

## Seeing is believing: communication modality, anger, and support for action on behalf of out-groups

Demis E. Glasford<sup>1,2</sup>

<sup>1</sup>Department of Psychology, John Jay College

<sup>2</sup>Graduate Center, CUNY

Correspondence concerning this article should be addressed to Demis E. Glasford, Department of Psychology, John Jay College; 524 West 59<sup>th</sup> Street, New York, NY 10019, USA.  
E-mail: dglasford@jjay.cuny.edu

doi: 10.1111/jasp.12173

### Abstract

Relatively few studies have investigated the impact of communication modality (e.g., video vs. print) on political action intentions, as well as what motivates external observers to act when both the victim and perpetrator of injustice are out-group members. The present research experimentally investigated the influence of communication modality of an injustice (text vs. video), where all parties were out-group members, on observers' sympathy, anger, social cohesion to victims, and political action intentions. Participants reported greater intentions to politically act in the video condition, relative to print, which was explained by increased anger in the video condition. In addition, both sympathy and anger were positively related to social cohesion to the out-group, but only anger was associated with political action intentions.

. . . The images of wilting Muslims behind barbed wire concentrated grassroots and elite attention and inflamed public outrage about the war like no postwar genocide. . . 'There is an enormous difference between reading about atrocities and seeing those images,' . . . As had occurred when television reporters gained access to the frozen, bluish remains of Kurdish victims in Halabja, popular interest. . . were aroused by pictures far more than they had been by words.

Samantha Power (2007) writing on public response to Bosnian Serb military forces' actions toward Muslims (p. 276)

Prosocial emotions, such as sympathy, have been shown to increase helping, altruism, and solidarity between groups (Penner, Dovidio, Piliavin, & Schroeder, 2005; Thomas, McGarty, & Mavor, 2009). One intergroup context that has received relatively less attention is one in which an external observer will assist within a context where *both* the victim and the perpetrator of an injustice are out-group members. As the responses by external observers to the genocide in Serbia illustrate, within a context where both perpetrator and victim are of an out-group, it may be the case that communication modality can have a strong influence on political action intentions to assist out-group members. Moreover, given that recent work finds that the emotions often best able to explain

action and helping of in-group members, such as empathy and sadness, are less likely to explain assistance in contexts where out-group members are the victim (Sturmer, Snyder, Kropp, & Siem, 2006), more work may be needed to identify the most effective emotions able to facilitate political action on behalf of out-groups. The present research investigates both the "*how*" (communication modality) and the "*why*" (emotion) of action intentions on behalf of out-groups facing injustice.

Whereas much of the previous research on political action has investigated when members of a group will work on behalf of their own group (i.e., collective action; van Zomeren, Postmes, & Spears, 2008) or provide help to out-groups their own group has victimized (e.g., collective guilt; Doosje, Branscombe, Spears, & Manstead, 1998), the current work focuses on understanding the process that leads external observers, who are a member of neither the perpetrating or victim group, to assist an out-group. Contrary to situations where observers have clear motives or a "stake" in action, such as in collective action on behalf of one's own group (e.g., identity and resource motives; Klandermans, 2000), or when one's own group has harmed another group (i.e., motive to alleviate collective guilt; Wohl, Branscombe, & Klar, 2006), the current work examines a context where observers may have less motivation for action. Indeed, a number of studies have examined the motivations that help to explain collective action on behalf

of one's own group (van Zomeren et al., 2008) action to alleviate collective guilt (Wohl et al., 2006), as well as the processes that lead to helping of individual targets (Levine, Prosser, Evans, & Reicher, 2005), yet few studies have investigated how to motivate action among external observers that have no explicit stake tied to the group membership of either the perpetrator or victim group. The present research examines the psychology of external observer action, a context in which other strategies (e.g., a common identity; Levine et al., 2005) may be less feasible, with a particular focus on the influence of communication modality, as well as the emotions best able to explain action on behalf of out-groups.

Although the work contrasting the efficacy of print versus video modality is mixed, with some work finding more persuasive effects for print (Byrne & Curtis, 2000), some finding for video (Corston & Colman, 1997), and finally, other research finding no differences between the two communication mediums (Furnham, De Siena, & Gunter, 2002), there are reliable patterns for when video is more persuasive than print. Emotional messages are especially effective when using video, relative to print. Not only has video been shown to produce higher arousal relative to print (Fishfader, Howells, Katz, & Teresi, 1996), but once individuals are emotionally aroused, video produces higher involvement with the message (Ravaja, Saari, Kallinen, & Laarni, 2006). Of particular importance to the current work, in one of the few studies investigating the influence of communication modality on responses to out-group members, video was found to be more effective than print at holding the attention of an audience for out-group targets. Specifically, participants who received fictional stories of individuals diagnosed with HIV/AIDS showed higher engagement with the issue, more concern for victim, and better recall of the content in the video condition, relative to a print condition (Yadav et al., 2011). Much of the research on the relative effectiveness of communication modality, however, has investigated efficacy for messages targeted at promoting action on behalf of the viewing audience, such as attitude-change (Chaiken & Eagly, 1976) or health prevention (Corston & Colman, 1997), rather than intergroup contexts aimed at promoting action for an out-group. Given that there are mixed results regarding the efficacy of print versus video and also that persuasion involving out-groups often takes a different route than persuasion involving the self or an in-group (Wilder, 1990), it may therefore be the case that past communication modality results are less applicable to the external observer context. Taken together, these findings not only suggest a need for work investigating communication modality effects within the external observer context, but also evidence that video, relative to print, should produce greater emotions in response to an out-group in need of help.

In considering the emotions best able to explain political action on behalf of out-groups, recent work suggests not all

emotions may be equivalent in their ability to promote action on behalf of out-groups. A growing body of work suggests that relative to anger, prosocial emotions, such as sympathy and sadness may be less efficacious at promoting action. For example, there is evidence that empathy and sadness did not predict helping a depressed student that was new to campus (out-group member) or a student in need of money when the target was an out-group member, compared to when the target was an in-group member (Sturmer et al., 2006). Similarly, sympathy experienced toward an out-group target (e.g., women or indigenous peoples) has been shown to have a weak relation to political action intentions (Schmitt, Behner, Montada, Muller, & Muller-Fohrbrodt, 2000). Finally, and of particular relevance to the external observer context of the present work, sympathy for those in developing countries has been shown to be a poor predictor of political action by individuals in developed countries (Thomas, 2005). In sum, although the affective and motivational properties of empathy, sadness, and sympathy are distinct and all three emotions can increase concern and sometimes charity contributions for an out-group, the evidence suggests that all three emotions may be less efficacious at motivating *political action* on behalf of out-groups. Thus, although prosocial emotions, such as sympathy, can lead to greater concern for out-group victims, these emotions may not be able to explain social or political action on behalf of out-groups. Conversely, anger and outrage, often rooted in a violation of moral prescriptions and typically directed at a system or institution (Batson et al., 2007; Leach, Snider, & Iyer, 2002; Thomas et al., 2009), has been shown to be a strong predictor of a number of actions on behalf of out-groups, including helping individual out-group members (Montada & Schneider, 1989), action to alleviate poverty in developing countries (Thomas, 2005), and participation in protest on behalf of out-group members (Lodewijkz, Kersten, & van Zomeren, 2008). Thus, there is evidence to suggest that prosocial emotions, such as sympathy, may be less efficacious, relative to anger, in explaining action on behalf of out-group members.

One framework for explaining why anger and sympathy might lead to differing response outcomes on behalf of out-group targets is the dual paths to social change: social cohesion and collective or political action (Wright & Lubensky, 2009). This framework makes a distinction between social change via social cohesion, which seeks to increase positive harmonious connections between members of different groups (e.g., perceiver or in-group and an out-group target) and political action, often more focused on direct action to change inequity faced by an out-group. Recent work has differentiated between emotions that are likely to be associated with outcomes rooted in connection or *social cohesion* toward an out-group (e.g., closeness or attachment) and emotions that are more likely to be associated with outcomes rooted in *political action* on behalf of an out-group (Thomas et al.,

2009). At the group-level, whereas sympathy recognizes disadvantage and is often associated with an other-focus rooted in *connecting* to an out-group, anger or outrage is often associated with an other-focus rooted in *action* on behalf of an out-group (Harth, Kessler, & Leach, 2008; Leach et al., 2002). Moreover, relative to sympathy, anger not only often produces greater arousal, but also a more action-oriented approach motivation (Harmon-Jones, 2004). Taken together, this evidence suggests that, independent of method of communication modality, whereas sympathy should be more likely to be associated with social cohesion outcomes, such as intergroup attachment, anger in response to unjust authorities/institutions, on the other hand, should be more likely to be associated with political action outcomes (Thomas et al., 2009).

In sum, communication modality and emotions should play a strong role in explaining external observers' action in contexts where both perpetrators and victims of an injustice are of an out-group. Video, relative to print, should produce greater emotions (Fishfader et al., 1996). Moreover, because anger often produces arousal (Harmon-Jones, 2004) and is an important prerequisite to political action (Montada & Schneider, 1989; Thomas, 2005), increased anger in video, relative to print modality, should be associated with greater political action intentions on behalf of an out-group. Conversely, because emotions are often a necessary prerequisite to action on behalf of out-groups (Batson & Shaw, 1991; Goetz, Keltner, & Simon-Thomas, 2010), the print modality, which is often less likely to produce emotional arousal (Fishfader et al., 1996), should be more likely to be associated with legitimization of an injustice. Finally, recent work would also suggest that sympathy (social cohesion) and anger (political action) are likely to be distinctly related to social cohesion and political action outcomes (Thomas et al., 2009).

In the present research, individuals received information regarding an out-group victim via one of two communication routes: print versus video. Emotional responses, including sympathy and anger, were then assessed, and finally, measures of intergroup attachment (*social cohesion*), political action intentions (*political action*), as well as perceived legitimacy of the injustice were collected. It was hypothesized that the video communication modality, relative to print, would produce greater affect, political action intentions, and intergroup attachment. Drawing on work that has found a strong relation between anger and political action (Thomas, 2005), it was expected that increases in political action intentions in the video condition, relative to the print condition, would be explained by anger. Conversely, because of less affect, as well as psychological distance (Wellens, 1989), produced in the print condition, it was expected that legitimacy of out-group suffering would be higher in the print, relative to the video, condition. Finally, in line with work suggesting distinct emotional routes to social cohesion and political action outcomes

(Thomas et al., 2009; Wright & Lubensky, 2009), it was also hypothesized that independent of the modality that the injustice was presented (video or print), sympathy would be positively related to intergroup attachment (*social cohesion*), but not political action and anger would be positively related to increased political action intentions on behalf of the out-group victim (*political action*).

## Method

### Participants

Ninety-nine undergraduate students (69 women and 30 men) participated to fulfill one option of an introductory psychology course requirement. Thirty-eight percent of the sample self-identified as Latino/a, 22% as Black (African-American), 18% as White (European-American), 10% as Asian, 7% as multiracial, and 5% as "Other." Prior to completing the study, all participants self-identified as Americans in an earlier survey in order to qualify for the study. Moreover, none of the participants in the study self-identified as Nigerian (the context under investigation in the present work).

### Procedure

Participants were randomly assigned to one of two communication modality conditions (video vs. print; Chaiken & Eagly, 1976; Pezdek, Avila-Mora, & Sperry, 2010) and individually completed the procedures of the experiment. Each participant was asked to either read (print condition) or watch a video (video condition) with information about an action against hunger campaign in Niger, Africa. Because all participants self-identified as American, and none reported being Nigerian, the hunger crisis in Niger served as a context in which both perpetrator and victim were of an out-group to participants in this particular study.

In the print condition, each participant read a two-page transcript regarding the hunger crisis, whereby both the perpetrator (Nigerian authorities) and the victim (Nigerian people) were of an out-group. The transcript in the print condition included all text written on-screen, narrated, or discussed in interviews regarding the non-profit organization's message about the hunger crisis in Niger, Africa (i.e., all content, with the exception of the accompanying video). The transcript therefore provided a summary of the problem, as well as injustices regarding the government's perceived role in the crisis, and read, in part:

A therapeutic feeding center just outside of Morati in Niger has been ground Zero for the country's hunger crisis. . . . There has been fleeting attention from the international community, a spotlight that has now disappeared, leaving a country in crisis. . . . International Aid Organizations have been asking for help since last

year, but, despite a forecast of a famine, their calls were ignored. . . . the government denies there is a famine and that children need food. . . . Of course it is not surprising that the government says there is no famine in Niger, because this situation is also the result of the government's own policies. . . . as you can see there is no shortage of food here. In fact the country isn't suffering from a food shortage, but rather the people's access to it. . . . the government insists that farmers plant crops for export, driving food prices even higher. Currently more than half the population can't afford a bag of rice, surviving on just one dollar a day.

The video condition contained all the text from the print condition, but was accompanied by video, including images of children starving, those interviewed (i.e., local international aid workers and local journalists), as well as images of markets full of vegetables.

After receiving information about the injustice (via video or print), participants first rated their affective response "AT THIS MOMENT" regarding the "victims of the hunger crisis" on a 1 (*does not apply at all*) to 7 (*applies very much*) scales. Interspersed items, among a number of filler items, were averaged to create measures of sympathy (*concern, empathy, and sympathy*;  $\alpha = .76$ ) and sadness (*gloomy, sad, and melancholy*;  $\alpha = .68$ ). Participants next rated their affective response "AT THIS MOMENT" regarding the "institutions and governments" described as being responsible for the hunger crisis on 1 (*does not apply at all*) to 7 (*applies very much*) scales. Interspersed items, among filler items, were averaged to create a measure of anger (*angry, mad, and irritated*;  $\alpha = .92$ ). Participants were then asked to report on their intergroup connection to individuals in Niger on a 1 (*does not apply*) to 7 (*applies very much*) scale. Specifically, the intergroup attachment measure asked participants to consider the extent to which they "Liked" and felt "friendly" toward the people of Niger ( $\alpha = .71$ ).

Finally, among a number of filler items, participants reported on their political action intentions and perceived legitimacy of the problem of child hunger. Political action intentions was assessed using four modified items from the activism orientation scale (Corning & Myers, 2002), and participants were asked to indicate their level of agreement on a 1 (*extremely unlikely*) to 7 (*extremely likely*) scale. Participants were asked the likelihood they would engage in action "in response to hunger in Niger" using the following four items: "Go out of my way to collect information on child hunger," "Keep track of the views of members of Congress with respect to child hunger," "Attend a protest about child hunger," and "Go find out more information on the internet about child hunger" ( $\alpha = .83$ ). Lastly, perceived legitimacy of child hunger was assessed on a 1 (*strongly disagree*) to 7 (*strongly agree*) scale ( $\alpha = .71$ ) with three items: "It is understandable

that there is child hunger in the world," "It is completely legitimate that there is child hunger in the world," and "It is acceptable that there is a child hunger in the world."

## Results

Because of the skewed sample with respect to participant sex, preliminary analyses were conducted testing for the effects of participant sex, which revealed no significant effects. Thus, this variable was excluded from all subsequent analyses.

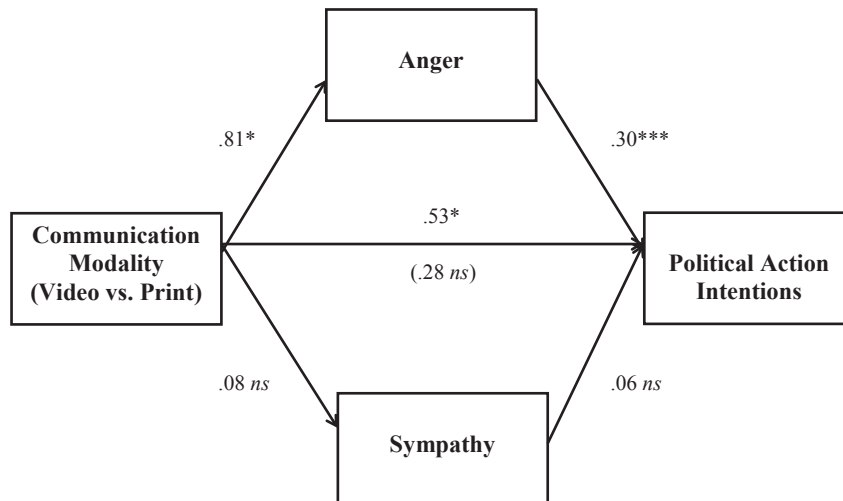
### Affective responses, intergroup attachment, perceived legitimacy, and political action intentions

It was hypothesized that the video condition, relative to print, would produce greater affective responses (across all three emotions measured). An analysis of variance (ANOVA) testing for differences between communication modality conditions (print vs. video) revealed, contrary to hypotheses, that participants did not report greater sympathy in the video condition (mean [ $M$ ] = 5.80, standard deviation [ $SD$ ] = 1.41), compared with print ( $M = 5.71$ ,  $SD = 1.33$ ) condition. Similarly, participants reported statistically equivalent sadness ( $M = 4.57$ ,  $SD = 1.44$ ;  $M = 4.52$ ,  $SD = 1.12$ ) in the video and print conditions, respectively,  $F$ 's(1, 97) < 1. Consistent with hypotheses, however, participants reported greater anger in the video ( $M = 4.61$ ,  $SD = 1.58$ ) condition, compared with the print ( $M = 3.80$ ,  $SD = 1.87$ ) condition,  $F(1,97) = 5.21$ ,  $p = .03$   $\eta^2_p = .05$ .

An ANOVA also revealed no differences between the video ( $M = 5.11$ ,  $SD = 1.11$ ) and print ( $M = 4.87$ ,  $SD = 1.41$ ) conditions on intergroup attachment to the Niger people,  $F(1, 97) < 1$ , but did reveal, as hypothesized, differences between the two communication modality conditions for political action intentions and perceived legitimacy of child hunger. Specifically, as expected, perceived legitimacy of child hunger in Africa was higher in the print condition ( $M = 4.17$ ,  $SD = 1.66$ ) compared with the video condition ( $M = 3.20$ ,  $SD = 1.47$ ),  $F(1,97) = 8.98$ ,  $p < .01$   $\eta^2_p = .08$ . Conversely, as hypothesized, participants reported marginally significant greater intention to politically act in the video ( $M = 4.52$ ,  $SD = 1.47$ ) condition, compared with the print ( $M = 3.99$ ,  $SD = 1.23$ ) condition,  $F(1,97) = 3.88$ ,  $p = .05$   $\eta^2_p = .04$ .

### Communication modality, affect, and political action intentions

To investigate the hypothesized mediating role of anger between communication modality and political action intentions (*political action*), a double-mediator path analysis including both anger (hypothesized mediator) and sympathy was conducted using a bootstrapping procedure (Preacher & Hayes, 2008). As hypothesized, the total effect of communica-



**Figure 1** Multiple mediation model of the effect of communication modality on political action intentions via anger and sympathy. All coefficients are standardized. \* $p \leq .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ . *ns*, not significant.

**Table 1** Correlation among Variables

	Sympathy	Anger	Sadness	Intgrp. Attch.	Pol. Act.	Legit
Sympathy	—	.26**	.01	.27**	.17	-.11
Anger		—	.38**	.47**	.44**	-.04
Sadness			—	.14	.19	-.11
Intergroup Attachment				—	.37**	.12
Political Action Intentions					—	-.08
Perceived Legitimacy of Child Hunger						—

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

tion modality condition on political action intentions went from approaching significance (total effect = .53,  $p = .05$ ) to non-significant (direct effect = .28, *ns*) when anger and sympathy were included as mediators (see Figure 1). Importantly, consistent with hypotheses, whereas anger, point estimate of .0099 and a 95% bias corrected/accelerated interval between .0275 and .5872, uniquely and significantly ( $p < .05$ ) explained the relation, sympathy was not a unique and significant mediator, estimate of  $-.0039$  and a 95% bias corrected/accelerated interval between  $-.0400$  and .1271, of political action intentions.

### Affective responses, social cohesion and political action

Drawing on a framework that suggests that the emotions and strategies that lead to social cohesion do not necessarily lead to political action (Thomas et al., 2009), it was hypothesized that, independent of the communication modality condition (i.e., across conditions), sympathy would be positively related to intergroup attachment (*social cohesion*), but not political action intentions, and anger would be positively related to political action intentions (*political action*). Consistent with

hypotheses, there was a positive correlation between sympathy and intergroup attachment ( $r = .27$ ,  $p < .01$ ), but a weak nonsignificant relation between sympathy and political action intentions ( $r = .17$ ,  $p = .09$ ). Conversely, anger was positively related to both intergroup attachment ( $r = .46$ ,  $p = .01$ ) and political action intentions ( $r = .44$ ,  $p < .001$ ). Table 1 shows the pattern of correlations among all variables.

### Discussion

The present research provides initial evidence of the strong role of communication medium, as well as emotions, in explaining when external observers will engage in political action on behalf of out-groups. Participants that received injustice information about an out-group in the form of video reported greater intentions to politically act relative to the print condition, which was explained by increases in anger produced in the video condition. Moreover, participants that received injustice information in the form of video, rather than print, were less likely to legitimize the injustice directed at the out-group. The results of the

current work illustrate the strong influence of communication modality on external observers' political action on behalf of out-groups.

The emotions that result from the differing forms of the communication of injustice may also play a strong role in explaining action on behalf of out-groups. In the current work, there were differences between communication modality conditions not only for political action intentions, but also in the emotions produced: video produced greater anger, but there were no differences between communication modality conditions for sympathy or sadness. These findings were unexpected and may be a result of the tendency of individuals to use different categorization cues and differing forms of information to label emotions when taking in information via dissimilar communication modality routes (Barrett, 2006). Nevertheless, as more and more individuals begin to not only receive information in text (e.g., Twitter) or video (e.g., via Facebook), but also use social media as a primary means to communicate information (Lenhart, Purcell, Smith, & Zickuhr, 2010), it becomes increasingly important for those interested in promoting political action on behalf of out-groups to understand whether different modalities of communication are associated with dissimilar levels of political action. The results of the current work, illustrating that different communication modalities inspire differing levels of political action intentions, demonstrates the critical role that the *form* or presentation of injustice plays in inspiring action. As such, one implication of the current findings is that organizations interested in increasing action on behalf of out-groups should consider exploring a variety of means to communicate their message, with a particular focus on moving beyond merely reporting the 'facts' of the injustice (e.g., narrative story of injustice; Slovic, 2007).

The present research also complements recent work suggesting there may be unique emotional pathways to social cohesion with an out-group, compared to political action on behalf of an out-group. Whereas a large body of work has found that sympathy, empathy or sadness explain helping of in-group members (Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991), these emotions often are less able to explain helping of individual out-group members (Sturmer et al., 2006). Consistent with a framework that suggests alternative pathways to social cohesion and political action (Thomas et al., 2009), in the current experiment both sympathy and anger were positively associated with intergroup attachment with the out-group (*social cohesion*), but only anger at a third party was associated with political action intentions on behalf of the out-group (*political action*). These findings may be partially a result of the emotion target used for sympathy (victims of the hunger crisis) compared with anger (institutions and government responsible) in this particular study. Nevertheless, the pattern of results complements work in a number of areas, including gender relations (e.g., benevolent

sexism; Glick & Fiske, 1996) and intergroup helping (e.g., paternalistic assistance; Nadler, 2002), that suggests sympathy and empathy do not necessarily always lead to beneficial political action on behalf of an out-group. Of course social cohesion and political action are not necessarily mutually exclusive. Indeed, in the current work there was a positive relation ( $r = .37, p = .04$ ) between intergroup attachment and political action intentions. Moreover, within a number of contexts, social cohesion among groups (e.g., via a shared superordinate identity) may be a critical precursor to a variety of alternative forms of political action (e.g., political solidarity between majority and minority groups; Subasic, Reynolds, & Turner, 2008). One fruitful avenue for future research, therefore, lies in understanding when particular emotions can promote category inclusion to shape political solidarity with an out-group (Thomas et al., 2009), but also when information about an out-group injustice can move external observers beyond increased social cohesion to political action.

A number of limitations suggest a cautious interpretation of the results is warranted. First, the study of persuasive effects of mass media in a laboratory setting is limited to the extent that a variety of influences, such as social company of others (Ruiz-Belda, Fernandez-Dols, Carrera, & Barchard, 2003) as well as social norms (Paluck, 2009), often have a strong influence on the persuasiveness of messages in field or applied settings. Similarly, the validity of the empirical test contrasting print versus video in the present work is of course complicated by the fact that additional factors in the video condition (e.g., individuals facial expressions while reading text) may help to explain some of the condition effects in the current study. Nevertheless, there is a large body of evidence that media effects studied in the lab often generalize to real-world settings (e.g., aggression; Anderson & Bushman, 1997), including work focused on action on behalf of out-groups (Levine & Crowther, 2008). In addition, some research suggests that even when controlling for irrelevant visual material, video produces more persuasive effects for an identical message (Corston & Colman, 1997). Second, the assessment of emotional states was based on self-report and thus may be biased by respondents' ability to accurately report on their feelings (Nisbett & Wilson, 1977). Indeed, there were unexpected results related to the two communication modalities leading to distinct emotions, but also unexpected patterns among the measured emotions. Although a large body of work suggests that self-reports are valid indicators of emotions, the unexpected patterns of findings may be due to lack of specificity within the instructions (Robinson & Clore, 2002). Finally, the results for political action intentions may be limited not only in terms of form of political action (i.e., the measure primarily focused on information-gathering), but also the extent to which the measure would generalize to actual political behavior.

The current work provides initial evidence of the strong role of video and anger in explaining political action intentions of external observers on behalf of out-groups. These findings suggest that presentation of information about injustice may not be sufficient to inspire political action. Too often the injustices of the world, such as the genocide in Bosnia, are only reported in text and go unseen, but the

present work illustrates that the words of injustice may not always be sufficient to arouse action. Indeed, the pattern of results carries the sobering implication that the “facts alone” of injustice may not always be enough and it is not just a matter of *how* one goes about communicating injustices, but also *what* emotions are aroused that is best able to explain whether people act in response to injustice facing out-groups.

## References

- Anderson, C. A., & Bushman, B. J. (1997). External validity of “trivial” experiments: The case of laboratory aggression. *Review of General Psychology, 1*, 19–41.
- Barrett, L. F. (2006). Solving the emotion paradox: Categorization and the experience of emotion. *Personality and Social Psychology Review, 10*, 20–46.
- Batson, C. D., Kennedy, C. L., Nord, L., Stocks, E. L., Fleming, D. A., Marzette, C. M., et al. (2007). Anger at unfairness: Is it moral outrage? *European Journal of Social Psychology, 37*, 1272–1285.
- Batson, D., & Shaw, M. (1991). Evidence for altruism: Toward a pluralism of prosocial motives. *Psychological Inquiry, 2*, 107–122.
- Byrne, M., & Curtis, R. (2000). Designing health communication: Testing the explanations for the impact of communication medium effectiveness. *British Journal of Health Psychology, 5*, 189–199.
- Chaiken, S., & Eagly, A. H. (1976). Communication modality as a determinant of message persuasiveness and message comprehensibility. *Journal of Personality and Social Psychology, 34*, 606–614.
- Corning, A. F., & Myers, D. J. (2002). Individual orientation toward engagement in social action. *Political Psychology, 23*, 703–729.
- Corston, R., & Colman, A. (1997). Modality of communication and recall of health related information. *Journal of Health Psychology, 2*, 185–194.
- Doosje, B., Branscombe, N. R., Spears, R., & Manstead, S. R. (1998). Guilty by association: When one’s group has a negative history. *Journal of Personality and Social Psychology, 75*, 872–886.
- Dovidio, J. F., Piliavin, J. A., Gaertner, S. L., Schroeder, D. A., & Clark, R. D., III. (1991). The arousal cost-reward model and the process of intervention: A review of the evidence. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 86–118). Newbury Park, CA: Sage.
- Fishfader, V. L., Howells, G. N., Katz, R. C., & Teresi, P. S. (1996). Evidential and extralegal factors in juror decisions: Presentation mode, retention, and level of emotionality. *Law and Human Behavior, 20*, 565–572.
- Furnham, A., De Siena, S., & Gunter, B. (2002). Children’s and adults’ recall of children’s news stories in both print and audio-visual presentation modalities. *Applied Cognitive Psychology, 16*, 191–210.
- Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology, 70*, 491–512.
- Goetz, J.L., Keltner, D., & Simon-Thomas, E. (2010). Compassion: An evolutionary analysis and empirical review. *Psychological Bulletin, 136*, 351–374.
- Harmon-Jones, E. (2004). Contributions from research on anger and cognitive dissonance to understanding the motivational functions of asymmetrical frontal brain activity. *Biological Psychology, 67*, 51–76.
- Harth, N. S., Kessler, T., & Leach, C. W. (2008). Advantaged group’s emotional reactions to intergroup inequality: The dynamics of pride, guilt and sympathy. *Personality and Social Psychology Bulletin, 34*, 115–129.
- Klandermans, B. (2000). Identity and protest: How group identification helps to overcome collective action dilemmas. In M. van Vugt, M. Snyder, T. Tyler, & A. Biehl (Eds.), *Collective helping in modern society* (pp. 162–183). London: Routledge.
- Leach, C. W., Snider, N., & Iyer, A. (2002). Poisoning the consciences of the fortunate: The experience of relative advantage and support for social equality. In I. Walker & H. J. Smith (Eds.), *Relative deprivation: Specification, development, and integration* (pp. 136–163). New York: Cambridge University Press.
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social media and mobile internet use among teens and young adults. Pew Research Center. February. Retrieved July 1, 2011, from <http://www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults.aspx> Retrieved on 7/1/11
- Levine, M., & Crowther, S. (2008). The responsive bystander: How social group membership and group size can encourage as well as inhibit bystander intervention. *Journal of Personality and Social Psychology, 95*, 1429–1439.
- Levine, M., Prosser, A., Evans, D., & Reicher, S. (2005). Identity and emergency intervention: How social group membership and inclusiveness of group boundaries shape helping behavior. *Personality and Social Psychology Bulletin, 31*, 443–453.
- Lodewijkz, H. F. M., Kersten, G. L. E., & van Zomeren, M. (2008). Dual pathways to engage in “silent marches” against violence: Moral outrage, moral cleansing and modes of identification. *Journal of Community and Applied Social Psychology, 18*, 153–167.
- Montada, L., & Schneider, A. (1989). Justice and emotional reactions to the disadvantaged. *Social Justice Research, 3*, 313–344.
- Nadler, A. (2002). Inter-group helping relations as power relations: Maintaining or challenging social dominance between groups through helping. *Journal of Social Issues, 58*, 487–502.

- Nisbett, R. W., & Wilson, T. D. (1977). Telling more than we know: Verbal reports on mental processes. *Psychological Review*, 84, 231–259.
- Paluck, E. L. (2009). Reducing intergroup prejudice and conflict using the media: A field experiment in Rwanda. *Journal of Personality and Social Psychology*, 96, 574–587.
- Penner, L. A., Dovidio, J. F., Piliavin, J. A., & Schroeder, D. A. (2005). Prosocial behaviour: Multilevel perspectives. *Annual Review of Psychology*, 56, 365–392.
- Pezdek, K., Avila-Mora, E., & Sperry, K. (2010). Does trial presentation medium matter in Jury simulation research? Evaluating the effectiveness of eyewitness expert testimony. *Applied Cognitive Psychology*, 24, 673–690.
- Power, S. (2007). *A problem from hell: America and the age of genocide*. New York: Harper Perennial.
- Preacher, K. J., & Hayes, A. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Ravaja, N., Saari, T., Kallinen, K., & Laarni, J. (2006). The role of mood in the processing of media messages from a small screen: Effects on subjective and physiological responses. *Media Psychology*, 8, 239–265.
- Robinson, M. D., & Clore, G. L. (2002). Belief and feeling: Evidence for an accessibility model of emotional self-report. *Psychological Bulletin*, 128, 934–960.
- Ruiz-Belda, M. A., Fernandez-Dols, J. M., Carrera, P., & Barchard, K. (2003). Spontaneous facial expressions of happy bowlers and soccer fans. *Cognition & Emotion*, 17, 315–326.
- Schmitt, M., Behner, R., Montada, L., Muller, L., & Muller-Fohrbrodt, G. (2000). Gender, ethnicity, and education as privileges: Exploring the generalizability of the existential guilt reaction. *Social Justice Research*, 13, 313–337.
- Slovic, P. (2007). “If I look at the mass I will never act”: Psychic numbing and genocide. *Judgment and Decision Making*, 2, 1–17.
- Sturmer, S., Snyder, M., Kropp, A., & Siem, B. (2006). Empathy-motivated helping: The moderating role of group membership. *Personality and Social Psychology Bulletin*, 32, 943–956.
- Subasic, E., Reynolds, K. J., & Turner, J. C. (2008). The political solidarity model of social change: Dynamics of self-categorization in intergroup power relations. *Personality and Social Psychology Review*, 12, 330–352.
- Thomas, E. F. (2005). The role of social identity in creating positive beliefs and emotions to motivate volunteerism. *Australian Journal on Volunteering*, 10, 45–52.
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009). Transforming “apathy into movement”: The role of prosocial emotions in motivating action for social change. *Personality and Social Psychology Review*, 13, 310–333.
- Wellens, A. R. (1989). Effects of telecommunication media upon information sharing team performance: Some theoretical and empirical observations. *IEEE AES Magazine*, (September), 13–19.
- Wilder, D. A. (1990). Some determinants of the persuasive power of in-groups and out-groups: Organization of information and attribution of independence. *Journal of Personality and Social Psychology*, 59, 1202–1213.
- Wohl, M. J., Branscombe, N. R., & Klar, Y. (2006). Collective guilt: Emotional reactions when one’s group has done wrong or been wronged. *European Review of Social Psychology*, 17, 1–37.
- Wright, S. C., & Lubensky, M. (2009). The struggle for social equality: Collective action vs. prejudice reduction. In S. Demoulin, J. Leyens, & J. F. Dovidio (Eds.), *Intergroup misunderstandings: Impact of divergent social realities* (pp. 291–310). New York: Psychology Press.
- Yadav, A., Phillips, M. M., Lundenberg, M. A., Koehler, M. J., Hilden, K., & Dirkin, K. H. (2011). If a picture is worth a thousand words is video worth a million? Differences in affective and cognitive processing of video and text cases. *Journal of Computing in Higher Education*, 23, 15–37.
- van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin*, 134, 504–535.