

Emotional Reactions to Success and Failure of Collective Action as Predictors of Future Action
Intentions: A Longitudinal Investigation in the Context of Student Protests in Germany

Nicole Tausch¹ and Julia C. Becker²

¹ University of St Andrews, Scotland

² University of Marburg, Germany

Tausch, N., & Becker, J. (2013). Emotional reactions to success and failure of collective action as predictors of future action intentions: A longitudinal investigation in the context of student protests in Germany. *British Journal of Social Psychology*, 52, 525-542.
doi:10.1111/j.2044-8309.2012.02109.x

*Requests for reprints should be addressed to Nicole Tausch, School of Psychology, University of St Andrews, St Mary's Quad, South Street, St Andrews, KY16 9JP, UK (e-mail: nt20@st-andrews.ac.uk).

Abstract

This research examined how emotional responses to success and failure of collective action relate to willingness to engage in collective action in the future. It was hypothesized that both pride (in relation to a success) and anger (in response to failure) would motivate future collective action. Findings are reported from a two-wave longitudinal study ($N = 98$) in the context of student protests against tuition fees in Germany, which was conducted before and after collective action had resulted in both a success and a failure. While anger positively predicted action intentions, over and above baseline action intentions, pride exerted a significant indirect effect on action intentions via increased efficacy perceptions, over and above baseline efficacy and action intentions. Politicized identification positively predicted the intensity of both pride and anger and baseline group efficacy positively predicted the intensity of anger. The theoretical and practical implications of these findings are discussed.

KEYWORDS: collective action; pride; anger; group efficacy; politicized identity.

The popular uprisings against oppressive regimes across the Arab world and the recent protests against austerity measures in many European countries are striking examples of people engaging in collective action. One of the defining features of collective action is that it is goal-oriented. According to a widely-used definition, people engage in collective action any time they are acting as representatives of their group and the action is directed at improving the conditions of the entire group (Wright, Taylor & Moghaddam, 1990). Such action is often aimed at challenging group disadvantage, or at ending or preventing an injustice. Like any goal-oriented behaviour, collective action involves effort and short-term costs, and is accompanied by successes, setbacks, and failures, all of which are likely to affect perseverance and continued engagement. Illuminating the social-psychological consequences of success and failure of collective action, and the implications of these for future engagement, is therefore of great interest to both theoreticians and practitioners (see Louis, 2009).

Although there is a vast literature on the structural and psychological factors that mobilize collective action (for reviews see Klandermans, 1997; Wright, 2010; Van Zomeren, Postmes, & Spears, 2008), little is yet known about how psychological reactions to the outcomes of collective action shape motivations to engage in such action in the future. In the present article we argue that emotional responses to success or failure are likely to play a vital role in driving future engagement. Specifically, we take a first step towards integrating research on collective action with the study of the motivational role of achievement emotions (e.g., Pekrun & Stephens, 2010; Weiner, 1985), which has thus far been confined primarily to educational and sports settings. We focus on two outcome-related emotions which seem particularly relevant in motivating future engagement: *pride* (about a success of collective action) and *anger* (in

response to a failure). Before describing the research context and outlining our hypotheses, we briefly review the literatures on collective action and achievement emotions.

The Roles of Emotion, Efficacy, and Identity in Collective Action

Why do people engage in collective action? This question has been studied from different theoretical perspectives. Relative Deprivation Theory (RDT; Guimond & Dube-Simard, 1983; Runciman, 1966; Walker & Smith, 2002) for example posits that people engage in collective action as a result of viewing their group as relatively deprived in comparison with a reference group. Work on RDT further stresses that *feelings* of deprivation, such as anger, resentment, and outrage are particularly important in driving action (see Walker & Smith, 2002). This focus on emotion is in line with research on Intergroup Emotion Theory (IET; Mackie, Devos & Smith, 2000; Smith, 1993), which proposes that, in situations where individuals categorize as members of a social group, group-related events become self-relevant and arouse specific emotions together with their associated action tendencies (see also Gordijn, Wigboldus, & Yzerbyt, 2001). Thus, the appraisal that the ingroup has been treated unfairly arouses (group-based) anger and evokes action tendencies to move against the offender (Mackie et al., 2000; Pennekamp, Doosje, Zebel, & Fischer, 2007; van Zomeren et al., 2004).

A second line of research has focused more on pragmatic concerns and has highlighted the importance of the perceived efficacy of collective action (e.g., Gamson, 1992; Klandermans, 1997; McCarthy & Zald, 1977; Martin, Brickman, & Murray, 1984). This idea is related to the notion of stability in Social Identity Theory (SIT; Tajfel & Turner, 1979), which posits that collective action is most likely to occur when the group hierarchy is viewed as unstable. Much research on collective action has emphasized more proximal, psychological factors such as agency (Gamson, 1974, 1992) or collective efficacy (Bandura, 2000), which correspond to the

extent to which the ingroup is perceived as being capable of bringing about the desired change. Consistent with this general approach, there is extensive evidence that the subjective experience of group efficacy predicts collective action intentions (e.g., Mummendey et al., 1999; Van Zomeren et al., 2004).

A third theoretical approach has focused on the importance of social identity in mobilizing action (e.g., Drury & Reicher, 2000; Reicher, 1996; Simon & Klandermans, 2001; Stürmer & Simon, 2004a,b; Tajfel & Turner, 1979). This line of work has emphasized the importance of identifying with a politicized group or social movement (Simon & Klandermans, 2001). A politicized identity is accompanied by an internalization of the goals and norms of the social movement, connects people with the plight of the disadvantaged group, and creates an inner obligation to act on its behalf (Simon & Klandermans, 2001; Stürmer & Simon, 2004b). Supporting this view, research has demonstrated that identification with a social movement (e.g., 'feminists', 'protest movement against tuition fees') is a more important predictor of engagement in collective action than identification with the disadvantaged group more generally (e.g., 'women', 'students'; Stürmer & Simon, 2004a).

Rather than viewing emotion, efficacy and identity as competing explanations of collective action, recent work has combined these factors in integrative models. For example, van Zomeren et al. (2004) demonstrated that emotion and efficacy perceptions are two distinct but complementary routes to collective action. In a further extension of this dual pathway model which incorporates the three social-psychological perspectives on collective action, van Zomeren et al. (2008) provided meta-analytic evidence that all three predictors had causal effects on collective action, and that identity can also be conceived of as a more distal predictor which

“bridges” the emotional and efficacy explanations of collective action, by both empowering individuals and amplifying injustice perceptions and group-based emotions.

Although there is now substantive evidence for anger, efficacy, and identity as predictors of collective action, it is still not clear what role situational factors such as success or failure of collective action play in motivating future engagement. We believe that achievement emotions are particularly relevant in this respect.

Achievement Emotions as Motivators for Future Action

Emotions play an essential role in initiating and guiding goal-directed behaviour (Frijda, Kuipers, & ter Schure, 1989; Williams & DeSteno, 2008). Achievement emotions include any emotions that are either directly tied to achievement-related activities (e.g., the enjoyment during an activity) or to achievement-related outcomes (e.g., the pride and hope resulting from success, the shame and frustration resulting from failure; see Pekrun & Stephens, 2010). Specific achievement emotions are tied to specific situational and individual antecedents. For example, Weiner (1985) proposed that appraisals of the causal factors underlying success and failure, such as locus of success or failure (internal vs. external), controllability, and stability are central in determining the specific emotional experience (e.g., anger, hopelessness, pride, shame). There are also a number of individual-level variables that determine the intensity of achievement emotions, such as the subjective importance of an achievement (see Pekrun & Stephens, 2010) or the extent to which an individual is invested in a domain (Britt et al., 2010).

The importance of examining achievement emotions lies in their role in shaping future behaviour. For example, shame in response to failure is likely to result in withdrawal, while guilt is likely to increase effort in the future (Weiner, 1985). Moreover, while hope, pride, or joy following a success are likely to have positive motivational effects, deactivating emotions like

relief may be demotivating (Pekrun & Stephens, 2010). Although there are a range of emotional reactions to performance outcomes that have implications for future behaviour, the present research focused on two emotions that seem particularly relevant in the context of collective action; anger, which has been shown to be a particularly potent predictor of collective action (Leach, Iyer, & Pedersen, 2006) and pride, which has been proposed a potentially important motivator of collective action (Thomas, McGarty, & Mavor, 2009a; van Zomeren et al., 2008), but has not yet been investigated.

Pride

Pride is a positive, activating (cf. Feldman Barrett & Russell, 1998) emotion that is experienced in response to achievements which can be attributed to the self (i.e., to one's own abilities or efforts; Pekrun & Stephens, 2010; Weiner, 1985). Williams and DeSteno (2008) proposed that pride is particularly capable of motivating engagement in difficult tasks. They suggested that, when feeling proud about an accomplishment, individuals are likely to feel an incentive to pursue further action in that domain, despite difficulties and short-term costs. In an experimental test of this idea, Williams and de Steno (2008) demonstrated that pride experienced in response to an accomplishment does indeed predict perseverance on a difficult subsequent task.

Although collective action research has traditionally focused on negatively valenced emotions such as anger or frustration, a number of scholars have suggested that positive emotions also play a role (see Drury & Reicher, 2005; Thomas et al., 2009b; van Zomeren et al., 2008). The experience of positive emotions as a consequence of success has, however, thus far been examined only in an ethnographic study by Drury and Reicher (2005), who compared two collective events, one of which succeeded while the other one failed. Their qualitative analysis

suggests that success is accompanied by positive emotions such as exhilaration and joy, is immediately empowering, and motivates future action (whereas the experience of failure is accompanied by negative emotions and needs to be cognitively reappraised and construed as a victory to be empowering). But the question of whether pride increases willingness in collective action has not yet been systematically investigated. We propose that the motivating qualities of pride make it a primary candidate to explain sustained collective action and predict that pride in relation to a success of collective action would overall be positively predictive of willingness to engage in such action.

We further consider the question of *how* pride affects future action intentions. Work on achievement emotions in the academic domain suggests that activating positive emotions such as pride are beneficial for students' academic agency (Pekrun, Goetz, Titz, & Perry, 2002). As the experience of efficacy is a proximal predictor of collective action (e.g., van Zomeren et al., 2004, 2008), one might therefore expect that pride exerts its effect on action by increasing efficacy (i.e., indirectly). This is intuitive as emotions are likely to occur immediately after a success and are then cognitively evaluated, resulting in the expectation that one (or one's group) is likely to succeed again in the future. This, in turn, motivates future participation. This reasoning is also consistent with Drury and Reicher's (2005) observations, who emphasize the centrality of emotion in (dis-)empowerment. Thus, pride as a consequence of successful action is likely to serve as a distal predictor of future engagement, by influencing the cognitive construal of the events and appraisals of the efficacy one's group.

Williams and DeSteno (2008) however suggest an alternative relation between pride and efficacy. Although they recognize that these constructs are closely related, they propose that, while efficacy is a cognitive appraisal of ability, pride adds an emotional component that drives

motivation and should be proximally predictive of behaviour. Thus, one might expect that pride mediates the relation between efficacy and action intentions, or that pride and efficacy exert independent effects on action intentions. We examine these alternative possibilities.

Anger

Like pride, anger is an activating outcome-related emotion in the context of goal achievement (Pekrun & Stephens, 2010; Weiner, 1985). It is a negative emotion in response to the nonattainment of a subjectively important goal. Importantly, anger occurs when the nonattainment of a goal is attributed to factors controllable by *others*, in particular when the barrier imposed by others is arbitrary and perceived as unjustified (Weiner, 1985). The literature on achievement emotions says little about the behavioural implications of anger in response to failure, and Pekrun and Stephens (2010) suggest that the relations between achievement-related anger and behaviour are likely to be complex. Based on appraisal theories of emotion (e.g., Frijda et al., 1989) one might expect, however, that anger in response to failure evokes action tendencies to move against the offender (the agent viewed as responsible for the failure). As anger is also a well-established proximal predictor of collective action tendencies (e.g., van Zomeren et al., 2004, 2008), we would expect anger in response to failure to be directly and positively related to willingness to engage in collective action in the future.

Although our conceptual framework applies to all members of a disadvantaged group (i.e., all group members who could become part of the mobilization potential, see Klandermans, 1997) who learn about the outcomes of the collective efforts, we would not expect each group member to react with the same emotional intensity to the success or failure of action. It is therefore important to consider predictors of anger and pride in response to (non-)attainment of collective goals. As mentioned above, individual differences in the subjective importance of a

goal can magnify emotional reactions to performance outcomes (Britt et al., 2010; Pekrun & Stephens, 2010). We suggest that, when we transfer achievement emotions to the level of groups and collective behaviour, individual differences in social identification are highly relevant. How successes of a group one identifies with affect pride was demonstrated in the studies on the phenomenon of “basking in reflected glory” (Cialdini et al., 1976). Moreover, the positive link between identification and emotional experience has been established empirically by work on IET (Smith, Seger, & Mackie, 2007). Thus, we expect identification, specifically politicized identification (Simon & Klandermans, 2001), to predict achievement emotions, such that those who identify more strongly with the movement engaged in collective action are more likely to experience pride and anger in response to its successes and failures, respectively.

Furthermore, we examined one additional prediction following from IET (Smith, 1993) and appraisal theories of emotion (Frijda et al., 1989) which relates to the experience of anger. These theoretical accounts suggest that the strength or resources the self (or ingroup) has relative to an offender is a key factor in whether anger (as opposed to fear) occurs. Consistent with this proposition, work on IET has demonstrated that collective support is positively related to anger (Mackie et al., 2000; see also Van Stekelenburg, Klandermans & van Dijk, 2011). Thus, we might expect a positive relation between group efficacy and anger. Efficacy and emotions are, however, conceptualized as separate pathways to action in van Zomeren et al.’s (2004) dual pathway model, suggesting that they may be unrelated. We examine this alternative hypothesis as well.

The Present Research

Our study was conducted in Hessen, Germany, where the conservative CDU government introduced tuition fees in October 2006. This resulted in a wave of protests and the formation of

a “protest movement against the introduction of tuition fees”. The protest movement organized a number of actions aimed at abolishing the fees, including demonstrations, discussion groups, and a boycott of fees (see Schmiedekampf, 2007). It also set up a petition calling for a law suit to determine whether or not tuition fees were lawful in Hessen, which was signed by 78,721 people. The law suit was brought to the federal court in September of 2007.

This study was a 2-wave longitudinal study of students in Hessen conducted in early January (T1) and early July (T2) of 2008. In January, the law suit was still underway and the future of tuition fees in Hessen therefore uncertain. Respondents completed a questionnaire that, among a number of other variables (see Becker, Tausch, Spears, & Christ, 2011; Tausch, Becker, Spears et al., 2011), assessed their identification with the protest movement, the perceived efficacy of students in abolishing tuition fees, as well as their own willingness to engage in a number of actions against tuition fees. In the period between our first and second assessment, two events occurred: First, there was a change in government in late January, when the centre-left SPD party gained power in Hessen. In keeping with their election promise, the SPD-led government abolished tuition fees in early June of 2008. This was a clear success of the protest movement and was widely celebrated as such (e.g., see Frankfurter Rundschau, 2008; Studis Online, 2008). However, this success was closely followed by what can be conceived of as a failure of collective action. In mid-June of 2008, the outcome of the lawsuit against the constitutionality of tuition fees, which deemed tuition fees constitutional, was announced. Thus, the campaign of the protest movement to declare tuition fees unconstitutional was unsuccessful and a reintroduction of the fees in the future was therefore possible.

These events created a unique situation where collective action resulted in both a success (the abolishment of fees) and a failure (the rejection of the complaint). It allowed us to

simultaneously investigate the effects of emotional reactions to success and failure as predictors of future action intentions. Our second wave of data collection took place briefly after these events, in the beginning of July of 2008. Respondents indicated the extent to which they were proud about the abolishment of the fees and the extent to which they felt anger about the court decision. They also again indicated the perceived efficacy of students (this time in preventing a reintroduction of tuition fees), as well as their willingness to engage in collective actions against tuition fees should they be re-introduced. The panel design of this study allowed us to assess the effects of achievement emotions on action tendencies and efficacy over and above baseline levels of these variables, thus giving some insights into relative *changes* in these variables as a function of emotional reactions (Finkel, 1995).

Summary of Hypotheses

The proposed model is depicted in Figure 1. We expected identification with the protest movement at T1 to positively predict pride in response to the abolishment of fees (*Hypothesis 1*) and anger in response to the rejection of the complaint (*Hypothesis 2*). We further hypothesized that anger would positively predict action intentions at T2 (over and above action intentions at T1; *Hypothesis 3*) and that pride would affect action intentions indirectly by predicting increased efficacy at T2 (over and above T1 efficacy), which would be a positive predictor of action intentions at T2, over and above T1 intentions (*Hypothesis 4a*). Based on IET, we expected that efficacy at T1 would be a positive predictor of anger (*Hypothesis 5a*). We also considered a number of alternative hypotheses by testing alternative models. Based on Williams and DeSteno's (2008) suggestions, we considered the possibilities that pride would be a proximal predictor of action and mediate the relation between efficacy at T2 and action intentions at T2 (*Hypothesis 4b*) and that pride and efficacy would predict action intentions independently

(*Hypothesis 4c*) in two alternative models. Moreover, based on van Zomeren et al.'s (2004) suggestion that efficacy and anger are independent pathways to action, we considered the possibility that T1 efficacy would be unrelated to anger (*Hypothesis 5b*).

Method

Participants and Procedure

At T1, we posted a link to a web-based survey across various email distribution lists at several universities in Hessen. The study was announced as an opinion survey about tuition fees and 332 students participated. At T2, we sent the link for the T2 survey to those participants who had agreed to participate in a second study and who had provided their email-addresses at T1 ($N = 189$). Ninety-eight students participated at T2 (response rate = 52%). To match the two surveys, participants assigned themselves an individualized six-letter code along specified criteria. In exchange for participating, they were able to enter into a 2 x 50 Euro lottery. Participants' ages ranged from 18 to 36 years, with a mean age of 22.58 years ($SD = 2.83$). Fifty-six per cent of our sample was female. They represented a broad range of study subjects.

Measures

Time 1

Identification with the protest movement. Respondents indicated their identification with the protest movement against the introduction of tuition fees using three items (e.g., "I identify with the protest movement", $\alpha = .86$), on a seven-point rating scale (1 = *strongly disagree* to 7 = *strongly agree*).

Group efficacy. Using 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*), respondents indicated the efficacy of students in fighting tuition fees on four items ("I think that students can stop the introduction of tuition fees"; $\alpha = .85$).¹

Willingness to engage in collective action. Collective action tendencies were operationalized by six items. Respondents indicated how likely it is that they would participate in the following actions against tuition fees in the future (1 = *very unlikely*, 7 = *very likely*): participate in discussion meetings, participate in plenary meetings, write flyers, sign a complaint against tuition fees, engage in street theatre, and participate in demonstrations ($\alpha = .89$).

Time 2

Emotions. On scales ranging from 1 (*does not apply at all*) to 7 (*completely applies*), respondents indicated the extent to which they felt pride in response to the abolition of fees (“The thought about the abolishment of tuition fees fills me with pride”), as well as the extent to which they felt anger about the rejected complaint of unconstitutionality of tuition fees (“I’m angry about the rejection of the complaint of unconstitutionality”, “The rejection of the complaint of unconstitutionality makes me furious”; $r = .73$).

Group efficacy. Group efficacy was measured by the same four items as at T1, but this time referring to the potential re-introduction of fees (e.g., “I think that students can stop the re-introduction of tuition fees”; $\alpha = .83$).

Willingness to engage in collective action. Respondents were asked to indicate how likely it is that they would participate in the same six actions should the fees be reintroduced (1 = *very unlikely*, 7 = *very likely*; $\alpha = .89$).

Results

Preliminary Analyses

We first compared the respondents of the panel sample at T2 with those responding only at T1 (i.e., the dropouts who did not provide their email addresses or provided their email address but did not participate at T2) with regard to age, gender, identification, group efficacy,

and action tendencies. We employed a chi-square test for gender and independent *t*-tests for the continuous variables. None of the comparisons were significant (all *ps* > .10), suggesting that there were no systematic drop-outs with regard to these variables.²

Structural Equation Modelling

Rather than excluding participants with missing values, we imputed a number of missing values (less than 1.5% overall; 8% for identification, 1% for action tendencies at T1, and 1% for action tendencies at T2) using the expectation maximization algorithm (Tabachnick & Fidell, 2007), which is superior to listwise or pairwise deletion (Schafer & Graham, 2002) but yielded similar results to listwise deletion when the analysis was repeated here. Imputed values which were out of range were adjusted to the nearest acceptable score point. Descriptive statistics are presented in Table 1. Covariance matrices were used as input and estimates were derived using the maximum likelihood procedure. To assess overall model fit, we used the chi-square test, the comparative fit index (CFI), the root mean square of approximation (RMSEA), and the standardized root mean square residual (SRMR). A satisfactory fit is generally indicated by a non-significant χ^2 , a χ^2/df ratio ≤ 3 , a CFI $\geq .95$, and a RMSEA $\leq .08$ (*p*-close >.05-.10) (e.g., Hu & Bentler, 1999). To compare alternative models, we used the χ^2 -difference test for nested models (Steiger, Shapiro, & Browne, 1985) and the Akaike information criterion (AIC; Akaike, 1974) for non-nested models.

First, we compared our proposed model to two alternative models to assess Hypotheses 4a-c. *Model 1* (our proposed model) is shown in Figure 1. All exogenous variables (protest identification at T1, group efficacy at T1, and action intentions at T1) as well as the two emotions measured at T2 were allowed to correlate. *Model 2* was identical to Model 1 apart from that it treated pride as a mediator between T2 efficacy and action intentions. *Model 3* specified

two independent paths from pride and efficacy to action intentions. The residuals of efficacy and pride were allowed to correlate in this model. Model 1 showed a good fit to the data ($\chi^2(9) = 14.09, p = .119, \chi^2/df = 1.57, CFI = .98, RMSEA = .076, p\text{-close} = .252, SRMR = .07, AIC = 52.09$), while Model 2 ($\chi^2(9) = 26.62, p = .002, \chi^2/df = 2.96, CFI = .94, RMSEA = .142, p\text{-close} = .010, SRMR = .11, AIC = 64.62$) and Model 3 ($\chi^2(8) = 20.62, p = .008, \chi^2/df = 2.58, CFI = .96, RMSEA = .128, p\text{-close} = .032, SRMR = .10, AIC = 60.62$) did not. The χ^2 -difference test comparing Models 1 and 2 further indicated that Model 1 fit the data significantly better ($\Delta\chi^2 = 6.15, df = 1, p < .05$).

Next, we compared Model 1 with a model where T1 efficacy did not predict anger at T2 (*Model 4*) to evaluate the alternative Hypotheses 5a and 5b. Model 1 fit the data significantly better ($\Delta\chi^2 = 7.55, df = 1, p < .01$) than Model 4 ($\chi^2(10) = 21.64, p = .017, \chi^2/df = 2.16, CFI = .96, RMSEA = .11, p\text{-close} = .062, SRMR = .08, AIC = 57.64$).

Thus, Model 1 was the best-fitting model (see Figure 2 for results). The model explained a sizeable amount of variance of action intentions at T2 ($R^2 = .54$). As would be expected, T1 group efficacy significantly predicted group efficacy at T2 ($\beta = .42, p < .001$) and willingness to engage in collective action at T1 predicted willingness at T2 ($\beta = .39, p < .001$). Also, as predicted (Hypotheses 1 and 2), identification with the protest movement at T1 positively predicted both pride ($\beta = .45, p < .001$) and anger ($\beta = .45, p < .001$) at T2. There was also a positive relation between group efficacy at T1 and anger at T2 ($\beta = .24, p = .005$), consistent with Hypothesis 5a. As expected (Hypothesis 3), anger positively predicted action intentions at T2 ($\beta = .31, p < .001$). Pride positively predicted efficacy at T2 ($\beta = .30, p < .001$), which, in turn, positively predicted T2 action intentions ($\beta = .26, p < .001$). To test the significance of this indirect effect, we performed a bootstrapping analysis with 2,000 re-samples. Consistent with

Hypothesis 4a, pride exerted a significant indirect effect on action intentions at T2 via increased efficacy at T2 (point estimate = .078, [.031; .154], $p = .002$).^{3,4}

Discussion

The purpose of this research was to extend current work on collective action by assessing the role of two achievement emotions (pride and anger) in response to success and failure of collective action as predictors of future action intentions. As predicted, anger about the failure of collective action predicted willingness to engage in collective action in the future. This is in line with previous work supporting the motivating potential of anger (Guimond & Dube-Simard, 1983; Mackie et al., 2000; van Zomeren et al., 2004). However, extending upon this work, the present research demonstrates that the anger about the non-attainment of a collective goal, which, according to Weiner (1985), occurs when that non-attainment is attributed to the (unjustified) actions of others, can mobilize further action.

Our hypothesis that pride about a success of the movement would indirectly predict willingness to get engaged by increasing the perceived efficacy of the ingroup in achieving future goals was also supported. This indirect effect suggests that pride, which is likely to occur immediately after a success, can shape expectation that one's group is likely to be successful again in the future. This, in turn, increases individuals' willingness to engage in collective action in the future. This interpretation is consistent with Drury and Reicher's (2005) findings, who suggested that positive emotions are central to empowerment, and is in line with work emphasizing the proximal relation between efficacy and action intentions (van Zomeren et al., 2004, 2008). This finding is, however, inconsistent with Williams and DeSteno's (2008) suggestion that pride should be a proximal predictor of behaviour. In their experiment, Williams and DeSteno found that feelings of pride predicted perseverance on a subsequent task over and

above participants' rating of their performance on a dot estimation task compared to others (which the authors used as a proxy for self-efficacy), which itself did not predict perseverance. That efficacy in this case did not proximally predict behaviour over and above pride in that context is not surprising; performance on the dot estimation task relative to others was in fact the manipulation to induce pride (and the measure of self-efficacy thus a manipulation check) and the additional task was performed directly after this manipulation. It is likely that these experiences of pride would, over time, feed into self-efficacy. Nonetheless, the psychological mechanisms by which the experience of positive achievement emotions such as pride feeds into subjective experiences of efficacy warrant future research.

Furthermore, the intensity of pride and anger was predicted by respondents' identification with the protest movement. Thus, students who identified with, or were psychologically invested in, the movement were more likely to feel proud about the accomplishments of the movement (the abolition of the fees) and more likely to be angry about the non-attainment of a group goal (establishing the unconstitutionality of fees). This finding is in line with theorizing regarding politicized identities, which are accompanied by an internalization of the goals of the movement (Simon & Klandermans, 2001). It is also consistent with IET (e.g., Smith et al., 2007) which posits that the experience of group-related emotions is a function of level of identification with that group.

Also consistent with IET (see Mackie et al., 2000), and appraisal theories of emotion more generally (e.g., Frijda et al., 1989), was the finding that perceived group efficacy at T1 predicted anger in response to failure at T2. These theories suggest that, because emotions are functional (i.e., they guide adaptive behavior), the strength the self has is a key factor in whether or not anger is experienced (e.g., Frijda et al., 1989). When the self is perceived as strong, anger,

which is accompanied with “move against” action tendencies, is experienced. Conversely, when the self is relatively weak, anxiety and fear (together with “move away” action tendencies) are more likely to be experienced. The relation between strength and anger has also been established in the context of intergroup behaviour (Mackie et al., 2000), where participants who perceived the ingroup as strong were more likely to experience group-based anger and to report “move against” action tendencies against the offending outgroup (see also van Stekelenburg et al., 2011, for consistent evidence). Our data provide additional evidence for this relation in the context of collective action. Students who perceived their group as efficacious were more likely to experience anger about a failure, which was, in turn, predictive of future action intentions. This finding might seem at odds with van Zomeren et al.’s (2004) dual pathway model, which views anger and efficacy as independent pathways to collective action. It is, however, consistent with more recent theoretical developments that emphasize dynamic relations between the various predictors and outcomes of collective action. For example, van Zomeren, Leach, and Spears (in press) propose a model in which they explicate feedback loops between appraisals and coping responses. In this model, appraisals predict coping responses (e.g., collective action participation) and coping responses in turn feed back into re-appraisals (e.g., an increase in perceived coping potential), which also influence one another (e.g., increased coping potential influences anger). Moreover, in Thomas et al.’s (2009a) normative alignment model, sustained collective action is the consequence of an alignment between identities and norms about efficacy, emotion and action.

Strengths and Limitations

We believe that the current research has a number of strengths. First of all, our research was conducted in the context of real-life collective action, where success and failure had real

consequences for the groups involved. The study therefore possesses a good degree of ecological validity. Furthermore, improving upon other studies of real-life collective action that have often used cross-sectional data (e.g., Mummendey et al., 1999; Pennekamp et al., 2007), the present study used a panel design, which allows stronger causal inferences and the assessment of relative change in our primary outcome variables (Finkel, 1995). Nonetheless, longitudinal studies are still susceptible to third variable influences and experimental work is therefore needed to further back up our results. Furthermore, the focus on a specific context poses the question of external validity and we suggest that future research should replicate our findings in other contexts of collective action to show that our findings are generalizable.

Furthermore, like most research on collective action, we relied on behavioural intentions as our criterion variable. Previous research has shown that behavioural intentions are a proxy for behaviour and predict actual participation in collective action (e.g., Blackwood & Louis, in press; De Weerd & Klandermans, 1999; Webb & Sheeran, 2006). Examining action intentions is also valuable in itself as it helps us to understand how people become part of the mobilization potential of a movement (Klandermans, 1997). Nonetheless, future research should further strengthen the present findings by investigating the extent to which achievement emotions predict actual participation.

Finally, we would like to emphasize that the current work does not represent a complete analysis of the role of achievement emotions in collective action. Although we believe that anger and pride are highly relevant and common achievement emotions in the domain of collective action, the literature on achievement emotions considers a wide array of achievement-related emotions (see Pekrun & Stephens, 2010; Weiner, 1985), some of which (e.g., deactivating emotions such as sadness or hopelessness in response to failure) are likely to reduce motivations

to engage in collective action. Moreover, the present research has focused on the group-based emotions in response to the outcomes of collective action and has not considered emotions related to the activity itself (e.g., enjoyment while protesting; see Pekrun & Stephens, 2010), which are also likely to predict further participation. These emotions could be further investigated in future research.

Contributions, Implications and Directions for Future Research

Despite these limitations, we believe that the present research makes a number of valuable contributions. To our knowledge, this study is the first to examine how emotional outcomes of success and failure of collective action determine motivations to get engaged in the future. It thereby highlights the importance of considering the reciprocal relations between emotions and collective action, and fits into recent calls to develop dynamic theoretical models of collective action and its predictors (see Becker et al., 2011a; Becker, Tausch, & Wagner, 2011b; van Zomeren et al., in press). For example, in a recent theoretical extension of the dual pathway model, van Zomeren et al. (in press) proposed that collective action would feed back into appraisals of disadvantage, emotions, and perceived efficacy. The present work further qualifies these ideas by highlighting the importance of taking into account outcomes of collective action with their associated achievement emotions, which are likely to affect how and in what direction disadvantage and efficacy are re-appraised. For example, while successful collective action would increase perceived efficacy, unsuccessful action might not.

Furthermore, to our knowledge, the present study is also the first to empirically investigate the motivating role of pride in the context of collective action. That pride might be a relevant emotion that motivates collective action has been proposed by several authors (see Thomas et al., 2009b; van Zomeren et al., 2008), but this claim had thus far remained

unsubstantiated. The present findings provide insights into the process through which pride influences action intentions by showing that pride increases the perceived efficacy of the ingroup in achieving social change. This idea further extends van Zomeren et al.'s (in press) recent model by suggesting that one mechanism through which collective action affects the perceived coping potential and efficacy of the ingroup is through feelings of pride in response to successful collective action (or action that is construed as such).

By taking a first step towards integrating collective action research with the literature on achievement emotions, and transferring ideas surrounding achievement motivations to the group level, the present work opens up a range of potentially fruitful avenues for future research. The literature on achievement emotions, which has thus far been confined to settings of individual-level educational or sports achievement (see Pekrun & Stephens, 2010), is very rich and makes a number of relevant predictions regarding the cognitive appraisals of success and failure that determine distinct emotional experiences. For example, Weiner (1985) posits that the perceived causes of success and failure can be classified among three main dimensions, *locus* (whether the cause of success or failure is perceived as due to internal factors such as ability or external factors such as luck), *stability* (whether the factors responsible for success or failure are expected to fluctuate or to be relatively constant), and *controllability* (whether the factors that caused success or failure are controllable by the individual). Causal attributions along these dimensions then affect a variety of emotional experiences with important consequences for future behaviour (e.g., the persistence with which a goal is pursued in the future).

These dimensions of causal attribution should also be relevant in the context of success or failure of collective action, and may independently or interactively predict emotional responses. For example, successful collective action that is attributed internally (the organization and

strength of the movement) is more likely to result in pride (and subsequently in higher efficacy beliefs and future action intentions) than successful collective action that is attributed externally (luck, a weak opponent, or other specific situational circumstances). Perceiving the causes of failure as stable could result in hopelessness and consequently apathy and inaction or, as suggested by recent work (Spears et al., 2011), to particularly provocative action strategies among actors who feel that they have nothing to lose.

Furthermore, examining the attributions that accompany success and failure of collective action could also give insights into the aetiology of less well-understood emotions in the context of collective action. For example, recent work on the emotional predictors of extreme forms of collective action suggests that contempt (rather than anger) predicts non-normative action (Tausch et al., 2011). It is not yet clear, however, how such (political) contempt develops, and when injustice appraisals are accompanied by anger and when by contempt. The literature on emotions in interpersonal relations indicates that contempt arises from anger than remains unresolved (Fischer & Roseman, 2007). This suggests that the failures of previous attempts to achieve justice, and how these are construed, may contribute to the development of contempt. Thus, further examining the cognitive appraisals and emotional reactions to failure of collective action might provide important insights into when and why movements come to consider non-normative forms of political action.

Understanding the causal attributions underlying achievement emotions in collective action could also have practical implications. For example, Drury and Reicher (2005) observed that actors can cognitively restructure failed collective action in such a way that it is perceived as a (moral) victory (see also Barr & Drury, 2009). We suggest that the causes of success or failure could similarly be re-appraised. Thus, to prevent apathy and despair in the face of failure of

collective action, re-attributing the likely causes of failure (e.g., from internal to external causes) and thereby reshaping emotional responses to failure (e.g., from despair to anger) could prevent dissolution and help to secure continued engagement.

To conclude, we suggest that future research should go beyond the present work by examining the impact of specific causal attributions of success and failure, the variety of emotional experiences resulting from these appraisals, as well as their role in motivating future engagement. Although the motivational dynamics resulting from the causal attributions of success and failure of collective action are likely to be complex, a better understanding of these mechanisms would help answering some of the “big” questions in collective action and social movement research (see Louis, 2009; Wright, 2009), such as why people remain committed to a cause in the face of setbacks and failures, when and why people come to opt for non-normative forms of political action such as violence, and what needs to be done to build enduring social movements for progressive social change.

References

- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, *19*, 716–723.
- Bandura, A. (2000). Social-cognitive theory: An agentic perspective. *Annual Review of Psychology*, *52*, 1-26
- Barr, D. & Drury, J. (2009). Activist identity as a motivational resource: Dynamics of (dis)empowerment at the G8 direct actions, Gleneagles, 2005. *Social Movement Studies*, *8*, 243-260.
- Becker, J., Tausch, N., Spears, R., & Christ, O. (2011a). Committed dis(s)idents: Participation in radical collective action fosters disidentification with the superordinate group but enhances political identification. *Personality and Social Psychology Bulletin*, *37*, 1104-1116.
- Becker, J., Tausch, N., & Wagner, U. (2011b). Emotional consequences of collective action participation: Differentiating self-directed and outgroup-directed emotions. *Personality and Social Psychology Bulletin*, *37*, 1587-1598.
- Blackwood, L. & Louis, W. (in press) If it matters for the group then it matters to me: Collective action outcomes for seasoned activists. *British Journal of Social Psychology*.
- Britt, T.W., McKibben, E.S., Greene-Shortridge, T.M., Beeco, A., Bodine, A., Calcaterra, J., Evers, T., McNab, J., & West, A. (2010). Self-engagement as a predictor of performance and emotional reactions to performance outcomes. *British Journal of Social Psychology*, *49*, 237-257.
- Cialdini, R. B., Borden, R. J., Thorne, A., Walker, M. R., Freeman, S., & Sloan, L. R. (1976). Basking in reflected glory: Three (football) field studies. *Journal of Personality and Social Psychology*, *34*, 366-375.

- Der Spiegel (2007). *Protest gegen Studiengebühren: Harte Strafen für Autobahnblockierer* [Protest against tuition fees: Severe sentences for highway blocker]. Available at: <http://www.spiegel.de/unispiegel/studium/0,1518,502442,00.html>
- De Weerd, M. & Klandermans, B. (1999). Group identification and political protest: Farmers' protests in the Netherlands. *European Journal of Social Psychology*, 29, 1073-1095
- Drury, J. & Reicher, S. D. (2000). Collective action and psychological change: The emergence of new social identities. *British Journal of Social Psychology*, 39, 579 - 604.
- Drury, J. & Reicher, S. D. (2005). Explaining enduring empowerment: A comparative study of collective action and psychological outcomes. *European Journal of Social Psychology*, 35, 35–38.
- Feldman Barrett, L. & Russell, J. A. (1998). Independence and bipolarity in the structure of current affect. *Journal of Personality and Social Psychology*, 74, 967–984.
- Finkel, S.E. (1995). *Causal analysis with panel data*. London: Sage.
- Fischer, A.H. & Roseman, I.J. (2007). Beat them or ban them: The characteristics and social functions of anger and contempt. *Journal of Personality and Social Psychology*, 93, 103-115.
- Frankfurter Rundschau (2008). Hessen kippt the Uni-maut. [Hessen topples the uni-toll] Available at: <http://www.fr-online.de/politik/hessen-kippt-die-uni-maut/-/1472596/3420960/-/index.html>
- Frijda, N. H., Kuipers, P., & ter Schure, L. (1989). Relations among emotion, appraisal, and action tendency. *Journal of Personality and Social Psychology*, 57, 212–228.

Gamson, W. A. (1975). *The strategy of social protest*. Homewood, ILL: The Dorsey Press

Gamson, W. A. (1992). The social psychology of collective action. In A. D. Morris & C.

M. Müller (Eds.), *Frontiers in social movement theory* (pp. 53-76). New Haven,

CT: Yale University Press.

Gordijn, E.H., Wigboldus, D., & Yzerbyt, V. (2001). Emotional consequences of categorizing

victims of negative outgroup behavior as ingroup or outgroup. *Group Processes and*

Intergroup Relations, 4, 317-326.

Guimond, S. & Dube´-Simard, L. (1983). Relative deprivation theory and the Quebec nationalist

movement. *Journal of Personality and Social Psychology*, 44, 526–535.

Hu, L. & Bentler, P. M. (1999). Cut-off criteria for fit indexes in covariance structure analysis:

Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.

Klandermans, B. (1997). *The social psychology of protest*. Oxford, England: Blackwell.

Leach, C. W., Iyer, A., & Pedersen, A. (2006). Anger and guilt about in-group advantage explain

the willingness for political action. *Personality and Social Psychology Bulletin*, 32, 1232-

1245.

Louis, W. R. (2009). Collective action—and then what? *Journal of Social Issues*, 65, 727 – 748.

Mackie, D. M., Devos, T., & Smith, E. R. (2000). Inter-group emotions: Explaining offensive

action tendencies in an inter-group context. *Journal of Personality and Social Psychology*,

79, 602–616.

Martin, J., Brickman, P., & Murray, A. (1984). Moral outrage and pragmatism: Explanations for

collective action. *Journal of Experimental Social Psychology*, 20, 484-496.

McCarthy, J. D., & Zald, M. N. (1977). Resource mobilization and social movements: A

partial theory. *American Journal of Sociology*, 82, 1212-1241.

- Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology, 76*, 229–245.
- Pekrun, R., Goetz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students' self-regulated learning and achievement: A program of quantitative and qualitative research. *Educational Psychologist, 37*, 91–106.
- Pekrun, R. & Stephens, E. J. (2010). Achievement emotions: A control-value approach. *Social and Personality Psychology Compass, 4*, 238-255.
- Pennekamp, S.F., Doosje, B., Zebel, S., & Fischer, A.H. (2007). The past and the pending: The antecedents and consequences of group-based anger in historically and currently disadvantaged groups. *Group Processes and Intergroup Relations, 10*, 41-55.
- Reicher, S. D. (1996). Social identity and social change: Rethinking the context of social psychology. In P. Robinson (Ed.), *Social groups and identities: Developing the legacy of Henri Tajfel* (pp. 317 - 337). Oxford: Butterworth-Heinemann.
- Runciman, W. G. (1966). *Relative deprivation and social justice: A study of attitudes to social inequality in twentieth-century England*. Berkeley: University of California Press.
- Schmiedekampf, K. (2007, August 28). Protest gegen Studiengebühren: Harte Strafen für Autobahn-Blockierer [Protest against tuition fees: Severe sentences for highway blocker]. *Der Spiegel*. Retrieved from <http://www.spiegel.de/unispiegel/studium/0,1518,502442,00.html>
- Schafer, J.L. & Graham, J.W. (2002). Missing data: Our view of the state of the art. *Psychological Methods, 7*, 147-177.
- Shrout, P. E. & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New

- procedures and recommendations. *Psychological Methods*, 7, 422-445.
- Simon, B. & Klandermans B. (2001). Politicized collective identity: A social psychological analysis. *American Psychologist*, 56, 319-331.
- Smith, E. R. (1993). Social identity and social emotions: Toward new conceptualizations of prejudice. In D. M. Mackie & D. L. Hamilton (Eds.), *Affect, cognition, and stereotyping: Interactive processes in group perception* (pp. 297–315). San Diego: Academic Press.
- Smith, E. R., Seger, C. R., & Mackie, D. M. (2007). Can emotions be truly group-level? Evidence regarding four conceptual criteria. *Journal of Personality and Social Psychology*, 93, 431–446.
- Spears, R., Scheepers, D. & van Zomeren, M. (2011). Nothing to lose: A provocative strategy in groups with stable low status. *Manuscript under review*.
- Steiger, J.H., Shapiro, A. & Browne, M.W. (1985). On the multivariate asymptotic distribution of sequential Chi-square statistics. *Psychometrika*, 50, 253-263.
- Studis Online (2008). Historischer Moment: Studiengebühren in Hessen abgeschafft. [Historical moment: Tuition fees in Hessen abolished.] Available at: <http://www.studis-online.de/HoPo/art-774-hessen-studiengebuehren-weg.php>
- Stürmer, S. & Simon, B. (2004a). The role of collective identification in social movement participation: A panel study in the context of the German gay movement. *Personality and Social Psychology Bulletin*, 30, 263-277
- Stürmer, S. & Simon, B. (2004b). Collective action: Towards a dual-pathway model. In W. Stroebe & M. Hewstone (Eds.), *European Review of Social Psychology* (Vol. 15, pp. 59-99). Chichester, England: Wiley.

- Tabachnick, B. G. & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Tajfel, H. & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations*. (pp. 33-48). Monterey, CA: Brooks/Cole.
- Tausch, N., Becker, J., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R.N. (2011). Explaining radical group behaviour: Developing emotion and efficacy routes to normative and non-normative collective action. *Journal of Personality and Social Psychology*, *101*, 129-148.
- Thomas, E. F., McGarty, C., & Mavor, K. I. (2009a). Aligning identities, emotions and beliefs to create commitment to sustainable social and political action. *Personality and Social Psychology Review*, *13*, 194-218.
- Thomas, E. F., McGarty, C., & Mavor, I. (2009b). Transforming “apathy into movement”: The role of prosocial emotions in motivating action for social change. *Personality and Social Psychology Review*, *13*, 310-333.
- Van Stekelenburg, J., Klandermans, B., & Van Dijk, W. W. (2011). Combining motivations and emotion: The motivational dynamics of collective action participation. *Revista de Psicologia Social*, *26*, 91-104.
- Van Zomeren, M., Leach, C.W., & Spears, R. (in press). Protesters as “Passionate economists”: A dynamic dual pathway model of approach coping with collective disadvantage. *Personality and Social Psychology Review*.
- Van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological

- perspectives. *Psychological Bulletin*, 134, 504 – 535.
- Van Zomeren, M., Spears, R., Fischer, A. H., & Leach, C. W. (2004). Put your money where your mouth is!: Explaining collective action tendencies through group-based anger and group efficacy. *Journal of Personality and Social Psychology*, 87, 649–664.
- Walker, I. & Smith, H. J. (Eds.) (2002). *Relative deprivation: Specification, development, and integration*. Cambridge, England: Cambridge University Press.
- Webb, T. L. & Sheeran, P. (2006). Does changing behavioural intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, 132, 249-268.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92, 548–573.
- Williams, L. & DeSteno, D. (2008). Pride and perseverance: The motivational role of pride. *Journal of Personality and Social Psychology*, 94, 1007-1017.
- Wright, S. C. (2009). The next generation of collective action research. *Journal of Social Issues*, 65, 859-879.
- Wright, S. C. (2010). Collective action and social change. In J.F. Dovidio, M. Hewstone, P. Glick, & V.M. Esses (Eds.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 577-595). Newburg Park, CA: Sage.
- Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, 58, 994-1003.

Footnotes

- (1) Note that these items refer to students more generally rather than the protest movement. They were however embedded in a number of other scales referring to the movement and concern students engaged in protest and were therefore probably understood as assessing efficacy of the protest movement.
- (2) We also measured past participation in collective action against tuition fees and anger about the introduction of the fees at T1. There were no significant differences between our panel sample and those who participated only at T1 in terms of past participation ($p = .194$) or anger ($p = .248$).
- (3) As we had also included a measure of own participation in collective actions against tuition fees at T1 we were able to examine the role of past participation as a predictor in our model. Past participation was positively correlated with collective action tendencies both at T1 ($r = .58, p < .001$) and T2 ($r = .44, p < .001$). A model where this variable was added as a correlate of T1 variables and as a predictor of anger, pride, and action tendencies at T2 fit the data well ($\chi^2(10) = 14.57, p = .148, \chi^2/df = 1.46, CFI = .99, RMSEA = .069, p\text{-close} = .303, SRMR = .05, AIC = 66.57$). The proposed relations between all variables in our model remained significant when controlling for own participation. Moreover, past participation significantly predicted anger ($\beta = .19, p = .042$) and was a marginally significant predictor of pride ($\beta = .19, p = .072$). It did not directly predict action tendencies at T2 ($\beta = .01, p = .899$), suggesting an indirect effect via achievement emotions (point estimate = .074, [.023; .154], $p = .015$).
- (4) Our theoretical model did not include baseline emotions because the variables of theoretical interest were emotions in relation to a specific event (the non-/attainment of a

goal) which occurred after the baseline data collection. Nonetheless, we had included a more general measure of anger about the introduction of tuition fees at T1, which allowed us to explore the role of baseline anger in our model. Anger about the introduction of tuition fees emerged as a significant predictor of both achievement emotions and was thereby indirectly (but not directly) related to action intentions at T2. Moreover, the proposed relations between variables in our model remained the same when anger was included, with the exception of the paths from identification to achievement emotions, which were reduced ($\beta = .18, p = .058$, for anger; $\beta = .17, p = .100$, for pride) and became non-significant. This suggests that anger about the general issue may be a more proximal, and identification a more distal, predictor of achievement emotions. Specific results of these additional analyses can be requested from the corresponding author.

Table 1

Means, standard deviations, and zero-order correlations among key variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Protest movement identification	3.75	1.70	-	.45***	.72***	.45***	.55***	.50***	.54***
2. Group efficacy (T1)	4.40	1.39		-	.44**	.32**	.48***	.51***	.44***
3. Action tendencies (T1)	4.38	1.70			-	.40***	.43***	.49***	.64**
4. Pride (about abolishment)	3.82	2.01				-	.55***	.43***	.47***
5. Anger (about complaint rejection)	4.50	1.85					-	.40***	.57***
6. Group efficacy (T2)	4.49	1.42						-	.57***
7. Action tendencies (T2)	3.78	1.78							-

Note. $N = 98$; *** $p < .001$; ** $p < .01$, * $p < .05$.

Figure Captions

Figure 1. The proposed structural model.

Figure 2. Structural model tested with Amos ($N = 98$). ; $\chi^2(9) = 14.09$, $p = .119$, $\chi^2/df = 1.57$, CFI = .98, RMSEA = .076 ($p\text{-close}=.252$), SRMR = .07. Path coefficients are standardized estimates, *** $p < .001$; ** $p < .01$.

Figure 1

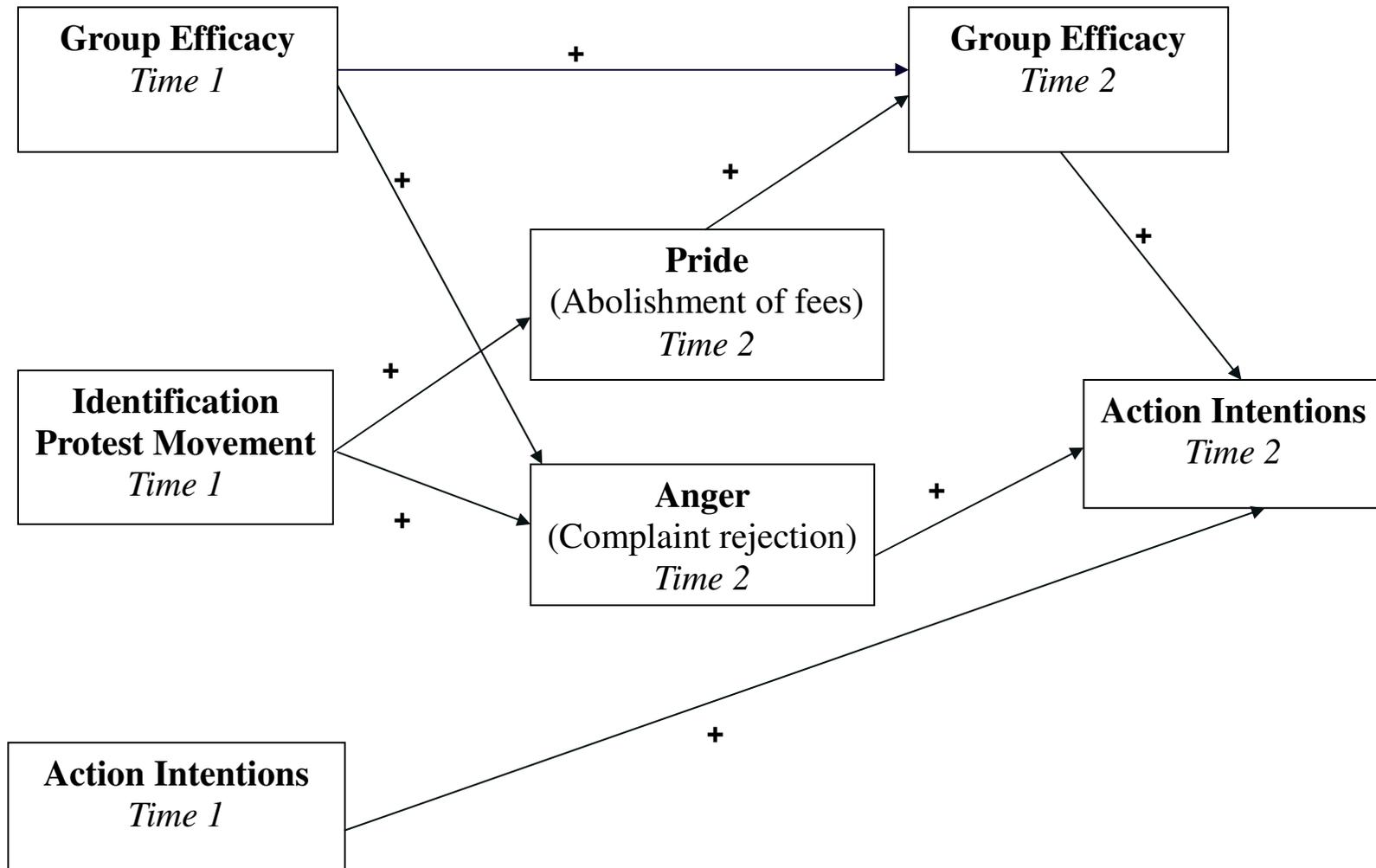


Figure 2

