Emotional reactions to harmful intergroup behavior

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Abstract

In this paper, we examined reactions to situations in which, although one is not personally involved, one could see oneself connected to either the perpetrators or the victims of unfair behavior. We manipulated participants' similarity and measured their identification to either one of two groups which participants later learned was the victim or the perpetrator of harmful behavior. As predicted, making salient similarities to the victims lead participants to: 1) appraise the perpetrator's behavior as more unfair; 2) experience more anger; and 3) be more likely to take action against it and less prone to show support for it as a function of their level of identification with their salient ingroup. In sharp contrast, focusing participants' attention on their similarities to the perpetrators reversed this pattern of findings: Compared to high identifiers, low identifiers appraised the behavior as more unfair than high identifiers, which made them feel angry (and guilty) and less likely to show support for the perpetrator's behavior. The data also provide strong support for a mediational model in which appraisal of the situation colors the emotional reaction which in turn orients action tendencies. We discuss the implications of our findings for the issue of group-based emotions. Copyright © 2006 John Wiley & Sons, Ltd.

Imagine the following situation. Suppose you are a student in the state where you are a resident. This state is experiencing great financial difficulty and therefore the State Representatives are actively searching for new funding opportunities to bring in additional money. One solution the regents decide on is that out-of-state students should pay an additional 35% increase in their tuition, which is an

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extraordinary single year increase for a publicly funded institution. This income would go directly to the state and benefit the entire population of the state. How would you feel about the behavior of the State Representatives? To some extent you may feel similar to the victims of this proposal, who are students like you, but also to the responsible representatives, who are residents of your state.

In this paper, we examine reactions to situations in which, although one is not personally involved, one could see oneself connected to either the perpetrators or the victims of unfair behavior. We argue that the extent to which people judge a behavior to be unfair, and the extent to which they feel angry or not and intend to do something about it or not, depends on the relative salience of their similarities to either the perpetrators or the victims. In other words, the way observers appraise a particular instance of intergroup behavior and react emotionally about it is a function of perceivers' salient social identity. To come back to our example, the solution imagined by the State Representatives in order to address the budget problem faced by the state is likely to be appraised differently and to generate different emotional reactions when observers see themselves primarily as students (like the victims, the out-of-state students) or when they think of themselves in terms of state residents (like the perpetrators, the State Representatives).

Presumably, a focus on the similarities with the victims would increase the perception of the behavior as unfair and anger would be the consequence. In contrast, when the links with the perpetrators are being stressed, the behavior is likely to be seen as justified and chances are that they are not angry. Next to the impact of group membership on emotional reactions via the appraisal of the situation, an additional and indeed intriguing question concerns the moderating role of identification. That is, we would expect the above findings to emerge more readily among people who value their membership in either one of these groups. These are the key predictions that we address in the present study.

Anger and Intergroup Relations

According to appraisal theories of emotions (e.g. Frijda, Kuipers, & Ter Schure, 1989), an emotion such as anger is most likely to occur when someone else's behavior is perceived to be intentionally unfair and people feel they have the power to do something about it. If a situation is appraised in such a way that it arouses anger, people will be more likely to take action against the perpetrator than when it is appraised in alternative ways. Frijda et al. (1989) argued that unfair behavior is only likely to arouse anger when the observer perceives the situation to be self-relevant. What does this mean for situations in which the observer is not directly involved? Can one be angry on behalf of one's group? Recent research suggests that this is indeed possible.

Smith (1993; see also Mackie, Devos, & Smith, 2000; Mackie & Smith, 2002) proposed a theory of differentiated intergroup emotions, in which he integrated insights from appraisal theories of emotions (e.g. Frijda et al., 1989; Scherer, 1988; Smith & Ellsworth, 1985) and lessons from social identity theory (Tajfel, 1981) and self-categorization theory (Turner et al., 1987). In line with social identity theory and self-categorization theory, he argued that group membership can exert an important influence on emotion. This is because under some circumstances ingroups and ingroup memberships become part of the self. In line with appraisal theories, Smith (1993) argued that different contexts may elicit different emotions among ingroup members because in those different circumstances appraisals will not be similar. So, when the situation is such that perceivers see a particular group as an important ingroup and it happens that ingroup members are treated unfairly and suffer from the behavior of some outgroup, they could feel angry. Moreover, research by Van Zomeren, Spears, Fisher, and Leach (2004) has shown that such group-based anger affects collective actions tendencies.

The Victim's Perspective

According to Smith (1993), people experience emotions on behalf of members of their ingroup. According to the social identity approach/self-categorization theory, the way people perceive the social world in general and themselves in particular can be quite flexible. People may perceive themselves as members of a variety of groups as a function of, among other factors, the salience of contextual information. This simple yet powerful idea led Gordijn, Wigboldus, and Yzerbyt (2001) to propose that experiencing anger when seeing other people being unfairly treated could vary as a function of whether the similarities between oneself with these victims were made salient.

In order to test their hypothesis, Gordijn and colleagues (2001) manipulated the context such that the victims of unfair behavior were seen as members of the ingroup or as members of the outgroup. They did so by relying on the crossed categorization paradigm (see Brown & Turner, 1979; Urban & Miller, 1998; Vanbeselaere, 1991). In the crossed categorization paradigm, a specific target person is part of the outgroup on one dimension and part of the ingroup on another dimension. By focusing attention of observers on their similarities to the target, the target will be seen as belonging to the ingroup. In other words, the observers will see themselves and the target as belonging to the same group. However, when the attention of observers is focused on their differences to the target, this target person will be seen as belonging to the outgroup. In line with the predictions by Gordijn and colleagues (2001), the results indicated that when observers focused on similarities to the victims of the unfair behavior, observers felt angrier and less happy than when focused on differences from the victims. In this last case, they took the perspective of outsiders.

Dumont, Yzerbyt, Wigboldus, and Gordijn (2003) examined emotional reactions with respect to a real life event by using a similar manipulation of categorization. Specifically, they examined to what extent people from the Netherlands and from Belgium were likely to experience fear after being reminded of the terrorist attacks on the World Trade Center in 2001. The data showed that making similarities to the American victims salient albeit in a subtle way was conducive to more fear among the Dutch and Belgium participants than when differences were made salient to them. In addition, participants were more likely to show behavioral intentions and actual behaviors that can be related to fear when similarities rather than differences to the victims were made salient to them.

One important question regarding the above results concerns the existence of potential moderators of the emotional reactions. Is it the case that people always feel emotions on behalf of the ingroup when their similarities are made salient to them or could it be that some people react more strongly than others? Yzerbyt, Dumont, Wigboldus, and Gordijn (2003) found evidence that there can be differences in reactions between people on the basis of their identification with the group. That is, the salience of the similarity to the victims was found to generate angry feelings among observers of unfair behavior to the extent that these observers strongly identified with the relevant category. This is in line with self-categorization theory, according to which people are likely to self-stereotype not only in reaction to transient features of the situation but also as a function of their chronic level of identification with the group. High identifiers are expected to adopt the prototypical behavior of the ingroup to a larger extent than low identifiers (Branscombe & Wann, 1992).

The Perpetrator's Perspective

So far, our work focused on the way people's reactions to victims varied as a function of whether participants were led to categorize themselves as members of the same or a different group than the

victims (Yzerbyt, Dumont, Gordijn, & Wigboldus, 2002; see also, Yzerbyt, in press; Yzerbyt, Dumont, Mathieu, Gordijn, & Wigboldus, in press). But what happens when observers realize that they belong to the same group as the perpetrator of the unfair behavior? If our model is correct, a focus on their similarities to the perpetrators should lead people to feel emotions that are likely to be similar to those experienced by the perpetrators.

Most research that has focused on the perspective of the perpetrator has investigated the occurrence of collective guilt (e.g. Branscombe, Doosje, & McGarty, 2002; Doosje, Branscombe, Spears, & Manstead, 1998; Iyer, Leach, & Crosby, 2003). For example, Doosje et al. (1998, Study 2) gave Dutch participants information about the Dutch colonial occupation of Indonesia. When both positive and negative things were said about the Dutch colonial history, people who did not strongly identify with being Dutch felt guilty about this and wanted to compensate the victims, even though they themselves were not personally involved. High identifiers did not feel guilty at all. In fact, high identifiers only felt guilty when the Dutch history was presented as strongly and unambiguously negative. So, the participants experiencing the most collective guilt were those who identified the least with the group. According to Doosje et al. (2002) high identifiers are less likely to feel guilty about their group's behavior and more likely to defend the group. The reason for this is that high identifiers are more inclined than low identifiers to see their group in a positive view and they are less likely to accept negative aspects of their group when confronted with information that portrays their group negatively. This is especially possible when the information about the ingroup is not clearly just negative. Low identifiers on the other hand, are more likely to acknowledge the negative aspects of their group, as they feel less commitment towards the group.

Victim versus Perpetrator Perspective

The research we have so far discussed only examined the affective and conative consequences of perceiving negative behavior from the point of view of *either* the victims *or* the perpetrators, and not even within the same research paradigm. However, quite often people may be connected by some degree to both the victims and the perpetrators of unfair behavior. How will they react to unfair behavior under such circumstances? The present work brings together insights from previous research regarding emotional consequences of salient similarities to *victims* of negative behavior (e.g. Gordijn et al., 2001; Dumont et al., 2003; Yzerbyt et al., 2003), and research on emotional consequences of being a member of the group that is the *perpetrator* of negative behavior (e.g. Doosje et al., 1998), by examining both within the same research paradigm.

We propose that when the context allows for either one of both identities to be activated, making salient similarities to the victims will lead observers: to 1) appraise the perpetrator's behavior as more unfair; 2) experience more anger; and 3) be more likely to take action against it, as a function of their level of identification with the ingroup. In sharp contrast, focusing perceivers' attention on their similarities to the perpetrators should reverse this pattern, as in this case only low identifiers: 1) appraise the perpetrator's behavior as more unfair; 2) experience more anger; and 3) are more likely to take action against it.

We further claim that the interactive impact of group membership and identification on emotions and action tendencies should be mediated by perceivers' appraisals of the situation. Evidence for such a pattern would confirm the presence of mediated moderation (Baron & Kenny, 1986; Muller, Judd, & Yzerbyt, 2004; Wegener & Fabrigar, 2000; Yzerbyt, Muller, & Judd, 2004) and would be entirely in line with our view that group-based emotions are indeed triggered by specific appraisals.

METHOD

Participants and Design

Twenty-four male and 62 female undergraduates of the University of Colorado at Boulder, all Colorado residents, participated in the experiment in order to partially fulfill course requirements (mean age $= 18.95$, $SD = 1.15$). Participants were randomly assigned to one of the two conditions in which attention was focused on either their similarities to the victims or on their similarities to the perpetrators.

Experimental Materials

A story was developed which described harmful behavior of members of a group toward members of another group. In this story, it was explained that the State of Colorado was experiencing financial difficulty and that Colorado representatives were actively searching for new funding opportunities to bring in additional money to support its funding obligation to public programs. It was further said that given the attractiveness of the universities for out-of-state students, the regents began to discuss a controversial policy that would have out-of-state students paying an additional 35% increase in their tuition, which would then go directly to the state and benefit the entire population of Colorado. Moreover, it was said that a majority of the State House of Representatives was expected to approve the motion. It was also described that upon hearing these plans, the associations representing out-of-state students declared that they were shocked by this obvious case of discrimination against out-of-state students, and that they immediately initiated an active lobby campaign against the proposal. The story was presented as a recent newspaper article that appeared in the Denver Post. It should be noted that raising tuition costs was timely given the budget crisis faced in Colorado at the time we ran the study. Moreover, it is fairly common for out-of-state students to pay more for tuition than residents, although, of course, a 35% increase in tuition is quite extreme.

In a pilot study, this story was presented to 20 undergraduates of Colorado University who were out-of-state students in order to examine to what extent the story elicited anger rather than other emotions among the victims. First, respondents were reminded that they were students (in comparison to non-students), and then they were asked to report the extent to which they felt angry, sad, afraid, guilty, and happy on a series of nine-point scales ranging from 1 ($=$ absolutely not) to 9 ($=$ absolutely). To examine whether the story influenced feelings, we conducted an ANOVA with feelings (angry, sad, afraid, guilty, and happy) as a within-subject factor. This analysis revealed the presence of a main effect for feelings, $F(4, 76) = 30.21$, $p < 0.0001$. Further analyses showed that respondents felt more angry ($M = 7.50$, $SD = 1.50$) than sad ($M = 5.30$, $SD = 2.03$), $F(1, 19) = 22.65$, $p < 0.01$, afraid ($M = 4.75$, $SD = 2.40$), $F(1, 19) = 36.03$, $p < 0.01$, guilty ($M = 2.95$, $SD = 2.28$), $F(1, 19) = 62.96$, $p < 0.01$, or happy ($M = 1.80$, $SD = 1.11$), $F(1, 19) = 110.04$, $p < 0.01$.

We also measured on nine-point scales ranging from 1 ($=$ absolutely not) to 9 ($=$ absolutely) the extent to which the State House of Representatives (the perpetrator) was perceived to behave in a unfair manner with respect to the out-of-state students (victims). As expected, the situation was seen as extremely unfair to the students ($M = 8.15$, $SD = 1.23$). An additional nine-point scale ranging from 1 ($=$ absolutely not) to 9 ($=$ absolutely) revealed that most respondents wanted to take action against the proposal ($M = 7.0$, $SD = 2.62$). Together, these findings suggest that the story can be used to induce anger.

Procedure and Independent Variables

Participants were invited in groups to a classroom where they were given the questionnaire. In the first few pages of the questionnaire, we manipulated participant's categorization as *perpetrators* or *victims*. Specifically, the questionnaire was said to be distributed either among Colorado residents and non-residents or among students and non-students. The former instruction was chosen in order to make salient similarities of the participants with the group that *later* turned out to be the perpetrators (Colorado State House of Representatives). As for the latter instruction, it was intended to make salient similarities of the participants with the group that *later* turned out to be the victims (non-residential students). Moreover, in order to enhance categorization, and also to measure individual levels of identification with the salient group, participants were given a group identification scale comprising three nine-point rating scales ranging from 1 (= absolutely not) to 9 (= absolutely). Depending on the experimental condition, the identification scale was written with reference to the group of students or to the group of Colorado residents. Specific items were 'Being a student/from Colorado is a key aspect of who I am', 'I identify with other students/people from Colorado', 'Being a student/from Colorado means a lot to me'. Then, in order to emphasize the categorization context even more participants in the perpetrator condition were asked to compare Colorado residents and non-residents on a number of traits. Participants in the victim condition had to do the same task for students and non-students. It should be noted that at this moment, participants did not yet know who the victims and perpetrators were, as the participants had not read the newspaper article yet.

   After this, participants in both conditions were asked to read an article that allegedly had appeared in the Denver Post newspaper. In this article it is made clear who the perpetrators are (Colorado State House of Representatives) and who the victims are (non-residential students). This article was described in the 'Experimental Materials' section.

Dependent Variables

After reading the information contained in the newspaper article, participants had to rate their *appraisals* of the situation on nine-point scales ranging from 1 (= absolutely not) to 9 (= absolutely). To this end, we selected a series of features that would allow differentiating the evaluation of the harmful behavior as being unfair or, in contrast, justified. Specifically, participants were asked to what extent they thought the Colorado State House of Representatives proposal to increase tuition for out-of-state students by 35% was fair (recoded), harmless (recoded), normal (recoded), rational (recoded), unjust, prejudicial, and harsh in order to measure to what extent they appraised the proposal as unfair.

   Next, they had to rate on a series of 9-point scales ranging from 1 (= absolutely not) to 9 (= absolutely) how they felt about the Colorado State House of Representatives proposal to increase tuition for out-of-state students by 35%. They were asked to what extent they felt *anger* (i.e. angered, outraged, annoyed, irritated) about the proposal. We also measured the extent to which they felt *guilty* (i.e. guilty, remorseful), *ashamed* (ashamed, embarrassed), *happy* (i.e. happy, pleased, delighted, amused), *worried* (i.e. worried, afraid, anxious, alarmed, distressed), and *sad* (i.e. sad, miserable, depressed) to examine other negative and positive emotions as well. However, we did not have any specific predictions about these measures.

   After this, participants had to rate on nine-point scales ranging from 1 (= absolutely not) to 9 (= absolutely) what they wanted to do about the Colorado State House proposal. The questionnaire contained a series of behavioral intentions aimed at capturing participants' behavioral reactions associated with support or disapproval. Specifically, participants were asked to what extent they

wanted to support the proposal, take action against the proposal, do nothing about it, show their sympathy for the out-of-state students, show their support for the State House representatives, and find out how one could prevent this proposal from being enforced.

The last measure concerned identification with state of residence and with being a student. All participants had to rate on nine-point scales ranging from 1 ($=$ absolutely not) to 9 ($=$ absolutely) whether they felt strong ties with people from their state, whether being from their state is important to them, and whether they would mention that they are from their state, when describing themselves. Similar questions were asked with respect to being a student. Finally, participants were debriefed, thanked, and dismissed.

RESULTS

Initial Identification with Salient Group

The three identification items measured at the onset of the study, as part of the manipulation were combined in a scale (Cronbach's alpha $= 0.84$). A one-way ANOVA using categorization, i.e. victim *v.* perpetrator, as the between-subjects factor revealed that the identification of participants with the victims, that is, the group of students ($M = 7.10$, $SD = 1.50$), was stronger than the identification with the perpetrators, that is, the Colorado residents ($M = 5.52$, $SD = 2.17$), $F(1, 84) = 15.39$, $p < 0.01$. Because we were interested in the relative impact of identification in the two conditions, we standardized the identification measure within each condition when we used it as a moderator variable in the regression analyses.[1]

Unfairness Appraisal

The seven items were combined into a scale (Cronbach's alpha $= 0.85$). We tested our predictions by means of a multiple regression analysis using the unfairness scale as the criterion and categorization (contrast coded: victims $= -1$, perpetrators $= 1$), identification, and the interaction between these two variables as the predictors. The only reliable predictor of unfairness was the interaction between identification and categorization, $\beta = -0.30$, $t = -2.79$, $p < 0.01$. This interaction is displayed in Figure 1. Following Aiken and West (1991), we selected data points for estimating the regression lines at $+/-1$ standard deviation for predictors of the regression equation. As can be seen, when similarities to the victims were salient, higher levels of identification tended to induce participants to appraise the situation as more unfair, $\beta = 0.28$, $t = 1.80$, $p < 0.08$. In contrast, when similarities to the perpetrators were salient, higher levels of identification had participants appraise the situation as less unfair ($\beta = -0.32$, $t = -2.16$, $p < 0.05$).

Emotional Reactions

The 20 emotion items were submitted to a principal component analysis. Because we had specifically constructed the emotion scale to include five different emotions, we performed a varimax rotation by

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[1]We also ran the analyses by ranking participants on identification within each condition and then centering it (Judd, personal communication). The results show a similar pattern.
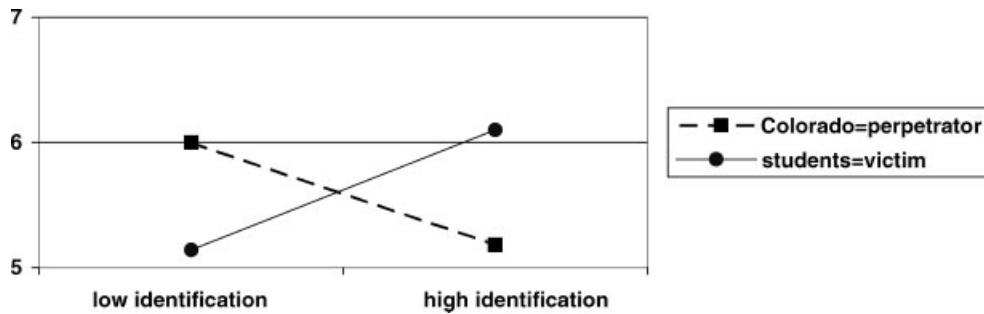
Figure 1. Appraisal of proposal being unfair as a function of identification and categorization. *Note*: To avoid misinterpretation one ought to remember that identification is standardized within conditions. This means that identification level in this figure is to be understood relative to the mean of that specific group. The same remark holds for Figures 2–4

Table 1. Rotated factor matrix: Emotions

	Happiness	Anger	Guilt	Concern	Sadness
Happy	**0.685**	−0.443	0.197	−0.188	−0.218
Amused	**0.776**	−0.014	−0.047	0.026	0.228
Delighted	**0.876**	−0.023	0.060	−0.011	−0.098
Pleased	**0.831**	−0.189	0.089	−0.026	−0.215
Angry	−0.257	**0.640**	0.083	0.215	0.493
Annoyed	−0.236	**0.598**	0.112	0.414	0.083
Outraged	−0.128	**0.745**	0.263	0.319	0.163
Guilty	0.074	−0.216	**0.750**	0.314	0.191
Embarrassed	0.016	0.216	**0.733**	0.036	0.423
Remorseful	0.026	0.106	**0.745**	0.221	−0.116
Ashamed	0.126	0.407	**0.721**	0.151	0.135
Afraid	0.013	0.054	0.440	**0.684**	0.046
Alarm	−0.119	0.096	0.111	**0.740**	0.404
Worried	0.079	0.157	0.108	**0.878**	0.095
Distressed	0.086	0.405	0.188	**0.732**	−0.011
Depressed	0.167	0.340	0.235	**0.698**	0.075
Sad	0.073	0.287	0.197	0.238	**0.782**
Anxious	0.333	0.258	0.504	0.465	−0.290
Miserable	0.247	0.389	0.537	0.490	−0.026
Irritated	−0.277	0.497	0.246	0.549	0.216

Note: Extraction method: Principal component analysis. Rotation method: Varimax.

imposing five factors.[2] The factor solution did not reveal the five factors that we intended to measure. As can be seen in Table 1, we found a 'happiness' factor (happy, delighted, pleased, and amused: eigenvalue $= 3.0$; explained variance $= 15\%$; Cronbach's $\alpha = 0.83$), an 'anger' factor (angrered, outraged, annoyed: eigenvalue $= 2.69$; explained variance $= 13.45\%$; Cronbach's $\alpha = 0.80$), a 'guilt' factor (guilty, remorseful, ashamed, and embarrassed: eigenvalue $= 3.27$; explained variance $= 16.33\%$; Cronbach's $\alpha = 0.81$), a factor, which we named 'worry' (afraid, alarmed, distressed, depressed, worried: eigenvalue $= 4.15$; explained variance $= 20.76\%$; Cronbach's $\alpha = 0.88$), and

[2]We relied on Varimax rotations. One could argue that in the case of emotions an oblique rotation is more appropriate to use as an exploratory tool in order to allow for the relatedness of the emotion items to occur. We thank the reviewers for suggesting this. However, it should be noted that the factor structure revealed by the Varimax rotation was strictly similar to the one suggested by the oblique rotation.
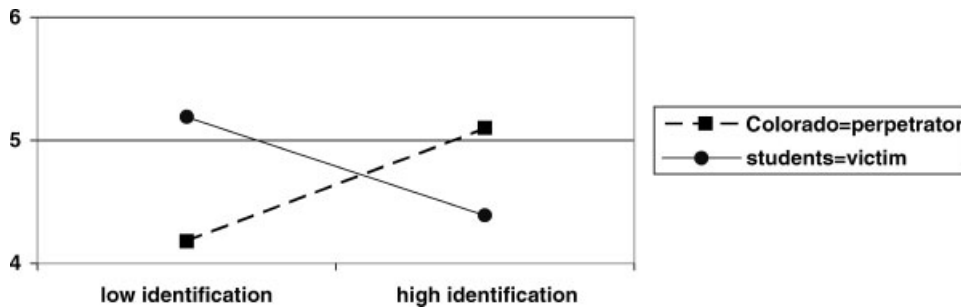
Figure 2.   Anger as a function of identification and categorization

sadness (one item) loaded on the last factor (eigenvalue $= 1.60$; explained variance $= 8.01\%$). Three items (anxious, miserable and irritated) did not clearly load on any one of the factors and were not examined further.

We tested our predictions by means of a multiple regression analysis using each of the emotion factors as the criterion and categorization (contrast coded: victims $= -1$, perpetrators $= 1$), identification, and the interaction between these two variables as the predictors. As expected, the only reliable predictor of *anger* was the interaction between identification and categorization, $\beta = -0.23$, $t = -2.16$, $p < 0.05$. This interaction is displayed in Figure 2. As can be seen, there was a tendency for identification to go hand in hand with anger when similarities to the victims were made salient, $\beta = 0.25$, $t = 1.63$, $p < 0.11$. When similarities to the perpetrators were salient, identification was associated with lower levels of anger, $\beta = -0.21$, $t = -1.43$, $p < 0.15$, although this was not statistically significant.

The only predictor of *guilt* that was again the interaction between identification and categorization, $\beta = -0.21$, $t = -1.93$, $p < 0.06$. When similarities to the victims were salient, the trend was for identification to be associated with guilt, $\beta = 0.24$, $t = 1.56$, $p < 0.12$. Identification did not influence guilt when similarities to the perpetrators were salient, although lower levels of identification seemed associated with higher levels of guilt, $\beta = -0.17$, $t = -1.17$, $p < 0.25$.

We also examined the correlation between guilt and anger. When similarities to the perpetrators were made salient, the correlation between these two emotions was significant, $r(42) = 0.59$, $p < 0.01$. In contrast, when similarities to the victims were made salient, the correlation between guilt and anger was not significant for this group, $r(40) = 0.25$, $p < 0.11$. In order to examine whether the correlation between guilt and anger was significantly stronger in the perpetrators' condition than in the victims' condition, we performed a regression analysis in which guilt (centered), categorization (contrast coded: victims $= -1$, perpetrators $= 1$), and the interaction between guilt and categorization are entered as predictors and anger as the dependent variable. The interaction between guilt and categorization significantly predicted anger, $\beta = 0.19$, $t = 1.96$, $p < 0.05$.

With respect to happiness, we found a significant main effect of categorization, which indicates that people felt happier in the perpetrator condition than in the victim condition ($\beta = 0.23$, $t = 2.15$, $p < 0.05$). With respect to worry or to sadness none of the predictors was reliable.

Action Intentions

The six action intention items were submitted to a principal component analysis followed by a varimax rotation. As can be seen in Table 2, we found two factors with an eigenvalue greater than 1: 1) 'action

Table 2.   Rotated factor matrix: Action intentions

	Action against	Support
Find out how to prevent this	**0.711**	−0.489
Take action against the proposal	**0.763**	−0.492
Don't want to do anything (recoded)	**0.900**	0.061
Show support for the State House representatives	−0.032	**0.917**
Support the proposal	−0.373	**0.838**
Show sympathy for the out-of-state students	0.569	−0.507

Note: Extraction method: Principal component analysis. Rotation method: Varimax.

against proposal' (find out how to prevent, want to take action against, do nothing (recoded): eigenvalue = 2.36; explained variance = 39%; Cronbach's $\alpha = 0.83$), and 2) 'support for proposal' (show support for State House representatives, support proposal: eigenvalue = 2.29; explained variance = 38%; Cronbach's $\alpha = 0.83$). One item (show sympathy for the out-of-state students) did not clearly load on either factor, so we disregarded it.

We tested our predictions with respect to 'action against proposal' and 'support for proposal' scale by means of multiple regression analyses using categorization (contrast coded: victims = −1, perpetrators = 1), identification, and the interaction between these two variables as predictors. The only reliable predictor of *action against proposal* was the interaction between identification and categorization, $\beta = -0.25$, $t = -2.42$, $p < 0.05$. This interaction is displayed in Figure 3. As can be seen, when similarities to the victims were salient, higher levels of identification were related to stronger willingness to take action against the proposal, $\beta = 0.44$, $t = 2.93$, $p < 0.01$. In contrast, when similarities to the perpetrators were salient, identification did not influence taking action against the proposal, $\beta = -0.07$, $t = -0.47$, $p < 0.64$.

The only reliable predictor of *support for proposal* was the interaction between identification and categorization, $\beta = 0.26$, $t = 2.45$, $p < 0.05$. This interaction is displayed in Figure 4. As can be seen, when similarities to the victims were salient, higher levels of identification seemed to induce less support for the proposal than low levels of identification, $\beta = -0.18$, $t = -1.21$, $p < 0.23$, although this was not statistically significant. The opposite pattern emerged when similarities to the perpetrators were made salient. In this case, higher identification was associated with more support for the proposal than lower identification, $\beta = 0.34$, $t = 2.27$, $p < 0.05$.
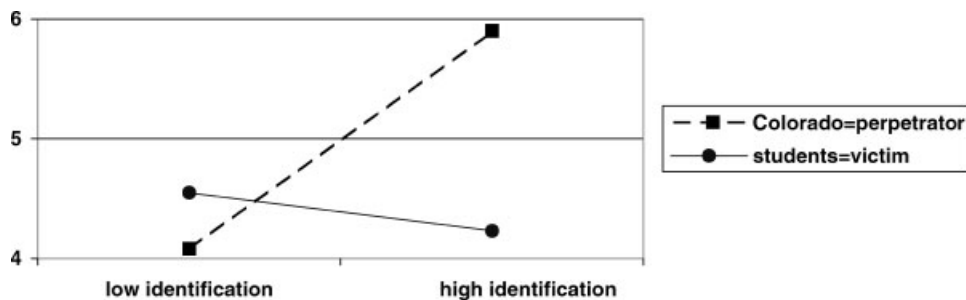

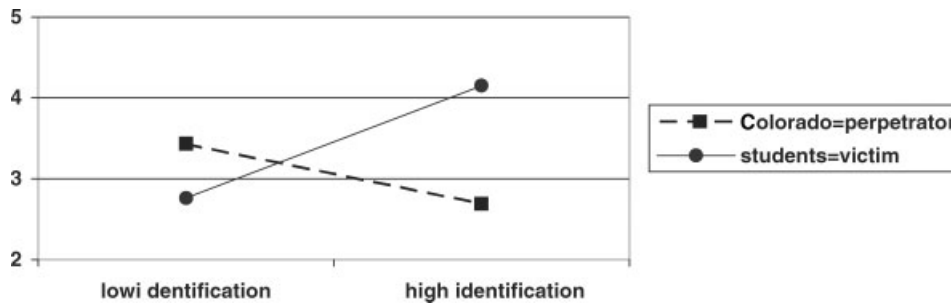Figure 3.   Taking action against proposal as a function of identification and categorization

Figure 4.   Showing support of proposal as a function of identification and categorization

Mediation of Anger by Unfairness

To examine whether the combined effect of categorization and identification on anger was mediated by the appraisal that the proposal was unfair, we performed several regression analyses. In line with predictions, we found that the interaction effect on anger was no longer statistically significant, $\beta = -0.08$, $t = -0.89$, $p = 0.38$, when the appraisal that the proposal was unfair was added as a predictor. The Sobel (1982) test also proved statistically significant, $z = 2.53$, $p < 0.05$. Importantly, the appraisal of unfairness continued to predict anger, $\beta = 0.57$, $t = 5.96$, $p < 0.01$. Such a pattern is strongly indicative of the presence of mediated moderation.

To further ascertain the nature of the process, we looked at a competing model in which anger mediates the impact of the interaction of categorization and identification on the appraisal of unfairness. As it turns out, the interaction effect still tended to influence the appraisal of the proposal being unfair, $\beta = -0.16$, $t = -1.73$, $p < 0.09$, when anger was entered in the model even though anger was found to predict unfairness, $\beta = 0.55$, $t = 5.96$, $p < 0.001$. As a set, these data indicate that the interactive effect of categorization and identification on anger was mediated by the appraisal of unfairness rather than the other way around.

Mediation of 'Taking Action Against' by Unfairness and Anger

To examine whether the interactive effect of our independent variables on taking action against the proposal was mediated by anger through unfairness, we performed several regression analyses. First, we found that the interaction effect of categorization and identification on taking action against was no longer statistically significant, $\beta = -0.13$, $t = -1.34$, $p < 0.19$, when unfairness was added as a predictor. In this case, unfairness continued to predict taking action against, $\beta = 0.47$, $t = 4.80$, $p < 0.01$. Importantly, the Sobel test proved statistically significant, $z = 2.41$, $p < 0.05$.

Second, we found that the interaction effect of categorization and identification on taking action against was no longer statistically significant, $\beta = -0.09$, $t = -1.23$, $p < 0.22$, when anger was added as a predictor. In this case, anger predicted taking action against, $\beta = 0.68$, $t = 8.83$, $p < 0.01$. The Sobel test was again statistically significant, $z = 2.10$, $p < 0.05$.

Finally, anger was added as a predictor in a model containing our independent variables and their interaction along with unfairness. In this model, both the interaction effect, $\beta = -0.08$, $t = -1.04$, $p < 0.30$, and the effect of unfairness, $\beta = 0.13$, $t = 1.31$, $p < 0.19$, were no longer statistically significant whereas anger predicted taking action against the proposal, $\beta = 0.61$, $t = 6.46$, $p < 0.01$.

As a set, these findings suggest that the interactive effect of categorization and identification on taking action against the proposal was mediated by the emotional experience of anger, which in turn was mediated by the appraisal of unfairness.

Mediation of 'Showing Support' by Unfairness and Anger

To examine whether the interaction effect of our independent variables on showing support for the proposal was mediated by anger through unfairness, we performed several regression analyses. First, we found that the interaction effect on showing support was no longer statistically significant, $\beta = -0.05$, $t = -0.56$, $p < 0.58$, when unfairness was added as a predictor. In this model, unfairness predicted showing support, $\beta = -0.69$, $t = -8.43$, $p < 0.01$. The Sobel test proved statistically significant, $z = 2.65$, $p < 0.01$.

Second, we found that the interaction effect on showing support was no longer statistically significant, $\beta = -0.14$, $t = -1.51$, $p < 0.14$, when anger was added as a predictor whereas, anger continued to predict showing support, $\beta = -0.51$, $t = -5.44$, $p < 0.01$. The Sobel test confirmed the mediational role of anger, $z = 2.01$, $p < 0.05$.

Finally, when anger was added as a predictor in a model containing our independent variables and their interaction along with unfairness, the interaction effect ($\beta = -0.03$; $t = -0.36$, $p < 0.72$) was no longer statistically significant, but both unfairness ($\beta = -0.58$, $t = -5.97$, $p < 0.01$) and anger ($\beta = -0.20$, $t = -2.12$, $p < 0.05$) continued to predict showing support of the proposal. This pattern suggests that the interactive effect of categorization and identification on showing support for the proposal was mediated by both the appraisal of unfairness and anger.

Identification with Being a Student and with being a State Resident

We also analyzed identification with both groups measured at the end of the questionnaire. The three State identification items were combined in a scale as the reliability analysis revealed that the internal consistency was good (Cronbach's $\alpha = 0.81$). The three student identification items were also combined in a scale as the reliability analysis revealed that the internal consistency was satisfactory (Cronbach's $\alpha = 0.66$). The two identification scales were positively and statistically significantly related, $r(82) = 0.32$, $p < 0.01$. Thus, people who are likely to strongly identify with being a resident from their State are also likely to strongly identify with being a student.

DISCUSSION

The present study aimed at testing a series of important predictions that both replicate and add new evidence and insights to our earlier work on group-based emotions (for a review, see Yzerbyt et al., 2002). First, we wanted to replicate our earlier findings regarding the impact of the contextual salience (Gordijn et al., 2001) and an individual's chronic attachment (Yzerbyt et al., 2003) to social categories on the emergence of group-based emotions and intentional behaviors. When people were led to see themselves as belonging to the same category as the victims, they were more inclined to report experiencing anger when they were strongly rather than weakly attached to the category that includes themselves and the victims. The same pattern held for the behavioral intentions. More action against the proposal initiated by the perpetrators was found when participants saw themselves in the same category as the victims and identified strongly rather than weakly with this category.

An important new message of the present study is that the same situation could also be experienced from the point of view of the perpetrators, with a different experience of group-based emotions as a consequence. That is, participants who saw themselves in the same category as the perpetrators by way of the experimental manipulation and had initially expressed strong identification with this category showed a pattern of emotions and behavioral reactions that is likely to be found among the actual perpetrators. Specifically, when the context stressed membership to the same category as perpetrators, participants were less likely to believe the proposal was wrong and they seemed to experience less anger when they identified more as opposed to less with the group. Moreover, support for the proposal initiated by the perpetrators was found when participants saw themselves in the same category as the perpetrators and identified strongly rather than weakly with this category.

Interestingly, our data are not only in line with our previous findings regarding the role of contextual salience of social categorization and the chronic identification to social identities on emotions and behavioral intentions. They also confirm and extend our findings regarding the mediating role of emotions on behavioral intentions (see Yzerbyt et al., 2003). In the current research, we found that anger was the emotion that mediated the impact of categorization and identification on the intention to take action against and show support for the behavior of the perpetrators.

An important asset of the present work is that we measured participants' cognitive appraisal of the harmful behavior in the various conditions. In line with the available work on appraisal theories of emotion, such as Smith's (1993) ideas regarding the emergence of group-based emotions, we found that participants who were induced to see themselves and the victims as members of the same category seemed to judge the proposal put forth by the perpetrators to be more unfair if they identified strongly with this category. In sharp contrast, when participants were led to think of themselves as members of the same category as the perpetrators they judged the proposal put forth by their fellow perpetrators to be less unfair if they identified strongly with this category.

We also examined the mediating role of participants' appraisal of the harmful behavior on the emotion and behavioral intention as a function of categorization and identification. As the model of group-based emotions would predict, this appraisal mediated the influence of our independent variables on our dependent variables. That is, the extent to which people wanted to take action against the harmful behavior was dependent on whether their similarities to either one or the other category were made salient combined with their identification with this category. The interaction of these two factors shaped a particular appraisal of the behavior, which in turn affected the extent to which they felt angry about the proposal. Finally, the emotional experience influenced the behavioral intention.

A fairly similar path was obtained for the expression of support for the proposal, although both the perception of unfairness and anger remained significant mediators of the impact of participants' appraisal of the behavior on the behavioral intention. Perhaps this difference between behavioral intentions is caused by the different nature of just showing support versus actually doing something about it. It is easy to say that you will show support for something. In this case, appraising something as unfair might be enough to say you will not show support, while anger just adds something to this intention. But if you really want to take action against something that you do not want to happen, you have to be very angry. In this case, the cognitive appraisal of unfairness may not be enough to lead to action. Action will only be taken if unfairness leads to the emotional experience of anger. Future research should further examine these different kinds of behavioral intentions.

Although we did not measure any actual behaviors in the present study, the obtained pattern on appraisals, emotions, and behavioral intentions as well as our previous work in which actual behaviors were examined (Dumont et al., 2003) encourages us to conjecture that participants may indeed end up acting very differently as a function of the contextual salience of similarities to one rather than another of their social identities and the extent to which they identify with this salient social category (Yzerbyt, in press).

The present research focused on anger but we also measured other emotions. With respect to guilt we found some interesting results. Our findings indicate that when similarities to perpetrators are salient, anger and guilt are more related than when similarities to victims are salient. So, although these participants manifested a pattern of anger that very much resembles the one found among those participants who were associated with and felt strongly about the group of victims, there is a noticeable difference between these two groups of participants. One reason might be that when similarities to perpetrators are salient guilt will feed into anger. More research is needed to be more conclusive about this issue, however. In the current research, anger rather than guilt was the center of attention. Therefore, we did not measure specific action tendencies or appraisals with respect to this emotion.

Future research should also look more into the difference between the experience of group-based guilt and shame. In our research we did not find a difference between guilt and shame, although previous research suggests that these emotions are quite different as they have, for example, different action tendencies (see e.g. Lickel, Schmader, & Barquissau, in press; Tangney, Miller, Flicker, & Barlow, 1996). For example, shame will stimulate people to hide from others, while guilt stimulates people to repair their wrongdoings (or the wrongdoing of their group). However, this does not mean that a situation could not cause people to experience these emotions at the same time. Moreover, as Tangney et al. (1996) argue, 'because our use of emotion language can be imprecise, both psychologists and laypeople may find it difficult to differentiate these types of affective experiences' (p. 1256). Although this makes these emotions difficult to separate in research (e.g. see Smith & Ellsworth, 1985), it might be worth including measures that better discriminate between these two emotions in future work on group-based emotions.

All in all, the present data provide support for the idea that people's social identity is a strong determinant of their emotional experience and, in turn, influences their behavioral intentions. This finding is in agreement with Smith's (1993) theoretical proposal that membership in a social group would exert a strong impact on people's emotional reactions even though the event does not affect the individual in the first place. Indeed, the scenario we selected allowed observers to see themselves as similar to the victims or the perpetrators. Technically speaking, the victims could only be out-of-sate students and the actual perpetrators are the state representatives not the participants themselves. What is especially interesting in our study is that people who are highly identified with students are also people who are more likely to be highly identified with being a Colorado resident. Still, just focusing their attention on similarities to either one of these groups is enough to result in a totally different emotional response to the story we presented to them. It is only to the extent that the context induced people to embrace larger social identities that connected them to either one of these two groups, and to the extent that they felt a certain level of attachment to these identities, that they started to appraise the situation in a certain way, experience the accompanying emotions, and contemplate a selected set of behavioral responses.

The present work shows once again the key role of social identity in the way people appraise a given behavior. This message is at the heart of an impressive body of research conducted under the banner of self-categorization theory (e.g. Ellemers, Spears, & Doosje, 2000; Hogg & Abrams, 1988; Oakes, Haslam, & Turner, 1994; Turner et al., 1987). Interestingly, our studies provide a good illustration that people's social identity, as it is influenced by the immediate contextual factors as well as more chronic levels of attachment, not only concerns issues of opinions, attitudes, and behaviors but also emotional experiences. As such, our findings are in line with recent theorizing by Mackie, Smith, and colleagues (for a collection, see Mackie & Smith, 2002).

That the specific interpretation of the same events with its host of consequences rests on such subtle differences in the environment is one more illustration that people's behavior may indeed take very different paths for reasons that they may largely ignore (Nisbett & Wilson, 1977). Part of the explanation may reside in the fact that people have little appreciation for the versatility and flexibility

of social identities. They would rather stick to the idea that they are always endorsing the same kind of identity or that their behavior would hardly be affected by possible changes in identity. Obviously, and as the present data reveal, this conviction hardly resists the analysis of scientific inquiry. It is our belief that many scholars inside and outside the field would do well in appreciating the fact that intergroup relations may indeed be highly sensitive to factors that are often more under one's control than what one would like to think. Minor modifications to the way the social landscape is constructed can make dramatic differences to how people react to events (Yzerbyt, in press). Our work aims at better understanding the way politicians and other decision makers could take advantage of this fact to promote tolerance and social harmony.

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