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British Journal of Social Psychology (2008), 47, 353–372
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Exploring psychological mechanisms of collective action: Does relevance of group identity influence how people cope with collective disadvantage?

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Two studies examined how the relevance of group identity influences two psychological mechanisms of collective action: Emotion- and problem-focused coping with collective disadvantage. Extending Van Zomeren, Spears, Fischer, and Leach's (2004) integrative theoretical model of coping with collective disadvantage, we predicted that when group identity is more relevant to disadvantaged group members, it increases their collective action tendencies through their feelings of *group-based anger* about their group's disadvantage. When group identity is less relevant and hence emotion-focused coping processes are less likely, *group-efficacy beliefs* become more predictive of disadvantaged group members' collective action tendencies because people focus more instrumentally on whether collective action will be effective (and benefit them) or not. A field study and a follow-up experiment both showed that the relevance of group identity facilitated emotion-focused coping and moderated problem-focused coping with collective disadvantage. We discuss these results in terms of two distinct psychological mechanisms of collective action.

Individuals for whom group identity is more relevant are more likely to participate in collective action against a disadvantage suffered by their group (e.g. a rise in tuition fees for students) than individuals for whom group identity is less relevant (Ellemers, 1993; Kelly, 1993; Kelly & Breinlinger, 1996; Klandermans, 1997; Stürmer & Simon, 2004; Tajfel, 1978). However, less is known about *why* people, for whom group identity is more or less relevant, engage in collective action. For example, some have argued that

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higher identifiers with a group are more *intrinsically* motivated to engage in collective action than lower identifiers (Stürmer & Simon, 2004), and are more *committed* to group (rather than individual) goals and interests (Ellemers, Spears, & Doosje, 1999; Ouwerkerk, De Gilder, & De Vries, 2000). In contrast, lower identifiers with a group are argued to be more pragmatic and instrumental in engaging in collective action because they are less committed to group goals and interests (e.g. Doosje, Spears, & Ellemers, 2002), and are more *extrinsically* motivated to engage in collective action (Stürmer & Simon, 2004).

In this article, we explore two potential psychological underpinnings of the collective action tendencies of individuals for whom group identity is more or less relevant as a result of more chronic (e.g. group identification; see Ellemers *et al.*, 1999; Tajfel & Turner, 1979) or more contextual factors (e.g. features that make group identity salient; see Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Extending Van Zomeren, Spears, Fischer, and Leach's (2004) integrative theoretical model of coping with collective disadvantage, we propose that when group identity is more relevant for members of disadvantaged groups, people focus more on group concerns, and this facilitates their collective action tendencies through *group-based anger* on the basis of group-based appraisal of unfair disadvantage (Mackie & Smith, 2002; Smith, 1993; see also Dumont, Yzerbyt, Wigboldus, & Gordijn, 2003; Yzerbyt, Dumont, Wigboldus, & Gordijn, 2003).

In contrast, when group identity is less relevant, and people focus less on group concerns, they should experience less group-based anger and hence display reduced collective action tendencies. However, in this case, individuals may still want to engage in collective action if they appraise collective action to be effective and beneficial to them (e.g. Doosje *et al.*, 2002; Ellemers *et al.*, 1999). In this sense, *group efficacy* (see Bandura, 1995, 1997; Kelly & Breinlinger, 1995; Mummendey, Kessler, Klink, & Mielke, 1999) should become more predictive of collective action tendencies when relevance of group identity is lower. In terms of the integrative model, translating group-based anger into collective action tendencies is conceptualized as *emotion-focused* coping, and translating group efficacy into collective action tendencies is conceptualized as *problem-focused* coping with collective disadvantage (see Lazarus, 1991, 2001). Therefore, we predicted that the relevance of group identity *facilitates* emotion-focused coping, and *moderates* problem-focused coping with collective disadvantage, and tested this analysis in a field study and a follow-up laboratory experiment.

Psychological mechanisms of collective action

Collective action in response to collective disadvantage is a complicated social phenomenon for which numerous explanations have been offered (for reviews, see Klandermans, 1997; Stürmer & Simon, 2004). However, there seems to be some consensus that *identity*, *injustice*, and *efficacy* are important social and psychological explanations of collective action (Gamson, 1992; Klandermans, 1997; Stürmer & Simon, 2004; for a meta-analysis, see Van Zomeren, Postmes, & Spears, 2007). For example, relative deprivation theory (Runciman, 1966; Stouffer, Suchman, DeVinney, Star, & Williams, 1949) and social identity theory (Tajfel & Turner, 1979) both focus on the degree to which group members perceive their disadvantage as based in group identity (see Kawakami & Dion, 1992; Kelly & Breinlinger, 1996; Simon *et al.*, 1998; Smith & Spears, 1996), and in perceptions of unfairness or undeservingness (e.g. Cook, Crosby,

& Hennigan, 1977; Crosby, 1976; Folger, 1987; Walker & Mann, 1987; Walker & Smith, 2002). In contrast, other approaches focus on more instrumental explanations of collective action that emphasize group members' sense of efficacy to 'solve' group-related problems such as collective disadvantage (e.g. Martin, Brickman, & Murray, 1984; Mummendey *et al.*, 1999), and on the mobilization of resources to enforce social change (Klandermans, 1984, 1997; McCarthy & Zald, 1977).

Van Zomeren *et al.* (2004) proposed that these different approaches fit nicely with a conceptual distinction between emotion- and problem-focused coping with collective disadvantage. A key difference between these two means of coping is that the former regulates the emotions tied to the situation, whereas the latter regulates the mobilization of actions for the explicit purpose of changing reality (e.g. Folkman & Moskowitz, 2004; Lazarus, 1991, 2001). And although the model explicitly suggests that collective disadvantage makes group identity salient, the main aim of the current research is to elucidate the role of the *relevance of this group identity* in emotion- and problem-focused coping with collective disadvantage. In other words, the current work specifies and extends this model by exploring the influence of the relevance of group identity on the two 'paths to protest'.

Emotion-focused coping with collective disadvantage

According to self-categorization theory (Turner *et al.*, 1987), when group identity is made relevant by contextual factors (such as features that make group identity salient), or chronic factors (such as group identification), individuals perceive themselves and their social world more in group terms. Thus, when group identity is more relevant, individuals should attend more to group-level concerns such as collective disadvantage and its injustice (see also Kawakami & Dion, 1992). As such, collective action against collective disadvantage should be more likely when group identity is more relevant. Consistent with this line of reasoning, theory and research on group identification and collective action suggests that group identification is a good predictor of collective action (e.g. De Weerd & Klandermans, 1999; Ellemers, 1993; Kelly & Breinlinger, 1996; Mummendey *et al.*, 1999; Stürmer & Simon, 2004; Tajfel & Turner, 1979; Veenstra & Haslam, 2000; Wright, Taylor, & Moghaddam, 1990; for a meta-analysis see Van Zomeren *et al.*, 2007). For example, Simon, Stürmer, and colleagues have repeatedly found that identification with a social movement is a unique predictor of collective action intentions and participation on behalf of that social movement (e.g. Simon *et al.*, 1998; see Stürmer & Simon, 2004), independent of individual cost-benefit motivations for collective action (Klandermans, 1984). In line with this analysis, Ellemers *et al.* (1999) suggested that higher identifiers are more concerned about and committed to group goals and interests than lower identifiers (who are more committed to their *individual* goals and interests).

Moreover, different approaches suggest that collective action is more likely when group identity is relevant because the relevance of group identity facilitates *group-based* emotions such as anger, based on group-based appraisals such as unfairness. The relative deprivation literature, for example, shows that individuals are more likely to engage in collective action when they perceive their group as a whole as suffering an unjust disadvantage (e.g. Dubé-Simard & Guimond, 1986; Guimond & Dubé-Simard, 1983; Kelly & Breinlinger, 1995; Leach, Iyer, & Pedersen, 2007; for a meta-analysis, see Smith & Ortiz, 2002). Indeed, stronger group identification leads to a greater perception of

collective disadvantage and injustice (Mummendey *et al.*, 1999; Smith & Spears, 1996; Tropp & Wright, 1999).

Furthermore, it has become increasingly clear that it is the *affective* component of relative deprivation that best predicts collective action (Smith & Ortiz, 2002). This fits with recent theory on group-based emotions suggesting that a relevant group identity facilitates the experience of group emotion grounded in group-based appraisals that serve as the psychological basis of the emotion (Leach, Snider, & Iyer, 2002; Mackie & Smith, 2002; Smith, 1993). Thus, in line with appraisal theories of emotion (for an overview see Lazarus, 1991, 2001; Scherer, Schorr, & Johnstone, 2001), a relevant group identity facilitates the group-level appraisal that a collective disadvantage is unjust and thereby promotes the group-based emotion of anger (e.g. Dumont *et al.*, 2003; Mackie, Devos, & Smith, 2000; Van Zomeren *et al.*, 2004; Yzerbyt *et al.*, 2003). Specific group-based emotions like anger are theorized to have distinct implications in terms of specific *action tendencies* (like wanting to move against the out-group; Frijda, 1986; Frijda, Kuipers, & Ter Schure, 1989; Lazarus, 1991, 2001; Mackie *et al.*, 2000; Smith, 1993). Taken together, all these different approaches suggest that when group identity is more relevant, emotion-focused coping is facilitated because people make group-based appraisals that shape group-based emotions which predict collective action tendencies.

Problem-focused coping with collective disadvantage

When relevance of group identity is lower, people should experience less group-based anger and be less motivated to engage in collective action (i.e. less emotion-focused coping). However, this does not mean that when the relevance of group identity is lower, people do not engage in collective action at all. Rather, people may simply cope differently with collective disadvantage, but with implications for whether or not they engage in collective action. Van Zomeren *et al.* (2004) suggested that people can also engage in problem-focused coping, which regulates the mobilization of actions for the explicit purpose of changing reality, in terms of their *group-efficacy* beliefs.

There are at least two theoretical reasons for why group-efficacy beliefs should become more predictive of individuals' collective action tendencies when the relevance of group identity is lower. First, there is little reason to expect the relevance of group identity to 'solve' the problem of collective disadvantage by itself (Mummendey *et al.*, 1999; see also Bandura, 1995, 1997). From an appraisal theory perspective (e.g. Lazarus, 1991, 2001), appraisals that signal *relevance* (e.g. of group identity) are differentiated from appraisals that signal power, control, or strength of the group to respond to the relevant event (for a specific discussion see Smith & Kessler, 2004). Stronger relevance of group identity (as a so-called *primary* appraisal) should therefore generate a stronger group-based emotional response to collective disadvantage, but not necessarily generate a stronger sense of group efficacy. Rather, group-based appraisals of power, control, and strength of the in-group (like group efficacy) should be more likely bases of problem-focused coping with collective disadvantage (see also Van Zomeren *et al.*, 2004). Weaker relevance of group identity therefore requires more of a focus on such so-called secondary appraisals that influence decisions to engage in collective action.

Second, another line of research suggests that lower identifiers with a group are less *committed* to group goals and hence are more pragmatic and instrumental, typically engaging in collective action to achieve group goals that coincide with their individual goals (e.g. Doosje *et al.*, 2002; Ellemers *et al.*, 1999). Ouwerkerk *et al.* (2000), for

example, showed that higher identifiers with a group *increased* their efforts for their group after collective failure, whereas lower identifiers 'dropped out' more when their group started to reflect negatively on them. Furthermore, Doosje *et al.* showed that, in contrast to higher identifiers, lower identifiers stuck more with their group when chances of social change were more likely in terms of instability of the intergroup status differential. Finally, Kelly and Breinlinger (1995) showed that political-efficacy beliefs were a better predictor of collective action among low-identified women than among highly identified women.

Taken together, all these results suggest that when relevance of group identity is lower, people attend less to group goals, and people focus on more pragmatic and instrumental benefits of engaging in collective action. More specifically, we expect that group-efficacy beliefs predict collective action tendencies more strongly when the relevance of group identity is lower. In sum, we expect the relevance of group identity to *facilitate* emotion-focused coping, and to *moderate* problem-focused coping with collective disadvantage.

We tested these two hypotheses in two empirical studies. For purposes of external and internal validity, we decided to test our predictions in the field as well as in the laboratory. Study 1 provided an opportunity for examining our hypotheses among participants of a student demonstration against financial cuts on higher education (that took place on March 15, 2004, in Amsterdam, The Netherlands). Study 2 aimed to experimentally test our two hypotheses in a controlled laboratory setting.

STUDY 1

Method

Participants and procedure

Sixty-one participants (28 males, 33 females, mean age 20.61 years) participated in a field study during a real-life demonstration in Amsterdam, The Netherlands. Participants were recruited out of the few hundred involved in the demonstration and asked to complete a survey. After completing the survey, participants were thanked for their effort and given a chocolate bar.

Materials

Survey introduction

Participants received a booklet that introduced the collective disadvantage. This introduction stated that the government wanted to cut down its educational expenses, and that liberalization of the annual college fees students pay in the Dutch system would allow universities to raise these fees. As a consequence, an independent research body associated with the University of Amsterdam wanted to investigate the attitudes of students towards these cuts.

Survey measures

After having introduced the topic of investigation, participants were asked to respond to questions on 7-point Likert-type scales (i.e. 1, *not at all*, 7, *very much*). First, as an indicator of the (more chronic) relevance of group identity, we measured group

identification with four items (i.e. 'I see myself as/am glad to be a student', 'I identify/feel connected with other students'; $\alpha = .78$). Second, derived from Van Zomeren et al. (2004), we measured group-based anger with four items ($\alpha = .85$; e.g. 'I feel angry/irritated/furious/displeased because of this proposal'); we used a three-item measure of group efficacy ($\alpha = .92$; e.g. 'I think together we are able to change this situation/we are able to stop this proposal/that students can successfully stand up for their rights'), and collective action tendencies with five items ($\alpha = .72$; e.g. 'I would participate in a future demonstration to stop this proposal/participate in raising our collective voice to stop this proposal/do something together with fellow students to stop this proposal/participate in some form of collective action to stop this proposal/sign a petition to stop this proposal').¹

Principal components analysis (PCA) with Oblimin rotation (allowing factors to be correlated) showed four factors (group identification, group-based anger, group efficacy, and collective action tendencies), explaining 67.91% of the variance, with items loading strongly on their respective factor (factor loadings $> .62$).² These results support the construct validity of our measures. We also obtained background variable measures such as home town, study major, political preference, and whether participants were a member of a student union. None of these background variables had significant effects on our key dependent measures.

Results

Descriptive statistics

Our participant sample was highly heterogeneous. Although almost half of our sample ($N = 30$) lived in Amsterdam, the remaining 31 participants came from different (university) cities in The Netherlands (such as Utrecht, Nijmegen, Leiden, Rotterdam, Wageningen, and Maastricht). Study majors were also very different across the sample, ranging from Philosophy and History to Physics, Law, and Political Science. Only nine participants studied Psychology. Furthermore, only 14 out of 61 participants were members of a national student union. The vast majority of these participants (50 out of 61) voted for left-wing parties. Table 1 shows the descriptive statistics of our key measures.

Hypothesis testing

We first tested for the hypothesized effects of group identification on group-based anger and collective action tendencies using multiple regression analysis (Baron & Kenny, 1986). In the first step, we found that group identification predicted collective action

¹ In line with the idea that group-based appraisal of injustice is a basis of emotion-focused coping with collective disadvantage (and in particular procedural unfairness), we included a two-item measure of procedural unfairness ('I think that students are being treated unfairly by the government' and 'These plans of the government suggest to me that they do not take students seriously'), with $r = .60$, $p < .001$. Group identification predicted this measure ($\beta = 0.35$, $p < .01$), and when group identification and procedural unfairness were entered to predict group-based anger, procedural unfairness predicted group-based anger ($\beta = 0.39$, $p < .01$) whereas group identification no longer did ($\beta = 0.22$, $p = .07$). The indirect effect was significant, Sobel's $z = 2.14$, $p = .03$.

² One item ('I would participate in raising our collective voice to stop this proposal') in the collective action scale had a loading lower than .60 on its factor (namely .40). However, results with or without inclusion of this item in the collective action scale were not dramatically different. Since this item did load quite highly on its factor in the pilot study and in Study 2, we decided to retain the item in the analysis on these grounds.

Table 1. Mean scores and standard deviations for, and correlations between, main dependent variables in Study 1

		2.	3.	4.
1. Group identification		.35*	-.20	.29*
M	5.66			
SD	1.04			
2. Group-based anger			-.03	.57*
M	4.50			
SD	1.45			
3. Group efficacy				.02
M	4.25			
SD	1.46			
4. Collective action tendencies				
M	5.51			
SD	1.02			

Note. * $p < .05$.

tendencies ($\beta = 0.29, p = .03$). In the second step, group identification predicted group-based anger ($\beta = 0.35, p < .01$). However, group identification did not predict group efficacy ($\beta = -0.20, p = .12$). In the final step, group-based anger predicted collective action tendencies ($\beta = 0.54, p < .001$), whereas group identification was no longer a predictor of collective action tendencies ($\beta = 0.10, p = .40$). Indeed, a Sobel Test ($z = 2.47, p = .02$) confirmed that the indirect effect was significant. Although correlational data cannot, by definition, imply causality, these results are consistent with our hypothesis that group identification increases collective action tendencies through group-based anger (i.e. emotion-focused coping with collective disadvantage).³

We then tested for the hypothesized interaction effect between group identification and group efficacy on collective action tendencies by running another multiple regression in which the effects of group identification, group efficacy, group-based anger, and the two-way interactions between group identification and group efficacy, and between group identification and group-based anger were entered to predict collective action tendencies (Aiken & West, 1991). The results showed significant effects only for group-based anger ($\beta = 0.53, p < .001$), and for the interaction between group identification and group efficacy ($\beta = -0.26, p = .05$). None of the other effects were significant (β s $< |0.19|, p$ s $> .15$). As can be seen in Figure 1, lower identifiers indeed displayed stronger collective action tendencies when their group-efficacy beliefs were stronger ($\beta = 0.45, p = .09$). Also in line with predictions, group efficacy did not predict collective action tendencies for higher identifiers ($\beta = -0.11, p = .52$). Thus, these results provide initial support for our second hypothesis that group identification

³ We assume a causal path from group-based anger to collective action tendencies in these analyses, which is supported by theory (e.g. Smith, 1993) and research (e.g. Mackie et al., 2000; Van Zomeren et al., 2004). In Study 1 and 2, we also tested for the reverse mediation sequence (from relevance of group identity to group-based anger through collective action tendencies). In Study 1, results were inconclusive because the reverse mediation sequence resulted in a significant (but smaller) indirect effect (Sobel's $z = 2.07, p = .05$; vs. $z = 2.47, p = .02$, for the sequence we argue for). The explained direct effect was also smaller for the reversed mediation sequence than for the sequence we argue for ($\beta = 0.10$ vs. $\beta = 0.20$). In Study 2, results were more conclusive as they showed that the indirect effect for the reverse mediation sequence was not significant, Sobel's $z = 1.76, p = .08$.

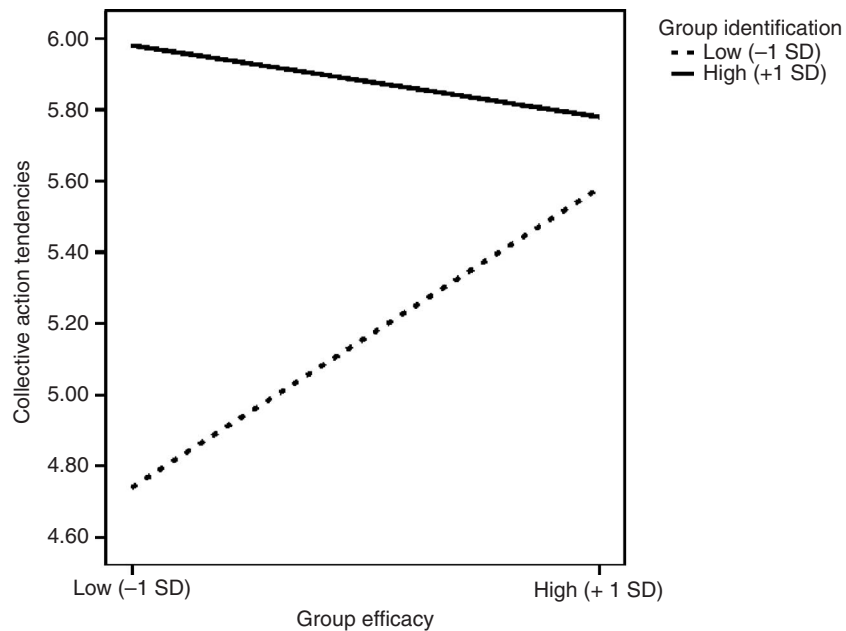


Figure 1. Two-way interaction effect between group identification and group efficacy on collective action tendencies, Study 1.

moderates the link between group efficacy and collective action tendencies (i.e. problem-focused coping with collective disadvantage).

Discussion

The results of Study 1 showed support for our hypotheses concerning the differential influence of the relevance of group identity on emotion- and problem-focused coping with collective disadvantage. Results supported our first prediction that stronger relevance of group identity (as indicated by stronger group identification) results in stronger collective action tendencies through stronger feelings of group-based anger. Second, we also found some support for our second prediction that group efficacy predicts collective action tendencies more strongly when the relevance of group identity is lower. In fact, group efficacy did not predict collective action tendencies for higher identifiers. More generally, the relevance of group identity facilitated emotion-focused coping, and moderated problem-focused coping with collective disadvantage.

The first effect emphasizes that the relevance of group identity facilitates group-based emotions like anger in the context of unfair collective disadvantage. Our reasoning is that stronger relevance of group identity gives rise to group-based appraisal of unfairness, group-based anger, and collective action tendencies (see also Kessler & Holbach, 2005; Mackie & Smith, 2002; Smith, 1993; Yzerbyt *et al.*, 2003). Moreover, the group identification by group-efficacy interaction effect suggests that lower relevance of group identity results in group-efficacy beliefs predicting collective action tendencies more strongly. Indeed, lower relevance of group identity should make emotion-focused coping less likely. However, lower relevance of group identity also makes people focus more pragmatically and instrumentally on achieving individual goals that coincide with

group goals, and therefore their perception of the group's efficacy should predict their collective action tendencies more strongly.

However, Study 1 is not without its limitations. For example, people had already chosen to participate in a particular collective action (i.e. a public protest event), and it seems indeed likely that they were at the protest partly because their group identity was very relevant to them. Moreover, people were immersed in a crowd when filling out the questionnaire, which may also increase the relevance of group identity. However, note that these limitations should only work *against* our two key hypotheses (that are based on differences between higher and lower relevance of group identity). Nonetheless, a fairer test of our two hypotheses can be provided in a more controlled laboratory setting where people can be isolated from other group members, and where the range in group relevance is less restricted to the upper end. Therefore, we decided to validate the Study 1 results by conducting a follow-up laboratory experiment in which we manipulated the relevance of group identity by making students' group or personal identity contextually salient. Although group identification and group identity salience are conceptually distinct variables (Ellemers *et al.*, 1999; Turner *et al.*, 1987), they are also related in their predicted effects; the former implies a more chronic, and the latter a more contextual, relevance of group identity. Therefore, focusing on salience in this study also provides an opportunity to test for the robustness and generality of our arguments concerning group relevance. Hence, we predicted that the salience of group identity (in Study 2) would have similar effects as group identification (in Study 1).

STUDY 2

Before conducting the actual experiment, we ran a pilot study to demonstrate the construct validity of our key measures. Rather than relying on PCA we decided to use Confirmatory Factor Analysis (CFA; as recommended by Russell, 2002). We therefore needed a larger sample size than for the experiment itself. One hundred and thirteen students at the University of Amsterdam (29 males, 84 females, mean age 21.03 years) participated by filling out a survey on a salient collective disadvantage issue. As in Van Zomeren *et al.* (2004, Study 1), students were placed in the position of having an unfair collective disadvantage by leading them to believe that the university would decide on a college fee increase without giving students voice in the decision. This would also be the issue used in Study 2.

We measured group-based anger with four items (i.e. 'I feel *angry/irritated/furious/displeased* because of this proposal by the Board'), group efficacy with four items (i.e. 'I think *together we are able to change this situation/we are able to stop this proposal/that students can successfully stand up for their rights against the Board/that students can really influence these decisions of the Board*'), and collective action tendencies with four items (i.e. 'I would *participate in a demonstration to stop this proposal/participate in raising our collective voice to stop this proposal/do something together with fellow students to stop this proposal/participate in some form of collective action to stop this proposal*'). We dropped the 'sign a petition' item (as compared with Study 1) because preliminary analyses and results suggested that this item was only a weak indicator of the collective action tendencies construct in this study. All items employed 7-point Likert-type scales (i.e. 1, *not at all*, 7, *very much*). The scales proved reliable (group-based anger, $\alpha = .88$; group efficacy, $\alpha = .88$; collective action tendencies, $\alpha = .94$).

We then assessed the *latent* structure of our dependent variables by performing a CFA on these 12 items with three latent factors representing group-based anger, group efficacy, and collective action tendencies. Each item was allowed to load only on its designated latent factor and no errors were allowed to correlate. Each latent factor was allowed to correlate to the other latent factors. The results showed that our hypothesized model of the three latent factors provided satisfactory fit to the data. Excellent fit is indicated when the χ^2/df ratio is below 2, whereas good fit is indicated when this ratio is between 2 and 3. In our case the value of χ^2 was 105.81 with 51 d.f., which means that the ratio (= 2.07) indeed falls below 2 and 3, indicative of good fit. Inspection of two relevant central and residual fit indices corroborated this conclusion (CFI = .94; SRMR = .06). Inspection of the parameter estimates showed that all items loaded highly on their designated factor (all factor loadings > .69). Furthermore, the correlations between the latent factors were in line with findings from previous work: Group-based anger and group efficacy were unrelated ($r = .06$, *ns*), whereas the correlations between group-based anger and collective action tendencies ($r = .61$, $p < .05$), and between group efficacy and collective action tendencies ($r = .29$, $p < .05$) were positive and significant (Van Zomeren *et al.*, 2004).

In sum, results show that a) the three key constructs can be empirically distinguished at the level of latent factors and b) their interrelationships replicate those found in previous research. We therefore used these measures in the following experiment.

Method

Participants and design

Forty-five students of the University of Amsterdam (16 males, 29 females, mean age 21.07 years) participated in an experiment for required course credit. Participants were randomly allocated to one of two experimental conditions (group vs. personal identity salience). Then they started the remainder of the experiment that was disguised as a survey conducted by an independent research body. This (bogus) survey was about 'the opinion of first-year Psychology students at the University of Amsterdam towards a recent plan of the University Board'. Participants were informed that the plan was about the raising of the college fees students have to pay annually. As in Van Zomeren *et al.* (2004, Study 1), students were placed in the position of having an unfair collective disadvantage by leading them to believe that the university would decide on a college fee increase without giving students voice in the decision. After completing the survey, participants were thanked and excused.

Procedure

We manipulated the salience of individual's personal or group identity by asking participants to write down a typical day in their life, either as a *student* (group identity salience condition) or as an *individual* (personal identity salience condition). In essence, by making the student group identity salient, we increased the 'normative fit' (Turner *et al.*, 1987) between participants' salient group identity and the collective disadvantage we presented them with. This normative fit should increase the psychological relevance and meaningfulness of participants' collective disadvantage as

students. Participants were given five minutes to write down their typical day. Then, the bogus survey started. All participants read the following: 'As you might have heard, there are government plans for financial cuts affecting all universities in The Netherlands. If these plans would be adopted, all universities will then have to solve the problem of wishing to maintain high levels of quality education while lacking sufficient funds to fulfil this wish. Therefore, the University of Amsterdam has forwarded a plan to raise annual college fees for its students by 200 euros (which equals about US \$250). Then, participants read the following: 'To illustrate this plan, University Board member J. Verhagen recently said in an interview, "Cuts always hit hard, but what can we do about it? If our students want to maintain their high level of quality education, we think they should pay more. Moreover, we feel that students do not understand the problems we are facing. Therefore, we wish to make this decision without student approval"'.

Dependent measures

We measured group-based anger, group efficacy, and collective action tendencies with four items each (all similar to those used in the pilot study). The scales again proved reliable (group-based anger, $\alpha = .82$; group efficacy, $\alpha = .92$; collective action tendencies, $\alpha = .95$).⁴ As an objective check of our manipulation, we analysed the texts participants wrote for words or phrases indicating activities based in their student rather than personal identity (e.g. studying, going to classes, spending time with fellow students).

Results

Preliminary analysis

An analysis of variance (ANOVA) with the number of words related to student identity as the dependent variable and identity salience as the independent variable showed a significant main effect, $F(1, 43) = 12.94$, $p < .001$, $\eta^2 = .23$. Participants indeed referred more to their student identity when their group identity was salient ($M = 3.65$, $SD = 1.90$) than when their personal identity was salient ($M = 2.00$, $SD = 1.15$).

Analyses of means

Group-based anger

As predicted, an ANOVA with group-based anger as our dependent variable and the identity salience manipulation as the independent variable revealed a significant main effect, $F(1, 43) = 5.51$, $p = .02$, $\eta^2 = .11$. Inspection of the means showed that group identity salience indeed resulted in stronger feelings of group-based anger ($M = 4.74$, $SD = 0.96$) than personal identity salience ($M = 3.97$, $SD = 1.18$).

⁴ PCA performed on these items resulted in the predicted three-factor solution when the eigenvalue for extracting a factor was set to .96 rather than 1.00. Explained variance was 78.98%. Consistent with the CFA in the pilot study, all items loaded highly ($> .79$) on their respective factors of group-based anger, group efficacy, and collective action tendencies. When taking into consideration the small sample size in Study 2, and the CFA results of the pilot study, one may conclude that our measures can be empirically distinguished.

Group efficacy

We conducted an ANOVA with group efficacy as our dependent variable and the identity salience manipulation as the independent variable. The results showed no significant main effect of identity salience on group efficacy, $F(1, 43) = 1.59, p = .22$ ($M_{\text{social}} = 4.60$ vs. $M_{\text{personal}} = 4.08$, with SDs of 1.52 and 1.25, respectively). Thus, identity salience did not affect group efficacy.

Collective action tendencies

An ANOVA with collective action tendencies as our dependent variable and the identity salience manipulation as the independent variable showed a marginally significant main effect, $F(1, 43) = 3.72, p = .06, \eta^2 = .08$. As predicted, group identity salience resulted in somewhat stronger collective action tendencies ($M = 4.95, SD = 1.44$) than personal identity salience ($M = 4.03, SD = 1.70$).

Hypothesis testing

Table 2 shows the correlations between the key variables for the full sample. To test whether the identity salience manipulation affected collective action tendencies *through* feelings of group-based anger, we used multiple regression analysis (Baron & Kenny, 1986). First, we checked whether the identity salience manipulation affected group-based anger ($\beta = 0.34, p = .02$), but not group efficacy ($\beta = 0.19, p = .22$). Then, we examined whether the marginal effect of identity salience on collective action tendencies ($\beta = 0.28, p = .06$) turned non-significant when entering group-based anger in the equation. Indeed, the effect of the manipulation on collective action tendencies was not significant ($\beta = 0.09, p = .49$), with group-based anger significantly predicting collective action tendencies ($\beta = 0.56, p < .001$). The results of the Sobel Test showed that the indirect effect was significant ($z = 2.06, p = .04$). Thus, in line with predictions, the identity salience manipulation affected peoples' collective action tendencies through their feelings of group-based anger (i.e. emotion-focused coping with collective disadvantage). In other words, we conceptually replicated the first key effect obtained in Study 1 by again showing that the relevance of group identity facilitates emotion-focused coping with collective disadvantage.

We then tested for the hypothesized interaction effect between identity salience and group efficacy on collective action tendencies by running another multiple regression in which the effects of the manipulation, group efficacy, group-based anger, and the two-way interactions between identity salience and group efficacy, and between identity salience and group-based anger were entered to predict collective action tendencies. The results showed significant effects only for group-based anger ($\beta = 0.45, p < .01$),

Table 2. Correlations between main dependent variables in Study 2

	2.	3.	4.
1. Identity salience manipulation	.34*	.19	.29†
2. Group-based anger		.51*	.60*
3. Group efficacy			.73*
4. Collective action tendencies			

Note. * $p < .05$; † $p < .07$.

for group efficacy ($\beta = 0.48, p < .001$), and for the interaction between identity salience and group efficacy ($\beta = -0.30, p = .02$). None of the other effects were significant ($\beta\text{s} < |0.23|, p\text{s} > .09$). Inspection of the predicted two-way interaction effect (Figure 2) suggested support for our hypothesis: Collective action tendencies were indeed predicted more strongly by group efficacy in the personal identity salience condition ($\beta = 0.67, p < .001$) than in the group identity salience condition ($\beta = 0.22, p = .31$). Thus, these results provide more support for our second hypothesis that the relevance of group identity moderates the link between group efficacy and collective action tendencies. More specifically, when group identity is less relevant, group-efficacy beliefs more strongly predict individuals' collective action tendencies.

Discussion

The results of Study 2 support our hypothesis that the relevance of group identity (here in terms of the contextual salience of group identity) facilitates emotion-focused coping. Moreover, the results of Study 2 also support our hypothesis that the relevance of group identity moderates the link between group efficacy and collective action tendencies. This convergence of results is interesting given differences between the studies in terms of *method* and *context*. For example, Study 2 employed an experimental manipulation (tapping the more contextual relevance of group identity) whereas Study 1 employed a measure (tapping the more chronic relevance of group identity) of the independent variable. This convergence is in line with the idea that group identity salience and group identification (although conceptually distinct) should theoretically have similar

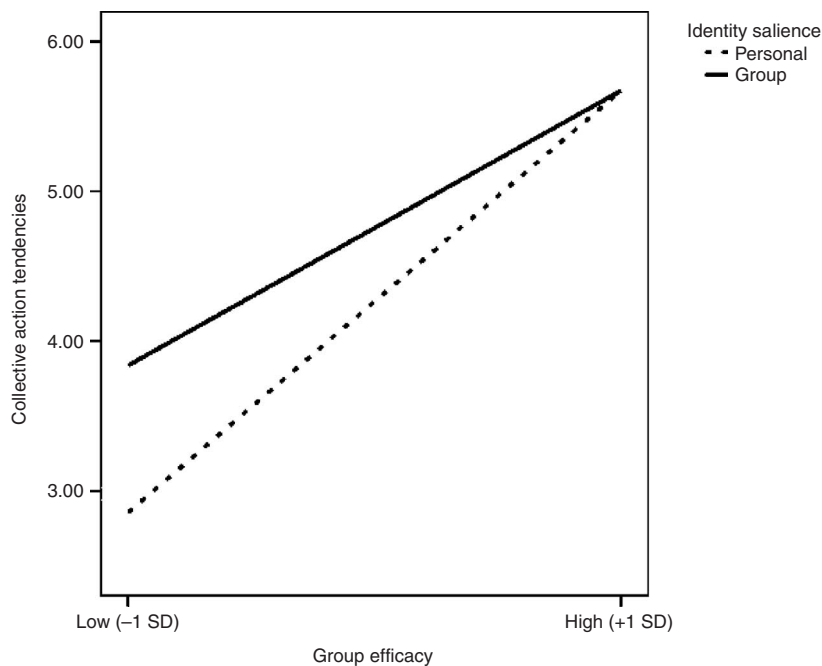


Figure 2. Two-way interaction effect between manipulation of identity salience and group efficacy on collective action tendencies, Study 2.

implications for collective action tendencies: They both indicate the relevance of group identity to individuals' (group-based) appraisal, emotion, and action tendencies. Furthermore, results converged despite differences in context: Whereas participants sat in isolated cubicles in Study 2, they were surrounded by fellow group members in a crowd in Study 1. This convergence suggests good internal and external validity of the results by confirming a similar pattern in both (controlled) laboratory and (externally valid) field settings.

GENERAL DISCUSSION

Two empirical studies showed that the relevance of group identity influences how individuals cope with collective disadvantage. Both the field and laboratory study showed that stronger chronic (i.e. group identification) and stronger contextual relevance of group identity (i.e. salience of group identity) relate differently to two 'psychological mechanisms of collective action', as represented by emotion- and problem-focused coping (Van Zomeren *et al.*, 2004). More specifically, results of both studies supported the idea that stronger relevance of group identity increases collective action tendencies through group-based anger (i.e. emotion-focused coping), whereas group efficacy predicted collective action tendencies more strongly under conditions of lower relevance of group identity. Thus, results support the idea that the relevance of group identity facilitates emotion-focused coping and moderates problem-focused coping with collective disadvantage. We discuss the theoretical and practical implications of these findings, as well as the limitations of the current studies, below.

Theoretical implications

Theoretically, the results map nicely on to intergroup emotion theory (e.g. Mackie & Smith, 2002; Smith, 1993) to the extent that stronger group identification and group identity salience increase the experience of group-based emotions and their associated action tendencies (e.g. Kessler & Holbach, 2005; Van Zomeren *et al.*, 2004; Yzerbyt *et al.*, 2003). They also fit with the relative deprivation framework such that it is the effective and group-based component of relative deprivation that is most predictive of collective action (e.g. Smith & Ortiz, 2002). This highlights the importance of group-based appraisals of injustice as antecedents of group-based anger about collective disadvantage (e.g. Lazarus, 1991, 2001; Leach, Iyer, & Pedersen, 2006; Van Zomeren *et al.*, 2004). Moreover, the current findings also fit with the social identity framework in the sense that lower relevance of group identity makes people attend less to group goals, and more pragmatic in terms of pursuing the collective goals that coincide with their individual goals (e.g. Doosje *et al.*, 2002; Ellemers *et al.*, 1999; Veenstra & Haslam, 2000).

Our findings also specify the idea of two distinct 'paths to protest', conceptualized as emotion- and problem-focused coping with collective disadvantage (Van Zomeren *et al.*, 2004). Since the relevance of group identity facilitates the former type of coping, it moderates the latter type of coping (which is in line with the conceptual distinction between primary appraisals of relevance, and secondary appraisals of control, power, or strength; Lazarus, 1991, 2001; Scherer *et al.*, 2001; Smith & Kessler, 2004). The current work thus shows that relevance of group identity is an important determinant of how individuals cope with collective disadvantage.

A key theoretical implication of our findings is that strong relevance of group identity may actually be able to *overpower*, or render irrelevant, possible group-efficacy concerns (and constraints). This is an interesting interpretation of our argument because it suggests that high identifiers may be likely to engage in collective action *independent of, or even despite*, low group-efficacy beliefs, or even little hope and scope for social change in general (Doosje *et al.*, 2002). If true, this would be an indication of quite an important psychological mechanism of collective action in the sense that strong relevance of group identity may lead people to engage in collective action when there are, from their individual perspective, few instrumental incentives for doing so.

However, there are two reasons why our line of reasoning does not rule out the possibility that both higher and lower identifiers can sometimes use both ways of coping. First, that stronger relevance of group identity weakens the effect of group efficacy on collective action tendencies does not imply that this effect is necessarily non-existent for higher identifiers. Of course, it may very well become empirically undistinguishable from zero at a certain level of relevance of group identity, but this is not inherent in our argument. Second, people may appraise available *contextual* resources that permit engaging in either or both ways of coping with collective disadvantage. For example, individuals may use explicit contextual sources of group-based anger or group efficacy to cope in a more emotion-focused way (e.g. when a group leader's rallying call emphasizes the injustice of collective disadvantage) or in a more problem-focused way (e.g. when a group leader's rallying call emphasizes the efficacy of the group to fight their collective disadvantage).

Note that this contextual analysis fits nicely with the assumption of the dual pathway model of coping with collective disadvantage that peoples' experience and expression of group-based anger is as 'rational', or at least as adaptive and functional, as more instrumental motivations for collective action like group efficacy. Indeed, a contextual analysis is consistent with an emerging consensus in the literature that emotions should be viewed as functional responses to changing environments (e.g. Frank, 1988; Frijda, 1986, 2007; Lazarus, 1991, 2001; Scherer *et al.*, 2001), and with the idea that coping processes are dynamic responses to shifts or changes in the social context (e.g. Van Zomeren *et al.*, 2004). It is also fully in line with the flexibility of self-categorization processes that are argued to underlie group-based appraisal, emotion, and action tendencies (Smith, 1993).

Practical implications

Our results also speak directly to the *practice* of mobilizing people for collective action. Indeed, the key practical implication of our findings is that group efficacy may be particularly important for motivating collective action for those people for whom group identity is less relevant. Admittedly, it is often hard to convert sympathizers into active participants in collective action (Klandermans & Oegema, 1987; Oegema & Klandermans, 1994), and a lower relevance of group identity (such as a weaker sense of group identification) may be one of the main reasons (e.g. Simon & Klandermans, 2001; Stürmer & Simon, 2004). However, if raising peoples' subjective group-efficacy beliefs is key to mobilizing particularly those for whom relevance of group identity is less relevant, then persuasive communications targeting these people should focus on their more instrumental and pragmatic concerns (i.e. will our collective goals be achieved through joint action?).

More specifically, individuals' stronger expectation that fellow group members will support them through actual participation in collective action (i.e. *instrumental* support) might be one of the key secondary appraisals (theoretically representing appraisals of in-group control, power, or strength) that increase their group-efficacy beliefs and hence their engagement in problem-focused coping with collective disadvantage (Van Zomeren *et al.*, 2004). In contrast, trying to raise group-based anger among individuals for whom group identity is less relevant (e.g. by emphasizing injustice) may not be very fruitful, unless it increases group relevance.

Consequently, another practical recommendation for moving those for whom group identity is less relevant into collective action is to increase their sense of 'groupness'. Current results suggest that this can be accomplished by raising their (more chronic) sense of group identification, but also the (more contextual) salience of their group identity. Making group identity relevant to the self in these different ways should facilitate individuals' collective action tendencies through group-based anger, and make their group-efficacy beliefs less predictive of their collective action tendencies.

Limitations and directions for future research

Two limitations of this set of studies should be noted. First, our measure of collective action relies on participants' action tendencies (as argued in particular by Frijda, 1986, 2007; but see also Lazarus, 1991, 2001) rather than their actual behaviour. Although we certainly do not wish to equate action tendencies or intentions to behaviour, research suggests that intentions are a good predictor of actual protest behaviour (De Weerd & Klandermans, 1999). Second, both studies employed the same collective disadvantage issue (i.e. the raising of college fees for students in The Netherlands) and hence may not generalize to other issues. Aside from the point that in an experimental sense this is also a strength of the present research (because it enables us to compare the results of the studies better), a different issue employed in previous research (i.e. an increase in the number of hours of research participation required of students; see Van Zomeren *et al.*, 2004, Study 2 and 3) has also produced evidence for the two 'paths to protest'. Thus, we have little reason to assume that the present results should not generalize to such other issues of collective disadvantage.

Future research should focus on two different avenues. First, future research may examine which *structural* and *contextual* factors can mobilize those for whom group identity is less relevant. Because these individuals will be the most difficult to mobilize, finding ways to mobilize them is both theoretically important and socially consequential. For example, research has shown that the instability of the intergroup status differential is a structural factor that aligns lower identifiers with their group (Doosje *et al.*, 2002; Ellemers, 1993; see also Bettencourt, Charlton, Dorr, & Hume, 2001). Applied to the present context, stronger instability should result in stronger group-efficacy beliefs and collective action tendencies (i.e. problem-focused coping). Similarly, future research may examine whether and how structural and contextual indicators of relevance of group identity (i.e. group identification and group identity salience) interact (e.g. Yzerbyt *et al.*, 2003). For example, a combination of stronger group identification and group identity salience may result in a particularly strong relevance of group identity, and hence particularly strong effects on emotion- and problem-focused coping with collective disadvantage.

A second important avenue of future research is the systematic examination of reverse causal effects, such as the influence of group efficacy and group-based anger on

the relevance of group identity. For example, Kessler and Holbach (2005) showed that although group identification can facilitate group-based anger, group-based anger can also facilitate group identification. Similarly, it may be possible that although the relevance of group identity does not necessarily facilitate group-efficacy beliefs, stronger group-efficacy beliefs *do* result in stronger relevance of group identity. Such reverse causal effects would fit nicely with our dynamic and context-sensitive perspective on coping processes.

To conclude, our analysis of collective action suggests a dynamic and context-sensitive approach to how stronger relevance of group identity leads people to cope differently with collective disadvantage. Our analysis of two psychological mechanisms of collective action, or two 'paths to protest', specifies multiple options for disadvantaged group members in terms of when and how to engage in collective action. This specification has both theoretical as well as applied value: Our approach fits into recent theoretical models of group identity, emotion, efficacy, and action, and it hopes to stimulate thinking about how to mobilize those who are easily, and not so easily, mobilized. Our approach thus moves away from a static, deterministic view of the relation between (the relevance of) group identity, group-based emotion, group efficacy and collective action, and moves towards a more complex representation of the different context-sensitive coping processes through which people become motivated to engage in collective action to fight their collective disadvantage.

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Received 24 July 2006; revised version received 18 July 2007

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