is an increased readiness to criticize the actions of one’s nation that could harm the nation’s long-term interests and are perceived to be contrary to the nations fundamental values (Roccas, et al., 2006, Schatz et al., 1999). Roccas, et al. (2006) state, “a shift from a state of mind of conventional attachment to that of critical attachment should be followed by an increased readiness to criticize the actions of one’s nation that are perceived as a violation the nation’s long-term interests and fundamental values” (p. 705). Therefore, participants in the critical attachment were asked to provide an example of how “United States is failing to live up to its fundamental American ideals” and how this failing might be corrected. On the other hand, participants in the conventional attachment condition were asked to describe how the US was upholding its ideals and why this was uniquely American. This manipulation was piloted on a sample of 50 participants recruited through MTurk. It was partially successful, at first an independent *t*-test revealed no significant difference between the two conditions. However, closer examination revealed that five (9%)

participants in the conventional attachment condition said they could not think of a way the US was upholding its values and criticized the US instead. If these participants were excluded from analysis, a one-way independent samples t-test revealed that conventional attachment group ( $M = 4.50$ ,  $SD = 1.27$ ,  $n = 19$ ) displayed marginally higher levels of glorification than the critical attachment group ( $M = 3.94$ ,  $SD = 1.28$ ,  $n = 28$ ),  $t = 1.45$ ,  $p = .077$ ,  $d = 0.44$ . However, there was no significant difference in attachment between the two groups. Therefore, this manipulation was used in study two, knowing that it might be necessary to exclude the small percentage of participants who cannot think of a way the United States upholds its values.

**Identity Threat Manipulation.** Because the manipulation in the first study failed to produce condition differences in identity threat, the manipulation was modified in this study to produce a greater difference between the two conditions (see Appendix L). The high identity threat condition remained the same. However, the specific story of abuse was removed from the low threat condition. In this condition, participants merely read a description of abuse at Guantanamo that used only general terms (e.g. physical abuse, psychological abuse, etc.). We hypothesized that this would be less threatening because research has shown that specific examples are much more convincing than general descriptions (Guadagno, Rhoads, & Sagarin, 2011). This modified manipulation was also piloted along with the identification manipulation and produced the expected differences in identity threat. Participants who read the high identity threat article felt significantly more identity threat ( $M = 5.38$ ,  $SD = 0.51$ ,  $n = 24$ ) than participants who read the low identity threat article ( $M = 4.74$ ,  $SD = 1.04$ ,  $n = 20$ ),  $t = 2.61$ ,  $p = .011$ ,  $d = 0.78$ .

**Collective Action.** Another measure of collective action was added in this study to increase the external validity of the measure of collective action. In the optional section of the

study participants were given the opportunity to donate money to Amnesty International, after reading a brief description of Amnesty International's work to close Guantanamo. While Amazon's Mechanical Turk does not allow participants to donate part of their payment, participants were told they would be paid a 50 cent bonus for completing the study. They could enter an amount to be donated to Amnesty International that would be taken out of their bonus. All the other parts of the collective action measure used in study one were also used in this study. Two scores were calculated based on this collective action measure. The first was just simple total where the amount of the donation was added to the total score calculated in the same way as the first study. In the second score, the donation was weighted so that participants received 1 point for every 10 cents they donated. This was done because a donation seemed more costly than the other forms of collective action we were measuring (answering a survey questions, providing one's email, etc.) and thus deserving of more weight.

All the other measures used in this study remained the same from the first study, except that the measures of collective guilt, shame, and collective action intentions were not used in this study.

## **Results**

### **Preliminary Analyses**

**Reliability.** The written responses to the identification manipulation question were examined because in the pilot study some participants did not follow the conventional attachment instructions and instead criticized the United States. Twelve participants were found who did not follow the conventional attachment manipulation instructions. Because they did not follow instructions and did the opposite of what they were instructed, they were excluded from

analysis. This left a sample of 122 participants (58 men, 64 women, 94 Caucasians, 10 African Americans, 18 Other,  $M_{\text{age}} = 37.83$  years).

**Identification Manipulation Check.** The identification manipulation was partially successful. Participants in the critical attachment condition had marginally lower levels of glorification than participants in the conventional attachment condition,  $t(120) = 1.699$ ,  $p = .092$ ,  $d = 0.31$ . Levels of attachment did not significantly differ between the two conditions.

Descriptive statistics for all study variables by condition are displayed in Table 4.

**Identity Threat Manipulation Check.** This manipulation successfully produced the expected differences in identity threat. Participants in the high threat condition felt significantly more identity threat ( $M = 5.81$ ,  $SD = 1.10$ ,  $n = 55$ ) than participants in the low identity threat condition ( $M = 5.21$ ,  $SD = 1.06$ ,  $n = 67$ ),  $t(120) = 3.09$ ,  $p = .002$ ,  $d = 0.55$ .

**Mood Check.** There was no significant difference in mood between the two identification conditions prior to the manipulation. However, there was a significant difference in mood between the two identity threat conditions. At the start of the study, participants in the low identity threat condition felt significantly more negative affect than participants in the high threat condition,  $t(120) = 3.38$ ,  $p = .001$ . As a result, negative affect was used as a covariate in the analyses involving ingroup directed anger.

### **Ingroup Directed Anger**

A 2 (Identity Threat Condition: Low, High)  $\times$  2 (Identification Condition: Conventional Attachment, Critical Attachment) ANCOVA was conducted on ingroup directed anger about abuse at Guantanamo Bay, with negative affect as a covariate. There was a main effect of condition, such that participants in the high identity threat condition felt significantly more anger ( $M = 4.74$ ,  $SD = 1.23$ ) than participants in the low threat condition ( $M = 4.22$ ,  $SD = 1.17$ ),  $F(1,$

121) = 7.85,  $p = .001$ ,  $d = 0.43$ . There was no main effect of identification condition. To determine if identification type still played the moderating role it had played in study 1, a 2 (Condition: Low Identity Threat, High Identity Threat)  $\times$  3 (Identification Type: Low Attachment, Conventional Attachment, Critical Attachment) ANCOVA was also conducted on ingroup directed anger. However, this also revealed no main effect of identification or interaction with identity threat.

### **Collective Action**

A 2 (Identity Threat Condition: Low Identity Threat, High Identity Threat)  $\times$  2 (Identification Condition: Conventional Attachment, Critical Attachment) ANOVA was conducted on collective action. There was a significant main effect of condition,  $F(1, 121) = 4.18$ ,  $p = .046$ . Participants in the high identity threat condition engaged in significantly more collective action than participants in the low threat condition. This effect became more significant when using the alternative measure of collective action that used the weighted donation amount,  $F(1, 121) = 4.54$ ,  $p = .035$ . Again there was no main effect of identification condition. To determine if identification type still played the role it had played in study 1, a 2 (Condition: Low Identity Threat, High Identity Threat)  $\times$  3 (Identification Type: Low Attachment, Conventional Attachment, Critical Attachment) ANOVA was also conducted on collective action. However, this also revealed no main effect of identification or interaction with identity threat.

### **Mediation Analysis**

Table 5 presents bivariate relationships between study variables. Because there was no effect of identification in this study we did not test our full moderated-mediation model. However, we did test whether ingroup directed anger mediated the relationship between identity

threat and collective action using the Hayes's (2012) PROCESS bootstrapping command with 10,000 iterations (model 4). Negative affect at the beginning of the study was also entered as a covariate. Confidence intervals (CIs) that do not contain zero indicate the presence of an indirect effect. There was a significant indirect effect of identity threat through on ingroup directed anger on collective action,  $\beta = .42$ , CIs [0.11, 0.85] (see Figure 3). This effect persisted if the alternative measure of collective action that weighted donations was used,  $\beta = .50$ , CIs [0.14, 1.06], or if the donation amount was used as a measure of collective action alone,  $\beta = .01$ , CIs [0.002, 0.027]. Preacher and Kelly's (2011) Kappa-squared measure of mediation of effect size was also calculated for all of these indirect effects, the indirect effect of identity threat through ingroup directed anger had a moderate effect size for collective action  $\kappa^2 = .074$ , CIs [0.002, 0.027], and the alternative measure of collective action  $\kappa^2 = .073$ , CIs [0.020, 0.146], and a small effect size for donations alone,  $\kappa^2 = .042$ , CIs [0.007, 0.109].

### Discussion

This study fully supported the hypotheses regarding identity threat, ingroup directed anger, and collective action about ingroup transgressions. Participants in the high identity threat condition felt significantly more ingroup directed anger, and engaged in more collective action, than participants in the low threat condition. In addition, ingroup directed anger fully mediated the relationship between identity threat and collective action. This further supports prior research that ingroup directed anger is the primary motivator of collective action about ingroup transgressions, because actual collective action was measured in this study.

However, the hypotheses regarding identification were not supported. There are a number of possible explanations for this. First, the increased difference between the two conditions could have overpowered the effects of individual differences in identification type.

Strong manipulations sometimes decrease the effect of individual difference variables. However, given that identification type had a strong effect on collective action independent of threat condition in study 1, this is unlikely. A second factor is probably the manipulation itself. First, of all, the manipulation was not completely successful, it only marginally reduced glorification and a Chi-squared analysis revealed that there were not significantly more participants with critical attachment in the critical attachment condition.

However, even when identification type was analyzed without including condition, the effects of identification from study 1 were not replicated. This indicates that the manipulation of identification may have had unintended consequences. Group identification is a basic part of one's identity (Tajfel & Turner, 1979), and is probably not easily changed. As a result, our manipulation may have briefly affected participants' concept of identification as they answered the identification scale, but left their true sense of identity fundamentally unchanged. Thus, the measure may not have truly captured participants' identification and was therefore unable to predict their emotions or actions. Another potential factor is general reactivity to the manipulation. Legault, Gutsell, and Inzlicht (2011) demonstrated that certain prejudice reduction interventions can actually increase prejudice, especially if interventions were directive. Something similar may have occurred with our manipulation. Since participants were told to criticize the United States in the manipulation, they may have been less willing to do so in the rest of study. In sum, because of the complications involved in manipulating the type of a participants' identification, we decided not to manipulate identification in the next study to determine if the individual differences produced by identification returned when identification was not manipulated.



### Study 3

The third study aimed to address two of the major methodological weaknesses of the first two studies. First, the manipulation of identification was removed in an attempt to replicate the effects of identification on both anger and collective action about ingroup transgressions. Second, we attempted to address the demand characteristics inherent in these studies. Because of the topics under study, demand is a major threat to the validity of the conclusions reached by the first two studies, albeit more to the self-report of anger than the behavioral measures of collective action. It is reasonable to assume that when participants read a negative article about actions of the U.S., are then asked how angry they are at Americans and the government, they might assume that they are expected to feel angry. It is also possible that participants might figure out that they are supposed to engage in the various collective action behaviors. There are some checks on demand in the study as well. The studies were both online so participants may have felt less direct pressure from the experimenter. Also it seems unlikely that participants would take the time to write letters to their congressmen or donate their money just because they thought the experimenters wanted them to.

However, this study aimed to address the issue of demand directly in two ways. First, participants were simply asked how they thought they were supposed to do the various parts of the survey. Second, an implicit measure of anger was used. Implicit measures have become widely used in psychological research because they are less susceptible to demand (Greenwald et al., 1998). One of the most frequently used implicit measures is the implicit association task (IAT) (Rezaei, 2011). Further, the IAT has been demonstrated to be robust against conscious distortion (Banse et al., 2001), even when participants are told how the IAT is designed to function (Kim, 2003). While originally developed to study prejudice, IAT's have been developed

to measure emotional variables as well. Egloff and Schmukle (2002) developed an IAT to measure trait anxiety, and Schnabel, Banse, & Asendorpf (2006) adapted this IAT to measure trait anger as well. More recently, Sato and Kawahara (2012) adapted this IAT to measure state rather than trait anxiety. Since there are currently no published implicit measures of state anger, we decided to adapt this implicit measure of state anxiety to state anger.

This study had similar hypotheses to the first two studies. First, it was hypothesized that the high identity threat condition would elicit higher levels of both implicit and explicit anger, and more collective action. In addition, it was predicted that identification would again moderate the relationship between identity threat and ingroup directed anger. It was expected that the critical and low attachment groups would display more ingroup directed anger than the conventional attachment group in the high threat condition, but any differences would be less pronounced in the low threat condition. Identification was also expected to affect collective action, such that participants with conventional attachment would engage in less collective action than participants with critical and low attachment. We also hoped to replicate ingroup directed anger's mediation of the relationship between identity threat and collective action. Further, if identification had its anticipated effects, we expected identification type to moderate the mediating role of ingroup directed anger.

## **Method**

### **Participants**

One hundred and fifteen undergraduate participants, 18 to 22 years old, (76 women, 39 men, 105 Caucasian, 10 Non-Caucasian,  $M_{age} = 19.52$  years) were recruited from Washington and Lee University. Participants were recruited through sign-up sheets posted in the school's

psychology department, through class announcements, and through a school wide email announcement.

### **Procedure**

Participants first completed the Ten-Item PANAS, followed by scales measuring attachment and glorification. They were then randomly assigned to read either the high or low identity threat article, the same articles used in study 2. After reading the article, they completed an IAT measuring state anger. Then, they completed the scale measuring ingroup directed anger and the Ten-Item PANAS again. Participants were then given the opportunity to participate in various forms of collective action. Next, participants completed the scale measuring various appraisals, followed by the manipulation check quiz and demographics. Lastly, participants completed the demand questionnaire. Participants were then debriefed.

### **Materials and Measures**

**State Anger IAT.** An IAT to measure state levels of anger was developed based on the state anxiety IAT developed by Sato and Kawahara (2012). The four categories of the IAT were *self*, *other*, *anger*, and *calm*. The *self* and *other* words were taken from Sato and Kawahara (2012), which have been used in a number of other studies (Egloff & Schmukle, 2002; Schnabel, Banse, & Asendorpf, 2006). The calm words were also taken directly from Sato and Kawahara (2012). The *anger* words were chosen to capture the concept of anger and matched to the calm words on length, frequency, orthographic neighbors, and phonological neighbors based on data from Balota, et al. (2007). For all words see Appendix M.

Stimuli words were displayed as black letters on a white computer screen using E-Prime. During the IAT session, the fixation display consisted of a central cross, which appeared for one second. The fixation display was followed by the target word in the center of the screen and the

two categories in the upper left and right hand corners. Participants were asked to judge whether the target word belonged to the left or the right category label as quickly and accurately as possible by pressing either the “m” key (for the right hand category) or the “z” key (for the left hand category). A red “X” was displayed in the center of the screen following an incorrect response.

Based on the procedure of Sato and Kawahara (2012), the IAT consisted of 5 blocks. The first block familiarized participants with the discrimination task for the self and other categories with 20 trials (each item was presented twice). Similarly, Block 2 familiarized participants with the anger and calmness categories with 20 trials (each item was presented twice). The initial key assignment for anger and calmness was counterbalanced between participants. In Block 3, the two categories were combined. Because of the counterbalancing, half of participants began with an anger-self/calm-other pairing and the other half began with a calm-self/anger-other pairing. Block 3 consisted of 20 practice trials followed by 60 critical trials. Block 4 was the same as Block 2 except that the key assignment for anger and calmness was switched. Block 5 was the same as Block 3 except with the opposite pairing of categories. The IAT data were analyzed according to an improved scoring algorithm (Greenwald, Nosek, & Banaji, 2003).

**Collective Action.** Because participants were not paid in this study, so they could not complete the donation part of the collective action measure. Therefore, participants completed the same collective action measures used in study one.

**Demand Questionnaire.** This questionnaire aimed to assess how much the participants guessed how they were supposed to react to the study because of demand characteristics. Participants were told that participants were randomly assigned to read to different articles. The first question asked participants how they thought they were supposed to respond to the IAT

compared to participants who read the other article. The second and third questions asked participants whether they thought they were supposed to feel more or less angry, and engage in more or less collective action respectively, than participants in the other condition. Participants were then asked if in general they thought participants who were angrier were supposed to engage in more or less collective action. Lastly, they were asked if they altered their responses at all based on how they felt they were supposed to respond. These responses were coded into three groups, participants received a 2 if they answered more (e.g. they felt they were supposed to feel more ingroup directed anger, engage in more collective action), a 1 if they said they were sure or didn't know, and a zero if they said less (e.g. they felt they were supposed to feel less ingroup directed anger, engage in less collective action).

## Results

### Preliminary Analyses

**Identity Threat Manipulation Check.** The manipulation did produce the expected differences in identity threat. Participants in the high threat condition felt significantly more identity threat than participants in the low identity threat condition,  $t(113) = 2.91, p = .004, d = 0.56$ . Descriptive statistics for all study variables are displayed by condition in Table 6.

**Mood Check.** There were no significant differences in mood prior to the manipulation.

**Demand.** The demand responses were analyzed to determine if there were any condition differences that should be controlled for in subsequent analyses. There were no differences between the conditions on how participants felt they were supposed to respond to the IAT. As would be expected most participants (62 of 115) reported that they didn't know whether the two conditions were supposed to respond differently on the IAT. However, more participants in the high identity threat condition than in the low threat condition thought that they were

supposed to feel more angry,  $\chi^2(2, 115) = 16.55, p < .001$ , and engage in collective action,  $\chi^2(2, 115) = 9.76, p = .008$ . This suggests that demand was in issue in the measurement of ingroup directed anger and collective action; therefore demand was controlled for in subsequent analyses. Lastly, there were no identity threat condition differences in whether participants thought higher ingroup directed anger was supposed to lead to more collective action.

### **IAT Analysis**

An independent samples t-test revealed no difference between the two conditions on the IAT effect score. In addition, the IAT effect score was not significantly correlated with participants' self-reported anger. To further understand the IAT results a 2 (Condition: high identity threat, low identity threat)  $\times$  2 (Critical Block: self-anger vs. self-calmness) mixed measures ANOVA was conducted on participants reaction times. There was no main effect of condition. However, there was a main effect of critical block,  $F(1, 112) = 89.61, p < .001$  (see Figure 4). In general, participants were faster to associate words in the self-calmness block than words in the self-anger block. Based on these analyses, it appears that the IAT failed to measure state anger and thus it was not included in any further analysis.

### **Ingroup Directed Anger**

A 2 (Identity Threat Condition: Low Identity Threat, High Identity Threat)  $\times$  3 (Identification Type: No Attachment, Conventional Attachment, Critical Attachment) ANCOVA was conducted on ingroup directed anger about abuse at Guantanamo Bay, with demand regarding anger as a covariate. There was a main effect of identity threat condition, such that participants in the high identity threat condition felt significantly more ingroup directed anger ( $M = 4.42, SD = 1.15$ ) than participants in the low threat condition ( $M = 3.92, SD = 0.92$ ),  $F(1, 113) = 9.64, p = .002, d = 0.48$ . There was no main effect of identification type. However, there was a

significant interaction between condition and identification type,  $F(1, 113) = 5.03, p = .008$  (see Figure 5). Post hoc tests were used to decompose this interaction. Participants who displayed conventional attachment exhibited no change from the low threat ( $M = 4.22, SD = 0.60, n = 16$ ) to the high threat condition ( $M = 4.09, SD = 1.16, n = 22$ ). Participants with critical attachment had marginally higher levels of ingroup directed anger in the high threat ( $M = 4.30, SD = 1.10, n = 25$ ) than in the low threat condition ( $M = 3.84, SD = 1.01, n = 36$ ),  $t(59) = 1.69, p = .096, d = 0.44$ . Lastly, participants with low attachment also had a significant increase in ingroup directed anger from the low threat ( $M = 3.53, SD = 1.04, n = 5$ ) to the high threat condition ( $M = 5.44, SD = 0.65, n = 10$ ),  $t(13) = 4.41, p = .001, d = 2.21$ .

### **Collective Action**

A 2 (Identity Threat Condition: Low Identity Threat, High Identity Threat)  $\times$  3 (Identification Type: No Attachment, Conventional Attachment, Critical Attachment) ANCOVA was conducted on collective action, with demand regarding collective action as a covariate. There was no main effect of condition, but there was a main effect of identification type,  $F(2,113) = 6.81, p = .002$  (see Figure 6). Independent  $t$ -tests were conducted to examine pairwise differences. Participants with low attachment engaged in more collective action ( $M = 4.73, SD = 1.66, n = 15$ ) than both participants with critical attachment ( $M = 3.83, SD = 1.85, n = 61$ ),  $t(74) = 2.60, p = .011, d = 0.77$ , and participants with conventional attachment ( $M = 2.61, SD = 1.85, n = 38$ ),  $t(51) = 3.87, p < .001, d = 1.20$ . In addition, participants with critical attachment engaged in more collective action than participants with conventional attachment,  $t(112) = 2.19, p = .046, d = 0.42$ .

### **Moderated Mediation Analysis**

Table 7 presents bivariate relationships between study variables. Because the identity threat condition had a significant effect on ingroup directed anger and there was an interaction between identification type and identity threat on ingroup directed anger, a moderated mediation model was tested. Specifically, it tested whether ingroup directed anger mediated the relationship between identity threat and collective action, and whether this mediating role was moderated by identification type. First, the mediating role of ingroup directed anger was tested using the Hayes's (2012) PROCESS bootstrapping command with 10,000 iterations (model 4) to test the indirect effect of identity threat on collective action through ingroup directed anger. Participants' responses to the demand question asking whether they thought ingroup directed anger was supposed to lead to collective action were also entered as a covariate. Confidence intervals (CIs) that do not contain zero indicate the presence of an indirect effect. There was a significant indirect effect of identity threat through ingroup directed anger on collective action,  $\beta = .24$ , CIs [0.046, 0.567] (see Figure 7). Preacher and Kelly's (2011) Kappa-squared measure of mediation of effect size was also calculated for this indirect effects the indirect effect of identity threat through anger had a small effect size for collective action  $\kappa^2 = .058$ , CIs [0.011, 0.140].

Since ingroup directed anger was a significant mediator of the relationship between identity threat and collective action, we continued with our moderated mediation analysis. Identification type was added to the model as a moderator using Hayes's (2012) PROCESS bootstrapping command with 10,000 iterations (model 8). Confidence intervals (CIs) that do not contain zero indicate the presence of an indirect effect. There was still an overall indirect effect of identity threat through ingroup directed anger on collective action,  $\beta = .41$ , CIs [0.114, 0.866]. However, this indirect effect persisted only in certain identification types. There was a significant indirect effect of identity threat through ingroup directed anger on collective action



for participants with critical attachment,  $\beta = .31$ , CIs [0.081, 0.686], and low attachment,  $\beta = .72$ , CIs [0.201, 1.442]. However, there was no indirect effect for participants with conventional attachment  $\beta = -.10$ , CIs [-0.456, 0.112]. Thereby supporting the hypothesis that ingroup directed anger is only an effective motivator of collective action for participants with low and critical attachment, in other words when glorification is absent.

### **Discussion**

This study supported all of our major hypotheses involving explicit ingroup directed anger. First, the high identity threat condition felt more ingroup directed anger than the low identity threat condition. In addition, identification type moderated the relationship between identity threat and ingroup directed anger. While this moderation did not completely follow the expected pattern it is not incongruent with theory. As expected, participants with low attachment felt significantly more ingroup directed anger in the high threat condition. Slightly unexpectedly, participants with critical attachment increased in ingroup directed anger only marginally from the low to the high threat condition. As predicted there was no difference in the conventional attachment group between the two conditions. However, there were two interesting comparisons among the identification types. First, participants with low attachment felt significantly more ingroup directed anger than the other two identification types in the high threat condition. The fact that those with low attachment were angered by the ingroup transgression even though they are not strongly attached to the ingroup supports the arguments of theorists (Halperin & Gross, 2011; Kuppens et al., 2003; Rozin, et al., 1999, Montada & Schneider, 1989) who argue that anger can be provoked by moral violations (such as ingroup transgressions) without strong involvement of the self.

On the other hand, our hypotheses regarding implicit anger were not supported. All participants associated self and calm words more quickly than self and anger words. However, since the IAT D-score was not correlated at all with participants' self reported anger, or even positive or negative affect, it appears that the IAT was not accurately capturing state levels of anger. There are a number of possible explanations for why the anger IAT was not effective. First, anger is typically an emotion directed at others (Kuppens, et al., 2003; Ellsworth & Tong, 2003; Berkowitz, 2010; Ellsworth & Smith, 1998; Frijda 1993; Lazarus, 1991), and thus participants may have associated anger words with the target of their anger, i.e. others, rather themselves. The case of ingroup directed anger further complicates these associations because anger is directed at the ingroup, which includes both the self and other members of the group. In addition, people are slower to associate negative words with themselves than positive words (Tanner, Stopa, De Houwer, 2006). Anger words are more negative than the calm words because anger is a negative emotion, so participants may have been biased to associate calm words with themselves regardless of their felt emotion. Lastly, using an IAT to measure state emotions is new and only one study has successfully done so. So, the observed effect could also be due to a reliability issue in the measure, because it has not been previously used or validated but was developed specifically for this study. Therefore, the process by which an IAT measures state emotions is not fully clear, and it is not clear if this process is fully applicable to anger.

The hypotheses regarding collective action were partially supported. While there was no expected effect of condition on collective action, this does replicate the first study where participants with conventional attachment engaged in significantly less collective action than participants with both critical and low attachment. In addition, this study fully supported our moderated-mediation model of ingroup directed anger and collective action. Ingroup

transgressions only provoked ingroup directed anger that led to collective action in participants with critical and low attachment, not with conventional attachment. However, somewhat surprisingly participants with low attachment engaged in more collective action than participants with critical attachment.

In sum, this study supported our hypotheses that ingroup directed anger drives collective action in response to ingroup transgressions. In addition, we demonstrated that national identification moderated this relationship, such that ingroup transgressions only provoked ingroup directed anger that led to collective action in participants with low or critical attachment. While this study, as well as the prior studies, indicate that ingroup directed anger is a significant motivator of collective action, it is important to examine other predictors of collective action to determine the unique explanatory power of anger when other theoretically-consistent mediators are considered.

#### Study 4

The fourth study aimed to examine other variables that might predict collective action in addition to ingroup directed anger, and to determine the unique contribution of ingroup directed anger in driving collective action about ingroup transgressions.

One other variable we considered was the motivation to restore one's positive group identity. When group members are confronted with an ingroup transgression, their positive social identity is threatened (Branscombe, et al., 1999). This threat to their identity leads to anger at their ingroup which then leads to collective action. In addition, because individuals are motivated to maintain their positive group identity (Tajfel & Turner, 1978), a threat to that identity should also motivate one to restore the positive identity of their group by correcting the ingroup

transgression. In addition, anger should also promote this motivation to restore identity. Anger is associated with the action tendency to correct the behavior of the anger-inducing target (Halperin et al., 2011; Kuppens et al., 2003; Mackie, Devos, & Smith, 2000). In the case of ingroup-directed anger, this corrective tendency should motivate people to correct ingroup transgressions through collective action. Thus, the motivation to restore group identity could also mediate the relationship between identity threat and ingroup directed anger.

In addition, most theoretical accounts of collective action, the Social Identity Model of Collective Action (SIMCA) and the Encapsulated Model of Collective Action (EMCA) see group efficacy as another important predictor of collective action (van Zomeren, Postmes, Spears, & Bettache, 2011; Thomas, Mavor, & McGarty, 2011; van Zomeren, Postmes, & Spears, 2008; van Zomeren, Spears, Fischer, & Leach, 2004). Group efficacy refers to one's belief that group-related problems can be solved by collective effort (Bandura, 1995, 1997). It makes sense that this would be an important predictor of collective action about ingroup transgressions as well because people are unlikely to engage in any collective action if they don't believe it will be effective (van Zomeren, et al., 2004).

Lastly, we expect that the effects of identification on ingroup directed anger and collective action will be replicated in this study. And thus, identification may moderate the relationship between identity threat and the mediators of collective action.

## **Method**

### **Participants**

Through Amazon's Mechanical Turk (MTurk) 162 participants volunteered to participate in this study. Participants were paid 50 cents for completing the study. We excluded 10 participants who did not take the study seriously (indicated by the fact that spent less than 30

seconds reading the manipulation article and answered a number of questions they were asked to leave blank) from analysis. This left a sample of 152 participants (68 men, 83 women,  $M_{age} = 38.87$ , 124 Caucasian, 15 African American, 12 other).

### **Procedure**

Participants first completed the scales measuring national identification. They were then randomly assigned to read either the high or low identity threat article; the same articles used in studies two and three. After reading the article, they completed the scales measuring, appraisals, motivation to restore group identity, group efficacy, and ingroup directed anger. Participants were then given the opportunity to participate in various forms of collective action. Next, participants completed the manipulation check quiz, demographics, and the demand questionnaire. Participants were then debriefed.

### **Materials and Measures**

**Motivation to Restore Positive Group Identity.** This scale was created to measure participants' desire to restore their positive ingroup identity by asking them if they would feel better about their American identity if policy regarding Guantanamo Bay changed (see Appendix O). The scale consisted of eight items including "If the prison at Guantanamo Bay were closed, I would feel better about being identified as an American" and "I would be more proud to be an American if the human rights of Guantanamo detainees were protected." Participants indicated their agreement with these items on a 7-point Likert scale ranging from "strongly disagree" to "strongly agree." This scale demonstrated good reliability (Cronbach's  $\alpha = .94$ ).

**Group Efficacy.** This scale was created to measure participants' group efficacy beliefs about Americans' ability to change policy regarding Guantanamo Bay (see Appendix N). The scale consisted of six items including "I think together individuals can influence the policy of the

government” and “I think the actions of individuals could ensure prisoners at Guantanamo Bay are treated better.” Participants indicated their agreement with these items on a 7-point Likert scale ranging from “strongly disagree” to “strongly agree.” This scale demonstrated good reliability (Cronbach’s  $\alpha = .85$ ).

**Collective Action.** The same measure of collective action was used as in study two.

**Demand Questionnaire.** Participants completed the same demand questionnaire that was used in study three except without the question asking about the IAT.

## Results

### Preliminary Analyses

**Identity Threat Manipulation Check.** The manipulation did produce the expected differences in identity threat. Participants in the high threat condition felt significantly more identity threat than participants in the low identity threat condition,  $t(150) = 3.08, p = .002$ . Descriptive statistics for all study variables are displayed by condition in Table 8.

**Demand.** The demand responses were analyzed to determine if there were any condition differences that should be controlled for in subsequent analyses. More participants in the high identity threat condition than in the low threat condition thought that they were supposed to feel more angry,  $\chi^2(2, 152) = 16.38, p < .001$ , and engage in collective action,  $\chi^2(2, 152) = 12.34, p = .002$ . Lastly, marginally more participants in the high threat condition thought that higher anger was supposed to lead to more collective action,  $\chi^2(2, 152) = 5.41, p = .067$ . As a result, these demand data were used as covariates in the main analyses related to the variables in question.

### Mediation Analysis

Table 9 presents bivariate relationships between study variables. First, the hypothesis that motivation to restore the ingroup's positive identity mediated the relationship between identity threat and collective action was tested. Hayes's (2012) PROCESS bootstrapping command with 10,000 iterations (model 4) was used to test the indirect effect of identity threat condition on collective action through motivation to restore the ingroup's positive identity. Confidence intervals (CIs) that do not contain zero indicate the presence of an indirect effect. There was a significant indirect effect of identity threat on collective action through the motivation to restore the ingroup's positive identity,  $\beta = .16$ , CIs [0.082, 0.401] (see Figure 8). Preacher and Kelly's (2011) Kappa-squared measure of mediation of effect size was also calculated for this indirect effects the indirect effect of identity threat through ingroup directed anger had a small effect size for collective action  $\kappa^2 = .042$ , CIs [0.005, 0.102]. However, there was still a direct effect of identity threat condition on collective action after motivation to restore the ingroup's positive identity was entered into the model,  $\beta = .72$ , CIs [0.132, 1.310]. This indicates that motivation to restore the ingroup's positive identity only partially mediated the relationship between identity threat and collective action. However, this is not surprising given that ingroup directed anger and group efficacy should also be mediators

However, group efficacy did not mediate the relationship between identity threat and collective action. In fact it was not even significantly correlated with collective action. This indicates that group efficacy may not be as important for determining collective action about ingroup transgression as it is in promoting other types of collective action.

### **Multiple Mediation Analysis**

We used Hayes's (2012) PROCESS bootstrapping command with 10,000 iterations (model 4) to test a multiple mediation model. Identity threat condition and collective action were

the independent and dependent variables respectively. Ingroup directed anger, group efficacy, and the motivation to restore positive group identity were entered as mediators. Also because there were condition differences on the degree to which participants thought ingroup directed anger was supposed to lead to collective action, those responses were entered as a covariate. Results showed that the total indirect effect,  $\beta = .27$ , CIs [0.361, 0.548] and that the unique contributions of ingroup directed anger  $\beta = .21$ , CIs [0.034, 0.552] were statistically significant (see Figure 9). However, the unique contributions of group efficacy,  $\beta = .01$ , CIs [-0.049, 0.167], and motivation to restore a positive ingroup identity,  $\beta = .01$ , CIs [-0.058, 0.273], were not significant.

### **Ingroup Directed Anger**

Next we sought to replicate the findings of the other studies. A 2 (Identity Threat Condition: Low Identity Threat, High Identity Threat)  $\times$  3 (Identification Type: No Attachment, Conventional Attachment, Critical Attachment) ANCOVA was conducted on ingroup directed anger about abuse at Guantanamo Bay, with demand regarding anger as a covariate. There was a main effect of condition, such that participants in the high identity threat condition felt significantly more ingroup directed anger ( $M = 4.66$ ,  $SD = 1.30$ ) than participants in the low threat condition ( $M = 4.13$ ,  $SD = 1.41$ ),  $F(1, 151) = 4.87$ ,  $p = .029$ ,  $d = 0.38$ . There was also a main effect of identification type,  $F(2, 150) = 15.09$ ,  $p < .001$  (see Figure 10). Independent  $t$ -tests were conducted to examine pairwise differences. Participants with low attachment reported more ingroup directed anger ( $M = 5.13$ ,  $SD = 1.33$ ,  $n = 52$ ) than both participants with critical attachment ( $M = 4.37$ ,  $SD = 1.31$ ,  $n = 33$ ),  $t(83) = 2.84$ ,  $p = .006$ ,  $d = 0.58$ , and participants with conventional attachment ( $M = 3.84$ ,  $SD = 1.13$ ,  $n = 67$ ),  $t(117) = 5.57$ ,  $p < .001$ ,  $d = 1.05$ . In



addition, participants with critical attachment reported marginally more ingroup directed anger than participants with conventional attachment,  $t(98) = 1.86$ ,  $p = .067$ ,  $d = 0.43$ .

### **Collective Action**

A 2 (Identity Threat Condition: Low Identity Threat, High Identity Threat)  $\times$  3 (Identification Type: No Attachment, Conventional Attachment, Critical Attachment) ANCOVA was conducted on collective action, with demand regarding collective action as a covariate. There was no main effect of identity threat condition, but there was a main effect of identification type,  $F(2,150) = 6.31$ ,  $p = .002$  (see Figure 11). Independent  $t$ -tests were conducted to examine pairwise differences. Participants with critical attachment engaged in more collective action ( $M = 4.73$ ,  $SD = 2.01$ ) than participants with conventional attachment ( $M = 3.13$ ,  $SD = 1.54$ ),  $t(98) = 3.77$ ,  $p < .001$ ,  $d = 0.77$ . In addition, participants with low attachment ( $M = 3.91$ ,  $SD = 2.11$ ) engaged in more collective action than participants with conventional attachment,  $t(117) = 2.32$ ,  $p = .022$ ,  $d = 0.42$ .

### **Discussion**

This study largely replicated our findings from the previous studies. Participants whose identity was highly threatened had higher levels of ingroup directed anger, which then led to more collective action. In addition, identification type was an important determinant of both ingroup directed anger and collective action. However, the pattern of results in this study was slightly different from the previous studies. In this study, identification type did not moderate the relationship between identity threat condition and ingroup directed anger; rather it had a main effect on ingroup directed anger. Participants with low attachment felt the most ingroup directed anger, followed by those with critical attachment, and then those with conventional attachment.

Participants with critical attachment engaged in the most collective action, followed by those with low attachment, and then those with conventional attachment. This is consistent with our theory that part of the reason people protest ingroup transgressions is to restore their positive group identity. Because they are highly attached to the group, those with critical attachment have the most motivation to restore their positive group identity and therefore engaged in the most collective action. Those with conventional attachment should also have this motivation, however they also have high levels of glorification, which prevent them from recognizing ingroup transgressions, feeling ingroup directed anger, and engaging in collective action. On the other hand, those with low attachment are not attached to the group. However, ingroup transgressions still cause ingroup directed anger for them and they still engage in collective action. Further, they also might have something to gain from improving group identity. If their group identity was more positive, they might be willing to identify more with the group and thus reap the benefits of positive group identification.

While the expected interaction between identification type and condition on anger did not occur, this outcome is not partially consistent with theory. Though the conditions were different in their levels of threat, both conditions were threatening to identity because they described moral violations committed by the group. Those with conventional attachment did not react with anger to either, most likely because both triggered defensive strategies designed to protect group identity. On the other hand, those with low attachment reacted with the most ingroup directed anger to both conditions because as people who do not identify with the group there was no reason to employ defensive strategies. Lastly, those with critical attachment reacted with more ingroup directed anger than those with conventional attachment, but less than low attachment. While critical attachment lacks high glorification and thus the defensive strategies

associated with it (Leidner, et al., 2010; Roccas, et al., 2006), those with critical attachment still derive their social identity from the group and are therefore motivated to protect it at some level. So it makes sense that they would fall between those with low and conventional attachment.

Lastly, this study indicated that ingroup directed anger is one of the most important drivers of collective action about ingroup transgression, even when other variables are controlled for. The desire to restore positive group identity did partially mediate the relationship between identity threat and collective action. However, this indirect effect became insignificant when ingroup directed anger was entered into the model. As noted earlier, the corrective action tendency of anger (Halperin et al., 2011; Kuppens et al., 2003; Mackie, Devos, & Smith, 200) should be correlated with this motivation. As a result, this motivation may not have predicted collective action above and beyond that already predicted by ingroup directed anger. In addition, group efficacy did not have any effect on collective action in this study, even though its effects have been well documented in other contexts (van Zomeren, et al., 2011; van Zomeren, et al., 2008; van Zomeren, et al., 2004). So, it is possible that group efficacy is less important for collective action about ingroup transgressions. If the primary motivators of collective action in this context are identity threat and ingroup directed anger, the efficacy of collective action may be less important. For example, research has shown that subtyping is a common response when our ideas about a group are threatened (Richard & Hewstone, 2001). Collective action about ingroup transgressions might facilitate subtyping by allowing one separate oneself from the rest of the group that committed or supported the transgression. In this case, it would still serve an important purpose for the individual even if it were not effective, thus reducing the importance of group efficacy in determining collective action. In addition, anger is usually considered an unpleasant affective experience, and engaging in action could reduce the feeling of anger. Again,

in this case action would serve an important psychological purpose that does not depend on its effectiveness.

### **General Discussion**

The current research investigated the implications of ingroup transgressions on identity threat, ingroup directed anger, and collective action about ingroup transgressions. This research offers a number of important new insights into these topics. First, it expands on prior research measuring actual collective action rather than just collective action intentions. Thus it strengthens the link between anger and collective action by demonstrating that anger is a powerful motivator not only of action intentions but actually drives people to action. Second, it elucidates the role of national identification in determining if people experience ingroup directed anger and engage in collective action in response to ingroup transgressions. These studies demonstrate that conventional attachment with its high levels of glorification is a significant impediment to ingroup directed anger and collective action. On the other hand, critical attachment, attachment without glorification, can actually be an important variable in promoting collective action and does not impede the experience of ingroup directed anger. In sum, these studies demonstrate that anger about ingroup transgressions can be a powerful motivator of collective action to correct these transgressions, but national identification can both help and hinder this process.

### **Identity Threat, Anger, and Collective Action**

This research supported the hypothesis that identity-threatening ingroup transgressions provoke ingroup directed anger. In all three studies where the manipulation successfully produced differential levels of identity threat, participants whose identity was highly threatened had felt significantly more ingroup directed anger than participants in the low threat condition. In

addition in these same three studies, ingroup directed anger fully mediated the relationship between identity threat and collective action, supporting the hypothesis that ingroup directed anger is an important emotional driver of collective action in response to ingroup transgressions.

This supports earlier literature that concluded that anger was the most effective emotion for driving collective action (van Zomeren, et al., 2011; Iyer, et al., 2007; Leach, Iyer, & Pederson, 2006; Iyer, 2004). While this literature only looked at action intentions, this research confirms that anger is effective in driving a variety of different actions, such as providing one's email to relevant organizations, writing letters to one's congressmen, and donating money. It is also in concordance with the broader literature about collective action, which sees anger as the driving emotion in other types of collective action (van Zomeren, et al., 2011; van Zomeren, et al., 2008).

### **Identification, Anger, and Collective Action**

Most of our hypotheses regarding the role of national identification were also supported.

**Critical and Conventional Attachment.** The most important differences are those between critical and conventional attachment. Low attachment is less important because this study was primarily focused on what causes members of a group, i.e. people who are attached to that group, to protest transgressions committed by their ingroup. In addition, usually a minority of the study displayed little attachment to their nation. As hypothesized, conventional attachment either resulted in less ingroup directed anger in reaction to the ingroup transgression than critical attachment (studies 1 and 4) or the threat conditions not producing change in the level of ingroup directed anger as it did in critical attachment. In addition, critical attachment always resulted in more collective action than conventional attachment. Lastly, the moderated mediation model in

study 3 showed that ingroup directed anger mediated the relationship between identity threat and collective action for those with critical attachment but not for those with conventional attachment.

This indicates that critical attachment is extremely important in allowing people who identify with their national group to feel ingroup directed anger that will motivate them to protest ingroup transgression. For this reason, we attempted to induce critical attachment in study 2. While this induction failed, future research should continue to investigate how to promote critical attachment. Further, the distinguishing feature between conventional and critical attachment is glorification. Therefore, these results support other research that demonstrates the negative impact of glorification on group critical emotions (Roccas, et al., 2006) and support for the correction of ingroup transgressions (Li, et al., 2013; Leidner, et al., 2011).

**Low and Critical Attachment.** While the differences in ingroup directed anger and collective action between low and critical attachment were less stable across these studies, some important conclusions can be drawn from these comparisons. First, even though participants with critical attachment felt less ingroup directed anger than participants in study 4 and in the high threat condition of study 3, this did not usually lead to a difference in collective action. While participants with low attachment engaged in more collective action in study 3, this study suffered from a very small sample of participants with low attachment. In study 1, participants with critical attachment engaged in more collective action than participants with low attachment (although this difference was not significant). However, in study 4, participants with critical attachment engaged in significantly more collective action than participants with low attachment.

In sum, these findings support the conclusions of other researchers that attachment does not pose a problem for intergroup relations when it is not accompanied by glorification (Leidner, et al., 2010, Roccas, et al., 2006). This is encouraging given that attachment to the ingroup

appears to be a fundamental psychological need of many individuals (Castano, 2004; Castano & Dechesne, 2005; Reid & Hogg, 2005), and is thus something that could easily be reduced. In fact, they indicate that higher levels of attachment could be beneficial. Particularly in the case of collective action about ingroup transgressions, sometimes those who are high in attachment engage in more collective action (as long as glorification is low) than those low in attachment. This is congruent with the major theoretical account of collective action, SIMCA, which sees social identification with a relevant group as the key factor in promoting collective action.

### **Collective Action Theory and Collective Action about Ingroup Transgressions**

These findings also have implications for theories of collective action such as the Social Identity Model of Collective Action (SIMCA) and attempts to adapt traditional theoretical models of collective action to collective action about ingroup transgressions. These findings are in some ways congruent and in other ways incongruent with the conception of collective action encapsulated in SIMCA. The fact that national identification determines whether ingroup directed anger leads to collective action is in line with SIMCA (van Zomeren, et al., 2008), which sees social identification as the key variable that determines whether group based anger is experienced in response to injustice and leads to collective action (see Figure 12). However, SIMCA predicts that stronger social identification leads to more anger and thus more collective action. This is not what happened in our studies, strong social identification only lead to anger if the identification was critical attachment.

In some ways, it makes sense that our results do not completely align with SIMCA. SIMCA was developed to explain collective action undertaken by a disadvantaged group to improve their own status. Collective action undertaken in protest of an ingroup's own transgressions is a completely different context. While no studies have adapted SIMCA to this

specific context of collective action. van Zomeren, et al. (2011) adapted SIMCA to help explain collective action by members of an advantaged group to improve the social status of a disadvantaged group, using the context of discrimination against Dutch Arab-Muslims in the Netherlands and discrimination against mainland Chinese by Hong Kong Chinese. Their model (see Figure 13) proposed that moral convictions about social inequality lead to identification with the disadvantaged group, both of which then lead to group-based anger, group efficacy, and thus collective action.

While this model worked well in the contexts studied by van Zomeren, et al. (2011), it does not appear to be congruent with our results for a number of reasons. First, regression analyses showed that in these studies, appraisals of moral violations did not predict ingroup directed anger when identity threat appraisals were controlled for. This indicates that the central role played by moral convictions in van Zomeren, et al.'s (2011) model is not operating here. Second, the importance of identity threat and national identification in determining ingroup directed anger and collective action suggests that participants' identification with their own group, not the disadvantaged outgroup is an important variable. While, van Zomeren et al. (2011) adaptation of SIMCA was successful in explaining collective action by an advantaged group on behalf of a disadvantaged in their study, based on our results this model may not apply to all contexts, particularly collective action in response to an ingroup transgression.

Lastly, theoretical models of collective action all highlight the importance of group efficacy, but the expected effects of group efficacy on collective action were not found in this study. This indicates that group efficacy may not be as important for collective action about ingroup transgressions. We speculated that this might be because people who engage in collective action about ingroup transgressions may be less concerned about whether such actions



are effective. In addition, this could have negative consequences if true. If people are less concerned about the effectiveness of collective action, they may be unsuccessful in correcting the groups' transgression. Further, they could engage in actions that might exacerbate the situation of intergroup conflict that in transgression occurred in.

### **Limitations and Directions for Further Research**

First, given the importance of critical attachment in allowing those who were attached to the group to feel anger and engage in collective action, future research should continue to investigate how to promote critical attachment. While our attempt to induce critical attachment failed, future research should continue to investigate if it is possible to induce critical attachment. Roccas, et al. (2006) were able to induce critical attachment in an Israeli sample. While this manipulation did not work in our study, it indicates that inducing critical attachment is possible but a method that works in the American context, or is applicable to all contexts is needed.

Second, future research should continue to investigate the relationship between group efficacy and collective action in response to ingroup transgressions. The results of our study suggest that participants are less concerned about the efficacy of their actions in the context of ingroup transgressions, because group efficacy is not a predictor of action. Further research should attempt to confirm this hypothesis. In addition, if participants are less concerned about the effectiveness of their actions future research should the implications of this. If this is the case, it is possible that this type of collective action may not be effective at correcting ingroup transgressions.

Beyond those already mentioned, these studies had a number of limitations that should be addressed in future research. First, all of our studies were conducted in the context of American abuses that have occurred at Guantanamo Bay. Thus, it is possible that the effects that

were observed would not generalize out of this specific context, or out of an American context. Future research should investigate collective action about ingroup transgressions both in other American contexts and in other national or international context.

In addition, while this study expanded on earlier research by measuring actual collective action instead of only collective action intentions, our measure of collective action does not fully capture this construct. We were limited to measuring actions that were relatively low cost to the individual (i.e. providing their email, writing a letter, donating a small amount of money). Thus our results might not generalize to higher cost actions, such as actually joining an organization, calling one's congressmen, or participating in a march or rally. Further, the actions were limited to ones that could be undertaken by an individual and thus were only collective in the sense that they were aimed at changing the group's behavior. Different dynamics than the ones studied here may be involved when action is taken by multiple individuals at once.

Lastly, these studies did not have a true control condition. Thus it is not clear how participants would have responded if their identities had not been threatened at all. While it is likely that this would result in less ingroup directed anger and collective action. Further research should include a true control in their studies.

Despite these limitations, our research was able to draw important conclusions about what affects people's willingness to engage in collective action to protest a transgression committed by their ingroup. In sum, the identity threatening aspects of these transgressions lead to ingroup directed anger, which ultimately motivates action to address these transgressions. However, this process can be affected by how participants identify with their national group. Conventional attachment with its high levels of glorification can interfere with this process. On the other hand, critical attachment may help facilitate this process. This information could very

important to developing strategies to ensure that popular pressure stops ingroup transgressions if they are ongoing, or ensures that steps are taken to prevent repeating past transgressions in the future.

While this study only examined the context of abuse at Guantanamo Bay, group based transgressions are a fundamental part of almost all intergroup conflicts. Whether it is acts of terrorism, human rights violations by an occupying military, or torture conducted during wartime, group transgressions are an inherent part of intergroup conflicts and usually serve to escalate existing conflicts. In this context, understanding how to motivate group members to take action to stop the transgression of their own group is an important part of constraining and resolving intergroup conflict.

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Table 1

*Descriptive Statistics For Identification Types in Study 1*

Identification Type	<i>n</i>	Attachment	Glorification
		<i>M (SD)</i>	<i>M (SD)</i>
Low Attachment	54	3.00 (0.91)	2.73 (0.70)
Critical Attachment	40	4.60 (0.46)	3.39 (0.46)
Conventional Attachment	75	5.24 (0.60)	4.75 (0.74)
Total	169	4.37 (1.20)	3.76 (1.13)

Table 2

*Frequencies for Collective Action Scores in Study 1*

<i>Score</i>	Frequency	Percent	Cumulative Percent
0	65	38.1	38.1
1	10	5.9	44.0
2	6	3.6	47.6
3	11	6.5	54.2
4	37	22.0	76.2
5	13	7.7	83.9
6	19	11.3	95.2
7	8	4.8	100.0
Total	169	100.0	100.0



Table 3

*Descriptive Statistics of Study 1 Variables*

Variable:	Low Identity Threat n = 82	High Identity Threat n = 87	Total N = 169
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>
Identity Threat	4.40 (1.34)	4.61 (1.13)	4.51 (1.24)
Positive Affect	14.67 (3.95)	14.95 (4.76)	14.81 (4.35)
Negative Affect	5.63 (1.70)	5.99 (2.04)	5.81 (1.88)
Attachment	4.31 (1.25)	4.43 (1.13)	4.37 (1.19)
Glorification	3.59 (1.10)	3.94 (1.40)	3.76 (1.13)
Ingroup Directed Anger	5.01 (1.66)	5.45 (1.54)	5.22 (1.61)
Collective Action	2.45 (2.35)	2.95 (2.69)	2.69 (2.53)

Table 4

*Descriptive Statistics of Study 2 Variables*

Variable:	Low Identity Threat <i>n</i> = 67	High Identity Threat <i>n</i> = 55	Conventional Attachment <i>n</i> = 52	Critical Attachment <i>n</i> = 70	Total <i>N</i> = 122
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )
Identity Threat	5.28 (1.07)	5.84 (1.10)	5.58 (1.11)	5.41 (1.13)	5.48 (1.12)
Positive Affect	15.91 (4.18)	16.29 (4.10)	16.71 (3.99)	15.61 (4.21)	16.08 (4.13)
Negative Affect	6.81 (3.02)	5.49 (1.36)	6.10 (2.78)	6.30 (2.66)	6.21 (2.50)
Attachment	4.42 (1.20)	4.53 (1.25)	4.66 (1.18)	4.33 (1.23)	4.47 (1.21)
Glorification	3.70 (1.27)	3.76 (1.26)	3.95 (1.14)	3.56 (1.33)	3.73 (1.26)
Ingroup Directed Anger	4.22 (1.18)	4.74 (1.23)	4.48 (1.24)	4.44 (1.23)	4.46 (1.23)
Donation	0.05 (0.11)	0.07 (0.13)	0.05 (0.12)	.07 (0.12)	0.06 (.12)
Collective Action	2.67 (2.66)	3.71 (2.87)	3.73 (3.41)	3.04 (2.79)	3.14 (2.79)
Alternative Collective Action	3.10 (3.28)	4.36 (3.53)	3.73 (3.41)	3.63 (3.48)	3.67 (3.44)

Table 5

*Bivariate Relationships Between Study 2 Variables*

	1	2	3	4	5	6	7	8
1. Identity Threat Condition	-							
2. Positive Affect	.04	-						
3. Negative Affect	-.26**	-.02	-					
4. Attachment	.05	.26*	-.04	-				
5. Glorification	.03	.21*	-.13	.68**	-			
6. Ingroup Directed Anger	.21*	.09	.11	-.19*	-.23*	-		
7. Donation	.11	.01	-.09	-.02	-.04	.18*	-	
8. Collective Action	.19*	.06	-.17	-.04	-.21*	.38**	.50**	-
9. Alternative Collective Action	.18*	.05	-.17	-.04	-.19*	.37**	.71**	.96**

\* $p < .05$  \*\* $p < .01$

Table 6

*Descriptive Statistics of Study 3 Variables*

Variable:	Low Identity Threat <i>n</i> = 58	High Identity Threat <i>n</i> = 57	Total <i>N</i> = 115
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )
Identity Threat	4.89 (0.69)	5.29 (0.75)	5.08 (0.74)
Positive Affect	13.29 (3.83)	13.53 (3.91)	13.41 (3.85)
Negative Affect	6.72 (3.22)	6.84 (2.70)	6.78 (2.96)
Attachment	4.72 (0.61)	4.81 (0.92)	4.76 (0.78)
Glorification	3.72 (0.66)	3.71 (0.98)	3.71 (0.83)
IAT D-Score	0.65 (0.72)	0.69 (0.76)	0.70 (0.74)
Ingroup Directed Anger	3.92 (0.92)	4.42 (1.15)	4.17 (1.07)
Collective Action	3.31 (1.78)	3.23 (2.11)	3.27 (1.94)

Table 7

*Bivariate Relationships Between Study 3 Variables*

	1	2	3	4	5	6	7
1. Identity Threat Condition	-						
2. Positive Affect	.03	-					
3. Negative Affect	.02	.09	-				
4. Attachment	.06	.10	.05	-			
5. Glorification	-.01	.11	.03	.64**	-		
6. Ingroup Directed Anger	.24*	.01	.13	-.36**	-.15	-	
7. Collective Action	-.02	.00	.04	-.30**	-.36**	.22*	-
8. Anger & Collective Action Demand	-.01	-.20*	-.10	-.08	-.05	-.14	.10

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

Table 8

*Descriptive Statistics of Study 4 Variables*

Variable:	Low Identity Threat <i>n</i> = 71	High Identity Threat <i>n</i> = 64	Total <i>N</i> = 135
	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )	<i>M</i> ( <i>SD</i> )
Identity Threat	5.21 (1.12)	5.76 (1.00)	5.48 (1.11)
Attachment	4.52 (1.17)	4.42 (1.20)	4.47 (1.18)
Glorification	3.99 (1.17)	3.76 (1.28)	3.88 (1.23)
Ingroup Directed Anger	4.14 (1.41)	4.59 (1.33)	4.40 (1.38)
Group Efficacy	4.36 (1.26)	4.77 (1.20)	4.53 (1.29)
Motivation to Restore Group Identity	4.58 (1.40)	4.95 (1.58)	4.79 (1.50)
Collective Action	3.29 (1.65)	4.23 (2.14)	3.70 (1.92)

Table 9

*Bivariate Relationships Between Study 4 Variables*

	1	2	3	4	5	6	7
1. Identity Threat Condition	-						
2. Attachment	-.04	-					
3. Glorification	-.09	.83**	-				
4. Ingroup Directed Anger	.20*	-.49**	-.42**	-			
5. Group Efficacy	.11	.26**	.29**	.04	-		
6. Motivation to Restore Group Identity	.16 <sup>T</sup>	-.26**	-.22**	.64**	.25**	-	
7. Collective Action	.23**	-.20*	-.27**	.37**	.08	.29**	-
8. Anger & Collective Action Demand	.17*	.09	.04	.03	.04	.02	.19*

<sup>T</sup> $p < .10$ , \* $p < .05$ , \*\* $p < .01$

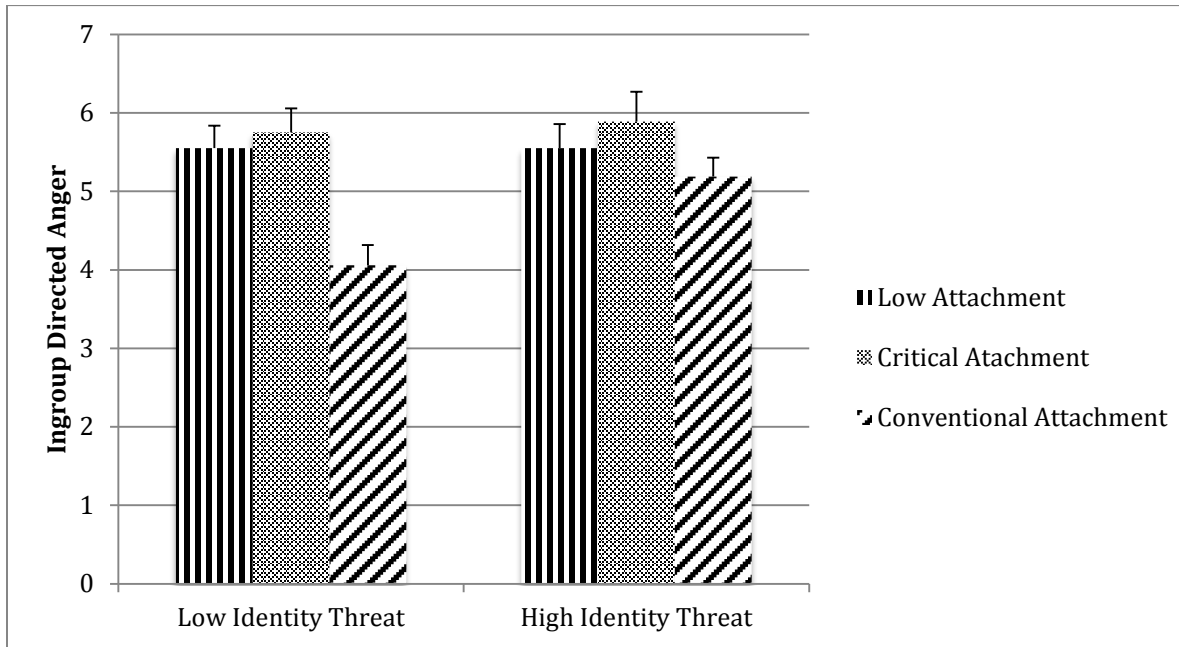


Figure 1. Significant interaction between identity threat condition and identification type in Study 1.



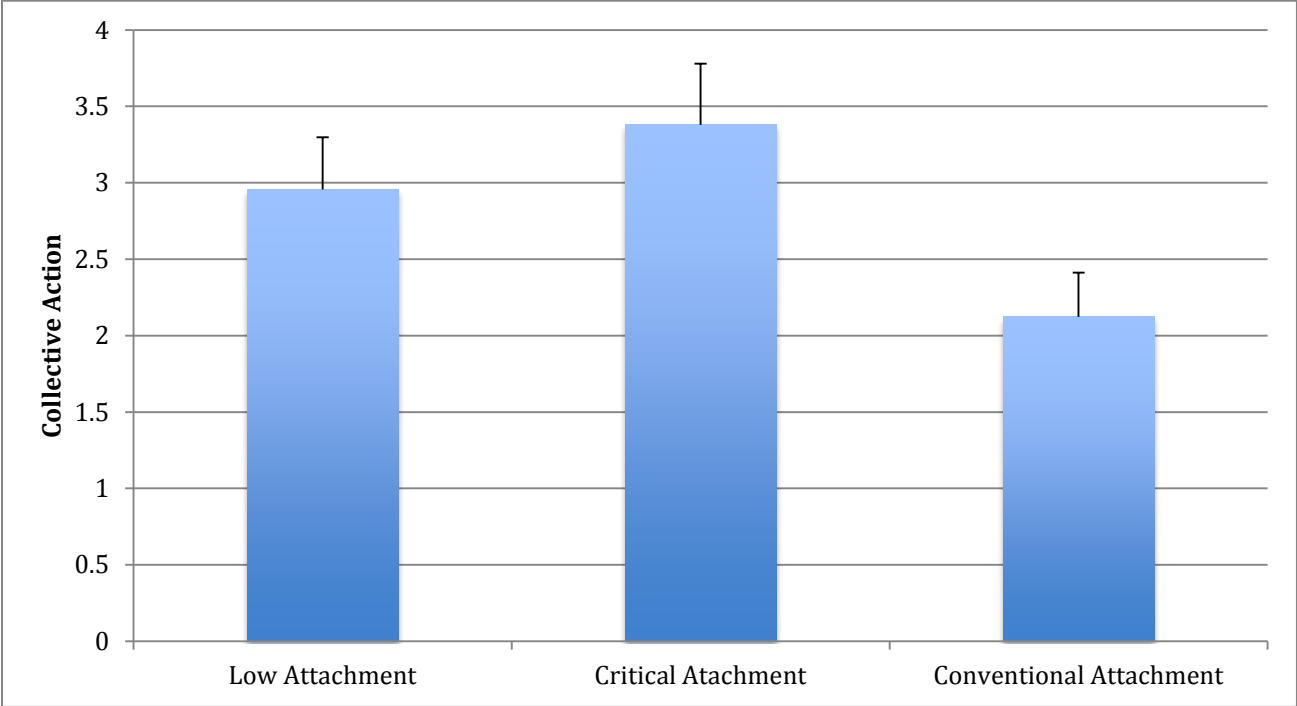


Figure 2. Effect of identification type on collective action in Study 1.

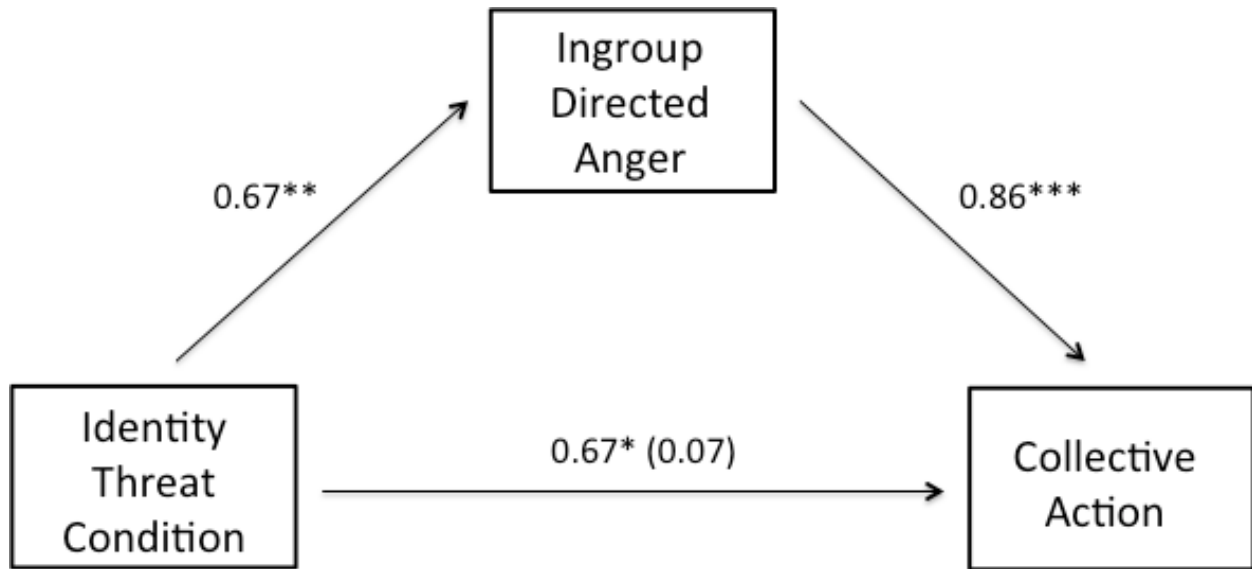


Figure 3. Path coefficients for mediation model testing the effect of identity threat condition on collective action through ingroup directed anger in Study 2, with prior negative affect as a covariate.

\* $p < .05$  \*\* $p < .01$  \*\*\*  $p < .001$

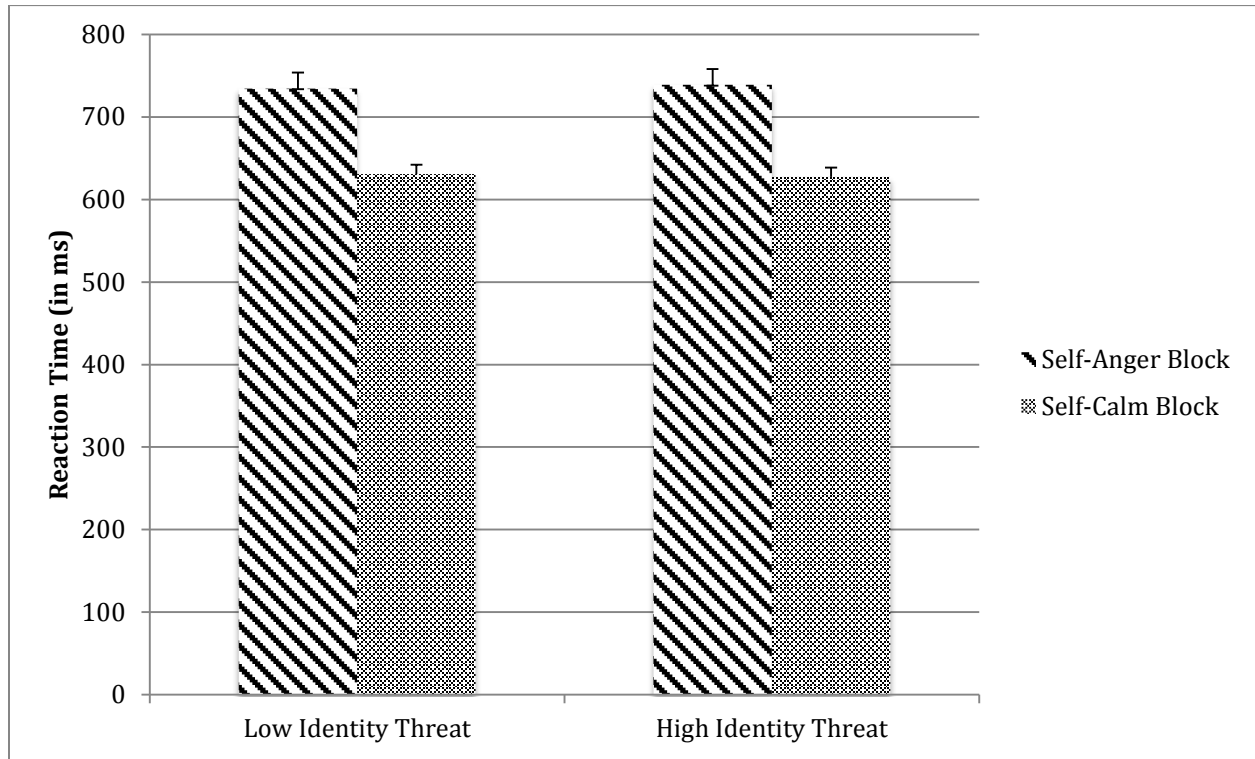


Figure 4. State anger IAT response times.

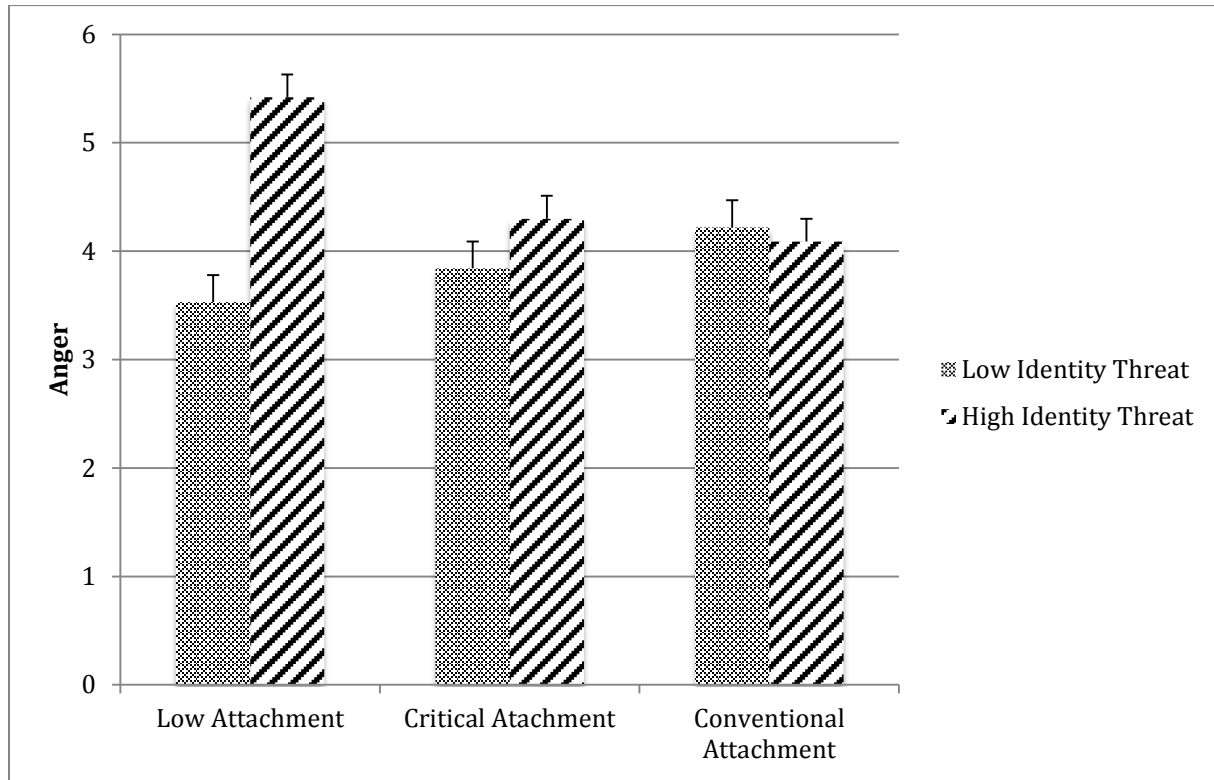


Figure 5. Significant interaction between identity threat condition and identification type in Study 3.

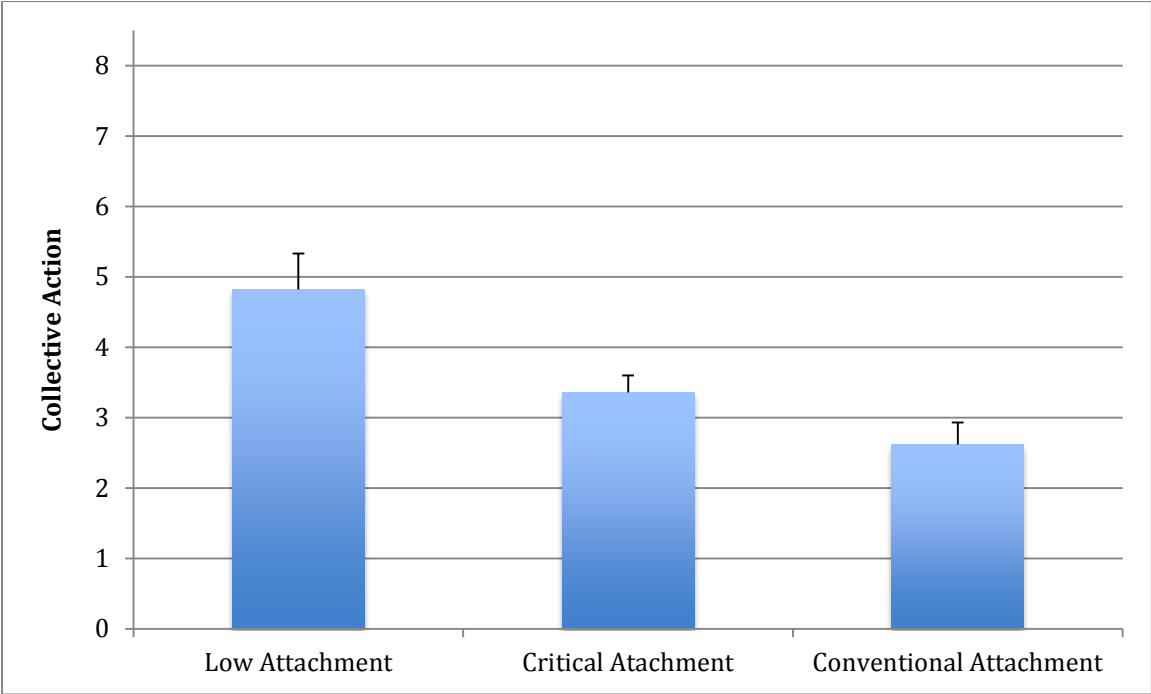


Figure 6. Effect of identification type on collective action in Study 3.

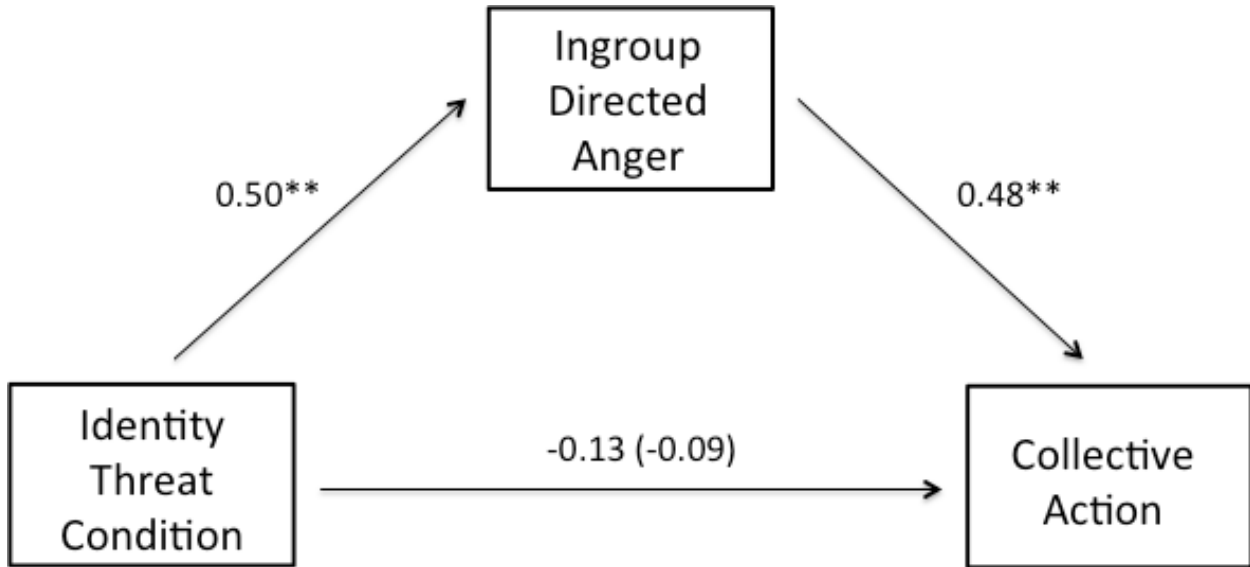


Figure 7. Path coefficients for mediation model testing the effect of identity threat condition on collective action through anger, with demand regarding anger’s link to collective action as a covariate.

\* $p < .05$  \*\* $p < .01$  \*\*\*  $p < .001$

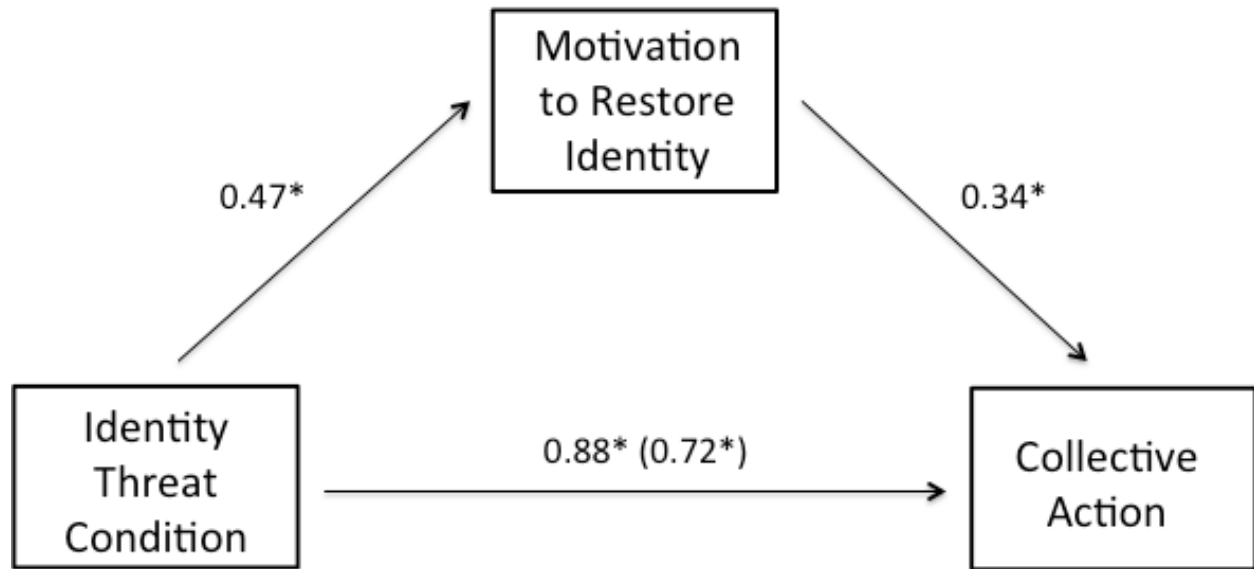


Figure 8. Path coefficients for mediation model testing the effect of identity threat condition on collective action through motivation to restore a positive ingroup identity in study 4.

\* $p < .05$  \*\* $p < .01$  \*\*\*  $p < .001$

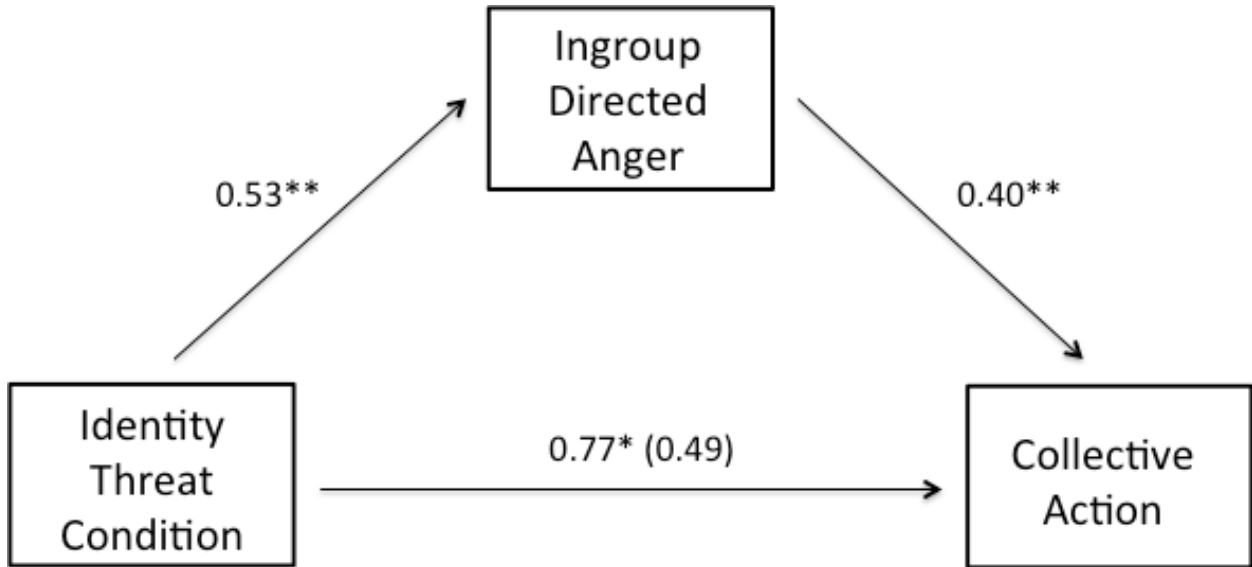


Figure 9. Path coefficients for the mediation model of the effect of identity threat condition on collective action through ingroup directed anger in study 4. with demand regarding anger’s link to collective action as a covariate.

\* $p < .05$  \*\* $p < .01$  \*\*\*  $p < .001$



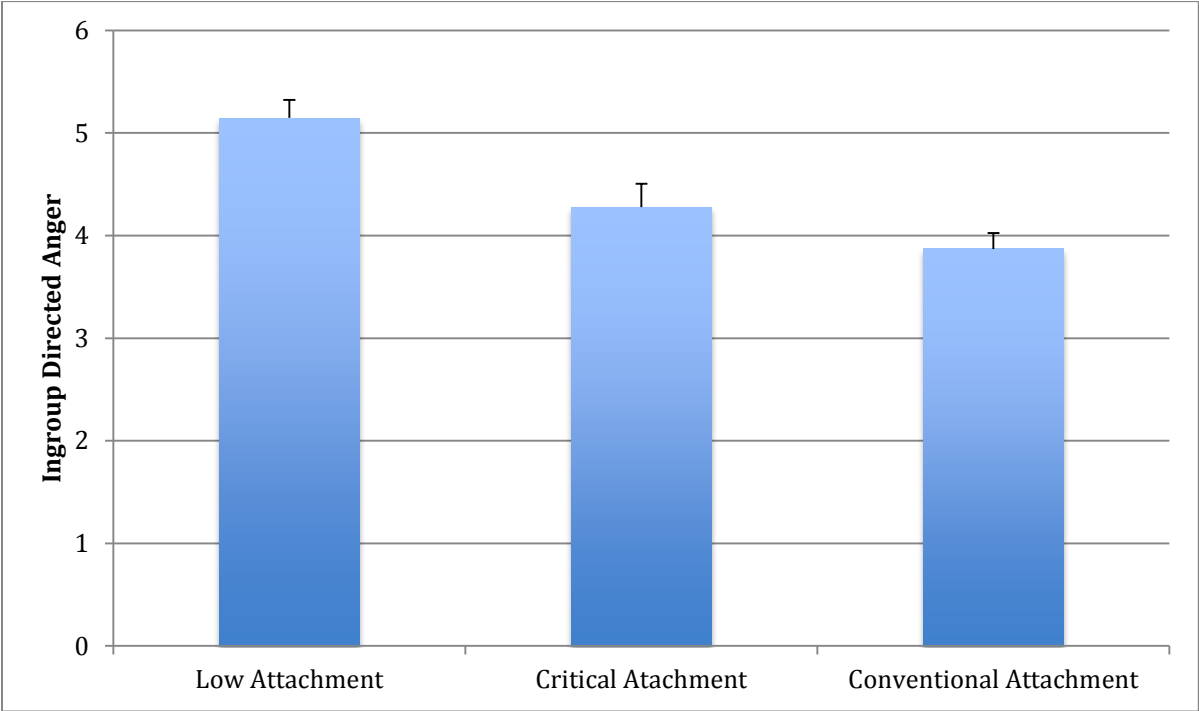


Figure 10. Effect of identification type on ingroup directed anger in study 4.

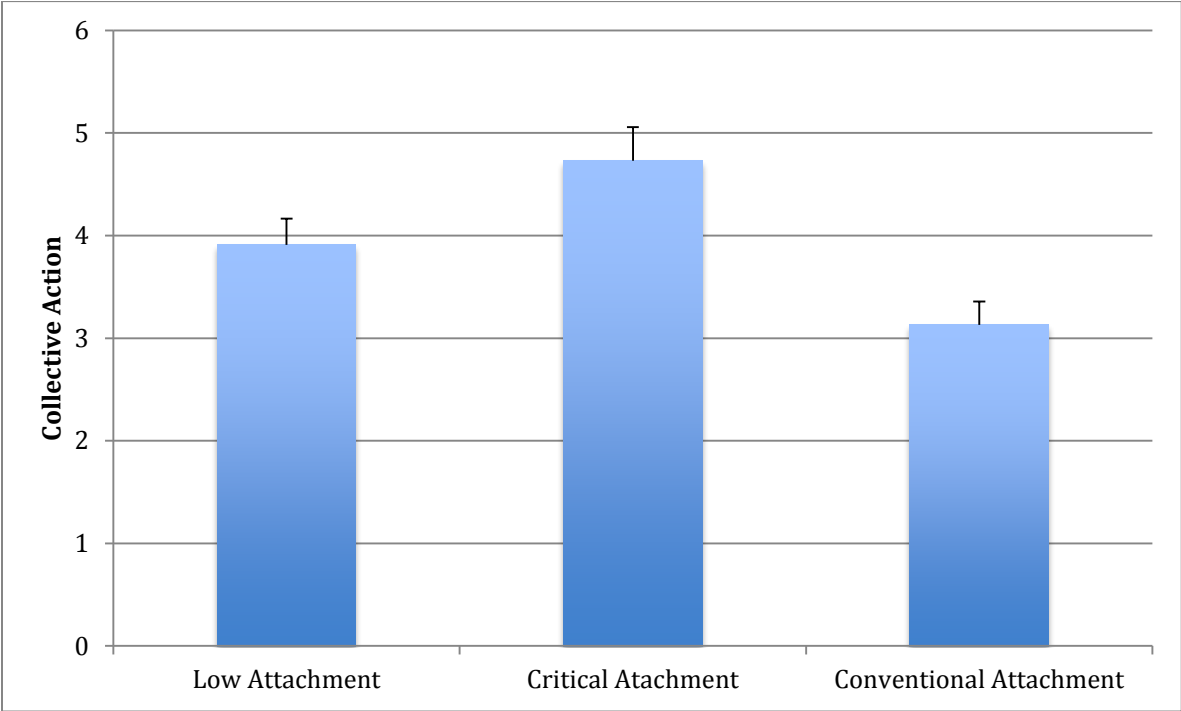


Figure 11. Effect of identification type on collective action in study 4.

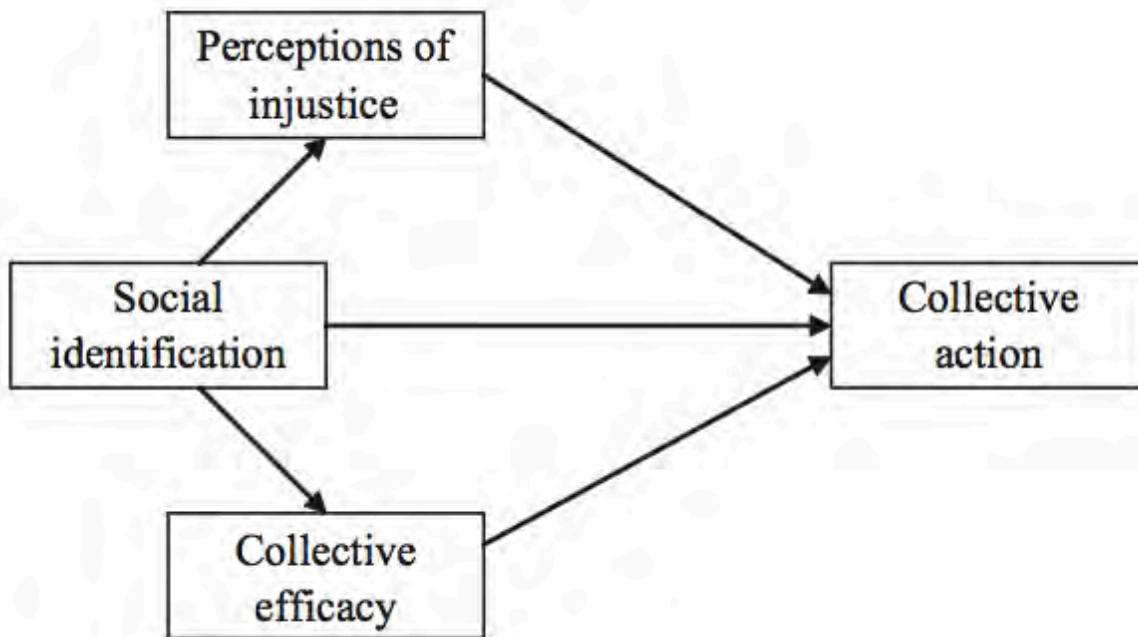
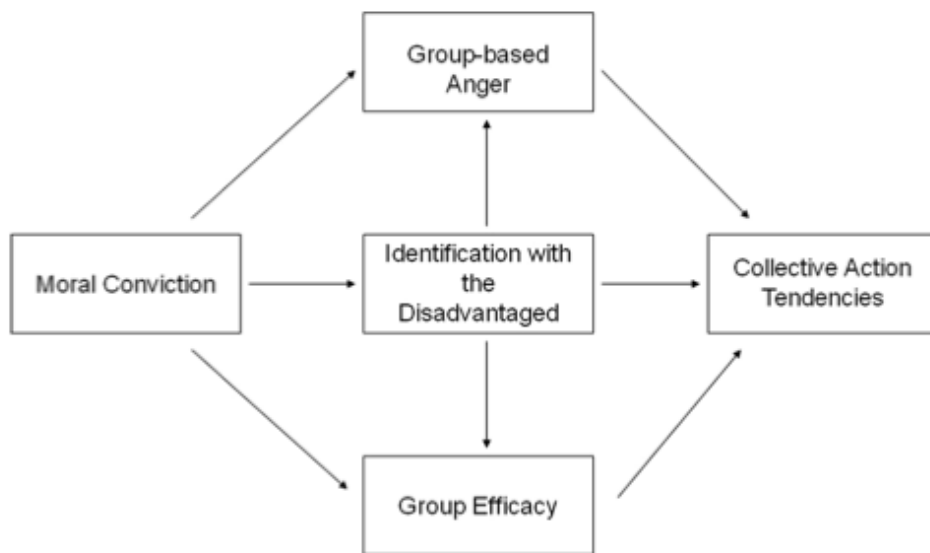


Figure 12. Social Identity Model of Collective Action



*Figure 13.* van Zomeren, et al.’s (2011) adaption of SIMCA to collective action on behalf of a disadvantaged group.

Appendix A

10-Item Positive and Negative Affect Schedule

This survey consists of a number of different words that describe different feelings and emotions. Read each item and then mark the appropriate answer. Indicate to what extent which you feel each emotion right now.

	very slightly or not at all	a little	moderately	quite a bit	extremely
upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix B

Group Identification Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

**Attachment Items**

- I love the United States of America.
- Being an American is an important part of my identity.
- It is important to me to contribute to my nation.
- It is important to me to view myself as an American.
- I am strongly committed to my nation.
- It is important to me that everyone will see me as an American.
- It is important for me to serve my country.
- When I talk about Americans I usually say “we” rather than “they.”

**Glorification Items**

- Other nations can learn a lot from America.
- In today’s world, the only way to know what to do is to rely on the leaders of our nation.
- The US military is the best army in the world.
- One of the important things that we have to teach children is to respect the leaders of our nation.
- Relative to other nations, we are a very moral nation.
- It is disloyal for Americans to criticize the United States.
- The United States is better than other nations in all respects.
- There is generally a good reason for every rule and regulation made by our national authorities.

## Appendix C

### Low Identity Threat

More than 11 years after the U.S. government transported the first prisoners from Afghanistan to the Guantanamo Bay Detention Center, and four years after President Obama signed an executive order promising to close the prison within a year, it remains open.

Prisoners in Guantánamo have reported being exposed to psychological and physical abuse. In addition, to abusive interrogation practices, prisoners also report harsh disciplinary measures. These reports have been corroborated by some news accounts. The United States has systematically applied the psychological, physical, and sexual abuse to prisoners, in connection with interrogation and disciplinary measures, and in the context of conditions of arbitrary confinement and detention. While we resorted to these measures in response to worst terrorist attack in our history, it is time to correct these abuses.

For example, both statements from detainees and an FBI memo describe the following incident. A prisoner was returning to his cell from a meal and resisted being returned to his cell. So the guard on duty pushed him into the cell onto the ground and cursed at him, but the prisoner yelled and continued to resist returning to his cell. So the guard called for a backup squad of guards. When the backup team arrived, a guard named Smith burst into the cell and jumped on the prisoner's back forcing the prisoner down on his stomach with his hands on his back. According to other detainees who viewed this incident, Smith weighed approximately 240 pounds. Because the prisoner continued to resist, at least two other men held the prisoner by the legs. Smith began to choke him with his hands, while another repeatedly hit his head on the floor. While being beaten, the prisoner lost consciousness and was subdued.

This excessive force used by the guards of Guantanamo is illustrated by an injury sustained by an American soldier who was ordered to act as a prisoner in a training exercise. Because the guards believed they were restraining an actual prisoner, not a U.S. soldier, they used the force regularly used against prisoners, slamming the soldier's head into the floor and grinding his temple into the steel.

Guantanamo represents a place where the United States was forced to use torture and violence as interrogation techniques and indefinite detention in order to combat the threat of terrorist attacks - the United States resorted to these measures to confront the existential threat of global terrorism. The vast majority of the 166 people held in Guantanamo have never been tried, convicted or even charged with a crime. More than half of them have been cleared for release or have been approved for transfer, but are still being held in the prison.

#### ***Reactions to Abuse at Guantanamo***

A recent Gallup poll survey reveals how these actions are affecting America's image in Europe. For example, one person interviewed said, "*Americans have committed many wrong and harmful actions during their war on terror, the prison in Guantanamo Bay is just another example of this. Its unfortunate that Americans have been forced to commit these actions because of war, but I think Americans are generally good people. In the end, it is just their actions in this war that are unjust.*" Another expressed the feeling that, "*Americans only committed these abuses after 9/11 in attempt to prevent an even worse attack on their country, while this does not completely justify their actions, it does show that Americans aren't bad people they were just reacting to negative circumstances.*"

### High Identity Threat

More than 11 years after the U.S. government transported the first prisoners from Afghanistan to the Guantanamo Bay Detention Center, and four years after President Obama signed an executive order promising to close the prison within a year, it remains open. The president has said he wants to close it, but the detention center remains an open moral wound, a symbol of the violation of our nation's deepest values.

Prisoners in Guantánamo have reported being exposed to extraordinary psychological and physical abuse. In addition to abusive interrogation practices, prisoners report harsh disciplinary measures. These reports have been corroborated by military and news accounts. The United States has systematically applied the psychological, physical, and sexual abuse to prisoners, in connection with interrogation and disciplinary measures, and in the context of conditions of arbitrary confinement and detention. These actions are reprehensible, especially because they demonstrate we have lost sight of the values that used to define us as Americans.

For example, both statements from detainees and an FBI memo describe the following incident. A prisoner returned to his cell and saw that the few items that had been in his cell had been removed and asked a guard what had happened to them. The guard on duty pushed him to the ground of the cell and cursed at him, the prisoner yelled in response. The guard called for a backup squad of guards. When the backup team arrived, they found the prisoner lying on his stomach with his hands on his back. Nonetheless, a guard named Smith burst into the cell and jumped on the prisoner's back wearing full riot gear. According to other detainees who viewed this incident, Smith weighed approximately 240 pounds. At least two other men held the prisoner by the

legs. Smith began to choke him with his hands, while another repeatedly hit his head on the floor. While being beaten, the prisoner lost consciousness. When the cage was hosed down later, the water ran red with blood.

This excessive force used by the guards of Guantanamo is illustrated by an injury sustained by an American soldier who was ordered to act as a prisoner in a "training" exercise. Because the guards believed they were restraining an actual prisoner, not a U.S. soldier, they used the force regularly used against prisoners, slamming the soldier's head into the floor and grinding his temple into the steel. The soldier roleplaying a prisoner suffered a traumatic brain injury and now has epilepsy, with up to 12 seizures a day.

Guantanamo represents a place where the United States broke faith with itself and used torture as an interrogation technique. It is a place where the moral wound of indefinite detention continues to cause immense pain and harm. The vast majority of the 166 people held in Guantanamo have never been tried, convicted or even charged with a crime. More than half of them have been cleared for release or have been approved for transfer, but are still being held in the prison. Sadly, this represents an abandonment of the fundamental American standards of justice and the rule of law.

### ***Reactions to Abuse at Guantanamo***

A recent Gallup poll survey reveals how these actions are affecting America's image in Europe. For example, one person interviewed said, "*Americans have committed many atrocities during their war on terror, and the abuses in Guantanamo are just another example of this. The abuse in Guantanamo and other American policies reveal the imperialistic and unjust character of Americans. Americans will do whatever they have to in order to get what they want, and I don't think this will ever change.*" Another expressed the feeling that, "*Americans have shown they have no respect for the rights or dignity of other people, which reveals their morally degenerate character. Their abuses of human rights in places like Guantanamo and Abu Ghraib merely reflect this character.*"



Appendix D

Anger Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

1. While reading the article, I felt angry about the violence committed against prisoners in Guantanamo.
2. While reading the article, I felt incensed about the violence committed against prisoners in Guantanamo.
3. While reading the article, I felt outraged about the violence committed against prisoners in Guantanamo.
4. While reading the article, I felt furious about the violence committed against prisoners in Guantanamo.
5. While reading the article, I felt hostile towards Americans.
6. While reading the article, I felt upset with Americans.
7. While reading the article, I felt angry with Americans.
8. While reading the article, I felt contempt towards Americans.
9. To ensure that you are paying attention to the questions, we ask that you please do not respond to this question
10. While reading the article, I felt hostile towards the US government.
11. While reading the article, I felt upset with the US government.
12. While reading the article, I felt angry with the US government.
13. While reading the article, I felt contempt towards the US government.
14. Because they elect the members of the government, the American people are ultimately responsible for the actions of the US government.\*
15. Ultimately, I feel that only government officials are responsible for the actions of the US government.\*

\*These items were not included in the total anger score.

Appendix E

Appraisals Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

**Identity Threat**

1. While reading the article, I felt as if the violence committed against prisoners in Guantanamo reflected negatively on how I see my self as a person.
2. While reading the article, I felt that the violence committed against prisoners in Guantanamo reflected negatively on my identity.
3. While reading the article, I felt that the violence committed against prisoners in Guantanamo makes Americans look bad.
4. While reading the article, I felt that that the violence committed against prisoners in Guantanamo have led the other people to have a negative view of my country.
5. While reading the article, I was afraid that the violence committed against prisoners in Guantanamo reflects poorly on me because it leads others to have a tarnished image of all Americans.
6. While reading the article, I felt that the violence committed against prisoners in Guantanamo gives people a negative impression of my country.
7. While reading the article, I felt that the violence committed against prisoners in Guantanamo gives people a negative impression of my country.
8. While reading the article, I felt that the violence committed against prisoners in Guantanamo might lead other people to think less of Americans.
9. While reading the article, I felt that the violence committed against prisoners in Guantanamo reflects poorly on the moral character of Americans.

**Moral Violation**

10. While reading the article, I felt that the violence committed against prisoners in Guantanamo were a violation of American moral standards.
11. While reading the article, I felt that the violence committed against prisoners in Guantanamo were a violation of American ethical norms.
12. While reading the article, I felt that the violence committed against prisoners in Guantanamo are compatible with American moral values.\*

**Goal Obstruction**

13. While reading the article, I felt that the violence committed against prisoners in Guantanamo were counterproductive to achieving American goals in the Middle East.
14. While reading the article, I felt that the violence committed against prisoners in Guantanamo are furthering American goals in the Middle East. \*
15. While reading the article, I felt that the violence committed against prisoners in Guantanamo are not promoting American goals in the Middle East.

\*These items were reverse scored.

16.

Appendix F

Shame Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

1. I feel ashamed of the violence committed against prisoners in Guantanamo by Americans.
2. I can easily feel embarrassed by the violence committed against prisoners in Guantanamo by Americans.
3. I feel shame for some of the violence committed against prisoners in Guantanamo.
4. I feel embarrassed by the violence committed against prisoners in Guantanamo.
5. After reading the article, being associated with the Americans who committed the violence makes me feel shame.

Appendix G

Guilt Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

1. I feel regret for Americans' violence against prisoners in Guantanamo .
2. I can easily feel guilty for the violence committed against prisoners in Guantanamo by Americans.
3. I feel regret for the violence committed against prisoners in Guantanamo in the past.
4. I believe I should repair the damage caused by the violence committed against prisoners in Guantanamo.
5. I feel guilty about the violence committed against prisoners in Guantanamo.

## Appendix H

Collective Action Intentions

Participants read the following paragraphs and then selected which actions they might be interested in engaging in.

Some Americans are taking action to express their opinions about what should be done about the problems in the Guantanamo Bay Detention Center. One group has been formed to call for the U.S. to provide monetary compensation to the inmates who were unjustly imprisoned or abused for the harm done to them. Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy.

Other Americans have formed a group to identify those responsible for the abuses that occurred in Guantanamo and to directly ensure they are appropriately punished for their actions. Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy.

Other Americans have formed a group to advocate closing the Guantanamo Bay Detention Center, releasing inmates who have not been charged and transferring the others to federal prisons. Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy.

Other Americans have formed a group to ensure that the inmates in Guantanamo receive the proper legal counsel. This group works to ensure that each inmates case is heard in court, that each receives a fair trial, and that any abuses they suffered are addressed by the legal system. Using the scale below, indicate how willing you would be to engage in various activities to support this group and its strategy.

Select all that apply.

- Volunteer with this group
- Vote for a candidate who agrees with this group
- Sign a petition
- Wear a badge supporting this group
- Attend a rally
- Join the group's e-mail list
- Recruit others to become involved with this group
- Go to a meeting of local representatives of this group

## Appendix I

Comprehension Check

Please answer the following comprehension questions about the article you just read.

How long has the prison at Guantanamo Bay been operating?

- 5 years
- 11 years
- 7 years
- 15 years

What happened to the prisoner in the example of abuse in the article?

- He was waterboarded
- He was physically beaten
- He was electrocuted with mild shocks
- He was force fed while on hunger strike

During a training exercise, how did the guards at Guantanamo injure the soldier who was role playing the "prisoner"?

- They broke his nose
- They gave him some severe bruises
- They gave him a traumatic brain injury
- They dislocated his shoulder

How many people are being held in the Guantanamo prison?

- 54
- 503
- 166
- 769

What percent of them have been cleared for release but are still being held?

- Less than 10%
- 15%
- 25%
- More than 50%

Select the paragraph that was the last paragraph in the article you read.

- A recent Gallup poll survey reveals how these actions are affecting America's image in Iraq, Afghanistan, and abroad. For example, one person interviewed said, "Americans have committed many wrong and harmful actions during their war on terror, the prison in Guantanamo Bay is just another example of this. The abuse in Guantanamo and American policies reveal the imperialistic and unjust character of Americans. Americans will do whatever they have to in order to get what they want, and I don't think this will ever change."
- A recent Gallup poll survey reveals how these actions are affecting America's image in Iraq, Afghanistan, and abroad. For example, one person interviewed said, "Americans have committed many wrong and harmful actions during their war on terror, the prison in Guantanamo Bay is just another example of this. Its unfortunate that Americans have been forced to commit these actions because of war, but I think Americans are generally good people. In the end, it is just their actions in this war that are horrifying and unjust."

Appendix J

Demographic Questionnaire

1. What is your sex?
  - Female
  - Male
2. What is your age? \_\_\_\_\_ years
3. What is the highest level of education you have completed?
  - Some high school/GED
  - High school diploma
  - Some college
  - Associate's degree
  - Bachelor's degree
  - Master's degree
  - Ph.D., J.D., or M.D.
4. Which of these best describes your ethnic background? If you are multi-racial please indicate the group with whom you identify the most.
  - White, non Hispanic
  - Black or African-American
  - American Indian or Alaska Native
  - Native Hawaiian or Pacific Islander
  - Asian
  - Hispanic or Latino
  - Arab
  - Other
5. How would you describe your current employment status?
  - Employed full time
  - Employed part time
  - Unemployed/ looking for work
  - Student
  - Homemaker
  - Retired
6. Please describe your political ideology:
 

1	2	3	4	5	6	7
Liberal			Moderate			Conservative
7. What political party are you affiliated with?
  - Republican Party
  - Democratic Party
  - Other
  - None

## Appendix K

Critical Attachment Manipulation

Please describe a way in which you think the United States is failing to live up to its fundamental American ideals (e.g. providing equal rights and opportunity for all citizens). Describe this issue, and how you think it might be solved, and why it is important to you personally as an American.

Conventional Attachment Manipulation

Please describe a way in which you think the United States upholds its fundamental American ideals (e.g. providing equal rights and opportunity for all citizens). Describe this American success, how it is uniquely possible in America, and why it is important to you personally as an American.



## Appendix L

### High Identity Threat

Our nation is based on the idea that “We the people” are the government. While we often feel removed from our government institutions, we are directly connected to them. Because we elect our leaders and officials, we are ultimately all responsible for their actions. Elected officials will only change their policy if a majority of the people demand it. Or if they refuse to change it is the peoples responsibility to replace them in the next election to correct their actions. It is time for “We the People” to take responsibility for the actions of our government in Guantanamo Bay.

More than 11 years after the U.S. government transported the first prisoners from Afghanistan to the Guantanamo Bay Detention Center, and four years after President Obama signed an executive order promising to close the prison within a year, it remains open. The president has said he wants to close it, but the detention center remains an open moral wound, a symbol of the violation of our nation's deepest values.

Prisoners in Guantánamo have reported being exposed to extraordinary psychological and physical abuse. In addition to abusive interrogation practices, prisoners report harsh disciplinary measures. These reports have been corroborated by military and news accounts. The United States has systematically applied the psychological, physical, and sexual abuse to prisoners, in connection with interrogation and disciplinary measures, and in the context of conditions of arbitrary confinement and detention.

For example, both statements from detainees and an FBI memo describe the following incident. A prisoner returned to his cell and saw that the few items that had been in his cell had been removed and asked a guard what had happened. The guard pushed him to the ground of the cell and cursed at him. The guard called for a backup squad. When the backup team arrived, they found the prisoner lying on his stomach with his hands on his back. Nonetheless, a guard named Smith burst into the cell and jumped on the prisoner's back wearing full riot gear. At least two other men held the prisoner by the legs. Smith began to choke him with his hands, while another repeatedly hit his head on the floor. While being beaten, the prisoner lost consciousness. When the cage was hosed down later, the water ran red with blood.

This excessive force used by the guards of Guantanamo is illustrated by an injury sustained by an American soldier who was ordered to act as a prisoner in a “training” exercise. Because the guards believed they were restraining an actual prisoner, not a U.S. soldier, they used the force regularly used against prisoners, slamming the soldier's head into the floor and grinding his temple into the steel. The soldier roleplaying a prisoner suffered a traumatic brain injury and now has epilepsy.

Guantanamo represents a place where the United States broke faith with itself and used torture as an interrogation technique. It is a place where the moral wound of indefinite detention continues to cause immense pain and harm. The vast majority of the 166 people held in Guantanamo have never been tried, convicted or even charged with a crime. More than half of them have been cleared for release or have been approved for transfer, but are still being held in the prison. Sadly, this represents an abandonment of the fundamental American standards of justice and the rule of law.

#### ***Reactions to Abuse at Guantanamo***

A recent Gallup poll survey reveals how these actions are affecting America's image in Europe. For example, one person interviewed said, *“Americans have committed many atrocities during their war on terror, and the abuses in Guantanamo are just another example of this. The abuse in Guantanamo and other American policies reveal the imperialistic and unjust character of Americans. Americans will do whatever they have to in order to get what they want, and I don't think this will ever change.”* Another expressed the feeling that, *“Americans have shown they have no respect for the rights or dignity of other people, which reveals their morally degenerate character. Their abuses of human rights in places like Guantanamo and Abu Ghraib merely reflect this character.”*

### Low Identity Threat

Our nation is based on the idea that “We the people” are the government. While we often feel removed from our government institutions, we are directly connected to them. Because we elect our leaders and officials, we are ultimately all responsible for their actions. Elected officials will only change their policy if a majority of the people demand it. Or if they refuse to change it is the peoples responsibility to replace them in the next election to correct their actions. It is time for “We the People” to take responsibility for the actions of our government in Guantanamo Bay.

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Prisoners in Guantánamo have reported being exposed to extraordinary psychological and physical abuse. In addition to abusive interrogation practices, prisoners report harsh disciplinary measures. These reports have been corroborated by military and news accounts. The United States has systematically applied the psychological, physical, and sexual abuse to prisoners, in connection with interrogation and disciplinary measures, and in the context of conditions of arbitrary confinement and detention.

For example, psychological abuse includes solitary confinement, light and sound manipulation, exposure to the elements and to temperature extremes (arguably also physical abuse), sleep deprivation, and threats of transfer for torture in another

country. In addition, numerous reports of extreme physical abuse have emerged from Guantanamo. Physical abuse is often meted out systematically by the specially trained "Immediate Reaction Force" (IRF); at other times, soldiers have beaten prisoners for no apparent reason or in connection with an alleged violation of a camp disciplinary rule. Some prisoners have sustained permanent physical injury as a result. Beatings are the most frequently reported form of mistreatment, with many prisoners providing details of such physical mistreatment. Some of the most severe physical abuse reported at Guantanamo is attributed to the IRF. Comparable to a riot squad, the IRF functions as a disciplinary force within the camps. The IRF carries Plexiglas shields and frequently uses tear gas or pepper spray. Though domestic and international law forbid the use of physical force to punish, rather than restrain, prisoners, the IRF frequently punishes Guantanamo prisoners with violence.

Guantanamo represents a place where the United States was forced to use torture and violence as interrogation techniques and indefinite detention in order to combat the threat of terrorist attacks - the United States resorted to these measures to confront the existential threat of global terrorism. The vast majority of the 166 people held in Guantanamo have never been tried, convicted or even charged with a crime. More than half of them have been cleared for release or have been approved for transfer, but are still being held in the prison.

### ***Reactions to Abuse at Guantanamo***

A recent Gallup poll survey reveals how these actions are affecting America's image in Europe. For example, one person interviewed said, "*Americans have committed many wrong and harmful actions during their war on terror, the prison in Guantanamo Bay is just another example of this. Its unfortunate that Americans have been forced to commit these actions because of war, but I think Americans are generally good people. In the end, it is just their actions in this war that are unjust.*" Another expressed the feeling that, "*Americans only committed these abuses after 9/11 in attempt to prevent an even worse attack on their country, while this does not completely justify their actions, it does show that Americans aren't bad people they were just reacting to negative circumstances.*"

Appendix M

*Target Words Used in the State Anger IAT*

Angry	Calm	Self	Other
angry	relaxed	I	they
indignant	comfortable	self	them
outraged	peaceful	my	you
furious	relieved	me	yours
incensed	at ease	own	others

Appendix N

Motivation to Restore Positive Group Identity Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

1. If the prison at Guantanamo Bay were closed, I would feel better about being identified as an American.
2. I would feel better about my American identity, if a swift fair trial was given to prisoners at Guantanamo.
3. I would be more proud to be an American if the human rights of Guantanamo detainees were protected.
4. Closing the Guantanamo Bay Prison would not make me any more proud to be American.\*
5. I would think about myself as an American more positively, if prisoners at Guantanamo were treated more humanely.
6. I would feel better about my American identity, if prisoners at Guantanamo were given legal rights.
7. I would be more proud to be an American if Guantanamo Bay Prison was closed.
8. Giving prisoners normal legal rights would have no effect on how I feel about my American identity.\*

\*These items were reverse scored.

Appendix O

Group Efficacy Scale

Participants rated the degree to which they agreed with the each statement on the following scale.

1	2	3	4	5	6	7
Strongly Agree	Agree	Slightly Agree	Neutral	Slightly Disagree	Disagree	Strongly Disagree

1. I think together individuals can influence the policy of the government.
2. I think individual citizens can effect the decisions politicians make.
3. I think that it's impossible for a group of individuals to change the policy of the government.\*
4. I think together individuals could convince politicians to close Guantanamo Bay Prison.
5. I think the actions of individuals could ensure prisoners at Guantanamo Bay are treated better.
6. I think the US government will never give the prisoners at Guantanamo legal rights no matter what citizens say or do.\*

\*These items were reverse scored.