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Believing in “making a difference” to collective efforts: Participative efficacy beliefs as a unique predictor of collective action

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Abstract

When rational actors believe that their group can achieve its goals through collective action (i.e., when they have strong group efficacy beliefs), they should not participate in it because they expect little benefit from their own participation. Paradoxically, however, research shows that individuals are more likely to participate when their group efficacy beliefs are stronger. In contrast to approaches that explain this paradox by invoking different psychological mechanisms (e.g., group identity, group-based anger), we provide a novel efficacy-based explanation by introducing the notion of *participative efficacy beliefs* (i.e., beliefs that one’s own actions will “make a difference” to collective efforts aimed at achieving group goals). Three correlational studies supported the construct and predictive validity of participative efficacy beliefs across different samples and contexts. We discuss the theoretical and practical implications of this notion for the psychology of collective action and social change.

Keywords

participative efficacy, group efficacy, individual efficacy, collective action, social change

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As exemplified by the 2011 Egyptian protests at Tahrir Square and elsewhere in the world, the exercise of collective agency through collective action can have enormous societal consequences (Bandura, 1997). Because collective agency is put into practice through individuals’ own participation in collective actions (e.g., demonstrations, strikes, riots; for reviews see Klandermans, 1997; van Zomeren, Postmes, & Spears, 2008), an important psychological question is what motivates them to engage in it. Instrumental explanations of collective action typically assume that

individuals’ motivation arises primarily from the expectancy that valued goals such as social change can be achieved through collective action

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(e.g., Klandermans, 1984; Olson, 1968; Simon et al., 1998). For this reason, individuals' efficacy beliefs about goal achievement through agentic action represent a powerful predictor of a wide range of human behavior (Bandura, 1997), including collective action (Klandermans, 1997; van Zomeren et al., 2008).

However, classic instrumental accounts of collective action such as Olson's (1968) suggest that rational actors generally prefer to free ride (see also Finkel, Muller, & Opp, 1989; Klandermans, 1984; Oliver, 1984; and specifically Bandura, 1997, p. 488), and this seems certainly likely in the case when they believe that the group will achieve group goals through collective action. Thus, when Olson's rational actors expect their group to achieve its goals with or without their own participation, they should remain inactive. This notion contradicts the well-established finding that group efficacy beliefs foster collective action participation (e.g., Mummendey, Kessler, Klink, & Mielke, 1999). We seek to explain this paradox by introducing the notion of *participative efficacy beliefs*. This notion refers to the belief that one can make a difference through one's own contribution to the collective efforts aimed at achieving group goals.

This notion explains the paradox because participative efficacy beliefs provide a critical link, or conceptual bridge, between beliefs in the group's achievement of group goals through collective action (i.e., *group* efficacy beliefs) and beliefs about the efficacy of one's own action to achieve them (i.e., *individual* efficacy beliefs). Although participative and group efficacy beliefs share a focus on the achievement of group goals through collective efforts, only participative efficacy beliefs explicitly include the belief in the incremental contribution of one's own action to the group efforts. As such, Olson's (1968) rational actors may free ride when they have strong group efficacy beliefs, but they can less easily do so when they have strong participative efficacy beliefs. This logic implies that although group efficacy is a well-accepted motivator of individuals' participation in collective action, participative efficacy may have additional and unique predictive power. We report three

empirical studies that test the construct and predictive validity of participative efficacy beliefs, and that reveal the undiscovered potential of this construct to predict individuals' willingness to engage in (violent as well as nonviolent) collective action (Studies 1 and 2), as well as their actual behavior (Study 3).

Group and Individual Efficacy Beliefs

Efficacy beliefs are crucial in human functioning in general, and in changing external circumstances in particular (Bandura, 1997). Rather than merely adapting to external circumstances, individual efficacy beliefs enable humans to change their circumstances through individual actions (e.g., by forethought and by mastering new skills; for reviews see Bandura, 1995, 1997). For instance, health behaviors such as quitting smoking are well predicted by the belief that individual efforts can contribute to changing one's personal outcomes (Witte & Allen, 2000). Moreover, individual efficacy beliefs predict individuals' academic achievement, performance in athletics, resilience to adversity, and the success of therapeutic means to reduce phobias (Bandura, 1977, 1997). Thus, it is clear that individuals' belief in the achievement of individual goals through their own actions is an important predictor of such action.

Similarly, group efficacy beliefs are important in motivating individuals to achieve group goals through collective action (Prussia & Kinicki, 1996). Indeed, the belief that one's group's actions can advance the achievement of group goals through collective action is a key predictor of individuals' support for, intentions to undertake, and actual participation in collective action (Corcoran, Pettinicchio, & Young, 2011; Hornsey et al., 2006; Mummendey et al., 1999; van Zomeren et al., 2008). The relevance of individual or group efficacy beliefs for predicting one's actions thus depends on whether one's actions are undertaken as an individual (to achieve individual goals) or on behalf of the group (to achieve group goals). It follows that group, but

not necessarily individual, efficacy beliefs should typically be a good predictor of collective action.

However, a sole focus on group efficacy beliefs in predicting collective action does not explain why Olson's rational actors would not free ride when they expect their group to achieve group goals with or without their own participation in collective action. After all, in many cases of collective action, individuals' own participation will not have much objective incremental value. For example, one's participation in a mass demonstration is unlikely to matter when thousands of people will attend. One's vote in a national election is similarly unlikely to have significant objective incremental value. Why, then, would individuals nevertheless decide to participate in collective action? We believe the paradox can be explained through considering the notion of participative efficacy beliefs.

Participative Efficacy Beliefs

Previous work on collective action explained the paradox mainly by shifting its analysis to nonefficacy predictors. The assumption in this work is that individuals do not always consider their efficacy beliefs when deciding to join collective action, for instance if they are highly identified with the group and/or experience emotions like anger on behalf of it (Kelly & Breinlinger, 1995; Simon et al., 1998; van Zomeren, Leach, & Spears, 2012). Notwithstanding the powerful motivations that group identity and group-based anger provide (e.g., Drury & Reicher, 2009; Miller, Cronin, Garcia, & Branscombe, 2009; Veenstra & Haslam, 2000), it is doubtful that individuals stop considering their efficacy beliefs in collective action contexts given the importance of efficacy beliefs for human functioning in general (Bandura, 1997; Louis, Taylor, & Neil, 2004; Mazzoni, van Zomeren, & Cicognani, 2012). Therefore, there is no a priori reason to explain the paradox outside of the efficacy domain.

We propose that the paradox is explained by considering the notion of participative efficacy beliefs as a type of efficacy that includes the

belief in achieving group goals through collective action *as well as* the belief that one's own contribution to it makes a difference to these collective efforts. We have borrowed the term from Azzi (1998; for a brief discussion see Smith & Kessler, 2004) who discussed the notion of participative self-efficacy, defined as the belief "that the individual's participation is seen as having a potential incremental effect on collective action" (1995, p. 104). However, theory and research on collective action have not picked up on this idea. In fact, we are not aware of any research on the notion of participative efficacy that systematically tests its predictive power vis-à-vis group and individual efficacy.

This is unfortunate because the notion of participative efficacy beliefs brings quite an opposite "logic" of collective action to the table than the one described in Olson's (1968) *The Logic of Collective Action*. Specifically, Olson's rational actors prefer to free ride because they assume that their own action will *not* make a difference, whereas individuals with strong participative efficacy beliefs are motivated to undertake collective action precisely because they believe that their action *will* make a difference. Therefore these beliefs should uniquely predict collective action. Note that both logics are equally rational because individuals still make calculations based on their expectancies (Bandura, 1997)—they just make a different decision depending on whether they believe that their own action will make a difference (i.e., participate or free ride). Participative efficacy beliefs may thus determine whether even Olson's rational actors do not free ride.

We now turn to three empirical studies designed to test the construct and predictive validity of participative efficacy beliefs across different collective action contexts and populations. We predicted that the three types of efficacy can be empirically differentiated, that group rather than individual efficacy beliefs are typically predictive of collective action, and that participative efficacy beliefs play a unique role in motivating individuals to engage in collective action.

Study 1

The main goal of Study 1 was to assess the construct and predictive validity of participative efficacy beliefs with respect to explaining willingness to participate in collective action. The study took place in uncertain political times in the Netherlands as data were collected after the fall of the Dutch government in early 2010 and before the formation of a new government later that year. In this interregnum, the Dutch media reported on future plans for mass financial cuts including cuts to higher education (later on, in January 2011, there was to be a large demonstration against these plans). Thus, the pretext for this study was to ask students' opinion about these potential cuts.

Method

One hundred and eighteen students (89 women, 29 men; M age 20.34 years, SD 2.93) from the University of Groningen participated in an online survey about "student issues." On the first screen participants read the following:

In this survey we are interested in your opinion about the possible plans for higher education that a new government might decide on. We are interested in particular in your view on the plans to turn students' study allowance from a gift into a loan, and to raise annual tuition fees with approximately 200 Euros. Both plans are part of the so-called Explorations by the Ministries about how financial cuts by the new government can come to total 18 billion Euros. The new government will decide how to divide the pain of financial cuts partially on the basis of these explorations. We therefore would like to ask for your view on these plans.

Participants then filled out the questionnaire. All items employed 7-point response scales (1 = *not at all*, 7 = *very much*). For *group efficacy beliefs*, we used a 4-item scale (adapted from van Zomeren, Leach, & Spears, 2010). These four items fit the

definition of group efficacy as beliefs that the group can achieve group goals through joint effort, and all refer to the group or category of "students" ($\alpha = .96$). We used the group efficacy items as a template for the novel measure of participative efficacy. These items fit the definition of participative efficacy as beliefs that individuals can make a significant individual contribution to the joint effort aimed at achieving group goals ($\alpha = .94$). The four items tapping into individual efficacy also used the group efficacy items as a template and fit the definition of individual efficacy as beliefs that individuals can achieve individual goals through individual effort ($\alpha = .91$).

With an eye to predictive validity, we included a 4-item measure of collective action assessing individuals' willingness to engage in actions such as signing a petition and participating in a demonstration organized specifically by the student union ($\alpha = .94$). To demonstrate the unique predictive validity of participative efficacy, we also included a 3-item measure of group identification (e.g., "Being a student is an important part of my identity"; $\alpha = .86$) and a 4-item measure of group-based anger (e.g., "As a student, I am angry about these plans for financial cuts to higher education"; $\alpha = .90$). The descriptive statistics can be found in Table 1.

Results and Discussion

Construct validity. We first performed a confirmatory factor analysis (CFA) on the 12 items with the three latent factors representing group efficacy, participative efficacy, and individual efficacy (see Figure 1). 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 with the other latent factors. The hypothesized model provided a satisfactory fit to the data. Excellent fit is indicated when the χ^2 / degrees-of-freedom (df) ratio is below 2, whereas good fit is indicated when this ratio is between 2 and 3. In the current case the value of χ^2 was 102.15, with 51 degrees of freedom. The ratio is thus 2.00, which indicates very

Table 1. Descriptive statistics, Study 1.

	2	3	4	5	6
1. <i>Group efficacy</i> <i>M</i> = 4.59, <i>SD</i> = 1.31	.43*	.26*	.47*	.32*	.36*
2. <i>Participative efficacy</i> <i>M</i> = 3.64, <i>SD</i> = 1.36		.52*	.37*	.27*	.23*
3. <i>Individual efficacy</i> <i>M</i> = 2.54, <i>SD</i> = 1.24			.18†	.12	.15
4. <i>Collective action tendencies</i> <i>M</i> = 4.53, <i>SD</i> = 1.38				.26*	.45*
5. <i>Group identification</i> <i>M</i> = 4.64, <i>SD</i> = 1.08					.44*
6. <i>Group-based anger</i> <i>M</i> = 4.64, <i>SD</i> = 1.16					

Note. * $p < .05$; † $p < .06$.

good fit. Inspection of the relevant central and residual fit indices corroborated this conclusion (CFI = .96, SRMR = .05) and the parameter estimates showed that all items loaded highly on their designated latent factor (with all factor loadings > .74). Group efficacy correlated only .29 with individual efficacy, participative efficacy correlated .55 with individual and .45 with group efficacy. Thus, the three types of efficacy can be empirically differentiated and they correlate positively with each other.

By contrast, a one-factor model that hypothesized all 12 items to fit one efficacy factor proved a poor fit to the data ($\chi^2 / df = 793.12 / 54 = 14.69$; CFI = .47; SRMR = .21). Furthermore, a two-factor model with group and participative efficacy as one factor and individual efficacy as the second proved a poor fit too ($\chi^2 / df = 489.36 / 53 = 9.23$; CFI = .69; SRMR = .22). Similarly, a two-factor model with group and individual efficacy as one factor and participative efficacy as the second also proved a poor fit ($\chi^2 / df = 442.40 / 53 = 8.35$; CFI = .72; SRMR = .23). All these results support the construct validity of the three types of efficacy.

Predictive validity. A regression analysis that included group, participative, and individual efficacy as predictors of collective action tendencies showed that the regression model was significant, $F = 13.16$, $p < .01$, with an adjusted explained

variance of 24%. In line with both hypotheses, the results showed that participative efficacy ($\beta = .22$, $p < .03$) and group efficacy ($\beta = .38$, $p < .01$) uniquely predicted collective action tendencies, but individual efficacy did not ($\beta = -.04$, $p > .70$). Entering group identification and group-based anger into the equation significantly increased the variance explained, $R^2_{\text{change}} = .08$, $p < .01$. Importantly, participative efficacy ($\beta = .21$, $p < .04$) and group efficacy ($\beta = .29$, $p < .01$) uniquely predicted collective action tendencies independent of group-based anger ($\beta = .32$, $p < .01$) and of group identification ($\beta = .03$, $p > .76$). All these results support the predictive validity of the notion of participative efficacy.

Study 2 aimed to strengthen the external validity of the findings from Study 1 in two different ways. First, we wanted to replicate support for the construct and predictive validity of participative efficacy in a different collective action context and population. We took advantage of recent protests of middle-class citizens in Israel against the high costs of living that represents a context of mobilization and a population with different demographics. This context also enabled a second way of extending the findings, namely to other, more violent forms of collective protest. Indeed, the Israeli protesters were, at the time of data collection, at the stage of contemplating nonviolent as well as violent forms of action. We wanted to explore this issue because recent

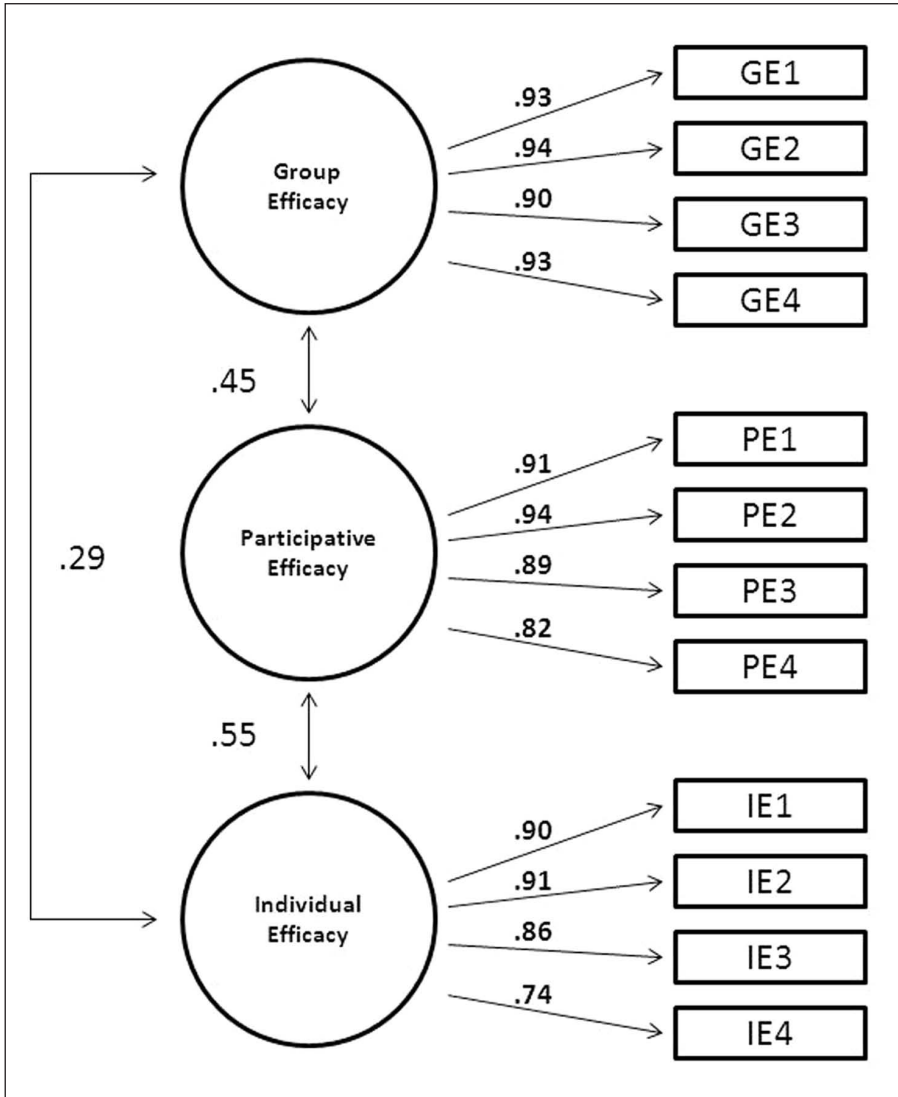


Figure 1. CFA, Study 1.

findings suggest that a *lack* of group efficacy increases interest in violent action (Tausch et al., 2011), arguably because individuals feel they have “nothing to lose.” This *negative* relationship between group efficacy and violent collective action tendencies can be contrasted to the predicted *positive* relationship between participative efficacy and violent collective action tendencies (although both explanations are not mutually exclusive). Indeed, a stronger belief in “making a

difference,” or contributing to collective efforts, even when they are violent, may promote individuals’ willingness to participate in them.

Study 2

In July 2011, dozens of tents were set up in central Tel Aviv to protest unreasonably high real estate prices, being unregulated by the government. Data for Study 2 were collected among

tent inhabitants and their supporters, at that initial phase of the protest when mobilization was ongoing although it still was unclear whether the protest would continue and expand, and in what form (later on, the movement expanded and turned out to be one of the largest protest movements of the middle class in Israel; Strenger, 2011).

Method

One hundred and eighty one Israeli tent inhabitants or their supporters (69 women, 97 men, one unrecorded; *M* age 28.13 years, *SD* 7.07) participated voluntarily. As in Study 1, all items employed 7-point response scales (1 = *not at all*, 7 = *very much*). We used briefer 2-item measures of the three types of efficacy in this study (the items in the Appendix marked by an asterisk identify these items). For *group efficacy beliefs*, these two items were highly correlated ($r = .79$, $p < .001$). We also used two items tapping into participative efficacy ($r = .68$, $p < .001$). The two items tapping into individual efficacy were also highly correlated ($r = .70$, $p < .001$). To test the construct validity of participative efficacy in particular, we also included an item that stated: "I am motivated to make a difference, even if it turns out to be small." This item should be

uniquely and strongly predicted by participative efficacy beliefs.

To examine the predictive power of the different types of efficacy with respect to different forms of action, we included items assessing individuals' willingness to participate in nonviolent forms of action such as those measured in Study 1 (e.g., signing a petition; 4 items, $\alpha = .62$) and also items tapping willingness to participate in violent forms of action (i.e., destroy public buildings, throw bottles, burn tires; $\alpha = .91$). As in Study 1, we further included a 3-item measure of group identification (e.g., "I identify with the group of protesters"; $\alpha = .77$), and a 3-item measure of group-based anger ("I feel angry because of the increased housing prices"; $\alpha = .93$). The descriptive statistics can be found in Table 2.

Results and Discussion

Construct validity. We performed a CFA on the 6 items with the three latent factors representing group efficacy, participative efficacy, and individual efficacy (see Figure 2). 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 with the other latent factors. The hypothesized model provided a satisfactory fit to the data ($\chi^2(6) = 3.39$; the ratio

Table 2. Descriptive statistics, Study 2.

	2.	3.	4.	5.	6.	7.
1. <i>Group efficacy</i> <i>M</i> = 5.53, <i>SD</i> = 1.52	.59*	.37*	.34*	-.08	.33*	.18*
2. <i>Participative efficacy</i> <i>M</i> = 4.68, <i>SD</i> = 1.57		.52*	.46*	.14†	.50*	.19*
3. <i>Individual efficacy</i> <i>M</i> = 3.00, <i>SD</i> = 1.86			.21*	.14†	.24*	.01
4. <i>Collective action tendencies (nonviolent)</i> <i>M</i> = 5.41, <i>SD</i> = 1.23				.27*	.48*	.39*
5. <i>Collective action tendencies (violent)</i> <i>M</i> = 2.29, <i>SD</i> = 2.00					.07	.13
6. <i>Group identification</i> <i>M</i> = 5.70, <i>SD</i> = 1.19						.39*
7. <i>Group-based anger</i> <i>M</i> = 6.06, <i>SD</i> = 1.37						

Note. * $p < .05$; † $p < .08$.

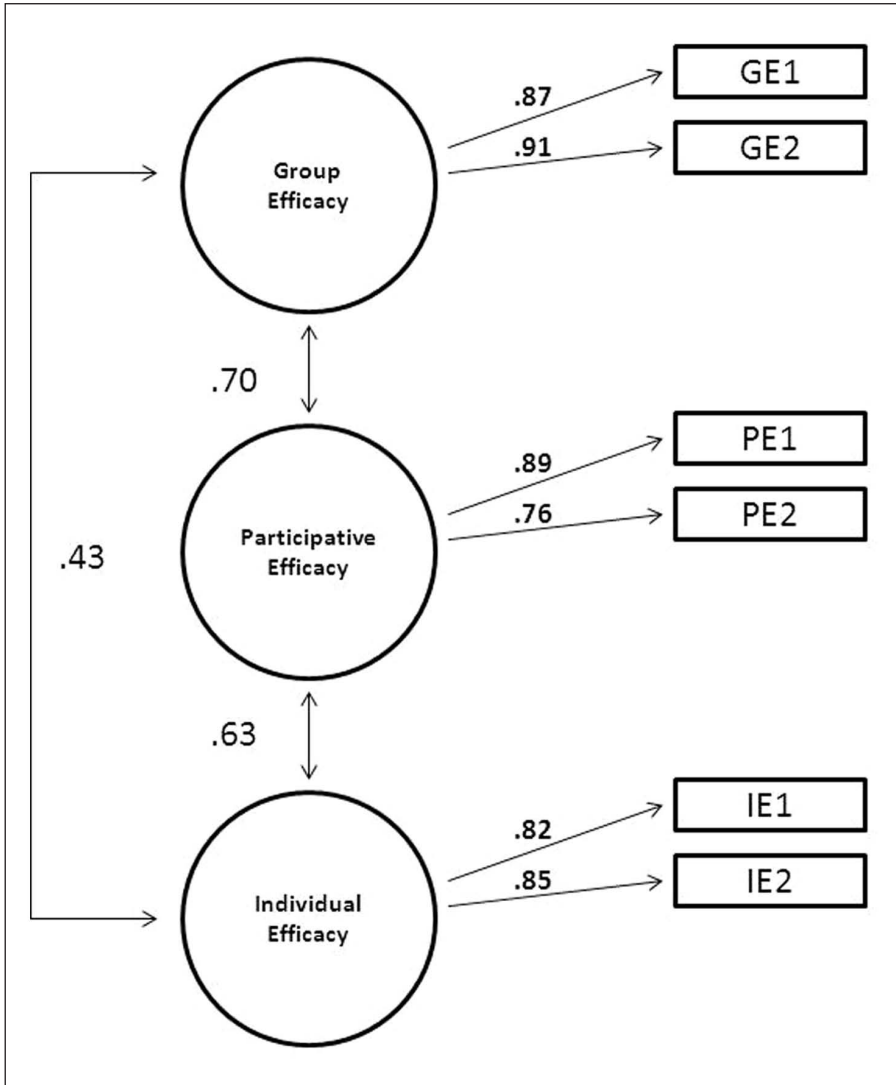


Figure 2. CFA, Study 2.

being 0.57; CFI = 1.00, SRMR = .00). All items loaded highly on their designated factor (all factor loadings > .76). Group efficacy correlated .43 with individual efficacy, participative efficacy correlated .63 with individual efficacy and .70 with group efficacy.

Despite the latter fairly strong correlations, a one-factor model that hypothesized all 6 items to fit one general efficacy factor proved a poor fit to the data ($\chi^2 / df = 151.35 / 9 = 16.82$; CFI = .73;

SRMR = .11). Furthermore, a two-factor model with group and participative efficacy as one factor and individual efficacy as the second proved a poor fit too ($\chi^2 / df = 76.07 / 8 = 9.51$; CFI = .87; SRMR = .09), and so did a two-factor model with group and individual efficacy as one factor and participative efficacy as the second factor ($\chi^2 / df = 118.04 / 8 = 14.76$; CFI = .79; SRMR = .13). These results replicate support for the construct validity of the three types of efficacy.

Specific evidence for the construct validity of participative efficacy beliefs came from regressing the “making a difference” item onto the three different measures of efficacy. As predicted, participative efficacy strongly predicted this item ($\beta = .53, p < .01$), whereas group and individual efficacy did not ($\beta = .10, p > .19$ and $\beta = -.05, p > .51$, respectively).

Predictive validity. Study 2 further enabled a test of the predictive validity of participative efficacy, this time considering both nonviolent and violent action tendencies. First, a multivariate regression analysis that included group, participative, and individual efficacy as predictors of nonviolent collective action tendencies showed that the regression model was significant, $F = 16.07, p < .01$, with an adjusted explained variance of 21%. As predicted, the results showed that participative efficacy ($\beta = .43, p < .01$) predicted collective action tendencies. Group efficacy did not significantly predict collective action tendencies ($\beta = .11, p > .20$), although as expected individual efficacy did not predict them either ($\beta = -.06, p > .47$). Entering group identification and group-based anger into the equation significantly increased the variance explained, $R^2_{\text{change}} = .12, p < .01$: Importantly, participative efficacy remained a significant predictor of collective action tendencies ($\beta = .27, p < .01$) independent of group-based anger ($\beta = .23, p < .01$) and group identification ($\beta = .23, p < .01$).

Study 2 also enabled a test of the hypothesis advanced by Tausch et al. (2011) that group efficacy beliefs might predict violent collective action tendencies *negatively*, which sharply contrasts with our prediction that participative efficacy should predict them *positively* (although these explanations are of course not mutually exclusive). A multivariate regression analysis that included group, participative, and individual efficacy as predictors of violent collective action tendencies showed that the regression model was significant, $F = 3.90, p < .01$, with an adjusted explained variance of 5%. In line with our ideas, participative efficacy significantly predicted collective action tendencies *positively* ($\beta = .22, p < .04$). Replicating

Tausch et al.’s findings (2011), group efficacy predicted collective action tendencies *negatively* ($\beta = -.25, p < .01$). Individual efficacy was not a significant predictor ($\beta = .13, p > .16$). Entering group identification and group-based anger into the equation did not significantly increase the variance explained, $R^2_{\text{change}} = .02, p > .15$. Thus, Study 2 replicated Tausch et al.’s findings (2011) and showed the unique power of participative efficacy to motivate individuals even for violent collective action. In fact, the opposite effects of group and participative efficacy on violent collective action tendencies strongly corroborate their construct validity (more specifically their discriminant validity).

Thus, Study 2 replicated support for the construct validity of the three types of efficacy in a different context and population, and extended its predictive validity to include also individuals’ willingness to undertake violent collective action. However, a limitation of both Study 1 and 2 is that we did not include a behavioral measure of collective action. Study 3 therefore included such a measure.

Study 3

Following up Study 1 in time, Study 3 took place some months after a new government took office in the Netherlands and executed most of the earlier plans for mass financial cuts including cuts on higher education. In order to obtain yet another different sample compared to Study 1 and 2, we focused in Study 3 on *foreign* students in the Netherlands. More specifically, we focused on the group that represents the vast majority of foreign students at the University of Groningen (where the study was conducted): German students. The pretext for this study was to ask German students’ opinion about the financial cuts, which also enabled us to provide them with the opportunity to sign a petition.

Method

One hundred and eighteen German students (74 women, 43 men, 1 unknown; M age 21.53 years, SD 1.39) participated in a survey about “student

issues.” The survey, allegedly organized by a new German student union, first provided information about the collective disadvantage that the financial cuts would introduce for German students in the Netherlands¹. Participants then responded to the survey items. For *group efficacy beliefs*, we used the 4-item scale used in Study 1, adapted to the relevant group (e.g., “I believe that German students, through joint actions, can stop the financial cuts to higher education”; $\alpha = .97$). We used similarly adapted 4-item scales from Study 1 for participative efficacy ($\alpha = .95$) and for individual efficacy ($\alpha = .92$). To further corroborate the construct validity of participative efficacy in particular, we also included an item that stated: “I am motivated to make a difference in this situation.”

As in previous studies, we also included a measure of collective action assessing individuals’ willingness to engage in actions such as signing a petition and participating in a demonstration organized specifically by the German student union (7 items; $\alpha = .92$). To demonstrate the unique predictive validity of group and participative efficacy, we also included a 4-item measure of group identification (e.g., “Being a German student is an important part of my identity”; $\alpha = .90$) and a 4-item measure of group-based anger (e.g., “As a German student, I am angry about

these plans for financial cuts on higher education”; $\alpha = .88$). Finally, participants were offered the opportunity to sign a petition opposing the government plans. The descriptive statistics can be found in Table 3.

Results and Discussion

Construct validity. We first performed a CFA on the 12 items with the three latent factors representing group efficacy, participative efficacy, and individual efficacy (Figure 3). 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 with the other latent factors. The hypothesized model provided a satisfactory fit to the data ($\chi^2(51) = 86.69$; the ratio is thus 1.70; CFI = .98, SRMR = .04). All items loaded highly on their designated latent factor (with all factor loadings > .74). Group efficacy correlated only .35 with individual efficacy, participative efficacy correlated .34 with individual and .69 with group efficacy.

By contrast, a one-factor model that hypothesized all 12 items to fit one efficacy factor proved a poor fit to the data ($\chi^2 / df = 714.17 / 54 = 13.23$; CFI = .58; SRMR = .20). Furthermore, a two-factor model with group and participative efficacy as one factor and individual efficacy as

Table 3. Descriptive statistics, Study 3.

	2.	3.	4.	5.	6.	7.
1. <i>Group efficacy</i> <i>M</i> = 4.43, <i>SD</i> = 1.46	.67*	.35*	.46*	.17†	.40*	.10
2. <i>Participative efficacy</i> <i>M</i> = 4.09, <i>SD</i> = 1.61		.33*	.49*	.20*	.37*	.29*
3. <i>Individual efficacy</i> <i>M</i> = 1.99, <i>SD</i> = 1.13			.12	-.02	.15	.06
4. <i>Collective action tendencies</i> <i>M</i> = 4.54, <i>SD</i> = 1.32				.25*	.61*	.42*
5. <i>Group identification</i> <i>M</i> = 5.31, <i>SD</i> = 1.19					.22*	.15
6. <i>Group-based anger</i> <i>M</i> = 5.33, <i>SD</i> = 1.40						.20*
7. <i>Signing the petition (yes = 1, no = 0)</i> <i>M</i> = 0.73, <i>SD</i> = 0.45						

Note. * $p < .05$; † $p < .06$.

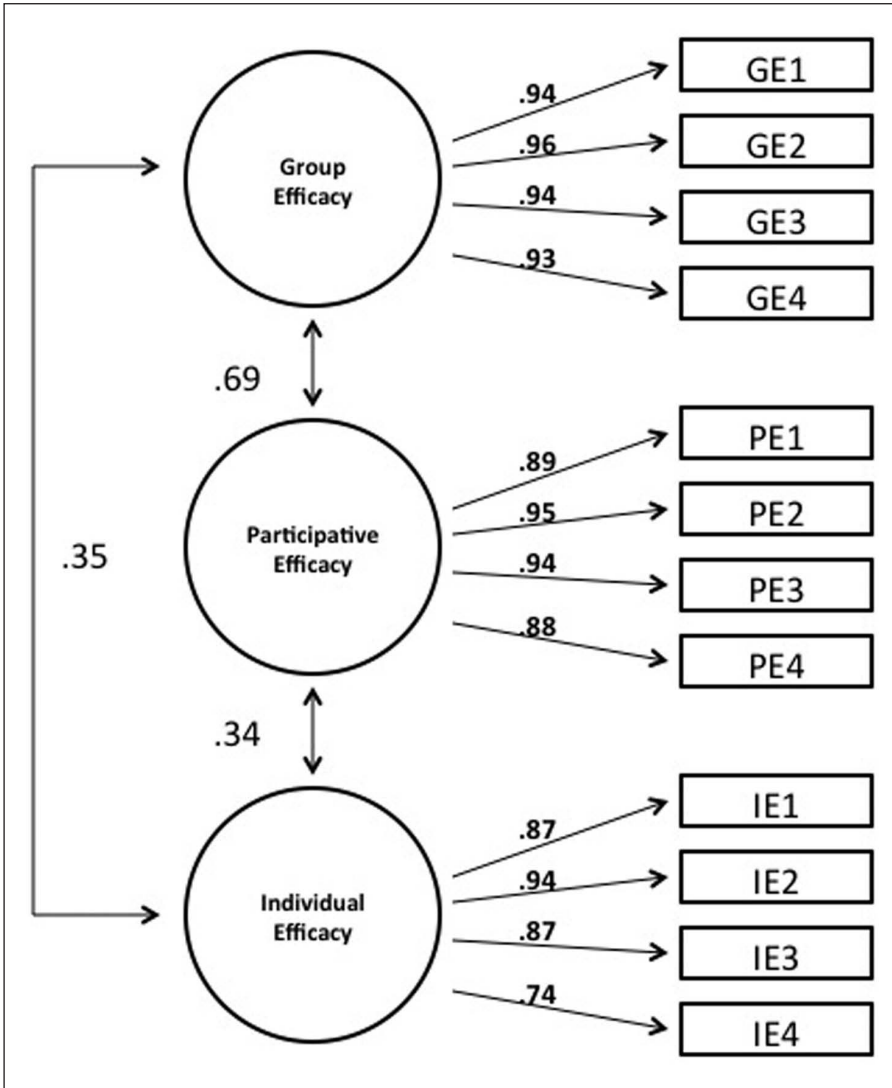


Figure 3. CFA, Study 3.

the second proved a poor fit too ($\chi^2 / df = 402.06 / 53 = 7.59$; CFI = .78; SRMR = .11). Similarly, a two-factor model with group and individual efficacy as one factor and participative efficacy as the second also proved a poor fit ($\chi^2 / df = 403.18 / 53 = 7.61$; CFI = .78; SRMR = .18). All these results show support for the construct validity of the three types of efficacy.

Evidence for the construct validity of participative efficacy in particular came from analyzing

the item “I am motivated to make a difference in this situation.” As intended, scores on this item were predicted by participative efficacy ($\beta = .36, p < .01$), but not by group efficacy ($\beta = .16, p > .15$) and individual efficacy ($\beta = .05, p > .58$).

Predictive Validity. Study 3 replicated the Study 1 results concerning collective action tendencies. A regression analysis that included group, participative, and individual efficacy as predictors of

collective action tendencies showed that the regression model was significant, $F = 10.00, p < .01$, with an adjusted explained variance of 32%. In line with our hypothesis, the results showed that participative efficacy ($\beta = .27, p < .02$) and group efficacy ($\beta = .31, p < .01$) uniquely predicted collective action tendencies, whereas individual efficacy did not ($\beta = -.07, p > .42$). Entering group identification and group-based anger into the equation significantly increased the variance explained, $R^2_{\text{change}} = .22, p < .01$. Group-based anger strongly predicted collective action tendencies ($\beta = .50, p < .01$), whereas group identification did not ($\beta = .06, p > .39$). When including these additional predictors, participative efficacy ($\beta = .17, p = .05$) and group efficacy (though marginally; $\beta = .17, p < .07$) still uniquely predicted collective action tendencies, whereas individual efficacy did not ($\beta = -.06, p > .37$).

In addition, Study 3 enabled a test of the predictive validity of participative efficacy with respect to actual behavior. A regression analysis that included group, participative, and individual efficacy as predictors of signing the petition (yes or no) collective action showed that the regression model was significant, $F = 3.41, p < .01$, with an adjusted explained variance of 11%. In line with our hypothesis, the results showed that participative efficacy ($\beta = .37, p < .01$) uniquely predicted signing the petition, whereas group efficacy ($\beta = -.14, p > .26$) and individual efficacy did not ($\beta = -.02, p > .83$)². Entering group identification and group-based anger into the equation did not significantly increase the variance explained, $R^2_{\text{change}} = .02, p > .21$. Thus, Study 3 obtained support for the predictive validity of participative efficacy beliefs with respect to actual behavior.

General Discussion

Three empirical studies showed support for the construct and predictive validity of participative efficacy beliefs across different collective action contexts and populations. As such, these studies show that participative efficacy is a distinct type of efficacy that represents a unique predictor of collective action. The reason for this is that

participative efficacy, unlike individual and group efficacy, uniquely captures the belief that one's own contribution makes a difference to these collective efforts. As such it represents a critical link, or conceptual bridge, between individual and group efficacy beliefs. We discuss implications of the notion of participative efficacy in what follows.

Implications

Our findings suggest that the collective action literature may have been too quick in trying to solve the paradox of collective action by resorting to nonefficacy explanations. As such, it missed out on the notion of participative efficacy beliefs as a conceptual bridge between individual and group efficacy beliefs (Azzi, 1995; Smith & Kessler, 2004). Indeed, this notion brings an opposite logic of collective action to the table than Olson's (1968). Whereas his free-rider logic seems more geared toward explaining inaction (i.e., free-riding), the participative efficacy logic is more geared towards explaining participation in collective action. This is because the notion explicitly acknowledges the importance of individual's own action as contributing to collective efforts to achieve group goals. Both logics are equally rational, however, because they are based in the same underlying efficacy mechanism. As Bandura (1997) succinctly put it, "Beliefs that one can help to ameliorate adverse conditions provide *additional* [emphasis added] self-interested reasons to participate in collective action" (p. 488).

In this sense, the notion of participative efficacy may relate to the phenomenon that individuals sometimes reason that "if you don't do it, nobody else will!" (e.g., Oliver, 1984). Indeed, at times individuals may not require the instrumental support of others as long as they believe that their own contribution to the group's efforts to achieve group goals matters. In line with this suggestion, Study 2 found straightforward evidence that participative efficacy uniquely and strongly predicted the item "I am motivated to make a difference, even if it turns out to be small." Future research should therefore

examine the relationship between participative efficacy beliefs and reasoning such as “if you don’t do it, nobody else will!”

This point resonates with the importance of relating participative efficacy beliefs to other important predictors of collective action such as group identification and group-based anger. Although the current results showed that participative efficacy predicted collective action tendencies and actual behavior independent of these variables, at the same time it is true that, across the board, participative efficacy correlated modestly and positively with them (whereas individual efficacy, for instance, did not). This suggests a potential for theoretical integration. In fact, the next task at hand is to integrate the notion of participative efficacy with existing models of collective action, many of which offer a central position to group identification (Drury & Reicher, 2009; Klandermans, 1997; Simon et al., 1998; van Zomeren et al., 2008). Future research can explore at least two potential explanations of this positive relationship.

First, a sense of group identification may be necessary for individuals to consider group goals and the efficacy of achieving them through collective action (Mummendey et al., 1999). Because higher identifiers with the group view the collective action context more likely in terms of group goals than lower identifiers with the group, the former should be more concerned with group and thus also with participative efficacy than the latter (for whom individual efficacy should be more important). However, a second explanation is that higher identifiers with the group may be more concerned with the significance of their own contribution to the group efforts to achieve group goals because they already consider themselves a likely participant. By contrast, lower identifiers may not share this view of themselves as a likely participant and thus may be more concerned with the efficacy of the group before they consider the efficacy of their own participation (cf. Olson’s [1968] free-rider logic). One could therefore predict that lower identifiers with the group typically rely on their group efficacy beliefs when deciding on their participation in collective action (e.g., Kelly & Breinlinger, 1995), whereas

higher identifiers with the group rely more on their participative efficacy beliefs.³ If true, participative efficacy beliefs may be more strongly based in group identity than group efficacy beliefs. Future research should test this possibility.

Although less central to our general argument, Study 2 contained a fascinating finding that requires some discussion. We found there that participative efficacy *positively* predicted violent collective action tendencies while group efficacy *negatively* predicted them. These results do not only corroborate the predictive validity of participative efficacy, but also evince its discriminant validity by showing that the two types of efficacy can work in opposition. This raises the theoretical issue why this should be the case. Tausch et al. (2011) explained the negative relationship between group efficacy and violent action by referring to a “nothing to lose” function of violent action. Our analysis and results suggest that, independent of finding support for this hypothesis⁴, we found support for our prediction that participative efficacy beliefs motivated violent collective action tendencies. Thus, individuals do not necessarily have to view their situation as one in which they have “nothing to lose” before violent collective action becomes appealing to them—independent of this possibility, they can view their personal contribution to violent collective efforts to achieve group goals as “making a difference.”⁵

The current results also may have implications for the practice of collective action. Instrumental approaches to collective action have typically provided recommendations that stress the importance of raising individuals’ expectancies about the achievement of group goals through collective action (e.g., “yes we can!”). The current work suggests a key role of participative efficacy beliefs in the psychology of mobilizing individuals for collective action. Practitioners of collective action should make clear in their mobilization campaigns that individuals should not only believe that the group will achieve its goal, but that individuals’ own contributions are key to, and valued aspects of, the success of these collective efforts. Indeed, our findings suggest that “yes we can... because your contribution makes a difference!”

would perhaps be an even more effective (though admittedly less catchy) slogan.

Limitations

The three empirical studies were designed to test the construct and predictive validity of participative efficacy beliefs in the context of collective action, employing samples from different countries and with different demographics, using contexts of mobilization and nonmobilization, and including measures of (nonviolent and violent) collective action tendencies as well as actual behavior. The external validity of our results thus seems good. Although a critic might point out that none of the current studies employed experimental methods that enable the inference of causality from correlational data, we would point out that theory and research on (group) efficacy and (collective) action is typically supportive of the assumed causal direction (i.e., from efficacy to intentions and actual behavior; see Bandura, 1997; van Zomeren et al., 2012). It is up to future research to experimentally manipulate participative efficacy beliefs in order to test the internal validity of our findings.

Another limitation is that all our studies focused on issues of material interest (e.g., increased living costs, increased cuts on higher education). Future research can test the application of the notion of participative efficacy in other collective action contexts (e.g., collective action on the basis of moral issues). Nevertheless, we believe that this notion should apply to any action aimed at achieving group goals, and therefore should be applicable to the psychology of collective action more generally (including environmental action and political participation; Klandermans, van der Toorn, & van Stekelenburg, 2008; Thomas & McGarty, 2009). Indeed, participative efficacy beliefs may be important to consider in any social dilemma where individual contributions to a joint enterprise are considered to have little objective incremental value (e.g., voting in a national election).

At a more general level, the efficacy “triad” we tested may have an even broader range of application. Aside from predicting individuals’ participation in *collective* action to achieve group goals, the efficacy triad can potentially be applied

to predicting *individual* action that aims to achieve individual change (e.g., health behavior; Witte & Allen, 2000). Individual efficacy should typically be more relevant than group efficacy in this domain, but participative efficacy can also be important when individual action can contribute to something larger (e.g., a higher order goal, or a “next step” on the road to individual change). Although these beliefs might not reflect individuals’ expected contribution to group efforts, they may reflect the contribution of one behavior (i.e., quit smoking, start working out) to a pattern of behavior that achieves a change toward a healthier lifestyle. Thus, our analysis of participative efficacy may apply not only to the psychology of collective action but also to the psychology of individual action (e.g., Witte & Allen, 2000). We thus believe that the construct of participative efficacy beliefs does not only have construct and predictive validity in the context of explaining collective action. We hope that future theory and research will broaden the scope of the notion of participative efficacy beliefs.

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Notes

1. Participants were randomly assigned to one of four experimental conditions that, however, were unsuccessful in manipulating the intended variables (being a promotion vs. a prevention regulatory-focus manipulation crossed with a gain or loss framing of the disadvantage). To ensure the quality of the data we decided to (1) use the data only of those who responded correctly to the manipulation checks (118 out of 145 participants), and (2) control statistically for the main and interactive effects of the manipulations in the regression analyses. The exact text for each condition is available from the first or the third author.
2. The results of a logistic regression analysis confirmed those of the standard regression analysis.

Participative efficacy uniquely predicted signing the petition ($B = .63, SE = .21, p < .01$), whereas group efficacy ($B = -.24, SE = .21, p > .25$) and individual efficacy ($B = -.05, SE = .25, p > .84$) did not.

3. The relative importance of participative versus group efficacy may also depend on the phase of action mobilization (e.g., Klandermans, 1997). We would speculate that group efficacy beliefs are more important especially in *earlier* phases of action mobilization (e.g., in the first steps of Klandermans' model where individuals are not yet committed to a social movement), whereas participative efficacy beliefs are more important in later phases of action mobilization (e.g., in the last steps of Klandermans' model where individuals are committed to the movement). Arguably, in the first steps individuals are more concerned with the efficacy of the group effort, whereas in later steps the importance of one's own contribution to it becomes more important. Future research can examine this issue.
4. We agree with Finkel et al. (1989) who argued that individuals prefer the means of action that they believe to be most efficacious. Thus, in our view willingness to engage in violent action should be positively related to group efficacy beliefs specifically *about violent action* as means to achieve group goals (van Zomeren et al., 2012). Neither the Tausch et al. (2011) nor the current studies, however, employed such specific measures.
5. We assume that violent actions can sometimes be viewed as legitimate means toward achieving group ends. We believe this was the case in Study 2. In fact, we would not predict participative efficacy to positively predict violent collective action tendencies if individuals did not view these actions as legitimate means toward group ends.

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Appendix

Group Efficacy Beliefs

1. I believe that (students), as a group, can (stop the financial cuts to higher education).
2. I believe that (students), together, can (stop the financial cuts to higher education).*
3. I believe that (students), through joint actions, can (stop the financial cuts to higher education).*
4. I believe that (students) can achieve their common goal of (stopping the financial cuts to higher education).

Participative Efficacy Beliefs

1. I believe that I, as an individual, can contribute greatly so that (students), as a group, can (stop the financial cuts to higher education).
2. I believe that I, as an individual, can provide an important contribution so that (students), together, can (stop the financial cuts to higher education).*
3. I believe that I, as an individual, can provide a significant contribution so that, through joint actions, (students) can (stop the financial cuts to higher education).*

4. I believe that I, as an individual, can contribute meaningfully so that (students) can achieve their common goal of (stopping the financial cuts to higher education).

Individual Efficacy Beliefs

1. I believe that I, as an individual, can (stop the financial cuts to higher education).*
2. I believe that I can (stop the financial cuts to higher education).
3. I believe that I, through individual actions, can (stop the financial cuts to higher education).*

4. I believe that I can achieve my personal goal of (stopping the financial cuts to higher education).

Note 1: Items marked with an asterisk (*) are included in the 2-item measures used in Study 2.

Note 2: Words between parentheses depend on the study context as they refer to the relevant group and the relevant goal.

Note 3: In Studies 1 and 3, the order in which the types of efficacy appeared in the questionnaire was first group, then individual, and then participative efficacy; in Study 2, the items were randomly mixed with other items.