Intergroup Emotions: Explaining Offensive Action Tendencies in an Intergroup Context

Diane M. Mackie and Thierry Devos
University of California, Santa Barbara

Eliot R. Smith
Purdue University

Three studies tested the idea that when social identity is salient, group-based appraisals elicit specific emotions and action tendencies toward out-groups. Participants' group memberships were made salient and the collective support apparently enjoyed by the in-group was measured or manipulated. The authors then measured anger and fear (Studies 1 and 2) and anger and contempt (Study 3), as well as the desire to move against or away from the out-group. Intergroup anger was distinct from intergroup fear, and the inclination to act against the out-group was distinct from the tendency to move away from it. Participants who perceived the in-group as strong were more likely to experience anger toward the out-group and to desire to take action against it. The effects of perceived in-group strength on offensive action tendencies were mediated by anger.

The annals of history and contemporary news sources bear overwhelming witness to the variety of ways in which out-groups are devalued, discriminated against, and sometimes decimated by the members of other groups. One group is shunned and avoided, a second economically exploited, another belittled and scapegoated, and yet another systematically murdered. In contributing a social psychological perspective to the understanding of negative intergroup behavior, social psychologists have typically focused on prejudice—a negative evaluation of a group and its members—as the cause of discrimination. Despite the insights provided by such an approach (for reviews, see Brewer & Brown, 1998; Dovidio, Brigham, Johnson, & Gaertner, 1996; Fiske, 1998; Macrae, Stangor, & Hewstone, 1996; Mackie & Smith, 1998a), conceptualizing prejudice as a negative evaluation of a group has proved of little help in explaining the wide variety of negative reactions to out-groups (Mackie & Smith, 1998a, 1998b; Schneider, 1996; E. R. Smith, 1993). Why does one out-group attract fear or contempt while another becomes the target of anger? If out-groups uniformly attract negative evaluation, what factors explain the impulse, desire, intention, or tendency to move against some groups and away from others? Unfortunately, very little work has been done to differentiate action tendencies elicited in intergroup contexts (Grant & Brown, 1995; Mackie & Smith, 1998a; Messick & Mackie, 1989; Wright, Taylor, & Moghaddam, 1990; important exceptions are discussed later). The research reported here constitutes an initial empirical investigation of a novel theoretical approach to answering these questions.

Although intergroup theorists have by and large concentrated on negative attitude or evaluation as a precursor to discrimination, emotion theorists have typically differentiated both the diversity of feelings that may be directed toward a particular target and the specificity of behavior that can follow from those feelings. Appraisal theories of emotion (Frijda, 1988; Roseman, 1984; Scherer, 1988; C. A. Smith & Ellsworth, 1985), in particular, conceptualize personal emotions as complex reactions to specific situations or events that include quite differentiated cognitions, feelings, and action tendencies. Specific emotions experienced by an individual are triggered by appraisals (cognitions or interpretations) of whether an event appears to favor or harm the individual's goals or desires and whether the individual has the resources to cope or not, for example. Depending on their particular configuration, cognitive appraisals trigger specific emotional experiences (Ellsworth & Smith, 1988; Roseman, Spindel, & Jose, 1990; C. A. Smith & Ellsworth, 1985) and these emotional experiences in turn promote certain behaviors (Frijda, Kuipers, & ter Schure, 1989; Roseman, Wiest, & Schwartz, 1994). Anger at another individual, for example, is typically conceptualized as resulting from appraisals that the other has harmed the self and that the self is strong. Such anger in turn leads to tendencies to aggress against that other person.

Appraisal theory was developed to explain personal emotions experienced by individuals, and this focus was maintained in an important application of it to the intergroup context. Dijksterhuis (1987; Dijksterhuis, Koomen, van den Heuvel, & Frijda, 1996) asked native Dutch participants their emotional reactions to individual members of naturally occurring out-groups, with the assumption that these reactions depended on the nature of interpersonal interactions that participants had experienced. Respondents reported feeling a range of distinct negative and positive emotions about out-group members indicating that their personal emotions were indeed influenced by their individual experiences in encounters with other groups.

---

Diane M. Mackie and Thierry Devos, Department of Psychology, University of California, Santa Barbara; Eliot R. Smith, Department of Psychological Sciences, Purdue University.

This research was supported by National Science Foundation Grant SBR 9209995, a Swiss National Science Foundation Fellowship, and National Institute of Mental Health Grants RO1 MH46840 and KO2 MH01178. Thierry Devos is now at the Department of Psychology, Yale University.

Correspondence concerning this article should be addressed to Diane M. Mackie, Department of Psychology, University of California, Santa Barbara, California 93106-9660. Electronic mail may be sent to mackie@psych.ucsb.edu.
Yet "the self" implicated in emotion-relevant appraisals is clearly not only a personal or individual self. According to self-categorization theory (Turner, 1985; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), when social identity is salient, group members perceive themselves as exemplars of the group, rather than as unique individuals. In doing so, they highlight the similarities between themselves and other in-group members (Mackie, 1986; Simon, 1998; Simon, Pantele, & Mummendey, 1995). They confuse their own characteristics with those typical of the group (E. R. Smith & Henry, 1996). In other words, in-groups and in-group memberships become part of the self.

If group membership becomes part of the self, events that harm or favor an in-group by definition harm or favor the self, and the self might thus experience affect and emotion on behalf of the in-group. With such considerations in mind, E. R. Smith (1993, 1999) developed a model of intergroup emotions that was predicated on social identification with the in-group. When social identity is salient, appraisals of situations or events related to social identity focus on social rather than personal concerns: Individuals are not necessarily personally concerned with the situation or the event, but they experience emotions because their group may be helped or hurt by it. When appraisals occur on a group basis, emotions are experienced on behalf of the in-group, and the in-group and out-group become the targets of emotion. Moreover, specific intergroup emotions lead to differentiated intergroup behavior. Differentiated intergroup behavior occurs because specific intergroup emotions have been triggered by particular appraisals of situations or events related to social identity. This group-membership-based approach thus moved distinctly beyond the individual and interpersonal contexts in which appraisal theory had originally been developed and applied.

Indirect evidence supports several aspects of this position (for reviews, see E. R. Smith, 1993, 1999; E. R. Smith & Ho, in press). Individual group members do feel happy or sad depending on the success or failure of a group with which they identify, even if they do not personally contribute to that outcome (Cialdini et al., 1976). Recent work on fraternal relative deprivation has confirmed the role of social identification in facilitating intergroup comparisons that in turn influence emotional and behavioral reactions to out-groups (Guimond & Dubé-Simard, 1983; Kawakami & Dion, 1993, 1995; Walker & Pettigrew, 1984). For example, social identification is centrally implicated in whether fraternal deprivation, and particularly its emotional component, determines collective action (Simon et al., 1998; H. J. Smith, Spears, & Hamstra, 1999; Tropp & Wright, 1999). Although these different approaches all converge to confirm the importance of social identification, most have investigated only a restricted range of cognitive, affective, and behavioral consequences. Relative deprivation work has, for example, focused on a single dimension of appraisal, comparisons of relative group standing, and on the feelings of frustration and gratification that such comparisons might generate. Integrations of relative deprivation with social identity have, in turn, focused on the antecedents of individual versus collective actions, such as participation in protest movements, that might bring about changes in those relative standings.

To our knowledge, however, there has been no systematic evidence of (a) the role of specific group-based appraisals in producing the wider range of specific group-based emotions posited by E. R. Smith's (1993, 1999; E. R. Smith & Ho, in press) framework or (b) the mediational role of those emotions in producing tendencies toward or intentions regarding specific intergroup behavior. Although specificity of emotional reactions was an explicit research focus, many of the correlational analyses reported by Dijker (1987; Dijker et al., 1996) regarding the reported antecedents of emotional reactions focused on a comparison between aggregated negative emotions and positive emotions. Rather than illuminating the relation between emotions and action tendencies, both were included in global reaction indices. And as already noted, this work accorded social identification no special theoretical role in this process. Whereas contemporary fraternal deprivation approaches have accorded social identification a central role and demonstrated a link between group-based appraisals and collective action, their applicability is narrowly restricted to cognitions, affects, and behaviors relevant to relative standing.

The correlational and two experimental studies reported here were designed to provide empirical support for Smith's (1993, 1999; E. R. Smith & Ho, in press) model by demonstrating that in a potentially threatening intergroup situation (i.e., one in which groups were in conflict and social identification had occurred), different appraisals of theoretically relevant features of the intergroup situation would produce specifically different emotional reactions. Further, the studies were designed to show that these differentiated emotions would produce differentiated action tendencies toward the out-group. Specifically, we sought to explain expressed intentions or impulses to engage in offensive as opposed to nonoffensive intergroup behavior. We term offensive those behaviors that reflect a desire to move against or harm the out-group, either verbally or physically. Such behaviors can be contrasted with behaviors that reflect negative evaluation of the out-group but which do not involve approach or "fight" reactions. For example, behaviors that reflect the desire to move away from, avoid, disdain, or shun the out-group are nonoffensive as we define it. According to the perspective advanced here, whether the out-group elicits offensive behavior tendencies depends on the specific emotions it elicits, which in turn depend on factors in the situation that contribute to particular appraisals of the out-group's actions. According to various appraisal theories, offensive action tendencies are linked to the experience of anger or irritation, the emotion of fight or attack. Thus, when group members experience anger toward the out-group, their impulse should be to move against it, whereas experience of another negative intergroup emotion, such as fear or contempt, should not necessarily prompt such action.

What kind of appraisals increase anger rather than other negative emotions toward a target? In appraisal theories of emotion, the strength, power, or control that the self has relative to the instigator of the relevant event is a key factor in whether anger is experienced (Frijda, 1986; Roseman, 1984; Scherer, 1988). When the self is strong, or has resources, anger is more likely to be experienced, whereas when the self is relatively weak, anxiety and fear are the more likely emotional experience. Extrapolating from the individual to the group, we predicted that when social identity is salient, group members' appraisals of the strength or weakness of the in-group relative to the out-group (rather than in absolute terms) would dictate whether they felt anger toward the other group, and in turn whether their behavioral intentions toward the other group were offensive.

We tested these ideas in one correlational and two experimental studies. Because the appraisal of intergroup events, the experience...
of intergroup emotions, and the impulse toward intergroup behavior are expected to depend on the salience of social identities, in each case we first reminded participants of their membership in a particular social group that reflected their adherence to important social values. Recent research demonstrates the role of such values in producing meaningful social identities (Esses, Haddock, & Zanna, 1993; Kristiansen & Zanna, 1994; Schwartz, Struch, & Bilsky, 1990). Moreover the in-group and out-group were characterized by a readily apparent conflict of values underlying agreement or disagreement with a controversial social issue. Given the many lines of research emphasizing the role of values in conflictual intergroup relations (Biermat, Vesco, & Theno, 1996; Esses et al., 1993; Kinder & Sears, 1981, Kristiansen & Zanna, 1994; Rokeach, 1960; Schwartz et al., 1990, Struch & Schwartz, 1989), we intended the obvious value conflict between the in-group and the out-group to constitute a context of intergroup opposition and threat.

We then either manipulated or manipulated the extent to which either the in-group or the out-group was perceived as strong. We did this by either assessing or varying the apparent collective, symbolic, or cognitive resources and support that the in-group or the out-group enjoyed. We then measured some specific negative emotions that group members might harbor toward the out-group. Finally, we assessed two action tendencies: group members’ desire, inclination, or impulse to move against and to move away from the out-group.

We predicted that group members would experience anger and report offensive action tendencies toward an opposing out-group if they had the impression that the in-group benefited from greater collective support than the out-group. If this comparison was unfavorable for the in-group, however, we expected participants’ emotional reactions and behavioral intentions toward the opposing out-group to be nonoffensive.

Study 1

In addition to providing a correlational test of our hypotheses, we intended Study 1 to provide evidence about the viability of differentiating specific negative emotions and related action tendencies in the intergroup context. That is, we wanted to see if group members experienced particular emotions, rather than any negative emotion, toward an out-group depending on the appraisal conditions, and whether they reported desiring to act in a specific rather than in any general negative way toward the group.

Method

Participants

Participants were 60 undergraduate students (41 women and 19 men). All participants received partial course credit in return for their participation.

Pretest

A pretest was conducted to identify the values brought into conflict by different social issues, using Tellock’s (1986) Informal Guess procedure. Forty-six undergraduate students were asked to guess the value priorities of people who had a different stand on a given issue. To do so, they rated to what extent the values were important for people on each side of the issue. They were given four response options: (1) the value is relatively unimportant to me, (2) the value is moderately important to me, (3) the value is very important to me, and (4) I can’t decide. They made such judgments for 12 values taken from Schwartz’s (1992) list.

On the basis of the pretest, we selected an issue related to the use of illegal drugs. The exact phrasing of the issue was, “Should the use of illegal drugs be punished severely?” Pretest responses showed high interrater agreement that this issue was underlain by a conflict between the values of social order (stability of society) and freedom (freedom of action and thought). Indeed, 74% of participants inferred that social order was very important for people in favor of severe punishment (only 1% thought it was important for people opposed to severe punishment). On the other hand, 80% of participants inferred that freedom was very important for people opposed to severe punishment (only 20% thought that was the case for people in favor of severe punishment).

Procedure

The study was introduced as being about attitudes and values. We explained that, “Controversial issues usually involve the values cherished by individuals. In other words, disagreements between people are often related to the fact that they do not share the same values.” We then introduced the specific issue of concern and asked participants to categorize themselves either as members of the group in favor of severe punishment or as members of the group opposed to severe punishment for drug use. To do so, participants wrote the word me in one of the circles representing the two groups.

To assess value conflict, participants indicated to what extent social order (stability of society) and freedom (freedom of action and thought) were important values for the in-group and for the out-group on 7-point scales ranging from 1 (not at all) to 7 (very much).

Appraisal of collective support was assessed by 10 items: (1) “Current opinion is in favor of which group?” (2) “Which group has more persuasive arguments?” (3) “Which group defends its position best?” (4) “Which group has more relevant arguments?” (5) “Which group is more willing to manipulate people in order to gain their support?” (reversed for scoring), (6) “Which group has more powerful arguments?” (7) “Which group has the stronger support of political representatives?” (8) “Which group has more coherent arguments?” (9) “Which group is more willing to use unfair means to defend its position?” (reversed for scoring), and (10) “Which group has stronger arguments?” Items 5 and 9 introduced the idea that only legitimate means enhance the collective support for a group; unfair or illegitimate actions are detrimental to the credibility of the group. For each item, responses were given on 7-point scales ranging from 1 (your group) to 7 (the other group).

Group identification was assessed by four items: “You stand by them,” “You share their values,” “You feel close to them,” and “You feel similar to them.” Participants answered these questions separately for the in-group and for the out-group. Responses were given on 7-point scales ranging from 1 (not at all) to 7 (very much).

1 Pilot testing measured us that this self-categorization into one of two groups marked by a clear difference in values was sufficient to induce intergroup conflict and threat. Fourteen participants not involved in these studies completed the self-categorization procedure for the drug use and punishment issue. They then reported (among other items), on 7-point scales ranging from 1 (not at all) to 7 (very much), the extent to which they believed members of the other group disagreed with, opposed, were united against, and threatened the in-group. Results indicated that the first three means were at or above the midpoint of the scale (Ms = 5.1, 3.0, and 4.0, respectively) with the last mean being slightly below it (M = 3.6). Of the 14 participants, 2 categorized themselves as in favor of severe punishment (a smaller percentage than in the study itself) and 12 categorized themselves as opposed to it.
We measured emotional reactions (anger and fear) toward the out-group. On 7-point scales ranging from 1 (not at all) to 7 (extremely), participants indicated to what extent the other group made them feel (a) angry, displeased, irritated, or furious (four items measuring anger), and (b) worried, anxious, afraid, or fearful (four items measuring fear).

Two action tendencies were assessed: the tendency to move against the out-group and the tendency to move away from it. On 7-point scales ranging from 1 (not at all) to 7 (very much), participants indicated to what extent out-group members made them want to (a) confront them, oppose them, or argue with them (3 items measuring move against), and (b) avoid them, have nothing to do with them, or keep them at a distance (3 items measuring move away).

Results and Discussion

Nineteen participants categorized themselves as members of the group in favor of severe punishment, and 41 participants categorized themselves as members of the group opposed to severe punishment. In all analyses reported, self-categorization refers to the between-subjects factor of selected value group membership (either the group favoring social order or the group favoring freedom). Target group refers to whether responses were made about the in-group or out-group and is a within-subjects factor.

Value Conflict

An analysis of variance (ANOVA) on the value measure revealed a highly significant Value × Target Group × Self-Categorization interaction, F(1, 58) = 103.05, p < .001. We therefore analyzed each value separately. The Target Group × Self-Categorization interaction was significant for social order, F(1, 58) = 69.32, p < .001. Simple effects tests revealed that members of the group favoring social order considered social order to be more important for the in-group (M = 5.79) than for the out-group (M = 2.90), F(1, 58) = 45.77, p < .001, whereas the reverse occurred for members of the group favoring freedom (M = 4.42 and 5.83, respectively), F(1, 58) = 23.59, p < .001. The Target Group × Self-Categorization interaction was also significant for freedom, F(1, 58) = 63.63, p < .001. Simple effects tests revealed that members of the group favoring freedom considered freedom to be more important for the in-group (M = 6.61) than for the out-group (M = 3.59), F(1, 58) = 126.36, p < .001, whereas the reverse occurred for members of the group favoring social order (M = 5.16 and 5.95, respectively), F(1, 58) = 3.99, p < .06. Consistent with the results of pretesting, participants clearly perceived a value conflict between the in-group and the out-group.

Group Identification

Responses to the four group identification items were averaged (α = .89 for the in-group as target and .88 for the out-group as target). Identification with the in-group (M = 3.89) was higher than identification with the out-group (M = 2.74), F(1, 58) = 34.54, p < .001, consistent with the idea that participants were identified with the social category membership they had selected. This effect was marginally qualified by self-categorization, F(1, 58) = 2.82, p < .10. Simple effects tests revealed that in-group identification was higher than out-group identification in both cases, but the effect was stronger for the group favoring social order (Ms = 4.24 and 2.58, respectively), F(1, 58) = 20.90, p < .001, than for the group favoring freedom (Ms = 3.73 and 2.81, respectively), F(1, 58) = 13.91, p < .001.

Appraisal of Collective Support

Responses to the 10 items assessing appraisal of collective support were averaged (α = .91). The score was reversed so that higher means indicated greater support for the in-group, and we subtracted 4 from this score to reflect deviation from the midpoint of the scale (equal support for both groups). Members of the group favoring social order (M = 1.77) perceived greater collective support for their group than did members of the group favoring freedom (M = −0.42), F(1, 58) = 76.56, p < .001.

Emotions Toward the Out-Group

To study the structure of emotional reactions, we used factor analyses. First, we ran a principal-components analysis on the eight emotion items specifying that factors with eigenvalues greater than 1 be retained. A two-factor solution was extracted. The two factors accounted for 74% of the variance. Factor loadings after varimax rotation showed that all fear items loaded strongly on the first factor (> .76), whereas all anger items loaded strongly on the second factor (> .62).

This analysis suggested that specific intergroup emotions could be differentiated. We also used confirmatory factor analysis to compare the fit of the data with three different models: a one-factor model, a two-factor model in which the factors were correlated, and a two-factor model in which the factors were uncorrelated. The second model was clearly the best one. It was the only model showing a good fit, χ²(19, N = 60) = 26.79, p = .10, χ²/df = 1.41, normed fit index (NFI) = .92, non-normed fit index (NNFI) = .96, comparative fit index (CFI) = .97, root mean squared error of approximation (RMSEA) = .08. This model was significantly better than both the one-factor model, as shown by an incremental χ²(1, N = 60) = 48.30, p < .001, and the two-factor model for which the factors were uncorrelated, χ²(1, N = 60) = 31.05, p < .001. Thus, although there was some overlap between these two negative emotions, anger and fear could clearly be differentiated in this context.

To what extent did appraisal of collective support for the in-group and identification with the in-group account for these specific emotional reactions? To answer this question, we used regression analyses. We averaged responses to the four anger items (α = .87, M = 3.64) and the four fear items (α = .89, M = 3.05). We then regressed each emotion on appraisal of collective support for both the in-group and in-group identification. In both cases, we also controlled for two additional factors. First, given the fact that we found group differences on the appraisal and group identification measures, we introduced self-categorization as a dichotomous variable in the analyses. Second, to control for the shared variance between emotions, we also introduced the other emotion in the regressions. In doing so, we were able to see if the appraisal of collective support for both the in-group and in-group identification accounted specifically for anger or fear, and above all, possible group differences.

For anger, the four variables introduced in the analysis accounted for a significant proportion of the variance, R² = .56, F(4, 58 = 7.80, p < .001. The greatest variance was explained by the appraisal of collective support for the in-group (β = .71, t = 5.80, p < .001), followed by appraisal of collective support for the out-group (β = .43, t = 2.80, p < .01). The other variables showed a marginally significant contribution (β = .18, t = 1.72, p = .09).
55) = 17.16, p < .001. More important, we found that appraisal of collective support (β = .36, p < .02) and in-group identification (β = .21, p < .05) were significant predictors of anger over and above the contribution of fear (β = .56, p < .001) and self-categorization (β = -.26, p < .08). For fear, R² = .49, F(4, 55) = 13.20, p < .001, appraisal of collective support (β = -.20, ns) and in-group identification (β = .02, ns) were not significant predictors once anger (β = .65, p < .001) and self-categorization (β = .35, p < .03) were taken into account.

Action Tendencies

To study the structure of the action tendencies, we also used factor analyses. First, we ran a principal-components analysis on the six action tendency items (retaining factors with eigenvalues greater than 1). A two-factor solution was extracted. The two factors accounted for 78% of the variance. Factor loadings after varimax rotation showed that all "move-away" items loaded strongly on the first factor (> .87), whereas all "move-against" items loaded strongly on the second factor (> .80).

Again, the results based on this exploratory technique suggested that specific action tendencies could be differentiated in the study of group-based behaviors. To test this idea more systematically, we used confirmatory factor analysis. We compared the same three models described earlier and found the two-factor model with correlated factors to be the best model, $\chi^2(8, N = 60) = 15.71, p < .05$, $\chi^2/df = 1.96$, NFI = .93, NNFI = .93, CFI = .96, RMSEA = .13. This model was significantly better than both the one-factor model, $\chi^2(1, N = 60) = 50.24, p < .001$, and the two-factor model for which the factors were uncorrelated, $\chi^2(1, N = 60) = 9.04, p < .005$. Once again, although there was some overlap between these two negative behavioral intentions, it was much more appropriate to differentiate them than not to do so.

To what extent did the appraisal of collective support for both the in-group and in-group identification account for specific action tendencies? Following the same steps already described, we first averaged responses to the three move-against items (α = .79, M = 3.51) and to the three move-away items (α = .91, M = 3.36) and regressed each action tendency on appraisal of collective support and in-group identification. In both cases, self-categorization and the other action tendency were also introduced as additional factors. For the move-against index, $R^2 = .35, F(4, 55) = 7.53, p < .001$, we found the contribution of appraisal of collective support (β = .33, p < .08) to be marginal and the contribution of in-group identification (β = .43, p < .002) to be significant over and above the contribution of the move-away index (β = .12, ns) and self-categorization (β = -.22, ns). For the move-away index, $R^2 = .21, F(4, 55) = 3.74, p < .01$, appraisal of collective support (β = .27, ns) and group identification (β = .13, ns) were not significant predictors once the move-against items (β = .15, ns) and self-categorization (β = .06, ns) were taken into account.2

Mediation Analysis

In line with our predictions, the appraisal of collective support and group identification were specifically related to the expression of anger (and not fear) toward the out-group and to the willingness to move against it (and not away from it). We tested whether the contributions of the appraisal of collective support and in-group identification to offensive action tendencies were mediated by anger using the multiple-regression approach recommended by Baron and Kenny (1986). Results of the regression analyses previously reported showed that the appraisal of collective support and group identification were specifically related to the expression of anger toward the out-group and the willingness to move against it. We conducted the same regression analysis described earlier for the move-against index but introduced anger as an additional predictor. This regression analysis showed that anger (β = .52, p < .001) predicted inclinations to move against the in-group, while controlling for the appraisal of collective support and group identification. The fact that the addition of anger eliminated the contribution of the appraisal of collective support (β = .18, ns) was consistent with the idea that its impact on tendencies toward offensive intergroup action was mediated by anger. The contribution of in-group identification (β = .38, p < .02) remained significant but dropped, providing evidence for partial mediation. Using Baron and Kenny’s (1986; see also Kenny, Kashy, & Bolger, 1998) modification of the Sobel test, the reduction because of anger was significant for the appraisal of collective support (Z = 2.14, p < .02) and for in-group identification (Z = 1.84, p < .04).

The results of this initial study were thus largely consistent with expectations. First, participants perceived a conflict of values between the in-group and the out-group, and overall they felt more similar to in-group members than to out-group members. Thus, the situation involved a meaningful intergroup categorization, and social identity was made salient.

Given this context, negative emotional reactions toward the out-group could be clearly differentiated. Although there was some overlap between anger and fear, these two negative emotions were most appropriately distinguished in the intergroup context (consistent with Dijksterhuis & Bolg, 1996). In addition, as far as action tendencies were concerned, moving against the out-group was also distinct from moving away from it, although they did again share some variance. Thus, consistent with the extension of appraisal theories of emotion into the intergroup domain, specific intergroup emotions and action tendencies could be differentiated.

Even more significantly, the inclination or willingness to take offensive action toward a group was predictably related both to appraisals of the in-group’s position relative to the out-group and to expressed intergroup emotions. The more group members appraised the in-group as being in a strong position relative to the out-group, the more they expressed offensive emotional reactions (anger toward the out-group) and offensive behavioral tendencies (moving against the out-group). In turn, such action tendencies toward the out-group were strongly related to the specific intergroup emotions experienced. The more group members expressed anger toward the out-group, the more they were inclined to oppose or confront the out-group. The expression of another negative emotion, fear, did not predict the desire to move against the group, nor did the presence of anger predict desire to avoid or distance

---

2 Because the identification item "you stand by them" might imply collective action, this analysis was rerun using an identification composite without this item. Results were identical.
oneself from the group. Thus, the expected specific emotion determined the expected specific intergroup behavior.

Study 2

Conclusions drawn from the results of Study 1 are tentative, of course, because of all the limitations associated with the correlational nature of the study. To more systematically test our hypotheses, we sought to examine the relations among appraisals, emotions, and action tendencies when appraisals of the in-group's strength were manipulated rather than merely measured. We expected to find that when social identities characterized by a value conflict were salient, appraisals of the in-group as stronger than the out-group would produce anger toward (but not fear of) the out-group and a greater inclination to move against (but not move away from) the out-group. Moreover, we expected any manipulation-dependent willingness to move against the group to depend on a feeling of anger toward the group, confirming the results of Study 1.

Given the context of a stronger manipulation of appraisal, we also thought it possible that we might replicate this specificity between intergroup emotion and intergroup behavior in the case of another emotion, fear. Some appraisal theories have argued that fear is related to the desire to move away from the fear-provoking stimulus (Dijksterhuis, 1987; Ellsworth & Smith, 1988; Frijda et al., 1989). However, we found no evidence in Study 1 for the idea that defensive emotions and action tendencies, such as fear and moving away from the out-group, were related to appraisals of the group as relatively weak. Given that group strength was not manipulated in Study 1, there was perhaps little basis for weak in-group appraisals, the experience of fear, or the desire to move away from the group. Given a strong manipulation of intergroup appraisals, however, these relationships might emerge.

Method

Participants

Participants were 94 undergraduate students (74 women and 20 men) who received partial course credit in return for their participation. Participants were randomly assigned to the three conditions. Participants were run in groups of up to 6 per session. They were seated well apart from one another in a room and did not interact in any way during the session.

Procedure

Self-categorization procedure. The experiment was introduced as being about attitudes and values. We explained that, "Controversial issues usually involve the values cherished by individuals. In other words, disagreements between people are often related to the fact that they do not share the same values." We added that, in this experiment, we were interested in the following issue: "Should homosexual couples in long-term relationships benefit from the same legal rights as people in heterosexual marriages?"

As before, we asked participants to categorize themselves either as members of the group in favor of equal rights for homosexual couples or as members of the group opposed to that. To do so, they wrote the word me in one of the circles representing the two groups.

Manipulation of the appraisal of collective support. Following the self-categorization task, participants read a list of 19 headlines supposedly taken from newspapers and related to the issue at stake. In the strong in-group condition, 16 headlines supported the in-group and only 3 supported the out-group, whereas in the weak in-group condition, 16 headlines supported the out-group and only 3 supported the in-group. This manipulation was thus designed to give participants the impression either that the in-group is in a relatively strong position, or, when confronted by many events or decisions supporting the other side, that the in-group is in a relatively weak position.

To reinforce the manipulation and as a partial check on its effectiveness, participants indicated "if the event or the decision mentioned in each headline is in favor of your group or in favor of the other group. In other words, does it reinforce your group or the other group?" Responses were made on 7-point scales ranging from 1 (your group) to 7 (the other group). In a control condition, participants did not read or rate the headlines; they immediately completed the different dependent measures.

Dependent measures. We then measured emotional reactions (anger and fear) toward the out-group. On 7-point scales ranging from 1 (not at all) to 7 (extremely), participants indicated to what extent the other group made them feel (a) angry, displeased, irritated, or furious (four items measuring anger), and (b) worried, anxious, afraid, or fearful (four items measuring fear).

Two action tendencies were also assessed: the tendency to move against the out-group and the tendency to move away from it. On 7-point scales ranging from 1 (not at all) to 7 (very much), participants indicated to what extent out-group members made them want to (a) confront them, oppose them, or attack them (3 items measuring move against), and (b) avoid them, have nothing to do with them, or keep them at a distance (3 items measuring move away).

Footnotes

3 This issue was also chosen on the basis of the results of pretesting described in Study 1, which indicated agreement that opinions on the issue were based on a conflict between the values "equality (equal opportunity for all)" and "respect for tradition (preservation of time-honored customs)."

Indeed, nearly 94% of participants inferred that equality was very important for people in favor of equal rights (only 11% of them thought that was the case for people opposed to equal rights). On the other hand, 87% of participants inferred that respect for tradition was very important for people opposed to equal rights (only 13% of them thought that was the case for people in favor of equal rights).

4 The pilot testing described in Footnote 1 indicated that self-categorization on the basis of attitudes toward equal rights for homosexual couples was also sufficient to induce perceptions of intergroup conflict and threat. Participants, all of whom classified themselves as in favor of equal rights, saw the other group as in disagreement with (M = 5.5), opposed to (M = 5.6), united against (M = 4.7), and a threat to (M = 4.1) the in-group.

5 A separate pretest was used to develop two sets of newspaper headlines that apparently supported the in-group versus the out-group. Twenty-four undergraduate students, who categorized themselves as members of the group in favor of equal rights for homosexual couples, rated 68 fake headlines supposedly taken from newspapers and related to the issue at stake. They indicated whether the event or the decision mentioned in each headline favored or reinforced "your group" or the "other group." Responses were given on 7-point scales ranging from 1 (your group) to 7 (the other group). On this basis, we selected 16 headlines supporting the in-group (M = 1.69, SD = 0.68) and 16 headlines supporting the out-group (M = 6.20, SD = 0.63), z(23) = -17.55, p < .001. The set of headlines supporting the in-group included the following examples: "Celebrities support equal rights for homosexual couples," "Non-discrimination bill introduced," "Gay leaders urge stronger actions in favor of homosexual couples," "Websites to promote equal rights," and "Gay marriage hearing: Victory for equality!" The set of headlines supporting the out-group included the following examples: "Role models are standing up to defend traditional values," "Anti-homosexual marriage bills spread across states," "Organization asks politicians to reinforce anti-gay legislation," "More anti-gay Websites," and "Court rules against homosexual couples."
Checks on the Effectiveness of Manipulations. To ensure that value conflicts were seen as underlying the self-categorizations, participants indicated to what extent "equality (equal opportunity for all)" and "respect for tradition (preservation of time-honored customs)" were important values for the in-group and for the out-group on 7-point scales ranging from 1 (not at all) to 7 (very much).

We also measured identification with the in-group and out-group to evaluate the success of the categorization procedure and to assess the mediational role of identification, using the same four items described in Study 1. Participants used 7-point scales to answer these questions separately for the in-group and for the out-group.

Appraisal of collective support was assessed by five items: (1) "Which group has a stronger position?" (2) "Which group is better organized to defend its position?" (3) "Which group defends its position best?" (4) "In which group is the collective mobilization the stronger?" and (5) "Current opinion is in favor of which group?" Responses were given on the 7-point scales ranging from 1 (your group) to 7 (the other group).

Results and Discussion

All participants included in the analyses described here categorized themselves as members of the group in favor of equal rights. In all analyses reported here, appraisal condition refers to the between-subjects manipulation of collective support for the in-group (strong in-group, weak in-group, or control). Target group refers to whether responses were made about the in-group or out-group and is within-subjects factor.

Checks on the Effectiveness of Manipulations

Value conflict. An ANOVA revealed a highly significant Value × Target Group interaction, F(1, 91) = 532.42, p < .001. We therefore conducted simple effects tests. As expected, participants considered that equality was more important for the in-group (M = 6.66) than for the out-group (M = 2.19), F(1, 91) = 694.48, p < .001, whereas respect for tradition was more important for the out-group (M = 6.17) than for the in-group (M = 3.44), F(1, 91) = 159.49, p < .001. Participants clearly perceived a value conflict between the in-group and the out-group. The two-way interaction was not qualified by appraisal condition (F < 1). Thus, the intensity of the perceived intergroup value conflict was not affected by the collective support manipulation.

Appraisal of collective support. We assessed the effectiveness of this manipulation in two ways. First, to ensure that participants perceived the headline task as intended, we averaged their ratings for the 16 headlines supporting one group and the 3 headlines supporting the other group. The Appraisal Condition × Type of Headlines interaction was highly significant, F(1, 60) = 470.97, p < .001. Not surprisingly, in the strong in-group condition the 16 headlines were rated as supporting the in-group (M = 1.74) and the other 3 headlines as supporting the out-group (M = 5.69), F(1, 60) = 186.61, p < .001. The reverse was true in the weak in-group condition (Ms = 6.42 and 1.64, respectively), F(1, 60) = 292.06, p < .001.

Second, responses to the five items assessing appraisal of collective support were averaged (α = .70). The score was reversed so that higher scores indicated higher support for the in-group, and we subtracted 4 from this score to reflect its deviation from the midpoint of the scale (corresponding to equal support for both groups). The effect of appraisal condition was highly significant, F(2, 91) = 14.67, p < .001. Post hoc comparisons (Tukey a)

revealed that collective support for the in-group was lower in the weak (M = −0.64) condition than in the strong (M = 0.57) and control (M = 0.35) conditions, but the difference between the strong and control conditions was not significant. To determine whether perceptions of inferiority or superiority were actually produced, we compared the mean scores of each condition to 0. Appraisal of collective support for the in-group was significantly lower than 0 in the weak condition, t(31) = −3.71, p < .002, and significantly higher than 0 in the strong condition, t(29) = 3.74, p < .002; the difference was in the same direction in the control condition, t(31) = 1.97, p < .06. Thus, the appraisal manipulation was highly effective, and participants not exposed to the manipulation assumed their in-group to be in a relatively strong position compared with the out-group.

Group identification. Responses to the four group identification items were averaged (α = .82 for the in-group and .84 for the out-group). The main effect of target group was highly significant, F(1, 91) = 30.09, p < .001. Overall, in-group identification (M = 3.72) was higher than out-group identification (M = 2.79). The Target Group × Appraisal Condition interaction was also significant, F(2, 91) = 5.45, p < .007. Simple effects tests indicated that in-group identification was higher than out-group identification in the strong in-group condition (Ms = 4.00 and 2.88, respectively), F(1, 91) = 13.72, p < .001, and in the control condition (Ms = 4.10 and 2.59, respectively), F(1, 91) = 26.68, p < .001, but not in the weak in-group condition (Ms = 3.08 and 2.90, respectively; F < 1). These results indicate that the self-categorization manipulation was most effective in the strong in-group and control conditions.

Dependent Measures

Emotions toward the out-group. We had predicted that the appraisal manipulation would determine participants’ emotional reactions to the out-group. To ensure that anger and fear could be differentiated, we ran a principal-components factor analysis on the eight emotion items specifying that factors with eigenvalues greater than 1 be retained. A two-factor solution was extracted. The two factors accounted for nearly 76% of the variance. Factor loadings after varimax rotation showed that all anger items loaded strongly on the first factor (> .81), whereas all fear items loaded strongly on the second factor (> .71).

This analysis suggested that specific group-based emotions could be differentiated. We then used confirmatory factor analysis to test the adequacy of three different models. As expected, a two-factor model with correlated factors was clearly the best one. It was the only model showing a good fit, χ²(19, N = 94) = 24.78, p > .10, χ²/df = 1.30, NFI = .95, NNFI = .98, CFI = .99, RMSEA = .06. This model was significantly better than both a one-factor model, incremental χ²(1, N = 94) = 135.86, p < .001, and a two-factor model for which the factors were uncorrelated, χ²(1, N = 94) = 31.77, p < .001. Consistent with Study 1, although there was some overlap between these two negative emotions, anger and fear could clearly be differentiated in this context.

6 This experiment was run soon after a 21-year-old gay student was murdered in a hate crime in Wyoming. Thus, homosexuality was a particularly sensitive issue at the time we collected the data.
What impact did the manipulation of appraisal have on feelings about the out-group? Responses to the four anger items were averaged ($\alpha = .90$). The effect of appraisal condition was significant, $F(2, 91) = 3.41, p < .04$, (see Table 1). Post hoc comparisons (Tukey a) revealed that the anger toward the out-group was significantly higher in the strong condition ($M = 4.58$, where 4 is the midpoint of the scale) than in the weak condition ($M = 3.57$), but the control condition ($M = 4.23$) was not significantly different from either condition. Responses to the four fear items were also averaged ($\alpha = .88$), but the effect of appraisal condition was not significant, $F(2, 91) = 1.84, p > .16$ (see Table 1).

**Action tendencies.** Our main prediction was that participants’ intended actions toward the out-group would depend on the experimental manipulations. We again used factor analyses to study the structure of the action tendencies. First, we ran a principal-components analysis on the six action tendency items specifying that factors with eigenvalues greater than 1 be retained. A two-factor solution was extracted. The two factors accounted for 66% of the variance. Factor loadings after varimax rotation showed that all the move-away items loaded strongly on the first factor (> .81), whereas all the move-against items loaded strongly on the second factor (> .55). The results thus suggested that specific group-directed action tendencies could be differentiated.

We then used confirmatory factor analysis to compare the fit of the three different models tested above. A two-factor model with correlated factors was the only model showing a good fit, $\chi^2(8, N = 94) = 13.71, p > .05, \chi^2(df = 1.71, NFI = .92, NNFI = .93, CFI = .96, RMSEA = .09$. This model was significantly better than both the one-factor model, incremental $\chi^2(1, N = 94) = 22.42, p < .001$, and the two-factor model with uncorrelated factors, $\chi^2(1, N = 94) = 18.40, p < .001$. Consistent with Study 1, although there was some overlap between the two types of negative action tendencies, it was much more appropriate to differentiate them than not to do so.

To evaluate our prediction, responses to the three move-against items were first averaged ($\alpha = .59$). As predicted, the effect of appraisal condition was significant, $F(2, 91) = 5.04, p < .009$ (see Table 2), and this effect remained significant when the move-away index was introduced as a covariate in the analysis, $F(2, 90) = 3.35, p < .05$. Post hoc comparisons (Tukey a) revealed that the tendency to move against the out-group was significantly higher in the strong in-group condition ($M = 3.27$) and in the control condition ($M = 3.09$, as might be expected from the results of the check on the appraisals manipulation) than in the weak in-group condition ($M = 2.46$).

Responses to the three move-away items were also averaged ($\alpha = .81$). There was a marginal effect of the appraisal condition, $F(2, 91) = 2.54, p < .09$ (see Table 2), but this effect became nonsignificant when the move-against index was introduced as a covariate in the analysis ($F < 1$). This suggested that the tendency to move away from the out-group was not specifically affected by the appraisal of collective support for the in-group.

**Mediation analysis.** The manipulation of collective support had an effect on emotion toward the out-group (specifically, anger) and on action tendencies (specifically, willingness to move against the out-group). An important element of our theoretical framework was that the effect of the appraisal manipulation on action tendencies should be mediated by the intergroup emotion. Because we also found that in-group identification was lower in the condition in which participants expressed less anger toward the out-group and were less willing to move against it, we needed to test the mediational effect of this variable on the predicted outcome. To test these ideas, we conducted a series of regression analyses (Baron & Kenny, 1986). The first regression analysis confirmed that the manipulation of collective support affected anger ($\beta = .26, p < .02$) and in-group identification ($\beta = .32, p < .003$). The second regression analysis demonstrated once again that the appraisal condition ($\beta = .30, p < .004$) had a significant effect on the tendency to move against the out-group. The third regression analysis showed that the contribution of anger ($\beta = .55, p < .001$) and in-group identification ($\beta = .24, p < .008$) were significant, while controlling for the appraisal manipulation. The effect of the appraisal condition ($\beta = .08, ns$) was no longer significant in the third equation. The reductions due to anger ($Z = 2.37, p < .009$) and to in-group identification ($Z = 2.04, p < .03$) were both significant.

These findings were largely consistent with predictions and with the results of Study 1. Independent of the experimental condition, participants perceived a conflict of values between the in-group and the out-group. Group members in the strong in-group condition perceived the in-group to be stronger than the out-group, whereas in the weak condition the opposite was true. When they received no particular information (control condition), participants assumed that the in-group was in a stronger position than the out-group.

Responses to the emotional items confirmed that the negative emotion of anger could be differentiated quite clearly from the

### Table 1
**Means and Standard Deviations for Emotions Toward the Out-Group by Appraisal Condition: Study 2**

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Control ($n = 32$)</th>
<th>Strong ($n = 30$)</th>
<th>Weak ($n = 32$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>4.23</td>
<td>4.58</td>
<td>3.57</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.58</td>
<td>1.44</td>
<td>1.60</td>
</tr>
<tr>
<td>Fear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>3.15</td>
<td>2.98</td>
<td>2.47</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.51</td>
<td>1.51</td>
<td>1.44</td>
</tr>
</tbody>
</table>

### Table 2
**Means and Standard Deviations for Action Tendencies Toward the Out-Group by Appraisal Condition: Study 2**

<table>
<thead>
<tr>
<th>Action tendency</th>
<th>Control ($n = 32$)</th>
<th>Strong ($n = 30$)</th>
<th>Weak ($n = 32$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move against</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>3.09</td>
<td>3.27</td>
<td>2.46</td>
</tr>
<tr>
<td>$SD$</td>
<td>0.97</td>
<td>1.13</td>
<td>1.08</td>
</tr>
<tr>
<td>Move away</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$M$</td>
<td>2.95</td>
<td>3.34</td>
<td>2.53</td>
</tr>
<tr>
<td>$SD$</td>
<td>1.34</td>
<td>1.52</td>
<td>1.40</td>
</tr>
</tbody>
</table>
negative emotion of fear in such an intergroup context. Also as predicted, when the in-group was in a strong position, group members expressed more anger toward the out-group than when the in-group was in a weak position.

The results also confirmed the impact of specific appraisals on intergroup behavioral intentions. The tendency to move against the out-group was higher in the strong in-group and control conditions than in the weak in-group condition. In other words, the fact that the in-group is perceived as being actively supported and collectively organized bolsters such offensive action tendencies. This pattern of results nicely paralleled the anger findings. In fact, as predicted and consistent with Study 1, willingness to move against the out-group was mediated by feelings of anger toward them. The stronger the in-group seemed, the more the out-group elicited anger, and the more the out-group elicited anger, the more likely the participants were to want to move against them. The impact of appraisal on intergroup behavior disappeared when anger expression was controlled for.

Despite the stronger manipulation of in-group versus out-group strength, but also consistent with Study 1, there was no evidence for defensive emotional reactions and behavioral intentions when group members had the impression that the in-group was in a weaker position than the out-group. There are several possible explanations for this. First, the identification responses indicated that participants in the weak in-group position did not identify highly with their chosen group. Although unexpected, these results nicely back up the idea that when group membership has negative implications for one’s self-image or is unattractive, self-definition as a unique individual is sometimes preferred to self-definition as an interchangeable group member (Doosje, Ellemers, & Spears, 1995; Ellemers, Spears, & Doosje, 1997; Spears, Doosje, & Ellemers, 1997). As a consequence, however, if individuals differentiate themselves from the in-group, they are less likely to experience group-based reactions.

Second, it might be that our collective support manipulation was not sufficient to enhance feelings of fear when the in-group was supposedly weak or that individuals are not willing to report that they are worried by the situation. Finally, it is possible that fear is not a relevant emotion in a context characterized by a conflict of values between groups in a democratic society. Although such conflicts might provoke anger, they may not trigger fear, even if the out-group is seen as benefiting from more collective support than the in-group.

Study 3

In Study 3, we tried to replicate the findings related to offensive emotional reactions and behavioral intentions found in Study 2. We did so using a different social issue, underlain by a different conflict of values. Our primary goal in Study 3 was thus to replicate and generalize the finding that appraising the in-group as strong in the context of an intergroup value conflict produces both anger toward and the tendency to move against the out-group.

Because fear did not seem to be a relevant emotion in this context and because it was not specifically related to the tendency to move away from the out-group, we decided to substitute exclusion emotions for fear. Roseman (1994; Roseman, Antoniou, & Jose, 1996) proposed a distinction between attack emotions (such as anger and frustration) and exclusion emotions (such as contempt and disgust). In this view, anger and frustration are linked to action tendencies against the triggering agent, whereas contempt and disgust increase the tendency to avoid the provoking agent. Study 3 thus had two additional goals. First, we wanted to see whether appraisals of a group with which one has a value conflict might produce either feelings of anger and irritation or feelings of contempt or disgust. Second, we wanted to see if the experience of those different emotions was differentially related to the desire to move against or away from the out-group, respectively.

Method

Participants

Participants were 92 undergraduate students (62 women and 30 men) who received partial course credit in return for their participation. Participants were randomly assigned to one of two appraisal conditions. Participants were run in groups of up to 6 per session. They were seated well apart from one another in a room and did not interact in any way during the session.

Procedure

Selection of social categorization issue. In Study 3, we again used the issue, "Should the use of illegal drugs be punished severely?" described in Study 1. The procedure for making self-categorization salient and the manipulation of appraisal of in-group versus out-group strength was the same as in Study 2, except that there was no control condition.7

Dependent measures. Dependent measures were the same as in Study 2 with two exceptions. Instead of measuring fear, four items related to exclusion emotions were included: contemptuous, disgusted, repelled, and sick. Concerning the assessment of move-against action tendencies, the item "want to attack them," was replaced by "want to argue with them" (given that the former elicited a low overall mean and loaded less strongly than the others on the appropriate factor in Study 2).

7 Pretesting helped develop two sets of headlines supporting each side of the issue. Twenty-five undergraduate students took part in this pretest. First, they categorized themselves either as members of the group in favor of severe punishment (9 participants) or as members of the group opposed to severe punishment (16 participants). Using the same scales as described for Study 2, they rated 100 fake headlines supposedly taken from newspapers and related to the issue at stake. On the basis of these ratings, we selected 16 headlines supporting the group in favor of severe punishment (M = 1.91, SD = 0.57) and 16 headlines supporting the group opposed to severe punishment (M = 5.94, SD = 0.61), F(1, 23) = 285.69, p < .001. The Sets of Headlines × Group Attitude interaction was not significant (F < 1); the ratings of the two sets of headlines were strongly consensual in both the group in favor of (Ms = 1.84 and 5.94, SDs = 0.73 and 0.64, respectively) and the group opposed to (Ms = 1.94 and 6.02, SDs = 0.49 and 0.62, respectively) severe punishment for the use of illegal drugs. The set of headlines supporting the group in favor of severe punishment included the following examples: "Protests in Washington: Anti-drug activists take it to the front line," "Passage of severe anti-drug law," "Politicians claim: Strong sanctions against drug offenders are effective," "Anti-legalization conference in Boston," and "Summit on drug policy: Law enforcement is the priority." The set of headlines supporting the group opposed to severe punishment included the following examples: "Over 30 organizations in favor of legalization gather for meeting," "City council adopts liberal drug policy," "Expert on substance abuse recommends decriminalization," "Cannabis decriminalization conference in New Jersey," and "Senator prefers alternatives to incarceration."
Results and Discussion

Thirty-seven participants categorized themselves as members of the group in favor of severe punishment, and 55 participants categorized themselves as members of the group opposed to severe punishment. We included this self-categorization as a between-subjects factor in all ANOVAs (in terms of values: group favoring social order vs. group favoring freedom). Appraisal condition had only two levels (strong in-group vs. weak in-group).

Checks on Effectiveness of Manipulations

Value conflict. An ANOVA revealed a highly significant Value × Target Group × Self-Categorization interaction, F(1, 88) = 198.74, p < .001. We therefore analyzed each value separately. The Target Group × Self-Categorization interaction was significant for social order, F(1, 88) = 161.83, p < .001. Simple effects tests revealed that members of the group favoring social order considered social order to be more important for the in-group (M = 6.22) than for the out-group (M = 3.49), F(1, 88) = 101.80, p < .001, whereas the reverse occurred for members of the group favoring freedom (Ms = 4.38 and 6.13, respectively), F(1, 88) = 61.87, p < .001. The Target Group × Self-Categorization interaction was also significant for freedom, F(1, 88) = 99.49, p < .001. Simple effects tests revealed that members of the group favoring freedom considered freedom to be more important for the in-group (M = 6.47) than for the out-group (M = 3.13), F(1, 88) = 223.87, p < .001, whereas this effect was not significant for members of the group favoring social order (Ms = 5.62 and 5.78, respectively; F < 1). As expected, participants clearly perceived a value conflict between the in-group and the out-group. The three-way interaction was not qualified by appraisal condition (F < 1). Thus, the intensity of the value conflict was not affected by the collective support manipulation.

Appraisal of collective support. We again assessed the effectiveness of this manipulation in two ways. First, we averaged participants’ ratings of the 16 headlines supporting one group and the 3 headlines supporting the other group. The Type of Headlines × Appraisal Condition interaction was highly significant, F(1, 88) = 403.12, p < .001. As in Study 2, the 16 headlines were rated as supporting the in-group (M = 2.10) and the 3 other headlines as supporting the out-group (M = 5.64) in the strong in-group condition, F(1, 88) = 200.43, p < .001; the reverse was found in the weak in-group condition (Ms = 5.77 and 2.19, respectively), F(1, 88) = 223.51, p < .001. This interaction was not qualified by self-categorization (F < 1).

Second, responses to the five items assessing appraisal of collective support were averaged (α = .89). The main effect of appraisal condition was highly significant, F(1, 88) = 16.08, p < .001. Collective support for the in-group was higher in the strong in-group condition (M = 0.41) than in the weak in-group condition (M = −0.58). There was also a highly significant main effect of the self-categorization, F(1, 88) = 79.74, p < .001. Consistent with the findings of Study 1, members of the group favoring social order (M = 1.16) perceived greater collective support for their group than members of the group favoring freedom (M = −0.96). The Appraisal Condition × Self-Categorization interaction was not significant (F < 1).

Group identification. Responses to the four group identification items were averaged (α = .83 for the in-group and .84 for the out-group). The main effect of target group was highly significant, F(1, 88) = 114.39, p < .001. Overall, in-group identification (M = 3.94) was higher than out-group identification (M = 2.54). The Target Group × Self-Categorization interaction was also highly significant, F(1, 88) = 29.95, p < .001. In line with Study 1, simple effects tests revealed that in-group identification was higher than out-group identification in both cases, but the effect was stronger for the group favoring social order (Ms = 4.61 and 2.26, respectively), F(1, 88) = 110.10, p < .001, than for the group favoring freedom (Ms = 3.49 and 2.72, respectively), F(1, 88) = 17.33, p < .001. No effect involving the appraisal condition variable was significant (Fs < 1).

Dependent Measures

Emotions toward the out-group. To study the structure of the emotional reactions, we once again used factor analyses. The principal-components analysis run on the eight emotion items extracted only one factor. This factor accounted for nearly 66% of the variance. All emotion items loaded strongly on this factor (>.54). This analysis suggested that anger and contempt were strongly positively correlated. Results of the confirmatory factor analysis also demonstrated that we were not able to differentiate anger and contempt. The two-factor model for which the factors were correlated did not fit the data very well, \( \chi^2(19, N = 92) = 51.13, p < .001 \), \( \chi^2/df = 2.69 \), NFI = .90, NFFI = .91, CFI = .94, RMSEA = .14. Nor was this model significantly better than the one-factor model, incremental \( \chi^2(1, N = 92) = .21, p < .05 \). Thus, it appeared that ingroup anger and contempt were not clearly distinguishable. Despite this fact, we looked separately at the effects of the independent variables on anger and contempt in order to compare the results of Studies 2 and 3.

Responses to the four anger items were averaged (α = .88; see Table 3). The main effect of the appraisal condition was significant, F(1, 88) = 6.25, p < .02. Anger toward the out-group was higher in the strong in-group condition (M = 3.73) than in the weak in-group condition (M = 2.96). The main effect of self-categorization was also significant, F(1, 88) = 12.65, p < .002. Anger toward the out-group was higher for the group favoring social order (M = 3.98) than for the group favoring freedom.

<table>
<thead>
<tr>
<th>Emotion</th>
<th>Social order</th>
<th>Freedom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strong (n = 18)</td>
<td>Weak (n = 19)</td>
</tr>
<tr>
<td>Anger</td>
<td>M: 4.36, SD: 3.62</td>
<td>M: 3.30, SD: 2.53</td>
</tr>
<tr>
<td></td>
<td>M: 1.69, SD: 1.21</td>
<td>M: 1.62, SD: 1.16</td>
</tr>
<tr>
<td>Contempt</td>
<td>M: 4.22, SD: 3.58</td>
<td>M: 2.85, SD: 1.95</td>
</tr>
<tr>
<td></td>
<td>M: 1.24, SD: 1.02</td>
<td>M: 1.19, SD: 0.95</td>
</tr>
</tbody>
</table>

Table 3

Means and Standard Deviations for Emotions Toward the Out-Group by Self-Categorization and Appraisal Condition: Study 3

Note. Strong and Weak represent the appraisal condition.
 Responses to the three move-away items were also averaged ($\alpha = .87$; see Table 4). The main effect of the appraisal condition was not significant ($F < 1$), but the main effect of the self-categorization was highly significant, $F(1, 88) = 16.17, p < .001$, and remained highly significant when the move-against index was introduced as a covariate in the analysis, $F(1, 87) = 14.07, p < .001$. The tendency to move away from the out-group was higher for the group favoring social order ($M = 3.75$) than for the group favoring freedom ($M = 2.45$). The Appraisal Condition $\times$ Self-Categorization interaction was not significant ($F < 1$).

**Mediation analyses.** We conducted a series of regression analyses to see if the effect of the collective support manipulation on the move-against index was mediated by emotional reactions. Results of these analyses confirmed that the appraisal condition affected anger ($\beta = .25, p < .02$), contempt ($\beta = .29, p < .002$), and the tendency to move against the out-group ($\beta = .24, p < .03$). We also found that anger ($\beta = .46, p < .02$) was a significant predictor of the inclination to move against the out-group even while controlling for the appraisal manipulation, but contempt ($\beta = .13, ns$) was not. Moreover, the effect of the appraisal condition ($\beta = .09, ns$) became nonsignificant in this analysis. The reduction due to anger ($Z = 1.74, p < .05$) was significant. In line with the findings of Study 2, the impact of the appraisal of collective support on the tendency to move against the out-group was clearly mediated by anger; contempt was not a significant mediator of the same effect. Thus, although we were not able to differentiate reports of anger and contempt, these analyses indicate that they are certainly not interchangeable with regard to their relation to action tendencies. We also tested whether the effect of self-categorization on the desire to move away from the out-group was mediated by emotional reactions (anger or contempt). Given group differences in social identification, we also included in-group identification as a third potential mediator. Results of regression analyses confirmed that self-categorization affected anger ($\beta = .34, p < .002$), contempt ($\beta = .54, p < .001$), and the tendency to move away from the out-group ($\beta = .39, p < .001$). We also found that contempt ($\beta = .36, p < .10$) was a marginal predictor of the desire to move away while controlling for the appraisal manipulation, but anger ($\beta = .12, ns$) and in-group identification ($\beta = .02, ns$) were not. Moreover, the effect of the self-categorization ($\beta = .14, ns$) became nonsignificant in this analysis. The reduction due to contempt was significant ($Z = 1.60, p = .05$). These results suggested that group differences in the willingness to move away from the out-group were mediated by the expression of contempt toward the out-group, rather than by anger or group identification. This result once again reinforced the idea that anger and contempt were not interchangeable, despite their lack of distinctiveness when participants reported their emotions.

The results of Study 3 are largely consistent with those of Study 2. Appraisal of the in-group as strong once again was associated with increased anger toward the out-group and with the tendency to take action against that group. Once again, the effect of the appraisals on the desire to move against the out-group was mediated by the experience of anger toward it. In addition, we found that contempt, although closely associated with the experience of anger, had clearly different effects on action tendencies. Whereas anger mediated intended action against the out-group, the
experience of contempt was associated with the desire to move away from the out-group.

Meta-Analysis

Consistent with expectations, the three studies reported above suggested that appraisal of collective support for the in-group increased feelings of anger toward the out-group and the willingness to move against it. Although the studies yielded similar findings in that respect, we conducted a meta-analysis to test the overall pattern of results more rigorously. We used the procedure recommended by Rosenthal (1991) to compare and combine a set of studies. First, we assessed whether the levels of significance and the effect sizes in the three studies were homogeneous. Second, we combined the significance levels as well as the effect sizes across the three studies for the impact of appraisal of collective support on anger and on the inclination to move against the out-group. As far as the emotional reactions were concerned, there was no significant difference in the levels of significance, \( \chi^2(2, N = 246) < 1, n_s \), or in the effect sizes, \( \chi^2(2, N = 246) < 1, n_s \). Thus, the findings were highly homogeneous across studies. Combining the three studies revealed that the impact of the appraisal of collective support on anger was highly significant (\( Z = 3.71, p < .0002 \)), although the effect size was small to moderate (\( r = .28 \)). We reached similar conclusions for the action tendencies. The three studies were highly homogeneous in terms of significance, \( \chi^2(2, N = 246) < 1, n_s \), and effect size, \( \chi^2(2, N = 246) < 1, n_s \). Overall, the effect of the appraisal of collective support on the tendency to move against the out-group was highly significant (\( Z = 3.59, p < .0003 \)), but its magnitude was small to moderate (\( r = .25 \)). The meta-analysis confirmed our predictions regarding the antecedents of anger and offensive action tendencies in a context characterized by a value conflict between groups.

General Discussion

Our primary aim in these experiments was to provide empirical evidence regarding the conditions under which groups might be inclined toward offensive behavioral options when dealing with an out-group. In this regard, the studies told a very consistent story. Compared with when the in-group appeared weak, appraisals of the in-group as enjoying collective support made group members more willing to report action tendencies like arguing with, confronting, opposing, and attacking the out-group. These findings lend empirical weight to suggestions in the moral exclusion literature of the crucial role of resources in one group actively aggressing against another (Staub, 1996). They are also consistent with experimental literature indicating that high status groups, and those with power, tend to discriminate more against out-groups in minimal group situations (especially on status-relevant dimensions; Blanz, Mummendey, & Otten, 1995; Mullen, Brown, & Smith, 1992; Reichl, 1997; Sachdev & Bourhis, 1987, 1991). But they also go further in specifying the mechanisms by which appraisals and offensive behavior are related. Appraisals of in-group strength produce anger toward an opponent out-group, and anger is a potent predictor of offensive action tendencies. Indeed, in all three studies, the impact of appraisal strength on offensive action tendencies was mediated by the self-reported expression of anger.

Our results also provided clear support for the theoretical innovation that produced our hypotheses. In his extension of appraisal theory to the intergroup context, E. R. Smith (1993) argued that individuals for whom group membership is part of the self would experience specific emotions (rather than any negative emotion) toward out-groups depending on their appraisals of the intergroup context. Given the close connection between emotion and action tendencies, the experience of those emotions would then increase the likelihood of specifiable repertoires of behavior (rather than general discrimination) directed toward the out-group. The results provide supportive evidence for three key elements in this formulation.

First, when membership in a group experiencing a value conflict with another group was made salient, participants showed greater identification with the in-group than the out-group (except for the weak appraisal condition of Study 2). Most importantly, results showed that group identification mediated some of the effect of appraisal on action tendencies, indicating the importance of the psychological conditions for experiencing emotions on behalf of one's group. Our results thus confirm the important role of social identification for intergroup cognitions, feelings, and action recently suggested by social identity approaches to relative deprivation.

Second, the prediction that group members would experience specific emotions (rather than any negative emotion) toward out-groups depending on their appraisals of the intergroup context was strongly supported. Results of the first two studies indicated that anger and fear are specific, distinct, negative emotions that are experienced under different intergroup appraisal conditions. An appraisal of the in-group as strong rather than weak increased the experience of anger toward an opponent group in all three studies but had no effect on fear in the first two studies. In other words, the fact that the in-group is perceived as being actively supported and collectively organized bolsters specific emotional reactions. At the same time, the results of Study 3 indicated that appraisals of collective support can increase both anger and contempt and that these two negative intergroup emotions may not be distinguishable under such conditions. As far as we are aware, this is the first empirical demonstration of the specificity of intergroup emotions following manipulations of group-relevant appraisals.

Finally, the expectation that specific emotions would increase the likelihood of specifiable repertoires of action tendencies (rather than just negative intentions in general) directed toward the out-group was strongly confirmed. In all three studies, behaviors that specifically involved moving against the out-group were quite distinct from behaviors that involved moving away from the group. In all three studies, the effect of appraisal on the tendency to move against the out-group was mediated by the experience of anger toward the out-group, holding other possible sources constant. And in Study 3, despite the fact that anger and exclusion emotions were not easily differentiable, anger was specifically related to intentions to act against the out-group, whereas emotions of exclusion were specifically related to intentions to move away from the group. This demonstration of the specificity of an intergroup action tendency, its sensitivity to appraisal conditions, and the mediational role played by a specific intergroup emotion in eliciting that tendency, constitutes a novel finding in the intergroup literature.

Several caveats about the interpretations of these results should be noted. First, although our ultimate goal is to better understand
intergroup behavior, in these studies we assessed action tendencies or behavioral intentions, rather than concrete behaviors. Action tendency is the term used in the appraisal literature to refer to impulses or inclinations toward a particular action, and our predominant use of it thus reflects the theoretical origins of the ideas assessed here. The term is loosely akin to behavioral intention, a term used in the attitude literature to signal the expressed goal of performing a particular action. Thus, like the discipline in general, we have retreated somewhat down the causal path. Indeed, focusing on action tendencies may have made the case for the relation among appraisals, emotions, and distinct behaviors easier to make. It is apparently easier to differentiate situations according to the readiness or inclination to engage in certain types of action, rather than by behavioral manifestations (Roseman et al., 1994). There are several reasons for this. First, actual behaviors are of course more constrained by situational factors or social sanctions than are impulses or intentions. Second, even an action tendency can be translated into various behavioral manifestations; it is difficult to know what will be the precise action resulting from the impulse, if any. Thus, a useful extension of the current work (and appraisal theories in general) would be to consider also the kinds of appraisals that may also intervene between action tendencies and actual behavior (just as many factors intervene between behavioral intentions and behavior; for a review, see Eagly & Chaiken, 1998).

For example, the appraisal of in-group strength may both encourage anger and offensive action tendencies toward the out-group and make acting on those impulses more likely (because aggression is less likely to be punished). Nevertheless, all situational constraints being equal, action tendencies themselves provide a significant advance in predicting offensive, compared with defensive, behaviors for example. In addition, the items used to assess action tendencies in these studies were quite strong. Replication and extension of these studies with concrete behavioral-dependent measures remains of paramount theoretical and practical importance.

Second, our studies all measured or manipulated the same type of in-group “strength.” Our resource manipulation was more precisely one of collective support for the in-group and leaves open the question of precisely what “resources” are necessary for offensive action. The manipulation may have been seen as reflecting the weight of consensus, or a zeigist effect, and including collective (i.e., protest, organization), symbolic (the support of influential individuals), or cognitive (the supportive persuasive arguments available) resources. Whether other resources work in the same way remains a question for future research. However, as noted above, the effect of the manipulation does converge with other indications that in-group strength promotes in-group aggression against out-groups.

Finally, we focused on group memberships defined by support for or opposition to particular attitudinal issues, albeit ones underpinned by important values. Although such groups may be unique in some ways, there are at least two advantages to using these types of group. First, the disagreement between the groups is both explicit and easily made salient, providing an appropriate but well-defined context for emotional reaction. Second, our college student participants are probably more willing to report differentiated (especially negative) feelings toward an out-group defined on an attitudinal basis. In contrast, social desirability concerns may well inhibit expression of negative feelings toward ethnic or gender groups. At the same time, membership in these groups appeared to operate in the same theoretically predicted manner that membership in other groups does. Data from participants indicated that self-categorization had predictable effects on perceptions of identification, and data from pilot participants indicated that these groups involved intergroup conflict. We were also able to deal analytically with some of the real differences that no doubt characterize such groups. In Study 1, for example, we took into account differences in social identification and appraisal of collective support displayed by participants on different sides of the drug issue.

Our research thus confirms that when group membership is salient and situations are appraised in terms of their consequences for the in-group, specific intergroup emotional reactions and behavioral intentions are triggered. In addition to helping specify when offensive reactions against an out-group might occur, the research also sheds light on the highly situation-specific nature of prejudice. A minority group may be appraised as being in a relatively weak position with regard to competition for jobs, for example, but may be seen as gathering strength in political influence, triggering negative reactions in this domain. Thus, an understanding of context-specific appraisals, and the intergroup emotions and behaviors that might follow from them, helps solve the puzzle of when and why prejudice may have so many, and varied, behavioral consequences.

References


Smith, E. R., & Ho, C. (in press). Prejudice as intergroup emotion: Integrating relative deprivation and social comparison explanations of


New Editors Appointed, 2002–2007

The Publications and Communications Board of the American Psychological Association announces the appointment of five new editors for 6-year terms beginning in 2002.

As of January 1, 2001, manuscripts should be directed as follows:

- For Behavioral Neuroscience, submit manuscripts to John F. Disterhoft, PhD, Department of Cell and Molecular Biology, Northwestern University Medical School, 303 E. Chicago Avenue, Chicago, IL 60611-3008.

- For the Journal of Experimental Psychology: Applied, submit manuscripts to Phillip L. Ackerman, PhD, Georgia Institute of Technology, School of Psychology, MC 0170, 274 5th Street, Atlanta, GA 30332-0170.

- For the Journal of Experimental Psychology: General, submit manuscripts to D. Stephen Lindsay, PhD, Department of Psychology, University of Victoria, P.O. Box 3050, Victoria, British Columbia, Canada V8W 3P5.

- For Neuropsychology, submit manuscripts to James T. Becker, PhD, Neuropsychology Research Program, 3501 Forbes Avenue, Suite 830, Pittsburgh, PA 15213.

- For Psychological Methods, submit manuscripts to Stephen G. West, PhD, Department of Psychology, Arizona State University, Tempe, AZ 85287-1104.

Manuscript submission patterns make the precise date of completion of the 2001 volumes uncertain. Current editors, Michela Gallagher, PhD; Raymond S. Nickerson, PhD; Nora S. Newcombe, PhD; Patricia B. Sutker, PhD; and Mark I. Appelbaum, PhD, respectively, will receive and consider manuscripts through December 31, 2000. Should 2001 volumes be completed before that date, manuscripts will be redirected to the new editors for consideration in 2002 volumes.