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I feel for us: The impact of categorization and identification on emotions and action tendencies

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Building upon the social emotion model (Smith, 1999), we examined the combined impact of categorization context and social identification on emotional reactions and behavioural tendencies of people confronted with the victims of harmful behaviour. Depending on conditions, participants were led to categorize the victims and themselves in the same common group or in two distinct subgroups of the larger common group. We also measured participants' level of identification with the group that was made contextually salient. As predicted, emotional reactions of anger and their associated offensive action tendencies were more prevalent when participants were induced to see the victims and themselves as part of the same group and when they were highly identified with this common group. In line with appraisal theories of emotion, we also found that the emotional reaction fully mediated the impact of categorization context and identification on action tendencies. We discuss the data with respect to their implications for the role of emotion in improving intergroup relations.

"We are all Americans!"

(Tony Blair, in his reaction to the terrorist attack of 11 September 2001)

That people's beliefs and behaviours are affected by virtue of their being members of a particular group has long been part of social psychological knowledge. From classic theories (Ash, 1952; Sherif, 1936, 1966) to more recent proposals (Tajfel, 1981; Turner, 1991), there is evidence aplenty that people tend to embrace opinions and engage in behaviours in ways that are heavily influenced by members of those groups that they belong to and feel associated with. An elegant illustration of the pervasive role of the social environment in the emergence of people's affective, cognitive and conative reactions can be found in Terry and Hogg's (1996) work. These authors found empirical evidence for the moderating role of social identification on the link between attitudes, norms, and perceived control, on the one hand, and behavioural intentions, on the other (Ajzen, 2001). Still, in contrast to the wide acceptance of the idea that

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group membership moulds our beliefs and our actions, there is comparatively little work to show that our association with a social category also shapes our emotions. The present study aims at furthering our understanding of the way in which people's social connections may have a bearing on their emotional experience. Specifically, we want to see whether identifying with the victim of an intentionally harmful behaviour may or may not trigger a reaction of anger, along with its associated behavioural tendencies, among observers. The crucial moderators, we contend, are the specific categorization that is being made salient in the context and the social identification of these observers.

Surprising as this may be, emotion research has not been much concerned with the idea that people may experience emotions on behalf of other people. In fact, the idea that people ought to be personally involved in the events is often presented as a prime condition for emotional reactions to occur. According to contemporary appraisal theories (Frijda, Kuipers, & ter Schure, 1989; Roseman, 1984; Scherer, 1988; C. A. Smith & Ellsworth, 1985), emotions are complex reactions to specific situations or events that include differentiated cognitions, feelings and action tendencies. That is, an individual is believed to interpret a specific event mainly in terms of whether the event harms or favours the individual's goals and desires and whether the individual possesses or lacks the resources to cope with the event. This cognitive appraisal then triggers a specific emotional experience which, in turn, promotes particular behavioural reactions. Clearly, therefore, little is said about the experience of emotions on behalf of other people, let alone entire social groups.

In an attempt to move beyond such an individualized context, Smith (1993, 1999) built upon self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and proposed a model of social emotions in which people are thought to be able to experience emotions on behalf of their group. The critical factor here is the focus of individuals' social identity. A distinct advantage of the social emotion model as compared to more classic perspectives on the role of affect in intergroup relations lies in the recognition that a wide variety of cognitive appraisals can serve as the antecedent of the emotional experience. As a consequence, the diversity of the emotional experiences thought to accompany intergroup relations far exceeds the traditional pairing of positive and negative affect (Dijker, 1987). The social emotion model offers another benefit relative to the dominant view in that the consideration of a cognitive appraisal step provides a straightforward account for the often reported simultaneous presence of positive stereotypical attributes assigned to the target group and negative emotional reactions towards that same group. For instance, the members of a given group could be seen as possessing a substantial level of competence, a very positive attribute, and yet trigger negative affective reactions (Fiske, Cuddy, Glick, & Xu, 2002). A final feature of the model is that the emotional reaction that follows from the cognitive appraisal of the situation is, in turn, thought to play a substantial role in shaping intergroup behaviour.

In recent years, only a handful of studies have been conducted in order to test Smith's (1993, 1999) model and investigate the various factors surrounding the emergence of social emotions (for a collection, see Mackie & Smith, 2002). A nice illustration of the cognitive appraisal underpinning the model can be found in a study by Mackie, Devos, and Smith (2000). According to appraisal theories, anger at another person is likely to result when the individual believes that *the other has harmed the self* and that *the self has the proper resources to react*. Applying this idea to the group situation, Mackie *et al*. (2000; Devos, Silver, Mackie, & Smith, 2002) predicted and

found that group members facing a conflict situation with an out-group experience anger and report offensive tendencies to the extent that they have the impression that their in-group benefits from greater collective support than the out-group.

Addressing the social dimension of the model in a more explicit way, we (Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003; Gordijn, Wigboldus, Hermsen, & Yzerbyt, 1999; Gordijn, Wigboldus, & Yzerbyt, 2001; for a review, see Yzerbyt, Dumont, Gordijn, & Wigdoldus, 2002) argued that people can, under certain conditions, be connected to others in such a way that they are likely to experience emotions even though they themselves are not directly confronted with the triggering situation. In particular, we proposed that people may indeed feel anger even though they themselves are not the victim of intentional harm perpetrated by a third party. The choice of anger as the focal emotion is by no means innocent. All in all, researchers have not paid much attention to the experience of anger on behalf of other people. This is hardly surprising if one looks closely at the specific characteristics of anger. Emotion theories generally assume that anger is only experienced when one perceives a situation that concerns oneself (Frijda *et al.*, 1989). A quick look at the literature on emotions indeed reveals that people seem to find it difficult to feel angry on behalf of somebody else. Moreover, research has shown that observers much prefer to believe that people get what they deserve, especially when there is no possibility of compensating the victims (Lerner, 1980). Not surprisingly, therefore, observers are not very likely to empathize with victims of harmful behaviour. Would it then be possible to delineate those conditions that would have people not distance themselves from the victims but rather empathize with them and experience anger toward the perpetrator? We hypothesized that observers may indeed be likely to feel angry toward the perpetrator if the victims can be seen as part of the in-group and the perpetrator can be seen as part of an out-group.

In an initial test of our idea (Gordijn *et al.*, 1999), we altered the way in which people construct their surrounding environment by manipulating the social context. Specifically, we used the cross-cutting categorization paradigm in order to lead participants to categorize the victims as part of the same group as their own or as part of an out-group. In the cross-cutting categorization paradigm, the victim is part of the out-group on one dimension and part of the in-group on another dimension (for a meta-analysis, see Urban & Miller, 1998). Depending on conditions, we told psychology students from the University of Amsterdam that we were interested in differences in impression formation between students of different majors (maths students vs. psychology students), or that we were investigating differences in impression formation between students of different universities (University of Amsterdam vs. Free University of Amsterdam).

Participants in both conditions were then asked to read an article that had allegedly appeared in a Dutch newspaper on the Internet. The story was about a math student of the Free University who had used the Internet facilities of the psychology department to hack into the Pentagon computer and alter some confidential information. The student had been caught and the Free University had decided to close the computer room at the psychology department for a period of time. Clearly, the psychology students at the Free University were the people harmed by the behaviour of a math student at the Free University. We reasoned that a focus on differences between students of different disciplines should make the victims appear to belong to the same group as the participants (psychology students). In contrast, a focus on differences between students at different universities should make the victims appear to belong to

a different group than the participants (students of the Free University). Participants then rated their feelings of anger and satisfaction (happiness).

Globally, participants reported feeling more satisfaction than anger upon reading the newspaper article. More importantly, and in line with prediction, the results showed that the same negative behaviour of an out-group member which harms others led to more anger among participants when their perception was focused on similarities rather than on differences between the harmed group and themselves. This pattern implies that an emotion such as anger can be influenced by the way one perceives the people being harmed, but only when similarities rather than differences between oneself and the victims are made salient.

Results of a follow-up study (Gordijn *et al.*, 2001) that included anxiety as an additional emotion, a control group in which the categorization context was not manipulated, and a different newspaper article aimed at triggering more anger than pleasure (happiness) replicated and extended the initial pattern of findings. In accordance with the social emotion model, participants felt more angry than pleased and anxiety was intermediate. More importantly, the critical interaction effect between feelings and categorization of the victim was significant: participants felt more angry when their attention was focused on the fact that they belonged to the same category as the victims than when their attention was focused on differences or when their focus of attention on category was not manipulated; the latter conditions not differing from each other. Also, participants felt less pleased when their attention was focused on the fact that they themselves and the victims belonged to the same category than when their attention was focused on differences or when their focus of attention on category was not manipulated. Again, the latter two conditions did not differ from each other. Finally, the data revealed no significant differences for anxiety as a function of the manipulation of target category.

In our view, findings such as these show that the unfair and deliberate behaviour of the perpetrator influenced anger rather than anxiety as a function of categorization. Interestingly, the data obtained for the control group suggest that a focus on differences is the default option and that observers are more likely to spontaneously categorize victims as different rather than as similar, a pattern reminiscent of the classic just world findings (Lerner, 1980). In summary, these initial studies provide encouraging evidence of the dramatic consequences that may derive from a subtle change in the way that people are led to categorize themselves with respect to the victims of the harmful behaviour of an out-group. The merits of these studies notwithstanding, several intriguing questions still remain unanswered. The present research aims to clarify these important issues.

The present study: Overview and hypotheses

A first aspect concerns the set of negative emotions included in our earlier studies. Not only are there only two negative emotions in the list given to the participant, but we did not put anger in competition with a closely related emotion, namely fear. The differences between the appraisal conditions leading to fear rather than anger are much more tenuous than the differences between the appraisal conditions leading to anxiety rather than anger. Obviously, it would be most instructive to increase the range of negative emotions that are being sampled in the emotional questions so as to further stress the specificity of the cognitive appraisal that was created in the experimental

scenario. To this end, we decided to omit anxiety and include fear and sadness as two other negative emotions on the list of dependent measures.

Secondly, our previous work remains inconclusive as to the impact of the categorization context on factors other than emotions. However, appraisal theories of emotion typically predict that the specific emotion experienced as a result of the particular cognitive appraisal will in turn promote behavioural tendencies. So, another important goal in the present study was to see whether the specific features of the event would also have some consequences in terms of particular action tendencies.

Thirdly, a most critical objective of the present empirical efforts was to see whether the emotional experience would in fact mediate the impact of the self-categorization factors on some specific action tendency. According to appraisal theories of emotions, people's action tendencies are indeed conditioned according to their emotional experience. We would therefore expect the categorization context to cease to directly influence the action tendencies once emotional reactions are taken into account.

Our final objective in this study was to examine the moderating role of more enduring aspects of group identification in the emergence of the specific emotional experience and, ultimately, in the occurrence of the behavioural reactions toward the out-group. According to self-categorization theory (Turner *et al.*, 1987), people are likely to self-stereotype as a function of their level of identification with the group. High identifiers are expected to adopt the prototypical behaviour of the in-group to a larger extent than low identifiers. In the present setting, we would therefore expect a direct impact of group identification on the sensitivity to the experimental scenario (Branscombe & Wann, 1992; Doosje, Branscombe, Spears, & Manstead, 1998).

The present study capitalized on a scenario that was slightly different from those used in our previous work (Gordijn *et al.*, 1999, 2001). As a matter of fact, our initial work always relied on what can be seen as a cross-categorization paradigm: the scenario involved the presence of two bases for categorization (e.g. psychology students/maths students and University of Amsterdam/another university). The experimenter addressed participants in terms of one dimension (e.g. 'we are interested to hear about your opinion as a psychology student') or the other (e.g. 'we are interested to hear about your opinion as a member of the University of Amsterdam'). This time, we wanted to test our hypotheses in a somewhat different way. We therefore confronted people with a categorization context that either placed them in the same group as the victims, or, alternatively, in a group that did not include the victims but was a subgroup of the larger group that included both the victims' group and the participants' group. Using the categories of our two initial studies, this means that we would either stress participants' identity as a psychology student (common group) or their identity as a psychology student from the University of Amsterdam (subgroup). We expected the impact of self-categorization on anger and satisfaction/happiness to be fine-grained enough that only the reference to the common group membership would lead to more anger.

If our reasoning about the impact of identification on intergroup emotion is correct, this factor should interact with the kind of category that is made contextually salient. That is, we would expect high versus low identifiers to be prone to experience anger and reluctant to feel pleasure/happiness when the context makes salient the participants' shared group membership with the victims but not when the context stresses the different group membership of participants and victims. Given that the study involved an examination of participants' action tendencies in addition to their emotions, we made similar predictions for our participants' behavioural reactions.

Specifically, we expected our participants to manifest a pattern of action tendencies that could be seen as offensive. Last but not least, we expected the combined impact of categorization context and group identification on the emergence of offensive action tendencies to be mediated by the emotional experience.

Method

Participants

A total of 95 participants took part in the study. Participants were contacted in university libraries on the campus of the Catholic University of Louvain (UCL: Université Catholique de Louvain) at Louvain-la-Neuve and asked to give 10 minutes of their time for a study that allegedly aimed at surveying people's opinions about a series of events that had recently been reported in national newspapers. All participants were French-speaking Belgians enrolled at UCL. Upon completion of the questionnaire, participants were debriefed as to the actual goal of the study and thanked for their participation.

Procedure

For half of the participants ($N=47$), the written instructions presented on the first page of the questionnaire booklet made very explicit that the study aimed at comparing the opinions of *students* and those of *professors*. To ascertain that participants would be well aware of the categorization context, they were asked to indicate at the bottom of the page whether they were a student or a professor. For the remaining participants ($N=48$), the instructions unambiguously indicated that the study aimed at comparing the opinions of the *students at UCL* with *students at other universities*. On the bottom of the page, participants were asked to state whether they were a student at UCL, at the Free University of Brussels or at the University of Ghent. This question allowed us to ensure that participants had paid attention to the categorization context.

Next, participants were presented with a group identification scale comprising five 7-point rating scales ranging from 1 (=not at all) to 7 (=totally). Depending on the experimental condition, the identification scale was written with reference to the group of students or to the group of students at UCL. Specific items were 'I perceive myself as a (UCL) student', 'I feel strong ties with the (UCL) students', 'Being a (UCL) student does not mean much to me' (reversed), 'I identify with (UCL) students', 'Being a (UCL) student has nothing to do with my identity' (reversed).

On the next page, participants read a xeroxed copy of a text allegedly taken from a national newspaper. The story was that the Board of Directors of the University of Ghent had decided to enforce the use of English as the sole language in the third, fourth and fifth years of university. Although most appraisal theories would generally stress the possibility for individual differences in people's reactions to a particular event, it is also true that one can rely on distinct situational features in order to channel people's appraisals (see Devos *et al*., 2002). With this in mind, we relied on the same general components that had been used by Gordijn *et al*. (1999, 2001) as means to make anger the most likely reaction to the text.

After they had read the text, participants were asked to indicate their feelings on a series of twelve, 7-point rating scales. Three items concerned anger (angry, irritated, revolted), three were related to sadness (sad, depressed, down), three had to do with fear (scared, anxious, terrified), and three were associated with happiness (happy,

amused, cheerful). Finally, participants used rating scales to indicate to what extent they endorsed each of 12 action tendencies. As for the emotions, three of the action tendencies were intended to concern offensive tendencies ('to intervene', 'to get angry', 'to set oneself against'), three were related to an absence of any reaction and to crying ('to do nothing', 'to lock oneself away at home', 'to cry'), three had to do with avoidance tendencies ('to hear no more about it', 'to stop thinking about it', 'to be reassured'), and three were associated with making light of the event ('to make fun of it', 'to mock it', 'to be exuberant about it'). These four sets of action tendencies were selected so as to be closely related to anger, sadness, fear and happiness, respectively.

Finally, a series of items aimed at checking the success of the manipulation. Specifically, participants answered on a 7-point scale ranging from 1 (=not at all) to 7 (=very much) to the following questions: 'To what extent do you think that the academic authorities are going over and beyond their role?', 'To what extent do you think that this project is OK for Ghent students?', 'To what extent are you favourable to such a system being adopted at your university?', 'To what extent do you think that academic authorities are aware of the risk of harming the students?', 'To what extent do you think students can do something against this project?', 'To what extent would you demonstrate in the event that such a project was adopted at UCL?', 'To what extent do you speak English?', 'To what extent would you like to have classes taught in English?'. Finally, participants were presented with an open question: 'Can you recall the groups whose opinions will be compared in the present survey?'

Results

Identification
The five identification items were submitted to a principal components analysis, which revealed the presence of one factor accounting for 49% of the total variance. Despite the good quality of the set of items, the loading of one item, namely 'Being a (UCL) student has nothing to do with my identity' turned out to be somewhat weaker than the loading of the other items. The marginal status of this item was confirmed by means of the Cronbach's α. The global α of .73 was raised to .75 after dropping this item. A similar conclusion emerged when we performed the analyses for each experimental condition separately. The five-item α values of .71 and .70 for the common group and subgroup conditions, respectively, increased to .74 and .72 when only four items were included in the analysis. For the sake of ensuring the best possible reliability on the identification measure, it was decided to rely on the four-item scale.

A one-factor ANOVA using condition as the between-subjects factor revealed that the identification of participants with the group of students, i.e. the common group ($M=5.03$) was stronger than the identification with the group of students at their university, i.e. the subgroup ($M=4.40$), $F(1, 93)=6.37$, $p<.02$. As a consequence, we performed median splits within each condition in order to distinguish the high and low identifiers in each condition. It is important to note that one-factor ANOVAs performed in each condition using identification level (high versus low) as the between-subjects factor showed the presence of an effect size of identification that was of comparable magnitude in the two experimental conditions ($\eta^2=.62$ and .64 for the common group and subgroup conditions, respectively).

Emotion scales
The 12 emotion items were submitted to a principal components analysis. Because we had specifically constructed the emotion scale to include four different emotions, we

performed a varimax rotation by imposing four factors. The rotated solution confirmed the presence of four clearly distinguishable sets of items. Moreover, with the exception of the emotion item 'terrified', all items referring to a given emotion loaded most strongly on the relevant factor. That is, the three anger items were associated with the first factor, the three sadness items were grouped on the second factor, the happiness items comprised the third factor, and the two remaining fear items fell on the fourth factor.

The reliability of our four emotion scales comprising all three corresponding items was evaluated by means of Cronbach's α. These analyses confirmed that all scales had sufficient reliability. The anger scale had a Cronbach's α of .89. The sadness scale had a Cronbach's α of .82. The fear scale had a Cronbach's α of .69. Finally, the happiness scale had a Cronbach's α of .82.

Action tendency scales

As for the emotion items, we submitted the action tendency items to a principal components analysis. Preliminary inspection of the means indicated, however, that the items related to non-action and crying were of dubious quality. The reason for this was that most subjects indicated a total absence of sadness-related action tendencies, resulting in extremely skewed distributions. This state of affairs was confirmed by the Cronbach's α of the three relevant items being unsatisfactory ($\alpha = .06$). In the light of this information, we discarded the three sadness action tendencies items and performed a principal components analysis on the remaining items. The unrotated solution suggested the presence of three factors with an eigenvalue >1 accounting for 37%, 22% and 11% of the variance, respectively. The rotated solution confirmed the presence of three factors corresponding to the three action tendencies; namely offensive tendencies, avoidance tendencies and mockery tendencies. Because the item 'to be exuberant about it' was not associated with its *a priori* factor and the reliability analysis additionally suggested its exclusion, we did not take it into account when computing the mockery action tendency scale. A reliability analysis of the resulting scales established that all three scales had an acceptable Cronbach's α, that is, .86, .69 and .61, for the action tendencies associated with offensive, avoidance and mockery tendencies, respectively.

Emotional reactions

Because we wanted to analyse the combined impact of the categorization context and the identification level on the emotional reactions, we submitted participants' answers to the emotion scales to a 2×2×4 mixed-model ANOVA using categorization context (common group vs. subgroup) and identification level (high vs. low) as between-subjects factors and emotion (anger vs. fear vs. sadness vs. happiness) as the within-subjects factor.

As expected, this analysis revealed the presence of a very significant emotion effect, $F(3, 273) = 74.43$, $p < .0001$. Participants reported feeling more anger ($M = 4.22$) than fear ($M = 3.01$), $F(1, 91) = 77.07$, $p < .0001$, sadness ($M = 2.11$), $F(1, 91) = 183.01$, $p < .0001$, or happiness ($M = 1.86$), $F(1, 91) = 99.84$, $p < .0001$. Participants also indicated that they felt more fear than sadness, $F(1, 91) = 57.20$, $p < .0001$, or than happiness, $F(1, 91) = 33.18$, $p < .0001$. Finally, participants reported having felt no more sadness than happiness. This effect confirmed that the newspaper article had indeed triggered the predicted emotion.
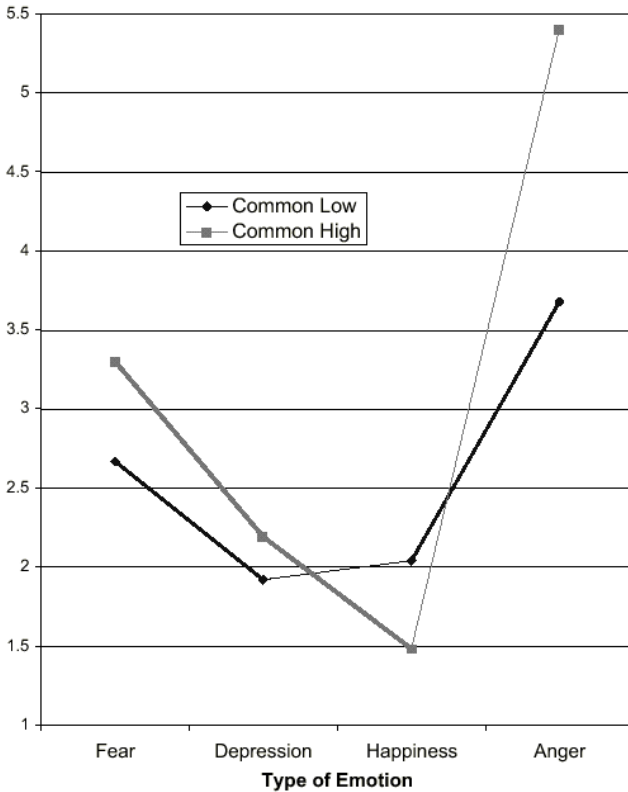
Figure 1. Intensity of each of the four emotions in the common group condition as a function of participants' identification with the group.

Both the emotion×condition and emotion×identification level interactions came out marginally significant, $F(3, 343)=2.18$, $p<.10$ and $F(3, 343)=2.60$, $p<.06$, respectively. In line with predictions, however, these two-way interactions were qualified by a very significant three-way interaction, $F(3, 343)=4.79$, $p<.003$. One way to examine this three-way interaction is by looking at the emotion×identification level interaction for each categorization context separately.

Looking at the data for the common group condition first, the data revealed the presence of significant main effects of identification level, $F(1, 45)=4.93$, $p<.04$, and emotion, $F(3, 135)=52.11$, $p<.0001$. These main effects were qualified by the presence of a significant two-way interaction between identification level and emotion, $F(3, 135)=7.44$, $p<.0001$. As can be seen in Fig. 1, *post hoc* analyses confirmed that high identifiers reported feeling more anger, $t(45)=4.35$, $p<.0001$, and marginally less happiness, $t(45)=1.71$, $p<.10$, than low identifiers. The data for the subgroup condition revealed the presence of a significant main effect of emotion replicating the pattern observed with the general data, $F(3, 135)=25.50$, $p<.0001$ (Fig. 2). *Post hoc* analyses allowed us to ascertain that identification had no impact on the emergence of emotional reactions (all ts <1, ns).

An alternative way to examine the three-way interaction between categorization context, identification level and emotion is by looking at the categorization context×identification level interaction for each emotion separately. In line with
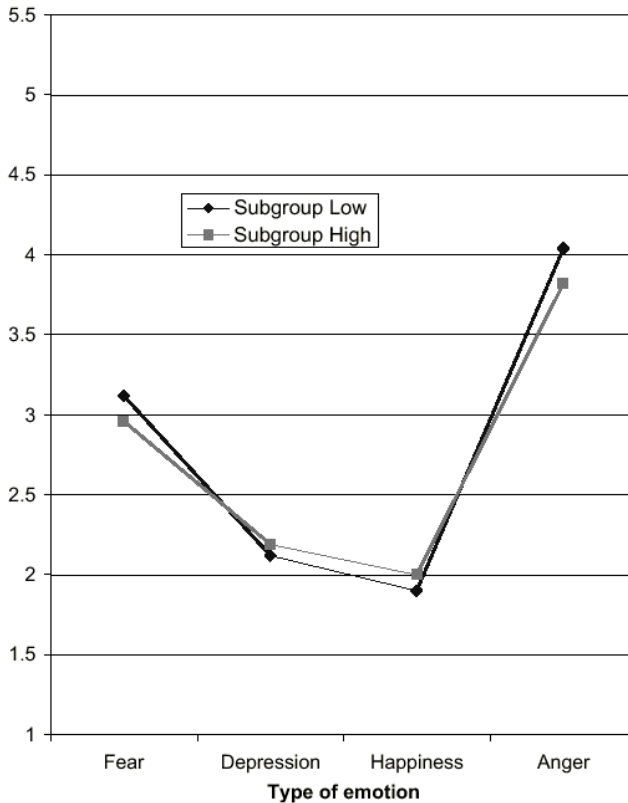
Figure 2. Intensity of each of the four emotions in the subgroup condition as a function of participants' identification with the group.

predictions, anger was the only emotion for which significant effects emerged. Specifically, whereas the main effect of categorization context turned out to be marginally significant, $F(1, 91)=2.98$, $p<.09$, the main effect of identification level reached a conventional level of significance, $F(1, 91)=4.49$, $p<.04$. More importantly, the interaction between identification level and categorization context was clearly significant, $F(1, 91)=7.56$, $p<.01$. As predicted, participants said that they were angry when they had been confronted with a context that stressed their common group membership with the victims *and* had admitted to being highly identified with this category. In all other conditions, participants reported experiencing the emotion of anger less strongly, all ts >2.70, $p<.01$.

Action tendencies
Taking into account the results of the principal components analysis on participants' answers to the behavioural reactions, we submitted participants' ratings to a 2×2×3 mixed-model ANOVA using categorization context (common group vs. subgroup) and identification level (high vs. low) as between-subjects factors and action tendency (offensive vs. avoidance vs. mockery) as within-subject factors.

This analysis revealed the presence of a very significant action tendency effect, $F(2, 182)=51.34$, $p<.0001$. Participants reported more offensive action tendencies
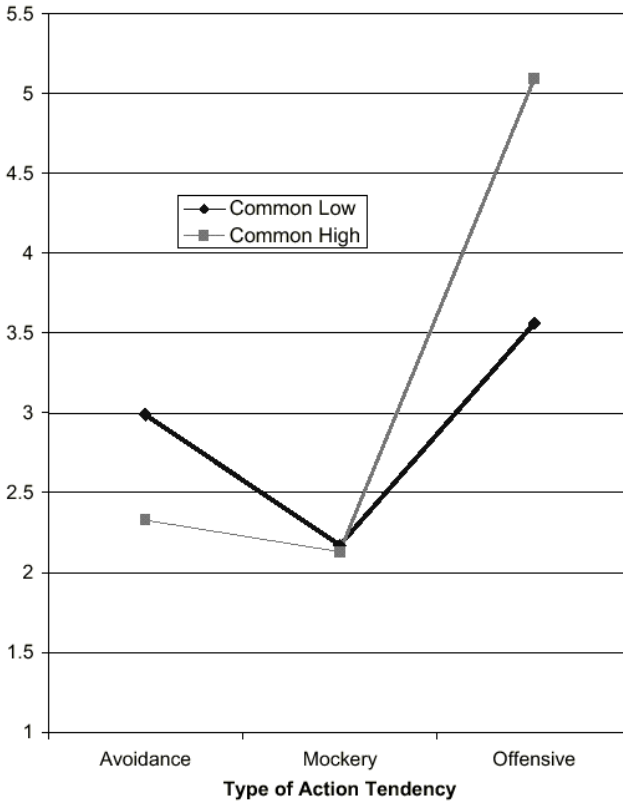
Figure 3. Intensity of each of the three action tendencies in the common group condition as a function of participants' identification with the group.

($M=4.12$) than avoidance ($M=2.67$), $F(1, 91)=31.61$, $p<.0001$, or mockery action tendencies ($M=1.98$), $F(1, 91)=95.63$, $p<.0001$. Participants also indicated the presence of more action tendencies related to avoidance than to mockery, $F(1, 91)=18.98$, $p<.0001$. This pattern is noteworthy in that it signals that the newspaper article generally induced the predicted action tendencies.

The action tendency×identification level interaction also came out significant, $F(2, 182)=3.47$, $p<.04$. As expected, this two-way interaction was qualified by a significant three-way interaction, $F(2, 182)=3.39$, $p<.04$. As before, one way to examine this three-way interaction is by looking at the action tendency×identification level interaction for each categorization context separately.

As far as the common group condition is concerned, there was a significant main effect of action tendency, $F(2, 90)=37.30$, $p<.0001$. This main effect was qualified by the presence of a significant two-way interaction between identification level and action tendency, $F(2, 90)=9.16$, $p<.0002$. *Post hoc* analyses showed that high identifiers reported more offensive action tendencies than low identifiers, $t(45)=15.33$, $p<.0001$. Interestingly, high identifiers also reported marginally less avoidance action tendencies than low identifiers, $t(45)=3.06$, $p<.09$ (see Fig. 3). The data for the subgroup condition signalled the presence of a significant main effect of action tendency, $F(2, 182)=19.46$, $p<.0001$, paralleling the pattern observed with the
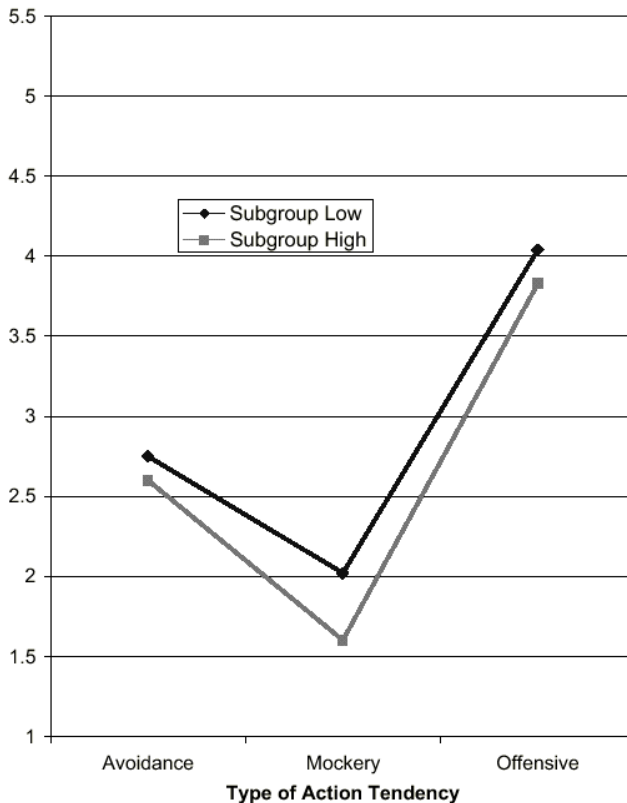
Figure 4. Intensity of each of the three action tendencies in the subgroup condition as a function of participants' identification with the group.

general data (see Fig. 4). *Post hoc* analyses established that identification had no impact on the emergence of action tendencies (all *t*s <1, *ns*).

The three-way interaction between categorization context, identification level and action tendency can also be examined by looking at the categorization context×identification level interaction for each action tendency separately. In line with predictions, the offensive action tendencies were the only ones for which significant effects emerged. As well as a significant main effect of identification level, $F(1, 91)=3.96$, $p<.05$, the interaction between identification level and categorization context was also clearly significant, $F(1, 91)=6.84$, $p<.02$. As expected, participants reported offensive action tendencies when they had been confronted with a context that stressed their common membership with the victims *and* had admitted to being highly identified with this category. Participants reported experiencing offensive action tendencies less strongly in all other conditions, all *t*s >2.21, $p<.03$.

Mediational analysis
The next step in our analysis concerned the mediational role of emotion in the relation between the categorization context and the action tendency. One way to test for mediation is by looking at the categorization context×identification level interaction effect on the offensive action tendencies in a model which includes the feeling of

anger as a covariate. In line with our mediational hypothesis, the interaction that was significant (see above) now failed to reach a conventional level of significance when the emotional data concerning anger were included in the analysis, $F(1, 91) <1, p>.43$.

To address this issue in a more direct way, we adapted the present situation to fit the standard procedure outlined by Baron and Kenny (1986). Specifically, we created a new independent variable that was given a value of 3 when participants were highly identified *and* the categorization context stressed their common group membership with the victims. In all other cases, the new variable was given a value of −1. First we regressed the offensive action tendencies on this independent variable. This analysis confirmed the presence of a significant impact of the independent variable on participants' offensive action tendencies, $b=.32$, $t(93)=3.31$, $p<.0013$. In addition, the newly created variable had a very strong influence on the emotion of anger reported by our participants, $b=.39$, $t(93)=3.80$, $p<.0003$. In line with the predictions based on appraisal theories of emotion, the emotional reactions of anger of our participants were strong predictors of the offensive action tendencies, $b=.73$, $t(93)=12.23$, $p<.0001$.

More importantly, a multiple regression including both the newly created independent variable and the emotional reactions of anger reported by our participants as predictors showed that the independent variable no longer had a significant impact on participants' offensive action tendencies, $b=.04$, $t(92) =.61$, $p>.54$. In contrast, the emotional reactions continued to be a very significant predictor of participants' action tendencies, $b=.72$, $t(92) =11.11$, $p<.0001$.

In order to further ascertain the validity of our conclusions, we submitted our data to a competing mediational analysis in which we swapped the roles of emotion reactions and action tendencies. As one would expect, the offensive action tendencies offered a good means of predicting the anger reported by our participants, $b=.84$, $t(93) =12.23$, $p<.0001$. The multiple regression including both our independent variable and participants' offensive action tendencies as predictors showed a most interesting pattern. Not surprisingly, participants' offensive action tendencies continued to be a very significant predictor of their emotional reactions, $b=.80$, $t(92) =11.11$, $p<.0001$. This time, however, the influence of our independent variable failed to vanish entirely. Instead, the combination of categorization context and identification continued to have a moderately significant impact on the level of anger felt by our participants, $b=.13$, $t(92) =1.86$, $p<.07$.

As a set, these various analyses confirm the mediational status of the emotional reactions in the relation between the independent variable and the offensive action tendencies. They unambiguously support the structural hypotheses that we derived from the model of social emotions (Smith, 1999).

Discussion

Combining the lessons of appraisal theories of emotions (Frijda, *et al.*, 1989; Roseman, 1984; Scherer, 1988; C. A. Smith & Ellsworth, 1985) and the achievements of self-categorization theory (Turner *et al.*, 1987), Smith (1993) recently proposed a theory of social emotions suggesting that people can indeed experience differentiated emotions toward out-groups and out-group members on the basis of the situation confronted by their own group and group members (for a collection, see Mackie & Smith, 2002). Although the initial evidence we collected (Gordijn *et al.*, 1999, 2001; for a review, see Yzerbyt *et al.*, 2002) proved highly encouraging with respect to the question of

people's ability to feel emotions on behalf of another person, the question remained as to what extent these so-called social emotions exert an impact at a conative level. Also, our previous studies always manipulated the categorization context without considering the more enduring aspects of identification. One thus remained ignorant of the impact of social identification on people's emotional experience and action tendencies. Finally, the paradigm we used in the present study allowed us to investigate the consequences of rendering salient the common group membership with the victims of harmful behaviour as opposed to some association with a group that is a distinct subgroup of the larger group including the victims.

The present results fully corroborated our hypotheses. Participants facing a context in which the *distinct* memberships of themselves and the victims were emphasized (i.e. the subgroup condition) reported feeling more anger than any other emotion, a logical consequence of the content of the story that was presented to them. In addition, they seemed somewhat less sad and happy than fearful. Quite a different pattern emerged for participants confronted with a context stressing their *common* group membership with the victims. Although these participants also reported feeling more anger than any other emotion and less happiness than any other emotion, the data additionally reveal the presence of the critical emotion×identification interaction. Further inspection of the means evidenced the presence of differential reactions in the common group membership/high identification condition, on the one hand, and in the three other conditions, on the other. Compared with the latter conditions, the former generated significantly more anger. In complete agreement with our predictions, this pattern confirms the fact that the impact of an emotional event is more pronounced among high identifiers than among low identifiers only when a common membership is made salient by the categorization context.

Another goal of this study was to examine the joint impact of category salience and group identification on action tendencies. Paralleling the data for emotions, the answers given to the action tendency questions revealed the presence of a significant interaction between action tendency and identification for those participants who were confronted with a *common* group membership but not for those who were led to think of themselves in terms of a *distinct* group membership. Additional analyses confirmed that high identifiers who were reminded of a common group membership stated that they wanted to 'move against' the perpetrator more than low identifiers. It is interesting to note that high identifiers were also less willing to 'move away' than their weakly identified colleagues.

The next step in our analysis sought to test the highly specific hypothesis that anger would not only be more extreme when both the contextual forces and the personal characteristics combine to exacerbate the inclusion of the victims in the self but that this emotional reaction would actually mediate the manifestation of action tendencies associated with anger. Our data are once again supportive of our predictions, as a mediational analysis confirmed that the offensive action tendencies were entirely mediated by the corresponding emotions.

Clearly, the present data replicate and extend earlier findings in several important ways. First, we were again able to establish the distinctive impact of the observed event on the emotional experience of our participants. In contrast to what was observed for anger, two other negative emotions, namely fear and sadness, proved to be largely unaffected by our manipulation of category salience and by participants' level of identification with the salient category. Second, and more important, we found supportive evidence for the combined impact of category salience and identification

on the emotional experience. Specifically, the salience of similarity was found to generate angry feelings among participants only to the extent that they strongly identified with the relevant category. Third, we were able to show that the impact of the independent variables was not limited to emotional consequences but had an influence at the conative level as well. Finally, we also showed that the tendency to oppose the perpetrator and react to the event was largely mediated by the degree to which angry feelings had been triggered in the first place.

In summary, we accumulated an impressive amount of evidence showing that the extent to which people perceive themselves as having a common group membership with the victims of harmful behaviour influences both their emotions and their action tendencies. In complete agreement with Smith's (1993, 1996) model of social emotions, we found the emotional experiences to be extremely specific and to play a mediational role in the emergence of action tendencies. As a note of caution, it should be pointed out that the data on action tendencies proved to be slightly more complex than expected. As a matter of fact, the experience of anger not only influenced offensive action tendencies but also tended to affect avoidance action tendencies. Whereas offensive action tendencies were exacerbated when high identifiers found themselves in a situation that stressed, albeit in a rather subtle way, their common group membership with the victims, avoidance action tendencies were reported to be somewhat less present. This pattern of findings can be seen as a reminder that one should not be overly deterministic in expecting a particular event to shape people's emotional experience, not to mention their action tendencies. Also, one should keep in mind that the action tendencies reported by participants in the present study cannot be seen as the same thing as behaviours. More research is needed to ascertain the impact of social emotions on people's actual behaviours.

The empirical evidence accumulated in the context of the present study also allows us to address one potential criticism concerning the role of social identification in the emergence of social emotions. Indeed, it is possible to argue that social identification is largely related to a more general ability to experience strong empathy towards the victims of hardship. As it happens, the prevalence of such an interpretation of what it means to be able to identify with a social group has caused us to disregard the impact of individual differences in social identification on the emergence of social emotions in our earlier work (Gordijn *et al.*, 1999, 2001). It is our opinion that the above data allow us to question the viability of such a problematic conception of social identification. As a matter of fact, we did not find that highly identified participants were systematically more sensitive to the fate of the victims. The emergence of more compassion was simply not observed among those participants confronted with a context stressing a distinct group membership. In fact, one would even be tempted to predict the exact opposite pattern in all those cases where the distinct group membership that is made salient in the context draws people's attention to a potential conflict with the subgroup to which the victims belong. Future research should allow us to examine this possibility (see also Branscombe & Wann, 1992).

The present paradigm is also most instructive with respect to intergroup contact and the promotion of harmonious relations in organizational settings or in multicultural contexts. Our data suggest that one way to encourage people to better appreciate the difficulties faced by others belonging to the same organization or living in the same society is to have them rely more on a joint membership. In other words, the extent to which people may be induced to feel and act in the interests of the underprivileged or the unfortunate members of their organization or society may heavily depend on the

ability of group leaders and policy makers to make salient some common group membership. That is, even though a large body of evidence would point to us being rather pessimistic about the possibility of increasing people's concern for the victims of hardship, the present data indicate that any approach that would simultaneously increase the salience of the common group membership between the wealthy and the poor and the level of identification of the affluent with this common group may well be conducive to higher levels of solidarity and greater compassion. This conclusion is in line with recent research results showing that a strategy that stresses perspective-taking on the part of the observers would also seem promising (Galinsky, in press; Galinsky & Moskowitz, 2000). Future research should allow us to better delineate the similarities and the differences between perspective-taking and identification as far as their influence on emotions, action tendencies and, ultimately, behaviours are concerned.

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