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What inverted U can do for your country: A curvilinear relationship between confidence in the social system and political engagement

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Abstract

We examined the link between political engagement and the tendency to justify the socio-political system. On one hand, confidence in the system should be negatively related to political engagement, insofar as it entails reduced desire for social change; on the other hand, system confidence should also be positively related to political engagement to the extent that it carries an assumption that the system is responsive to citizens' political efforts. Because of the combination of these two opposing forces, the motivation for political engagement should be highest at intermediate levels of system confidence. Five studies revealed a negative quadratic relationship between system confidence and normative political engagement. In two representative surveys, Polish participants with moderate levels of system confidence were more likely to vote in political elections (Study 1) and to participate in solidarity-based collective action (Study 2). Two field studies demonstrated a negative quadratic relationship between system confidence and actual participation in political demonstrations (gender equality and teachers' protests in Poland; Studies 3 and 4). This pattern of results was further corroborated by analyses of data from 50 countries drawn from the World Value Survey: we observed negative quadratic relationships between system confidence and collective action as well as voting. These relationships were stronger in democratic (vs. non-democratic) regimes (Study 5). Our results suggest that some degree of system confidence might be useful to stimulate political engagement within the norms of the system.

Keywords: system justification, political engagement, collective action, voting

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I went down to the demonstration, to get my fair share of abuse . . .

(Rolling Stones, "You Can't Always Get What You Want")

Disenchantment with the political system should be a motivator of political engagement in activities aimed at shifting the status quo, such as voting or participation in protests. Yet, dissatisfaction and resentment of politics are often accompanied by low political activism (Grönlund & Setälä, 2007; Putnam, 2000). This dynamic was noted by Barack Obama in his 2016 address at Howard University:

> "[I]f you don't get what you want long enough, you will eventually think the whole system is rigged. And that will lead to more cynicism—and less participation, and a downward spiral of more injustice and more anger and more despair. And that's never been the source of our progress. That's how we cheat ourselves of progress."

In this research we examine the link between political disenchantment and civic disengagement. In psychology, these issues may be approached from the perspective of system justification theory, which suggests that people are motivated to support existing socio-political systems, even if maintaining the status quo sometimes works to their disadvantage (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004; Jost & Hunyady, 2002). System justification addresses psychological needs by maintaining the sense that the social system is familiar, safe, and consensually embraced (Jost, Ledgerwood, & Hardin, 2008). Nevertheless, individuals differ in the extent to which they are motivated to engage in system justification (Hennes, Nam, Stern, & Jost, 2012). When the system fails to satisfy one's needs, system confidence should be very low, and people should develop a stronger motivation to engage in politics (Jost et al., 2010). Through political engagement people are

able to communicate their needs and preferences and to pressure officials to respond to their demands (Verba, Scholzman, & Brady, 1995).

In support of this theoretical logic, previous research conducted in the US, UK, and Greece, suggested that low confidence in the socio-political system was associated with willingness to participate in collective protests (Jost et al., 2012). [1] However, in other contexts, such as post-Communist countries where support for the socio-political system is relatively low, *higher* confidence in the system seems to be associated with political engagement (Cichocka & Jost, 2014). For example, Skarzynska and Henne (2012) observed that system confidence in Poland was a positive predictor of political action, such as meeting with politicians or participating in demonstrations.

One explanation for these seemingly contradictory effects is that low system confidence may be associated with low levels of political efficacy, such as the assumption that one's actions in the political sphere will be ineffective, because the authorities are unable or unwilling to respond to citizens' demands (Corcoran, Pettinicchio, & Young, 2015; Craig, Niemi, & Silver, 1990; Craig & Maggiotto, 1982; Long, 1978). A sense of political efficacy is essential for civic engagement, but individuals who fail to support the system often feel that it is impossible to change things (González et al., 2005; Mannarini, Legittimo, & Taló, 2008; Zimmerman, 1989). In this way, system justification may be positively associated with political efficacy (Cichocka & Jost, 2014; Osborne, Yogeeswaran, & Sibley, 2015). Similarly, system confidence should capture the belief that the system will be appropriately responsive to one's efforts to achieve political outcomes by working within the norms of the system. Such efforts are conceptualized as *normative* political actions, which include voting

[1] In this article, we use the term "system justification" to refer to the motivational process of justifying the system, and the term "system confidence" to refer to one's current level of satisfaction with the system (see also Banfield, Kay, Cutright, Wu & Fitzimons, 2011).

and participating in peaceful demonstrations (Becker & Tausch, 2015; Jost et al., 2012; Tausch et al., 2011; Verba et al., 1995; Wright et al., 1990).

We therefore propose that as dissatisfaction with the political system increases, people's faith that they can influence the status quo by working within the system should decline, all other things being equal. This decline in political efficacy might counteract the mobilizing effect of dissatisfaction. In other words, system confidence may exert two opposing effects: On one hand, system confidence should be negatively related to normative political engagement, insofar as it involves a decreased desire for social change in the first place; on the other hand, system confidence should be positively related to normative political engagement, because it includes faith in the effectiveness of political participation. For example, dissatisfaction with the educational system appears to have motivated recent teacher protests in several countries (Wong & Ross, 2015). At the same time, the teachers presumably had some degree of confidence in the system if they believed that the authorities would be responsive to their demands.

Because of these two processes, we hypothesized that the motivation for normative political engagement should be greatest at intermediate (rather than high or low) levels of system confidence (for parallel examples of curvilinear predictions in social and personality psychology, see Brewer, 1991; McGuire, 1968, 1997). Even though political engagement aimed at changing the status quo should be associated with lower system confidence in general, a certain degree of system confidence is needed to assume that the authorities will be responsive to such engagement. This hypothesis is highly consistent with Atkinson's (1957) expectancy-value theory, which specifies that the individual's motivation to engage in a particular task is a mathematical product of the value of the task and his or her expectation of completing the task successfully. According to Atkinson, achievement motivation should be strongest for tasks of moderate value and expectancy. If the task is too difficult, then the

expectation of success will be very low. On the other hand, if the task is too easy, then it might not be perceived as valuable or attractive. In line with this theorizing, we propose that the likelihood of political engagement will be shaped by the product of the value people place on changing the status quo and their expectation that such efforts will be successful in achieving the goal.

To return to the example of teacher protests, the likelihood of participating in protest should be greatest when teachers experience some desire for change (i.e., they value the potential outcomes of the protest), but at the same time feel that the government will be at least somewhat responsive to their demands (i.e., their expectation that the protest will lead to desired consequences is sufficiently high; see also Corcoran et al., 2015). In comparison, teachers with extremely low levels of system confidence may possess a strong need for change but feel that there is a zero (or near-zero) chance that their demands will be met; as a result, their likelihood of participating in the protest should also be near zero. Teachers with extremely high levels of system confidence would have a great deal of faith in the government's responsiveness but no real need for social change; they, too, would be unlikely to join the protest. Thus, the likelihood of political participation would the product (rather than the sum) of the need for change and beliefs about efficacy associated with system confidence. Likelihood of political engagement would then be maximized at moderate levels of system confidence, which strike a balance between the need for change and beliefs about political efficacy. Therefore, we hypothesize that the relationship between system confidence and political engagement should be curvilinear—a negative quadratic effect. Figure 1 illustrates our model schematically.

- Figure 1 -

We suggest that this relationship should hold for various forms of political participation, including voting and collective action. Voting is a conventional,

institutionalized form of normative political engagement (Adler & Goggin, 2005; Putnam, 2000; van Steklenburg, Klandermans, & Akkerman 2016). Through voting people communicate their preferences concerning the way the political system should work. Thus, although voting may well be used to express support for the status quo, in democratic societies participating in elections typically signifies an attempt to influence the socio-political system. Participation in protests or demonstrations may be considered a noninstitutionalized (yet still normatively acceptable) mode of political engagement that supplements institutionalized activities, in an effort to influence politics in a democratic system (van Stekelenburg et al., 2016). Both forms of political engagement should be most appealing when the system is perceived as requiring at least some improvement but at the same time working well enough to heed calls for improvement.

Overview

In the current research program we examined the pattern of relations between individual differences in system confidence and political engagement. In a set of survey and field studies we investigated the novel hypothesis that a negative quadratic relationship would hold between system confidence and two forms of political engagement: voting and collective action. We examined actual political behavior as well as intentions to engage in political action. To increase the generalizability of results, we sought to recruit non-student samples and consider non-"WEIRD" (Western, Educated, Industrialized, Rich and Democratic) societies (Henrich, Heine, & Norenzayan, 2010). We sought to analyze datasets with at least 173 participants, which would provide 80% power to detect an effect of r = .21—the typical effect in social/personality psychology (Richard, Bond Jr., & Stokes-Zoota, 2003; see also Vazire, 2015).

In Study 1, we examined the effect of system confidence on intentions to vote using a large nationally representative survey conducted in Poland. In Study 2, which was part of

another nationally representative survey in Poland, we examined the effect of confidence in the European Union system on intentions to participate in solidarity-based collective action on behalf of another country. In Study 3 we measured confidence in the gender system among Polish women and investigated whether it predicted participation in a feminist demonstration. In Study 4, we measured general system confidence among Polish teachers and tested whether it predicted participation in a demonstration calling for raises in teachers' salaries. Finally, in Study 5 we examined the negative quadratic effect of system confidence on voting and normative collective action in the World Values Survey and sought to determine whether the strength of this relationship would depend on the social context, namely the type of political regime (democratic vs. non-democratic).

To examine the relationship between system confidence and political engagement, in each study we performed a regression analysis in which we examined the linear and quadratic effects of mean-centered system confidence on the different indices political engagement. In each study we also tested the regression models adjusting for basic demographics and political orientation. All models were diagnosed for influential observations.

Study 1

In Study 1 we tested the curvilinear hypothesis in a nationally representative sample of Polish citizens. We focused on the political system and examined the quadratic effect of system confidence on intentions to vote in political elections. Although voting can serve to express support for the status quo, political campaigns often promote agendas designed to improve the present state of affairs, even if proposed changes are only incremental or have the larger aim to restore the way society is assumed to have worked in the past (e.g., see Jost, Glaser, Kruglanski, & Sulloway, 2003).

Method

Participants and procedure. We analyzed data from a 2009 domestic survey involving a large nationwide, statistically representative sample of Polish adults (N = 979). Computer-assisted personal interviews were conducted with 979 (445 men) individuals, between the ages of 18 and 89 years (M = 48.22, SD = 18.03). Sample demographic characteristics matched those of the 2011 Polish Census (Central Statistical Office, 2012). This dataset was analyzed by Bilewicz, Winiewski, Kofta, and Wójcik (2013), Cichocka, Winiewski, Bilewicz, Bukowski, and Jost (2015), and Golec de Zavala, Cichocka, and Bilewicz (2013), but none of these other studies considered the relationship between system confidence and political engagement. In line with institutional guidelines on externally funded survey research, this study was exempt from research ethics committee approval.

Measures.

System confidence was measured with three items: "In general, the Polish political system operates as it should", "In general, our society is fair", and "In Poland, everyone has a fair shot at wealth and happiness" (Kay & Jost, 2003; see Cichocka et al., 2015). Participants responded on a 5-point scale from 1= *definitely disagree* to 5 = *definitely agree* (α = .77, M = 2.05, SD = 0.92).

Political engagement intentions were operationalized as voting intentions, measured with a single question: "If the parliamentary elections were held next Sunday, would you participate in them?" Three response options were available: *I would definitely participate* (n = 473), *I don't know* (n = 256) and *I would definitely not participate* (n = 243). Responses were recoded so that higher numbers expressed higher political engagement intentions.

Adjustment variables included gender, age, education and political conservatism. Education was measured in terms of completed years of education (M = 11.72, SD = 3.52). Political conservatism was assessed with a single item measure ranging from 1 (*definitely left-wing*) to 7 (*definitely right-wing*). A large number of participants replied "difficult to say"

to the political conservatism question (n = 259), so we re-coded these responses at the scale midpoint in political conservatism (M = 4.31, SD = 1.15).

Results

Bivariate analyses. Correlations between continuous and ordinal variables are presented in Table 1. Voting intentions were positively related to system confidence as well as political conservatism. Independent sample t-tests further revealed that male and female participants did not differ with respect to system confidence, $t(959) = 0.70$, $p = .483$, $d = 0.05$, 95% CI [-0.08, 0.17]. On the other hand, gender differentiated voting intentions, $\chi^2(2) = 7.28$, $p = .026$. Men were more willing to vote in the elections (53.4%) than women (44.7%).

- Table 1 -

Logistic regression analysis with voting intentions as the outcome. In order to examine the relationship between voting intentions and system confidence, we conducted a multinomial logistic regression (Table 2).[2] Voting intentions were treated as a nominal dependent variable and individuals who declared that they would not participate in the parliamentary elections served as the comparison group. The analysis revealed a significant linear effect of system confidence on intentions to vote: relative to "I would not participate", there was a significant positive effect for responding "I don't know", $B = 0.54$, $OR = 1.71$, $p < .001$, as well as "I would participate", $B = 0.49$, $OR = 1.63$, $p < .001$. We also found significant quadratic effects of system confidence on intentions to vote. Relative to those who would not vote, responding "I don't know", $B = -0.34$, $OR = 0.71$, $p < .001$, as well as "I would participate", $B = -0.18$, $OR = 0.84$, $p = .017$, were both negatively predicted by the quadratic effect of system confidence. System confidence was associated with increased odds of responding "I don't know" or "I would participate" relative to "I would not participate"

[2] Due to the ordinal measurement of voting intentions, an ordered logistic regression was first conducted (see the Supplement). Because it did not meet the parallel slopes assumption (Hosmer & Lemeshow, 2005), we employed a multinomial logistic regression instead.

only up to a point (system confidence scores of 2.84 or 0.86 *SD* for "I don't know", and 3.41 or 1.48 *SD* for "I would participate"), after which its effect became negative (see Figure 2). This indicates that the probability of declaring willingness to participate in upcoming elections, relative to not participating, was highest at moderate levels of system confidence. The pattern of results was similar when we included adjustment variables (gender, age, education and political conservatism) in the model (see the Supplement). To test for influential cases we performed two binary logistic regressions comparing the reference category with "I don't know" and "I would participate" responses. Regardless of including or excluding adjustment variables, no influential cases were identified (all Cook's distances < .28; Hosmer & Lemeshow, 2005).

- Table 2-

- Figure 2-

Discussion

Among a large, representative sample, higher system confidence was associated with higher likelihood of voting, in line with past research linking voter turnout with trust in the government and satisfaction with the political system (e.g., Grönlund & Setälä, 2007). However, as we predicted, this linear effect was qualified by a significant negative quadratic relationship between system confidence and voting intentions: the probability of voting was highest at intermediate levels of system confidence.

Study 2

In Study 2 we sought to replicate our effects in another representative survey. This time, we considered a different type of political engagement—willingness to participate in collective action in solidarity with a disadvantaged group (Saab, Tausch, Spears, & Cheung, 2015). In Study 2 we asked participants about their willingness to protest on behalf of a socio-political issue that was salient at the time of data collection—the Russian involvement

in Ukraine after the 2014 EuroMaidan protests. According to national polls, the majority of Poles had been following the situation closely, and many expressed support for the European Union's sanctions against Russia (Kowalczuk, 2015). Thus, the situation in Ukraine was associated with attempts to influence the EU's stance towards Russia. Therefore, in this context, we measured confidence in the political system of the European Union. Because we asked about collective action in solidarity with Ukrainians, we adjusted our analyses for attitudes toward this national group.

Method

Participants and procedure. Study 2 was part of a nationwide survey conducted in Poland in 2014. The survey employed the same methodology as the survey used in Study 1. Participants were 1007 (472 men) individuals, aged between 18 and 87 (M = 47.59, SD = 17.59). This dataset was analyzed by Jaworska (2016) in a separate project examining intergroup attitudes. In line with institutional guidelines on externally funded survey research, this study was exempt from research ethics committee approval.

Measures.

System confidence. Three items selected from the System Justification Scale (Kay & Jost, 2003) and adjusted to the context of the European Union formed the measure of European system confidence: "In general, I find the European Union system to be fair", "The European Union political system operates as it should", and "The European Union system should be radically restructured" (reverse-scored). Participants responded on a 7-point response scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* (α = .74, M = 3.66, SD = 1.36).

Political engagement intentions were measured with two items capturing intentions to engage in collective action in solidarity with Ukraine: "I would participate in a demonstration against Russia's invasion in Ukraine." and "I would participate in a demonstration supporting

democratic changes in Ukraine" Participants responded on a 7-point response scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* (r[927] = .74, $p < .001$, $M = 3.62$, $SD = 2.08$).

Adjustment variables included attitudes toward Ukrainians, gender, age, education and political conservatism. Attitudes toward Ukrainians were measured with three items, e.g.: "I feel respect toward Ukrainians", with a scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* ($\alpha = .70$, $M = 4.98$, $SD = 1.28$). Education was measured in terms of completed years of education ($M = 12.91$, $SD = 3.50$). Political conservatism was assessed with a single item measure ranging from 1 (*definitely left-wing*) to 7 (*definitely right-wing*). A large number of participants replied "difficult to say" to the political conservatism question ($n = 213$), so we re-coded these responses at the scale midpoint in political conservatism ($M = 4.24$, $SD = 1.38$).

Results

Bivariate analyses. Correlations between continuous variables are presented in Table 3. Collective action intentions were unrelated to system confidence, but they were positively correlated with conservatism, as well as with attitudes toward Ukrainians. Independent t-tests indicated that gender was significantly related to collective action intentions, $t(963) = 2.83$, $p = .005$, $d = 0.18$, 95% CI [0.06, 0.31], and system confidence, $t(955) = -2.30$, $p = .022$, $d = 0.15$, 95% CI [0.02, 0.28]. In comparison to women, men manifested higher collective action intentions ($M_{men} = 3.82$, $SD_{men} = 2.12$ vs. $M_{women} = 3.44$, $SD_{women} = 2.03$) and lower system confidence ($M_{men} = 3.55$, $SD_{men} = 1.37$ vs. $M_{women} = 3.76$, $SD_{women} = 1.34$).

- Table 3-

Linear regression analysis with collective action intentions as the outcome. In order to examine the relationship between collective action intentions and system confidence, we conducted a hierarchical linear regression analysis (Table 4). Collective action intentions

were treated as the dependent variable. Because in this study we measured political engagement on behalf of an out-group, the following models adjusted for attitudes toward this group.[3] System confidence was not linearly related to collective action intentions, B = -0.05, SE = 0.05, β = -.03, p = .275, but, in line with our predictions, we found a significant negative quadratic effect of system confidence on collective action intentions, B = -0.06, SE = 0.03, β = -.07, p = .025 (Model 2). At its low values EU system confidence was associated with the intention to engage in collective action on behalf of Ukraine, but for individuals whose EU system confidence was higher than 3.24 (or -0.31 *SD*), justifying the political system of the EU was associated with lower intentions to engage in collective action (Figure 3). Adding other adjustment variables (i.e., gender, age, education and political conservatism) to the regression equation did not affect the quadratic term for system confidence (see the Supplement). Regardless of including or excluding adjustment variables, no influential cases were identified (all Cook's *Ds* < .03).

- Table 4 -

- Figure 3 -

Discussion

In Study 2, again conducted in Poland, intentions to take part in collective action in solidarity with another country—Ukraine, were highest at intermediate levels of system confidence. This effect appeared after we accounted for the general attitudes toward Ukrainians, suggesting that the curvilinear effect of system confidence on the collective action intentions was unique to political engagement. Given the international context of the study, we analyzed confidence in the political system of the European Union. Results were

[3] When this variable was omitted, neither the linear, nor the quadratic effect is significant (see the Supplement).

consisted with those obtained in Study 1, confirming that the effects extend beyond the context of justification of the national systems.

Study 3

In Studies 1-2 we examined the link between system confidence and normative political engagement *intentions*. The disadvantage of such approach is that it relies on people's declarations, rather than their actual participation in political activities. Therefore, in Studies 3 and 4 we sought to collect data during actual political events. In the first field study, data were collected from actual demonstrators versus bystanders at a protest march about gender inequality. Thus, compared to Study 2, the focus shifts to a different form of normative political engagement (participation in a collective action on behalf of the *own* group, i.e. women) and to a different system (gender-relations).

While lacking the obvious institutional structures of socio-political systems such as national or European governments, the gender system has important features in common with them (Risman, 2004). Critically, people vary in the extent to which they perceive the gender system to be just (Jost & Kay, 2005), changing (Morton, Postmes, Haslam, & Hornsey, 2009), and changeable via collective action (Deutsch, 2007). Research has shown that participation in normative collective action is predicted by variables associated with rejection of the gender status quo (e.g., Duncan, 1999), and variables associated with the perception that collective action is likely to be effective (Swank & Fahs, 2014). Therefore, while the gender system differs in some respects from other systems, our theoretical logic implies that a quadratic relationship may also hold between confidence of this system and participation in normative collective action designed to change it—in this case, participation in a protest.

Moreover, in Study 3 we sought to examine whether the quadratic effect would hold only for normative forms of political engagement. We expected that this relationship would play out differently for engagement in non-normative political behaviour that violates the

laws and norms of the system (Becker & Tausch, 2015; Tausch et al., 2011). Such actions are more likely to be taken by those who have little hope for change but at the same time feel they have nothing to lose (Scheepers, Spears, Doosje, & Manstead, 2006; Tausch et al., 2011). Therefore, perceptions of responsiveness are likely to play a different role in non-normative political engagement. In fact, we would expect that maximum levels of non-normative political engagement would occur when people desire change and feel that the system is not responsive to their efforts. Thus, non-normative actions should be predicted by a strong disappointment with the system. To test this prediction in Study 3 we additionally examined intentions to take part in normative and non-normative collective actions in support for gender equality.

Method

Participants and procedure. We used data from a larger survey conducted among 257 adult women aged between 18 and 85 (M = 34.65; SD = 14.91) who either did (n = 174) or did not (n = 83) participate in Manifa—an annual march in support of women's rights taking place in Warsaw, Poland.[4] Participants were recruited during the protest by research assistants instructed to interview as many individuals as possible, with the aim of collecting approximately 250 responses (this value was estimated to be realistic given the time period and number of available research assistants). Respondents who were not taking part in the protest were recruited among observers and passersby. Before taking part in the study, participants were asked to confirm whether they were or were not taking part in the march. This study was approved by the Committee on Research Ethics, Faculty of Psychology, University of Warsaw as part of a project entitled "Reactive and proactive collective action".

Measures.

[4]To comply with conditions set by the Committee of Research Ethics, the final sample excludes data from nine participants who were minors and seven others who failed to report their age.

Gender-related system confidence was measured with an eight-item scale developed by Jost and Kay (2005) which was translated into Polish. Sample item reads: "Most policies relating to gender and the sexual division of labor serve the greater good." Participants responded using a scale ranging from 1 = *strongly disagree* to 7 = *strongly agree* (α = .68; *M* = 2.91, *SD* = 0.90).

Political engagement was measured with four indices:

Protest participation was operationalized as actual participation in the march (0 = did not participate, 1= participated). Those actually marching were approached on the assumption that they were protestors, and those watching or walking nearby but not taking part were approached on the assumption that they were non-protestors. Their protest status was also confirmed verbally.

Support for collective action was measured with three items capturing participants support for collective action on behalf of women: "I support actions aimed at improving the situation of women in Poland", "I do not see a need to participate in actions aimed at improving the situation of women in Poland." (reverse coded), and "I would like to participate in actions aimed at improving the situation of women in Poland". Participants responded on a scale from 1 = *strongly disagree*, to 7 = *strongly agree* (α = .75; *M* = 6.29, *SD* = 1.05).

Normative collective action intentions. Participants were asked to what extent they were willing to participate in the following collective actions aimed at improving the situation of women in Poland: 1) distributing posters, flyers and links, 2) joining a legal demonstration**,** 3) signing a petition. Participants responded on a scale ranging from 1 = *Not at all* to 7 = *Very much so* (α = .75; *M* = 5.81, *SD* = 1.35).

Non-normative collective action intentions. Participants were also asked to what extent they were willing to participate in the following collective actions aimed at improving

the situation of women in Poland: 1) blocking streets, 2) destroying state property, 3) occupying state buildings. Participants responded on a scale from 1 = *not at all*, 7 = *very much so* (α = .84; *M* = 2.53, *SD* = 1.73).

Adjustment variables included age, education and political conservatism with respect to economic and social issues. Education was assessed in terms of the highest completed level of education (1 = *primary school*, 2 = *lower secondary school*, 3 = *vocational school*, 4 = *secondary school*, 5 = *university degree*; *M* = 4.66, *SD* = 0.59). Two items measuring economic (*M* = 3.22; *SD* = 1.74) and social political conservatism (*M* = 2.20, *SD* = 1.48) used a 7-point response scale ranging from 1 = *definitely left-wing* to 7 = *definitely right-wing*. As in previous research conducted in the Polish context (e.g., Cichocka, Bilewicz, Jost, Marrouch, & Witkowska, 2016; Kossowska & van Hiel, 2003), the two items were weakly correlated, *r* (252) = .24, *p* < .001. We treated them as separate indices of political orientation. [5]

Results

Bivariate analyses. Correlations between continuous variables are presented in Table 5. Differences between protesters and non-protesters were examined with independent *t*-tests. We first considered the relationships between different indices of political engagement. Those who took part in the demonstration declared stronger intentions for normative collective action (*M* = 6.11, *SD* = 0.99), than those who did not take part (*M* = 5.17, *SD* = 1.72), *t*(108.93) = 4.63, *p* <.001, *d* = 0.74, 95% CI [0.47, 1.01]. Those who took part in the demonstration also showed stronger support for collective action (*M* = 6.46, *SD* = 0.74), than those who did not take part (*M* = 5.93, *SD* = 1.44), *t*(102.82) = 3.15, *p* =.002, *d* = 0.52, 95% CI [0.25, 0.78]. We did not find a significant difference in intentions to take part in non-

[5] Perceptions of protest efficacy were also measured, but because these were administered only to protesters (and not observers), they were excluded from the main analyses.

normative collective action between protesters and non-protesters, $t(255) = 0.72$, $p = .475$, $d = 0.10$, 95% CI [-0.17, 0.36]. Intentions for normative and non-normative collective action were positively correlated (Table 5). Finally, support for collective action was significantly correlated with intentions for normative collective action, and significantly, although relatively less strongly ($Z = 5.01$, $p < .001$) correlated with intentions for non-normative collective action. Overall, protest participation and support for collective action were more strongly linked to normative, compared to non-normative, collective action intentions.

Gender system confidence was negatively correlated with all continuous indices of political engagement, and was generally lower among protesters ($M = 2.73$, $SD = 0.74$) than among non-protesters ($M = 3.28$, $SD = 1.08$), $t(119.73) = 4.21$, $p < .001$, $d = 0.53$, 95% CI [0.27, 0.80]. All indices of political engagement were also negatively correlated with social and economic conservatism (although the correlation between social conservatism and non-normative collective action intentions was not significant). Protesters were also less conservative both in terms of social ($M = 1.97$, $SD = 1.15$) and economic ($M = 3.03$, $SD = 1.71$) issues than non-protesters ($M = 2.60$, $SD = 1.93$ and $M = 3.63$, $SD = 1.76$, respectively), ps < .011.

- Table 5 –

Logistic regression analysis with actual protest participation as the outcome. For the analysis of political behavior, we performed a series of binomial logistic regressions with participation in the demonstration as the dependent variable. Results of the binomial logistic regression (Table 6, Model 2) demonstrated that both the linear, $B = -0.63$, $OR = 0.54$, $p < .001$, and quadratic, $B = -0.42$, $OR = 0.66$, $p = .008$, effects were significant. At its low values gender system confidence increased the probability of political engagement but for individuals whose gender system confidence was higher than 2.16 (or -0.83 *SD*s), supporting the existing system of gender relations decreased the probability of political engagement

(Figure 4). Including adjustment variables did not affect the pattern of results (see the Supplement). No influential cases were identified (Cook's *D*s < .84).

- Table 6 –

- Figure 4 -

Linear regression analyses with support for collective action as the outcome. We conducted hierarchical regression analyses to examine the relationship between system confidence and general support for collective action (Table 7). The initial analyses revealed a single influential case with Cook's distance greater than 1 (*D* = 2.10), so this case was excluded from the analyses. [6] In Model 2, both the linear, *B* = -0.35, *SE* = 0.07, β = -.29, *p* < .001, and the quadratic, *B* = -0.25, *SE* = 0.05, β = -.29, *p* < .001, effects were significant. Gender system confidence increased general support for collective action to a certain point (2.21 or -0.78 *SDs*), after which its effect became negative. The pattern of results remained the same when we included the adjustment variables in the model (see the Supplement). Overall, results for the endorsement of collective action on behalf of women supported our hypotheses about the inverted-U relationship between system confidence and political engagement.

- Table 7 –

Linear regression analyses with normative and non-normative collective action intentions as outcomes. We then analyzed intentions to engage in normative collective action with a similar hierarchical linear regression (Table 8). The initial analyses revealed the same influential case with Cook's distance greater than 1 (*D* = 1.13), so this case was excluded from the analyses.[7] Model 2 revealed a significant linear, *B* = -0.54, *SE* = 0.09, β = -.35, *p* < .001, and marginally significant quadratic, *B* = -0.13, *SE* = 0.07, β = -.11, *p* = .055,

[6] Similar effects were obtained when this case was retained (see the Supplement).
[7] The quadratic effect was not significant when this case was included (see the Supplement). No influential cases were identified for analyses with adjustment variables.

effect of gender system confidence on normative collective action. Although the quadratic effect for gender system confidence was marginally significant, the inflection point fell outside of the range of possible values for this variable (0.83 or -2.31 *SDs*). When adjustment variables were entered into the regression equation, the quadratic effect of gender system confidence was nonsignificant (see the Supplement).

Finally, we examined a regression model with intentions to take part in non-normative collective action as the outcome variable (Table 8). In line with our expectations, in Model 2 there was no quadratic effect of system confidence on non-normative collective action intentions, $B = 0.05$, $SE = 0.08$, $\beta = .04$, $p = .527$. We did find a significant linear effect $B = -0.34$, $SE = 0.13$, $\beta = -.18$, $p = .007$. However, the linear effect was no longer significant when we included adjustment variables in the analysis (see the Supplement). No influential cases were identified (all Cook's *D*s < .20).

- Table 8 -

Discussion

Study 3 revealed a negative quadratic effect of gender system confidence on normative political engagement. This effect was present for actual participation in a peaceful feminist demonstration, as well as for intentions to engage in other forms of normative collective action on behalf of women (although the latter effect was only marginally significant). Furthermore, the analyses for general support for collective action on behalf of women corroborated the effects obtained for actual and intended normative collective action. In all cases, the relationship between system confidence and political engagement was positive at the extreme low levels of system confidence. In line with the effects obtained in Studies 1-2, this relationship then reversed, although this happened still at relatively low levels of system confidence. This pattern of results may be a consequence of a predominance

of political activists in the sample, which might have resulted in relatively low overall levels of gender system confidence.

We did not obtain a similar negative quadratic effect of system confidence on intentions to engage in non-normative collective action on behalf of women. In line with our expectations, non-normative collective actions intentions had a negative linear relationship with gender system confidence, indicating that this type of actions might be linked to strong disappointment with the system. This finding is consistent with past research on the links between low system confidence and support for disruptive forms of protest (Jost et al., 2012).

Study 4

Study 4 again focused on political behavior in terms of participation in a public demonstration. We examined the quadratic effect of general system confidence on taking part in a protest organized by a teachers' union in Poland. The protest advocated an increase in teachers' wages and higher funds allocated to education in general. We also examined whether system confidence is indeed positively correlated with beliefs in system responsiveness and negatively correlated with need for change—the two factors likely contributing to the relationship between system confidence and political engagement. Therefore, Study 4 included measures of need for change and two forms of political efficacy. We measured external political efficacy which corresponds to the perceptions that the political system is responsive to one's demands. We also measured participants' perceptions of collective efficacy in the protest which captures beliefs in the effectiveness of the collective effort—one of the main predictors of collective action intentions that has been identified in previous research (Bandura, 1997; Greenaway, Cichocka, van Veelen, Likki, & Branscombe, 2016; van Zomeren, Leach, & Spears, 2010; van Zomeren, Postmes, & Spears, 2008). We predicted that justifying the political system would be especially strongly associated with external political efficacy, compared to collective efficacy.

Method

Participants and procedure. We used data from a larger survey conducted among 276 Polish teachers (39 men, 25 missing), aged between 25 and 78 (M = 43.31 SD = 9.11), who either did (n = 235) or did not participate (n = 41) in a protest organized by Polish teachers' unions in Warsaw. As in Study 3, a group of research assistants interviewed participants during the protest, with the aim to conduct as many interviews as possible aiming at 250. Those who did not take part in the protest were recruited online, via teachers-dedicated Internet forums. We included data from all teachers who (a) completed the online survey on the day of the protest and during the six days afterwards, and (b) explicitly declared in the survey that they had refrained from participating in the protest. This study was approved by the Committee on Research Ethics, Faculty of Psychology, University of Warsaw as part of a project entitled "Reactive and proactive collective action".

Measures.

System confidence was measured with the Polish translation of the eight item Kay and Jost (2003) scale. Sample item reads: "In general, the Polish political system operates as it should". Participants responded on a scale from 1 = *strongly disagree*, to 7 = *strongly agree* (α = .73, M = 3.00, SD = 0.90).

Political engagement was measured with two indices:

Protest participation was operationalized as actual participation in the protest, as in Study 3 (0 = did not participate, 1= participated).

Support for collective action was measured with three items capturing participants support for collective action. These items the same as those used in Study 3 except that they referred to the situation of teachers in Poland. Participants responded on a scale from 1 = *strongly disagree*, to 7 = *strongly agree* (α = .61; M = 6.09, SD = 1.06).

External political efficacy perceptions were measured with one item capturing government responsiveness: "The government generally considers teacher's protests" Participants responded on a scale from 1 = *strongly disagree*, to 7 = *strongly agree* (*M* = 2.25, *SD* = 1.32).[8]

Collective efficacy was measured with one item capturing the efficacy of the collective action (see van Zomeren et al., 2010): "I think today's protest has a chance to succeed". Participants responded on a scale from 1 = *strongly disagree*, to 7 = *strongly agree* (*M* = 4.29, *SD* = 1.62).

Need for change was measured with one item, "The situation of teachers in Poland needs to change". Participants responded on a scale from 1 = *strongly disagree*, to 7 = *strongly agree* (*M* = 5.74, *SD* = 1.54).

Adjustment variables. Analyses were adjusted for gender, age and political conservatism with respect to social (*M* = 3.83, *SD* = 1.62) and economic (*M* = 4.11, *SD* = 1.55) issues measured as in Study 3, $r(229) = .13$, $p = .044$.

Results

Bivariate analyses. We first examined whether the two indices of political engagement were related. Using an independent samples *t*-test, we found that indeed those who took part in the demonstration also showed stronger support for collective action (*M* = 6.24, *SD* = 0.96), than those how did not take part (*M* = 5.25, *SD* = 1.21), $t(45.36) = 4.77$, $p < .001$, $d = 0.77$, 95% CI [0.42, 1.12]. Correlations between continuous variables are presented in Table 9. In line with our predictions, system confidence was significantly negatively

[8] The survey included one other item measuring external efficacy ("Pressure from various social groups can change government policies"), but more than 50% of responses were missing because of a printing error. Therefore, it was omitted from the analyses. The survey also included a measure of the powerlessness component of political alienation (Radkiewicz, 2007), which was positively correlated with external political efficacy and negatively correlated with system confidence.

correlated with need for change and significantly positively correlated with external political efficacy[9]. The correlation between system confidence and feelings of collective efficacy was weak and non-significant.

Somewhat surprisingly, there were no significant differences between protesters and non-protesters in terms of system confidence, $t(47.53) = 1.35$, $p = .18$, $d = 0.23$, 95% CI [-0.10, 0.56], or need for change, $t(260) = 0.51$, $p = .61$, $d = 0.09$, 95% CI [-0.25, 0.42], although need for change was positively associated with support for collective action. In this sample, external political efficacy was higher among non-protesters ($M = 2.83$, $SD = 1.39$) than protesters ($M = 2.15$, $SD = 1.28$), $t(271) = 3.10$, $p = .002$, $d = 0.53$, 95% CI [0.19, 0.86], and it was negatively associated with support for collective action. Collective efficacy was higher among protesters ($M = 4.42$, $SD = 1.34$) than non-protesters ($M = 3.61$, $SD = 1.64$), $t(271) = 2.99$, $p = .003$, $d = 0.51$, 95% CI [0.17, 0.84], and it was positively associated with support for collective action.

None of the indices of political engagement were associated with political conservatism. Male and female participants did not differ with respect to protest participation, support for collective action, external political efficacy, or need for change, all ps > .388, all ds < 0.16. However, gender differentiated system confidence, $t(249) = 3.56$, $p < .001$, $d = 0.64$, 95% CI [0.28, 1.00], and collective efficacy $t(238) = 3.21$, $p = .002$, $d = 0.59$, 95% CI [0.22, 0.95]. In comparison to women, men manifested higher political system

[9] We also tested for quadratic relationships between need for change/external political efficacy and system confidence. We observed significant negative quadratic effects of need for change ($\beta = -.18$, $p = .04$) and external political efficacy ($\beta = -.16$, $p = .03$) on system confidence, but these were weaker than the linear effects ($\beta = -.29$, $p = .001$, and $\beta = .50$, $p < .001$, respectively). If we consider the possibility that the link between system confidence and political engagement would be influenced by the product of the two quadratic effects, then we would expect a negative quartic effect of system confidence on political engagement. A negative quartic effect would still be consistent with our broader hypothesis that political engagement should be highest at moderate levels of system confidence.

confidence (M_{men} = 3.49, SD_{men} = 0.70 vs. M_{women} = 2.94, SD_{women} = 0.91), and higher collective efficacy (M_{men} = 5.09, SD_{men} = 1.40 vs. M_{women} = 4.16, SD_{women} = 1.61).

- Table 9 -

Logistic regression analysis with actual protest participation as the outcome. As in Study 3, we then conducted a binary logistic regression to examine the relationship between system confidence and participation in the demonstration (Table 10). Model 2 revealed a non-significant linear, B = -0.23, OR = 0.79, p = .189, and significant quadratic, B = -0.34, OR = 0.71, p = .020, effect of system confidence on protest participation. System confidence heightened the probability of participating in the protest only for those who scored lower than 2.66 (or -0.32 *SD*) on system confidence. After this point, the effect of system confidence effect became negative (Figure 5). Results were similar when adjustment demographic variables were included the model (see the Supplement). No influential cases were identified (all Cook's *D*s < .73).

- Table 10 -

- Figure 5 -

Linear regression analysis with support for collective action as the outcome. We also conducted hierarchical regression analyses for general support for collective action. The linear effect was significant, B = -0.29, SE = 0.07, β = -.25, p < .001, F(2, 257) = 17.10, p <.001, R^2 = .06. The quadratic effect was negative but non-significant, B = -0.04, SE = 0.05, β = -.06, p =.35, F(2, 257) = 8.99, p <.001, R^2 = .07, ΔR^2 = .003. The pattern of results remained similar when we included the adjustment variables in the model. No influential cases were identified (all Cook's distances < 0.27).

Discussion

Study 4 replicated the results of Study 3 with respect to actual political engagement: We observed a negative quadratic relationship between system confidence and participation

in a teachers' union protest. Although we identified a similar negative quadratic relationship between system confidence and general support for collective action, the latter effect did not reach statistical significance. Study 4 also examined the association between system confidence and the two types of political efficacy and need for change. In line with our theoretical rationale, system confidence was associated with low need for change but high external political efficacy, that is, a belief in the system being responsive to one's political action. Collective efficacy, that is a belief in the effectiveness of the collective action, was unrelated to system confidence

Study 5

In Study 5 we sought to examine whether the curvilinear effect of system confidence on normative political engagement would replicate beyond the context of Poland (Studies 1-4). To this end, we analyzed data from the World Value Survey, which includes questions about taking part in various forms of normative political engagement, such as collective action and voting. The survey also measures perceptions of the legitimacy of political institutions—which can serve as a proxy for system justifying tendencies (see e.g., Jost, Pelham, Sheldon, & Sullivan, 2003).

In addition, Study 5 investigated whether the individual-level link between system confidence and normative political engagement effect might depend on macro-level characteristics. One important factor that might moderate this relationship is the type of political regime. Democratic political regimes are relatively open to the articulations of citizens' demands. In such regimes, protest and voting serve as conventional ways of participating in the political system and influencing political authorities (Norris, 2002). Nevertheless, individuals may still vary in their perceptions of how responsive the government is to such attempts. Non-democratic regimes, on the other hand, often preclude citizens from expressing their views and interests in the first place. In this class of political

systems, the individual costs of protest participation may be extremely high, including fines, detention, expulsion or the death penalty (Boudreau, 2004). Thus, democratic and non-democratic political regimes create different opportunities for political engagement in collective action—whereas the former facilitate citizens' engagement, the latter mitigate it (Dalton, van Sickle, & Weldon, 2010; Meyer, 2004; Welzel & Deutsch, 2012). Although other forms of political participation, such as voting, might be encouraged in nondemocratic regimes, they usually serve to show support for the authoritarian system rather than creating opportunities to express individual or collective interests and demands (see Gandhi & Lust-Oskar, 2009).

We propose that the divergent patterns of political opportunities inherent to democratic and non-democratic political regimes may affect the inverted U relationship between system confidence and political participation. Like other dispositions, system confidence constitutes a potential that can be differently realized depending on institutional factors (see van Zomeren, 2016). When the social system includes popular demonstrations and free elections as legitimate ways of participating in politics (as in full democracies), we are more likely to observe an inverted U relationship between system confidence and political engagement. We expected different patterns of results in non-democratic contexts. First, limited recognition or explicit disapproval of civic engagement specific to non-democratic polities should weaken the association between system confidence and collective action. In other words, we assume that differences in collective action participation will be more strongly predicted by system confidence in democratic as compared to non-democratic regimes. Second, because in non-democratic countries voting serves as an expression of regime support, we expected only a linear positive relationship between system confidence and voting in this context.

Method

The following analyses combined data from five sources. We used individual level data on system confidence and political engagement from the 6th round of World Values Survey, the largest cross national study of values and beliefs that have ever been executed (WVS, 2015). We also used the Economist Intelligence Unit (EIU, 2010-2014), United Nations Development Programme (UNDP, 2016), the World Bank (WB, 2016) and Central Intelligence Agency (CIA, 2016) data for country characteristics such as regime type, human development and economic inequalities. The results presented below are based on data for 50 countries, which had valid values on at least one of the dependent variables as well as all individual- and societal-level predictors.[10] Because this dataset is publicly available, this study was exempt from research ethics committee approval.

Participants.

In the current analyses we utilized data from 71,007 adult participants, aged 18-99 (*M* = 42.12, *SD* = 16.86). Women constituted 51.7% of the sample.

Individual-level measures.

System confidence. Following Brandt (2013), we estimated confidence in six societal institutions, namely the armed forces, the police, the courts, the government in nation's capital, the parliament and major companies (1 = *a great deal*, 2 = *quite a lot*, 3 = *no very much*, 4 = *none at all*). Participants' responses were recoded so that higher numbers reflected

[10] The full 6th round of World Values Survey covered 60 countries. For analyses focusing on collective action, we excluded data from 12 countries that lacked measures of collective action, confidence in armed forces, political conservatism, HDI, or Gini coefficients. For analyses focusing on voting, we excluded data from 11 countries that lacked measures of voting, confidence in armed forces, political conservatism, or Gini coefficients. For the precise lists of countries included in each of these analyses see the Supplement. Descriptive statistics were based on the data for 50 countries that were included in one or both of these analyses. Results for models based on larger data sets that omit individual- and societal-level adjustment variables confirm the negative quadratic effect (see the Supplement).

greater confidence in a given institution. The composite system confidence score was created by averaging the recoded responses (αs from .54 to .91).

Political engagement was operationalized as collective action participation and voting in national elections.

Collective action was measured with four questions. Respondents indicated if they had undertaken various forms of normative political action (signing petition, joining boycotts, attending peaceful demonstration, joining strike).[11] Three response options were available (1= *have done*, 2 = *might do*, 3 = *would never do*). Participants' answers were recoded so that higher numbers denoted higher engagement in a given form of protest. The average served as the index of collective action (αs ranging from .49 to .92).

Voting in national-level elections was assessed with a single question.[12] Respondents were asked to report how often they participated in elections (1 = *always*, 2 = *usually*, 3 = *never*). Prior to analyses, the responses were recoded so that higher values reflected more frequent voting.

***Adjustment variables*.** Education was assessed by asking respondents to indicate the highest educational level they had attained (1 = *no formal education*, 9 = *university-level education, with degree*). Item „In political matters, people talk of "the left" and "the right." How would you place your views on this scale, generally speaking?" (1 = *left*, 10 = *right*) served as the measure of political conservatism. Other individual-level covariates were gender (-.50 = male, .50 = female) and age.

Societal-level measures.

[11] Beyond items comprising the current index, the questionnaire used in the 6th round of WVS asked respondents to indicate if they had participated in any other type of collective action. Because Study 5 focused on normative engagement, we decided not to include the latter item in the composite score for collective action.

[12] Respondents were also asked to indicate how often they participated in elections at the local level. However, because our system confidence measure involved trust in national-level institutions, we omitted participation in local elections from our analyses.

Regime type. For countries' regime type we used four categories (1 = authoritarian regime, 2 = hybrid regime, 3 = flawed democracy, 4 = full democracy) generated by the Economist Intelligence Unit on the basis of Democracy Index – the state of democracy measure, which covers five areas of polities functioning (e.g. electoral process and pluralism, civil liberties, political participation, political culture and the functioning of government; EIU, 2015) and has been employed in prior cross-cultural research (e.g., Ellenbroek, Verkuyten, Thijs, & Poppe, 2014). The final sample of countries included 8 authoritarian regimes, 10 hybrid regimes, 20 flawed democracies and 10 full democracies.

Gini coefficient. The World Bank (WB, 2016) and Central Intelligence Unit (CIA, 2016) estimates of Gini coefficient reflected the countries' extent of income inequalities. The index could take values from 0 (=*perfect equality*) to 100 (=*perfect inequality*).

Human development was measured with United Nations Human Development Index (HDI; UNDP, 2016) which takes into account three key dimensions: long and healthy life (assessed by life expectancy at birth), knowledge (assessed indices of schooling) and the decent standard of living (assessed as gross national income per capita). In the current sample, HDI values ranged from 0.474 to 0.932 with higher values indicating higher level of human development. Where possible, the values of all societal-level variables matched the year of WVS administration in a given country.[13]

Descriptive statistics for all individual- and societal level variables are presented in Table 11.

Analytic strategy. Due to the two-level structure of the data (individuals nested within countries), we employed multi-level modeling (Hox, 2010) to verify our hypotheses. Two series of multi-level regression models with collective action and voting as the

[13] Exact scores, sources and years of measurement for political regime, HDI and Gini coefficient are available in the Supplement.

dependent variables were performed using maximum likelihood estimator with robust standard errors (MLR) . The analyses proceeded in the sequence of five steps. First, we estimated an intercept-only model (Model 1), which permitted political engagement intercepts to vary between the countries. This solution allowed for determining what part of variation in respondents' collective action or voting occurred at the individual- and the societal-level of analysis. Because a large proportion of variance at the societal-level justifies using multi-level modeling instead of OLS regression, Model 1 results were critical for determining subsequent analyses. Next, we added the random slopes for the two system confidence terms: linear in Model 2 and then quadratic in Model 3. The results of Model 3, testing the quadratic effect of system confidence in the full sample, were crucial to examine the universality of the inverted U relationship between system confidence and normative political engagement. In Model 4 we added individual-level adjustment variables (i.e. gender, age, education and political conservatism). In this solution, all individual-level effects were fixed. In Model 5, collective action or voting were additionally regressed on societal-level variables, i.e. political regime, HDI and Gini coefficient. Furthermore, in order to examine if the type of political regime moderated the relationship between system confidence and collective action, we regressed the two dependent variables on the two cross-level interactions of political regime with the random slopes for linear and the quadratic terms for system confidence. The fit of subsequent models was assessed on the basis of the deviance statistic.

Prior to performing multilevel models, both individual- and societal-level predictors were centered to the grand-mean. Appropriate centering of individual-level predictors is crucial for the interpretation of the results and should be linked to substantive research questions (Enders & Tofighi, 2007). Because both our hypotheses referred to the absolute

level of respondents' system confidence, rather than their relative position within a particular society, grand mean centering was more appropriate than group mean centering.

The rate of missing values for individual-level variables ranged from 0.1% for gender and age to 16.0% for political conservatism. To account for the missing data, we employed multiple imputation technique (Enders, 2010) with the total of 20 imputed datasets.[14] All computations were performed in Mplus (Version 7.4; Muthén & Muthén, 2012).

Results

Bivariate analyses. Correlations for individual- and societal-level continuous variables are presented in Table 11. The two types of normative political engagement—voting and collective action, were positively correlated. System confidence was correlated with voting intentions, but not with collective action. Political conservatism was positively linked to voting, but negatively to collective action. Gender differentiated collective action, $t(65923.45) = 21.02$, $p < .001$, $d = 0.16$, 95% CI [0.15, 0.18], voting, $t(68{,}100.65) = 3.39$, $p = .001$, $d = 0.02$, 95% CI [-0.01, 0.04], and system confidence, $t(70405) = -5.28$, $p < .001$, $d = 0.04$, 95% CI [0.03, 0.05]. In comparison to women, men manifested higher collective action participation ($M_{men} = 1.59$, $SD_{men} = 0.57$ vs. $M_{women} = 1.50$, $SD_{women} = 0.54$), higher voting participation ($M_{men} = 2.46$, $SD_{men} = 0.74$ vs. $M_{women} = 2.44$, $SD_{women} = 0.75$), and lower system confidence ($M_{men} = 2.48$, $SD_{men} = 0.67$ vs. $M_{women} = 2.51$, $SD_{women} = 0.67$).

- Table 11 -

Multi-level analyses with collective action as the outcome. Table 12 presents the results of five multi-level regression models with collective action as the dependent variable. The results of intercept-only Model 1 indicated that both individual- and societal-level variance were significantly larger than 0. At the same time, almost 21% of collective action

[14] When we did not impute the missing data the results remained similar (see the Supplement).

variability was explained by the differences between the countries, ICC = .21, 95% CI [.14, .27], $p < .001$. Thus, the multilevel analysis of the current data was justified.

Model 2 included the random slope for the linear effect of system confidence. On average, system confidence was not related to collective action in a linear fashion, $B = -0.01$, $SE = 0.01$, $Z = -0.80$, $p = .422$. However, societal-level variance in the linear effect of system confidence was greater than 0, which signifies substantial variability among countries.

In Model 3 we added the random slope for the quadratic effect of system confidence. In line with the results of Studies 1-4, the average quadratic effect of system confidence was negative and significant, $B = -0.04$, $SE = 0.01$, $Z = -5.38$, $p < .001$. On average, system confidence increased collective action only to the certain point (2.35 or -0.19 *SD*), after which its effect became negative. Nevertheless, the societal-level variance in the quadratic effect of system confidence differed from 0, which suggested that the curvilinear relationship between system confidence and collective action might depend on the properties of particular countries, such as the type of political regime.

Model 4 aimed to investigate if the curvilinear effect of system confidence on collective action was independent from the effects of individual-level adjustment variables such as gender, age, education and political conservatism. Adding adjustment variables into the equation did not change the significance of either quadratic, $B = -0.03$, $SE = 0.01$, $Z = -4.40$, $p < .001$, or linear, B = -0.003, $SE = 0.01$, $Z = -0.27$, $p = .785$, effects of system confidence on collective action.

Model 5 tested the direct effects of political regime, human development and inequalities as well as two cross-level interactions between political regime and system confidence. We operationalized political regime as the dichotomous variable where full

democracies were coded as 1, and other systems as 0.[15] The effect of political regime was positive, B= 0.35, SE = 0.09, Z = 4.01, p < .001, indicating that respondents living in full democracies reported higher collective action as compared to individuals living in other systems. Economic inequalities of a given country were associated with higher collective action, B = 0.01, SE = 0.003, Z = 2.39, p = .017, while human development had a marginal association with collective action, B = 0.37, SE = 0.21, Z = 1.80, p = .073. The cross-level interaction between political regime and the linear term for system confidence was nonsignificant, B = -0.02, SE = 0.02, Z = -0.81, p = .421. However, political regime interacted with the quadratic term for system confidence, B = -0.05, SE = 0.02, Z = -3.62, p < .001. In line with our predictions, the curvilinear relationship between system confidence and collective action was more strongly pronounced in full democracies, B= -0.08, SE = 0.01, Z = -6.05, p < .001, than other types of polities, B= -0.02, SE = 0.01, Z = -2.78, p = .005 (see Figure 6).

- Table 12 -

- Figure 6 -

Multi-level analyses with voting as the outcome. Next, we repeated the same steps for voting in the national elections as the dependent variable. Table 13 presents the results of five multilevel ordered logit models. The results of intercept-only Model 1 indicated that almost 21% of voting variability was explained by the differences between the countries, ICC = .21, 95% CI [.14, .28], p < .001, justifying the multilevel analysis of the current data.

As indicated by the results of Model 2, the random slope for system confidence was positive and significant, B = 0.42, SE = 0.05, Z = 9.18, p < .001. Model 3 revealed the

[15] We also examined models in which the type of political regime was dummy-coded (see the Supplement). This analysis suggested that authoritarian regimes, hybrid regimes and flawed democracies did not differ with respect to the relationship between political engagement and system confidence. Therefore, we decided to collapse these categories in the current analysis.

negative and marginally significant random slope for the quadratic effect of system confidence on voting, B = -0.06, SE = 0.03, Z = -1.86, p = .063 (with the inflection point falling outside the range of system confidence values, 5.83 or 4.98 *SD*s). Although marginal, this effect corroborated the results of analyses conduced for collective action as the dependent variable. In Model 4, which included the individual-level adjustment variables, the random slope for the quadratic effect of system confidence remained negative and significant, B = -0.07, SE = 0.03, Z = -2.20, p = .028. Importantly, the societal-level variance in the quadratic effect of system confidence was significant, suggesting that the curvilinear relationship between system confidence and voting might depend on the type of political regime.

Therefore, in Model 5 we checked whether the type of political regime moderated the relationship between system confidence and voting. Furthermore, we adjusted for each country's degree of economic inequality and human development. As shown in Table 13, the dependent variable was not predicted by HDI, B = 0.26, SE = 1.41, Z = 0.19, p = .852. The positive effects of political regime, B = 0.81, SE = 0.44, Z = 1.83, p = .067, and Gini coefficient, B = 0.02, SE = 0.01, Z = 1.76, p = .078, were only marginally significant. We found a significant cross-level interaction between political regime and the linear term for system confidence, B = 0.27, SE = 0.08, Z = 3.25, p = .001, indicating that the positive relationship between system confidence and voting was stronger in full democracies, B = 0.57, SE = 0.07, Z = 8.09, p < .001, than in other types of regimes, B = 0.30, SE = 0.05, Z = 6.10, p < .001. Crucially, we also found a significant negative interaction between the political regime and the quadratic term for system confidence, B = -0.26, SE = 0.09, Z = -2.99, p = .001. Similarly to results obtained for collective action as the dependent variable, the curvilinear relationship between system confidence and voting was stronger in full

democracies, B= -0.27, SE = 0.08, Z = -3.34, p = .001, than other types of polities, B= -0.02, SE = 0.03, Z = -0.60, p = .550.

- Table 13 -

Discussion

Study 5 confirmed the curvilinear relationship between system confidence and political engagement in the form of normative collective action and voting across 48 and 49 world countries, respectively. This effect was present even after adjusting for a variety of individual-level characteristics (i.e., gender, age, education or political conservatism) as well as macro-level factors, including levels of inequality and development, as well as the regime type. Furthermore, Study 5 demonstrated that the curvilinear effect of system confidence on collective action depended on the type of political regime. As expected, the inverted U relationships between system confidence and both forms of political engagement were more pronounced in fully democratic countries, compared to non-democratic regimes.

Thus, the present results demonstrate that, in contrast to non-democratic polities, fully democratic systems create the setting that highlights the effects of system justification. This is line with past research showing the impact of democratic vs. non-democratic institutional arrangements on the psychological processes leading to political engagement. For example, Dalton and colleagues (2010) showed that the positive effect of post-materialist values on collective action was stronger in more politically open (i.e. more democratic) countries. A study by Corcoran, Pettinicchio, & Young (2011) revealed that in countries with longer democratic traditions efficacy exerted stronger positive effect on collective engagement. The current Study 5 demonstrated a similar pattern for system justification as the individual-level predictor, highlighting the importance of context in understanding political engagement (see also van Zomeren, 2016).

General Discussion

Across five survey and field studies we demonstrated a negative quadratic relationship between system confidence and political engagement. The effect was obtained for various forms of political engagement. These included intentions to vote (Studies 1 and 5) and engage in normative collective action (Studies 2, 3 and 5), as well as actual political behavior, such as participation in political demonstrations (Studies 3 and 4). A similar pattern of results was observed for confidence in the system of gender relations as well as both national and international (European) systems. In all cases, at relatively low levels system confidence was positively related to political engagement, but at its higher levels system confidence was negatively related to political engagement. In other words, political engagement was highest at intermediate levels of system confidence. This curvilinear effect was observed in Poland (Studies 1-4), and conceptually replicated in 50 countries using data from the World Values Survey (Study 5).

Previous studies examining linear relationships between system confidence and normative political engagement yielded mixed results (for a review see Cichocka & Jost, 2014). Likewise, in the research reported here we found the linear effect of system confidence to be inconsistent: It was positive for intentions to vote in Studies 1 and 5, negative for collective action in Studies 3-4, and nonsignificant for collective action in Studies 2 and 5. The present studies suggest that a curvilinear relationship better captures the nature of the link between system confidence and normative political engagement (see also Grant & Schwartz, 2011).

We propose that the inverted U pattern we observed might be the result of two opposing processes. On one hand, system confidence might undermine political engagement to the extent that it involves little or no desire for social change. On the other hand, system confidence might strengthen political engagement to the extent that it carries with it the conviction that system-level authorities are responsive to citizens' political efforts (Cichocka

& Jost, 2014). In terms of system justification theory, the more people justify the system, the more confidence they should have in their ability to influence the system, but, at the same time they should place less value on changing it. Indeed, in Study 4 system confidence was positively associated with external political efficacy, that is, a belief that the system is responsive to one's political efforts, and negatively associated with the need to change the status quo. This suggests that system confidence incorporates both of these factors and helps to explain why a curvilinear pattern characterizes the relationship between system confidence and normative political engagement, with greatest engagement at intermediate levels of system confidence.

The precise shape of the curve seems to vary depending upon the type of normative political engagement. The inflection point showing the maximum likelihood of political participation was observed for higher levels of system confidence in the case of voting, in comparison with collective action (compare, for instance, Figures 2 and 3). It could be that feelings of external efficacy play a more important role in encouraging voting, whereas desire for social change plays a more important role in stimulating protest behaviour. These differences also suggest that the relationship between system confidence and political engagement does not always obey a perfect inverted U-shape. Depending upon the societal context and the type of engagement, the curve might be steeper on one side than on the other. For instance, we would speculate that the inflection point would be higher (in terms of system confidence) for those engaging in system-supporting protests (i.e., demonstrating against proposed changes, which may be more strongly driven by faith in the system's responsiveness) than for those engaging in system-challenging protests (i.e., demanding changes to the status quo, which might be more strongly driven by the desire for change; see Jost, Becker, Osborne, & Badaan, 2017; Tilly, 1976). By the same token, we would also expect the inflection point to be higher for those supporting incumbent and/or politically

conservative causes than for those supporting challengers and/or more progressive causes.[16] Future research is needed to specify the conditions that affect the shape of the negative quadratic relationship between system confidence and political engagement.

In determining the precise shape of the curve, future research would also benefit from directly measuring the values of system responsiveness and desire for change. Our model of political engagement suggests that these combine multiplicatively to drive political engagement. As either variable approaches zero, so does their product, and the likelihood of political engagement follows. Thus, our model would predict that in societal contexts in which few, if any, citizens perceive a strong need for change, the value of the product will not decline steeply from the inflection point on the right side of the curve. In contexts in which few, if any, citizens see the system as completely unresponsive, the value of the product will not decline steeply from the inflection point on the left side of the curve. In Study 4 we were able to explore some of these details, and we observed the hypothesized relations between system confidence and high external efficacy and low desire for change. However, the current data sets do not provide a definitive test of whether the two processes are capable of explaining the quadratic effect. Future research should employ experimental methods to facilitate the drawing of causal inferences and to investigate the interactive effects

[16] In Study 1, we obtained information about specific voting intentions. At the time the study was conducted, the incumbent leadership was a relatively progressive coalition (Civic Platform with the smaller Polish People's Party), and the largest of the challenging parties was conservative (Law and Justice). We conducted a multinomial logistic regression to compare voting for the Civic Platform party (vs. not voting) and voting for the Law and Justice party (vs. not voting). We observed a significant negative quadratic effect of system confidence on voting for the incumbent. The inflection point was relatively high in terms of system confidence, which is consistent with the notion that perceptions of system responsiveness would play a strong role in predicting incumbent support. At the same time, the quadratic effect suggests that support for the incumbent was also motivated by desire for change. We observed a weak negative quadratic effect for voting for the challenger, but this effect was only marginally significant (see Supplemental materials for details and for similar analyses including other incumbent and challenging parties).

of system responsiveness and desire for change. Ideally, these variables would be experimentally manipulated, and so, too, would system justification motivation.

We did not detect a quadratic relationship between system confidence and non-normative political engagement, such as insurgent activity that violates the legal code of the system (Becker & Tausch, 2015; Tausch et al., 2011). We hypothesised that support for non-normative collective action would be strongest when levels of disappointment with the system are extremely high. In support of this conjecture, we did observe in Study 4 that there was a negative linear effect of system confidence on non-normative collective action intentions (for a related finding, see Jost et al., 2012). This effect became non-significant once we adjusted for demographic variables and political orientation. It is conceivable that the concomitants of extremely low levels of system confidence would be better captured by measuring actual participation in non-normative collective action, as opposed to declarations of intention. Although there may be legal and ethical challenges in examining disruptive, non-normative political behaviour in the "real world," we hope that future research considers the implications of our research for that type of political activism.

Our findings shed light on the role of macro-level (as well as micro-level) factors involved in political engagement (van Zomeren, 2016). In Study 5 we discovered that the curvilinear effect of system confidence on political engagement depended upon the type of political regime. As expected, the strength of the inverted U relationship between system confidence and normative political engagement was more pronounced in fully democratic regimes, as compared to less democratic regimes. It seems that, in contrast to authoritarian polities, democratic systems foster a curvilinear relationship between system confidence and civic engagement. Thus, our research program demonstrates that normative collective action obeys the Lewinian formula that combines personal dispositions and elements of the social context.

Taking into account interactions between personal and situational variables is crucial for the study of political psychological processes. To date, the institutional determinants of collective action have rarely been considered in the social psychological literature (cf. Corcoran et al., 2011; but see Jost et al., 2017). Focusing exclusively on micro- (individual) and meso- (group) levels of analysis, explanations of collective action in social and personality psychology often neglect macro-level factors, making tacit claims for universal applicability. At the same time, research in sociology and political science demonstrates that participation in collective action is moderated by properties of the social system (Dalton et al., 2010; Welzel & Deutsch, 2012). Political systems ranging from authoritarian regimes to advanced industrial democracies create very different opportunities for collective action, which means that different types of personal qualities may predict political participation in different contexts (Norris, 2002; Tarrow, 1994). The same individual disposition may foster political engagement in one country and have negligible effects in another (Dalton et al. 2010). Taken in conjunction with comparative studies (e.g., Corcoran et al., 2011), the findings from our last study suggest that researchers should treat the investigation of contextual effects as a necessary part of understanding political engagement.

Our results point to the conclusion that some—presumably, moderate—degree of confidence in the socio-political system is useful for stimulating political participation. When citizens possess very low levels of system confidence, they may desire social change, but they may also experience a form of alienation and therefore disengage from political or civic activism. Conversely, when citizens possess very high levels of system confidence, they may regard authority figures as relatively open and receptive to their wishes, but they are unlikely to place much value on accomplishing social change. Future research is needed to specify the optimal level of system confidence that will stimulate social change without increasing ideological subjugation to the system, especially when it comes to members of disadvantaged

social groups. In the meantime, our findings may prove useful to those who are working in the public sector to promote civic engagement in democratic social systems. As President Obama noted in his 2016 speech: “Change is the effort of committed citizens who hitch their wagons to something bigger than themselves and fight for it every single day.”

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Table 1

Zero-Order Correlations among Continuous and Ordinal Variables (Study 1)

	1	2	3	4
1. Voting intentions				
2. System confidence	.13***			
3. Age	.03	-.07*		
4. Education	.18***	.05	-.40***	
5. Political conservatism	.14***	.02	.03	.05

Note. To compute correlations for the voting intentions, we used Spearman's ρ. All correlations for the continuous variables are Pearson's *r*.

* $p < .05$. *** $p < .001$.

Table 2

Results of a Multinomial Logistic Regression Predicting Voting Intentions (Study 1)

	Model 1			Model 2		
Group and predictor variable	*B*	*OR*	*OR* 95% CI	*B*	*OR*	*OR* 95% CI
I don't know						
Intercept	0.11			0.38**		
System confidence	0.36***	1.43	[1.16, 1.77]	0.53***	1.71	[1.36, 2.16]
System confidence^2				-0.34***	0.71	[0.59, 0.86]
I would participate						
Intercept	0.73***			0.89***		
System confidence	0.41***	1.51	[1.25, 1.82]	0.49***	1.63	[1.34, 1.99]
System confidence^2				-0.18*	0.84	[0.72, 0.97]
Nagelkerke's R^2		.02			.04	
-2 log-likelihood		152.52			139.55	

Note. DV's category of reference = "I would not participate". System confidence was mean-centered prior to the analyses.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 3

Zero-Order Correlations among Continuous Variables (Study 2)

	1	2	3	4	5
1. Collective action intentions					
2. System confidence	-.01				
3. Attitudes toward the out-group	.33***	.03			
4. Age	.02	-.09**	.01		
5. Education	.03	.03	.13***	-.30***	
6. Political conservatism	.10**	-.08*	.04	.06†	-.04

Note. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4

Results of Linear Regression Predicting Solidarity-Based Collective Action Intentions (Study 2)

	Model 1			Model 2		
Predictor variable	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI
Intercept	3.68***		[3.55, 3.80]	3.78***		[3.63, 3.94]
Attitudes toward the out-group	0.55***	.34	[0.45, 0.65]	0.56***	.34	[0.46, 0.66]
System confidence	-0.04	-.03	[-0.13, 0.05]	-0.05	-.03	[-0.14, 0.04]
System confidence^2				-0.06*	-.07	[-0.11, -0.01]
R^2		.11			.12	
F		$F(2, 921) = 58.08$***			$F(3, 920) = 40.57$***	
ΔR^2					.01	
ΔF					$F(1, 920) = 5.04$***	

Note. All predictors were mean-centered prior to the analysis.

* $p < .05$. *** $p < .001$.

Table 5

Zero-Order Correlations among Continuous Variables (Study 3)

	1	2	3	4	5	6	7
1. Support for collective action							
1. Normative collective action intentions	.59***						
2. Non-normative collective action intentions	.23***	.23***					
4. Gender system confidence	-.33***	-.36***	-.16*				
5. Age	-.04	-.08	-.11†	.03			
6. Education	.07	.05	.05	-.21***	.04		
7. Social conservatism	-.30***	-.23***	-.09	.43***	.07	-.15*	
8. Economic conservatism	-.18**	-.30***	-.25***	.37***	.03	-.12†	.24***

Note. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6

Results of a Binomial Logistic Regression Predicting Participation in the Demonstration (Study 3)

	Model 1			Model 2		
Predictor variable	*B*	*OR*	*OR* 95% CI	*B*	*OR*	*OR* 95% CI
Intercept	0.80***	2.23		1.08***	2.94	
Gender system confidence	-0.73***	0.48	[0.35, 0.67]	-0.63***	0.54	[0.38, 0.75]
Gender system confidence^2				-0.42**	0.66	[0.48, 0.90]
Nagelkerke's R^2		.11			.15	
-2 log-likelihood		301.73			293.65	

Note. Gender system confidence was mean-centered prior to the analyses.

** $p < .01$. *** $p < .001$.

Table 7

Results of the Linear Regression Predicting Support for Collective Action (Study 3)

	Model 1			Model 2		
Predictor variable	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI
Intercept	6.28***			6.47***		[6.33, 6.61]
Gender system confidence	-0.42***	-0.36	[-0.55, -0.29]	-0.35***	-.29	[-0.48, -0.21]
Gender system confidence^2				-0.25***	-.29	[-0.35, -0.15]
R^2		.13			.20	
F		$F(1, 254) = 36.54$***			$F(2, 253) = 32.42$***	
ΔR^2					.08	
ΔF					$F(1, 253) = 24.87$***	

Note. Gender system confidence was mean-centered prior to the analyses. Influential case excluded.

*** $p < .001$.

Table 8

Results of the Linear Regression Predicting Normative and Non-normative Collective Actions Intentions (Study 3)

	Normative Collective Action Intentions						Non-normative Collective Action Intentions					
	Model 1			Model 2			Model 1			Model 2		
Predictor variable	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI
Intercept	5.80***		[5.65, 5.96]	5.90***		[5.71, 6.08]	2.53		[2.32, 2.74]			[2.24, 2.73]
Gender system confidence	-0.58***	-0.38	[-0.76, -0.41]	-0.54***	-.35	[-0.72, -0.36]	-0.32**	-.16	[-0.54, -0.08]	-0.34**	-.18	[-0.59, -0.09]
Gender system confidence^2				-0.13$^+$	-.11	[-0.26, 0.003]				0.05	.04	[-0.11, 0.21]
R^2	.14			.16			.03			.03		
F	$F(1, 254) = 42.78$***			$F(2, 253) = 23.48$***			$F(1, 255) = 7.07$**			$F(2, 254) = 3.73$*		
ΔR^2				.01						.002		
ΔF				$F(1, 253) = 3.72^{\dagger}$						$F(1, 254) = .40$		

Note. Gender system confidence was mean-centered prior to the analyses. Influential case excluded.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 9

Zero-Order Correlations among Continuous Variables (Study 4)

Variables	1	2	3	4	5	6	7
1. Support for collective action							
2. External political efficacy	-.15*						
3. Collective efficacy	.33***	.07					
4. Need for change	.29***	-.13*	.28***				
5. System confidence	-.25***	.40***	.05	-.16*			
6. Age	.09	-.04	.02	.02	.03		
7. Social conservatism	-.02	.02	-.09	.07	-.08	.02	
8. Economic conservatism	-.04	.04	.07	.06	.12†	.08	.13*

Note. † $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 10

Results of a Binomial Logistic Regression Predicting Participation in the Demonstration (Study 4)

	Model 1			Model 2		
Predictor variable	*B*	*OR*	*OR* 95% CI	*B*	*OR*	*OR* 95% CI
Intercept	1.78***	5.90		2.07***	13.33	
System confidence	-0.32†	0.73	[0.50, 1.06]	-0.23	0.79	[0.56, 1.12]
System confidence^2				-0.34*	0.71	[0.54, 0.95]
Nagelkerke's R^2		.02			.06	
-2 log-likelihood		229.08			222.60	

Note. System confidence was mean-centered prior to the analyses.

† $p < .10$. * $p < .05$. *** $p < .001$.

Table 11

Descriptive Statistics and Correlations for Individual- and Societal-level Variables (Study 5)

Individual-level variables	*N*	*M*	*SD*	1	2	3	4	5
1. Collective action	66,626	1.55	0.56					
2. Voting	68,367	2.45	0.75	.12***				
3. System confidence	70,438	2.50	0.67	-.003	.08***			
4. Political conservatism	59,086	5.72	2.29	-.11***	.03***	.12***		
5. Education	70,240	5.61	2.35	.19***	.04***	-.02***	-.04***	
6. Age	70,989	42.10	16.86	-.01**	.25***	.03***	.01**	-.17***
Societal-level variables	*N*	*M*	*SD*	7	8			
7. Political regime type	50	2.56	1.05					
8. Human Development Index	50	0.75	0.12	.67***				
9. Gini coefficient	50	37.75	9.36	.05	-.25†			

Note. Values for political regime type could range from 1 = authoritarian regimes to 4= full democracies. To compute correlations for voting, we used Spearman's ρ. All correlations for the continuous variables are Pearson's *r*.

† $p < .10$. ** $p < .01$. *** $p < .001$.

Table 12

Individual-level and Societal-level Predictors of Collective Action Participation (Study 5)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	1.55 (0.04)***	1.55 (0.04)***	1.57 (0.04)***	1.57 (0.04)***	1.50 (0.04)***
Individual level (IL) effects					
System confidence		-0.01 (0.01)	-0.01 (0.01)	-0.003 (0.01)	0.001 (0.013)
System confidence^2			-0.04 (0.01)***	-0.03 (0.01)***	-0.02 (0.008)**
Gender				-0.08 (0.01)***	-0.08 (0.01)***
Age (10 years)				-0.06 (0.04)	-0.06 (0.04)
Education				0.04 (0.004)***	0.04 (0.004)***
Political conservatism				-0.02 (0.003)***	-0.02 (0.003)***
Societal level (SL) effects					
Political regime type					0.35 (0.09)***
Gini					0.01 (0.003)*
Human Development Index					0.37 (0.21)†
Cross-level interactions					

System confidence × Political regime type					-0.02 (0.02)
System confidence^2 × Political regime type					-0.05 (0.02)***
Variance					
IL variation of the DV	0.25 (0.01)***	0.25 (0.01)***	0.25 (0.01)***	0.23 (0.01)***	0.23 (0.01)***
SL variation of the DV	0.07 (0.01)***	0.07 (0.01)***	0.07 (0.01)***	0.07(0.01)	0.04 (0.01)***
SL variation in IL effect of system confidence		0.01 (0.002)***	0.01 (0.002)***	0.01 (0.001)***	0.01 (0.001)***
SL variation in IL effect of system confidence^2			0.002 (0.001)***	0.002 (0.001)***	0.002 (0.000)**
-2 log-likelihood	98746.21	98040.49	97809.80	94175.26	94144.27

Note. Gender coded -.50 for men and .50 for women. Age divided by 100. Political regime type coded 1 for full democracies and 0 for other systems. Continuous individual and societal-level predictors were grand-mean-centered prior to conducting analyses. Unstandardized coefficients reported. Robust standard errors reported in the parentheses. Missing data handled with multiple imputation (20 imputed datasets).

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 13

Individual-level and Societal-level Predictors of Voting in National Elections (Study 5)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5
Individual level (IL) effects					
System confidence		0.42 (0.05)***	0.40 (0.04)***	0.36 (0.05)***	0.30 (0.05)***
System confidence^2			-0.06 (0.03)†	-0.07 (0.03)*	-0.02 (0.03)
Gender				-0.09 (0.04)*	-0.09 (0.04)*
Age (10 years)				0.36 (0.03)***	0.35 (0.03)***
Education				0.08 (0.02)***	0.08 (0.02)***
Political conservatism				0.03 (0.01)***	0.03 (0.01)***
Societal level (SL) effects					
Political regime type					0.81 (0.44)†
Gini					0.02 (0.01)†
Human Development Index					0.26 (1.41)
Cross-level interactions					
System confidence × political regime type					0.27 (0.08)**

System confidence^2 × Political regime type					-0.26 (0.09)**
Tresholds					
Cut 1	-1.99 (0.14)***	-1.99 (0.08)***	-2.00 (0.06)***	-2.17 (0.07)***	-1.90 (0.16)***
Cut 2	-0.59 (0.14)***	-0.56 (0.07)***	-0.56 (0.04)***	-0.66 (0.07)***	-0.39 (0.16)*
Variance					
SL variation of the DV	0.87 (0.19)***	0.93 (0.20)***	0.98 (0.21)***	0.90 (0.19)***	0.80 (0.15)***
SL variation in IL effect of System confidence		0.10 (0.02)***	0.08 (0.02)***	0.09 (0.02)***	0.08 (0.02)***
SL variation in IL effect of System confidence^2			0.04 (0.01)**	0.03 (0.01)**	0.02 (0.01)***
-2 loglikelihood	119421.71	118145.82	118057.61	113988.98	113969.99

Note. DV's category of reference = "Never" Gender coded -.50 for men and .50 for women. Age divided by 100. Political regime type coded 1 for full democracies and 0 for other systems. Continuous individual and societal-level predictors were grand-mean-centered prior to conducting analyses. Unstandardized coefficients reported. Standard errors reported in the parentheses. Missing data handled with multiple imputation (20 imputed datasets).

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

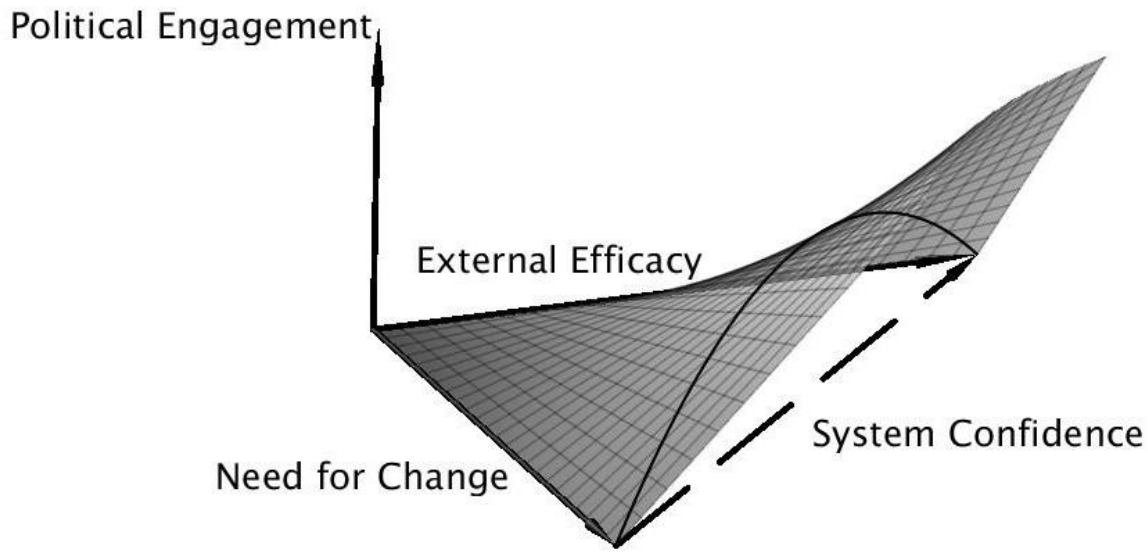

Figure 1. Theoretical model illustrating the curvilinear relationship between system confidence and political engagement. The model assumes that system confidence is the subspace where system confidence is negatively associated with need for change and positively associated with external efficacy (dashed arrow), and that political engagement is a product of need for change and external efficacy (surface shown).

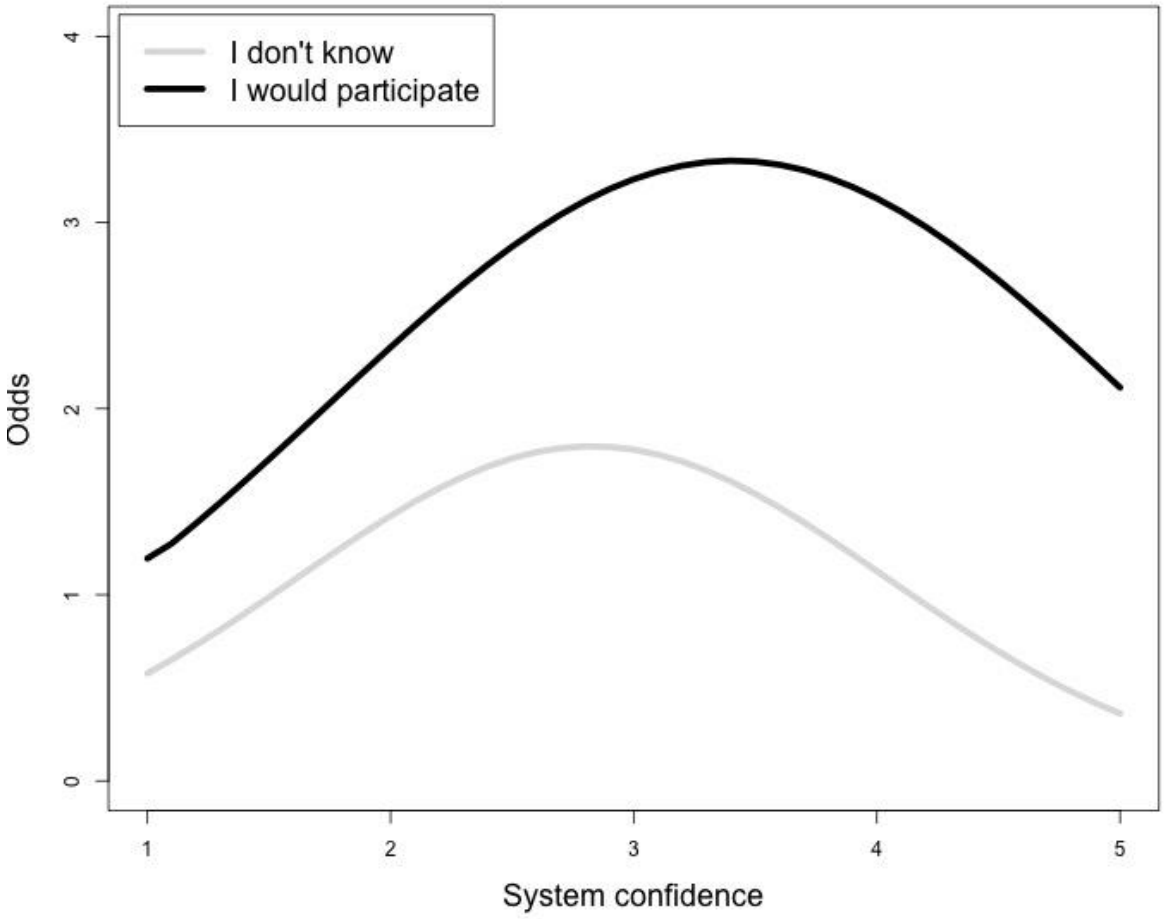

Figure 2. Voting intentions (odds of responding "I don't know" / "I would participate" relative to "I would not participate" with respect to upcoming elections) as a function of system confidence (Study 1).

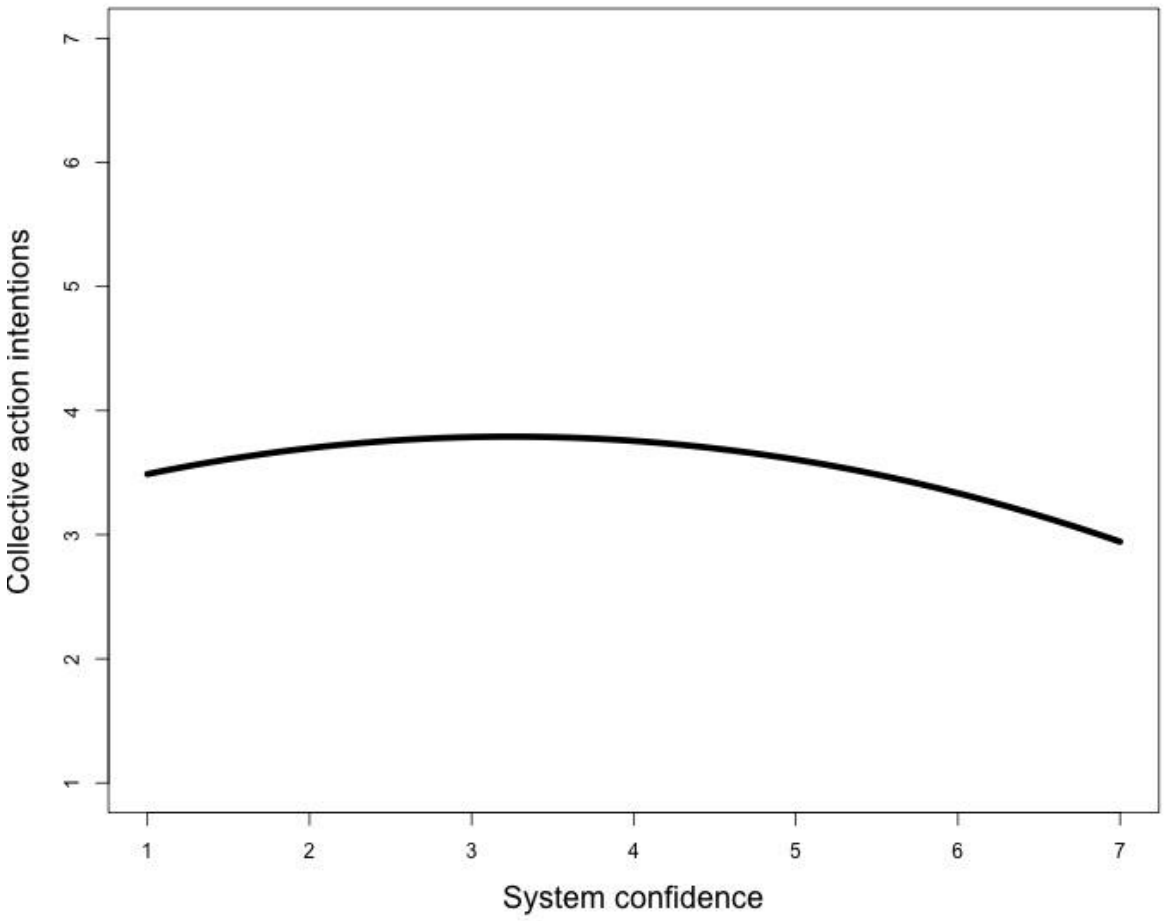

Figure 3. Solidarity-based collective action intentions as a function of system confidence (Study 2). Data plotted for average attitudes toward the out-group.

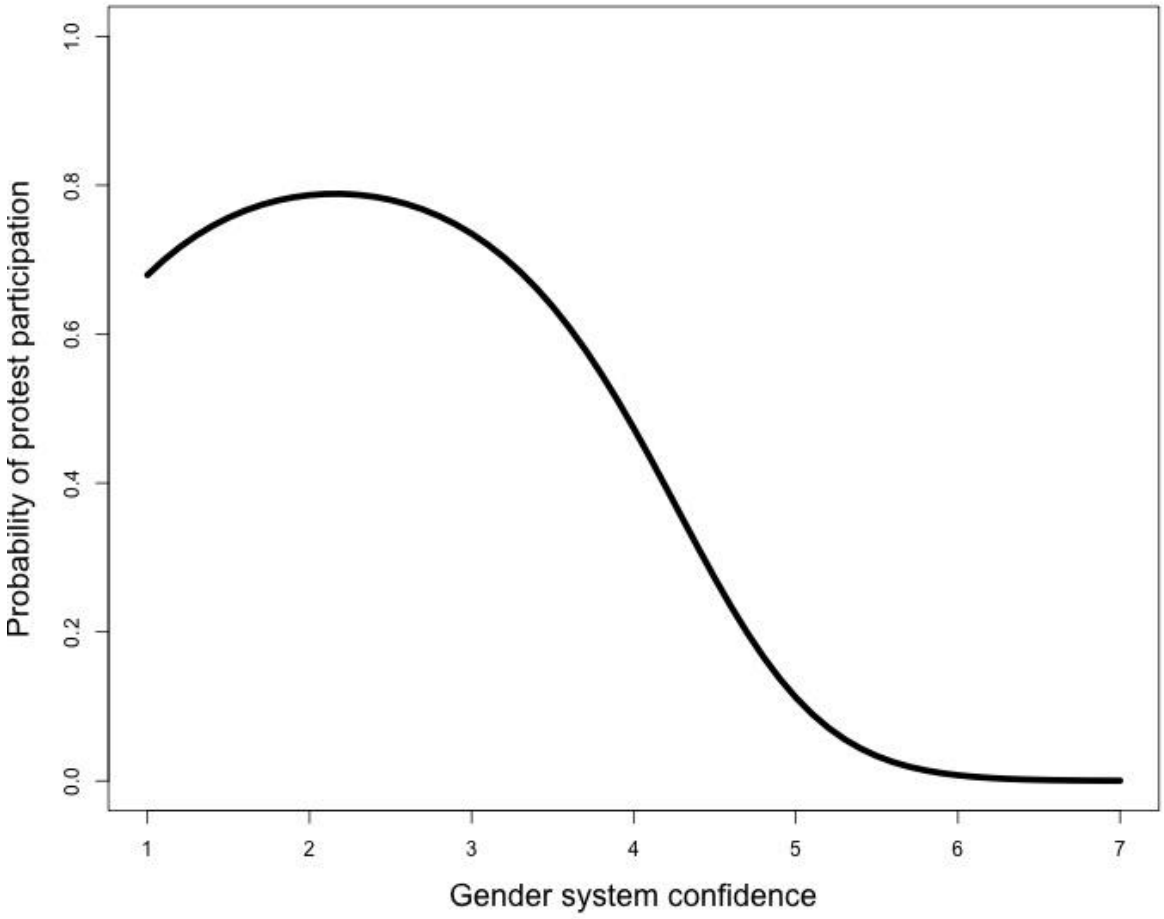

Figure 4. Probability of protest participation as a function of gender system confidence (Study 3). For gender system confidence values higher than 6.38 the plot was extrapolated.

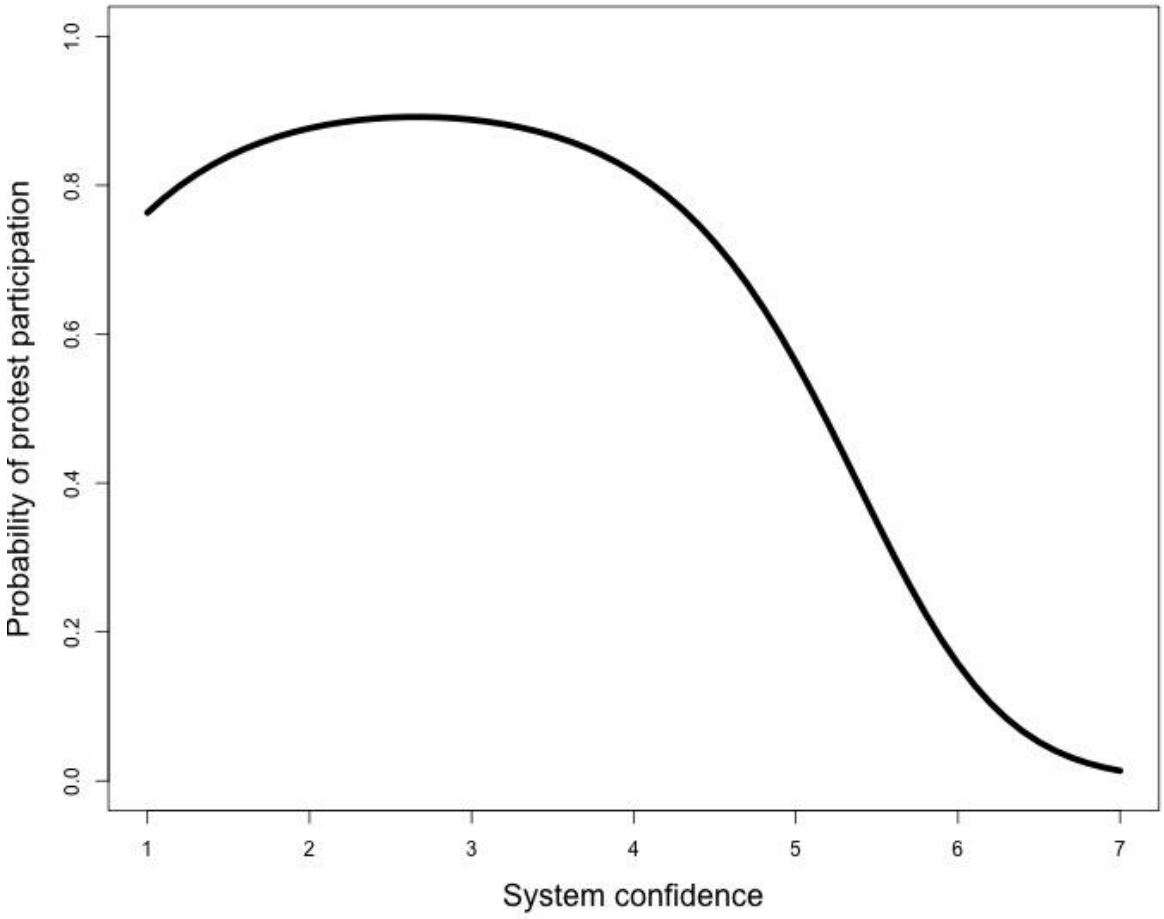

Figure 5. Probability of protest participation as a function of system confidence (Study 4). For system confidence values higher than 6.75 the plot was extrapolated.

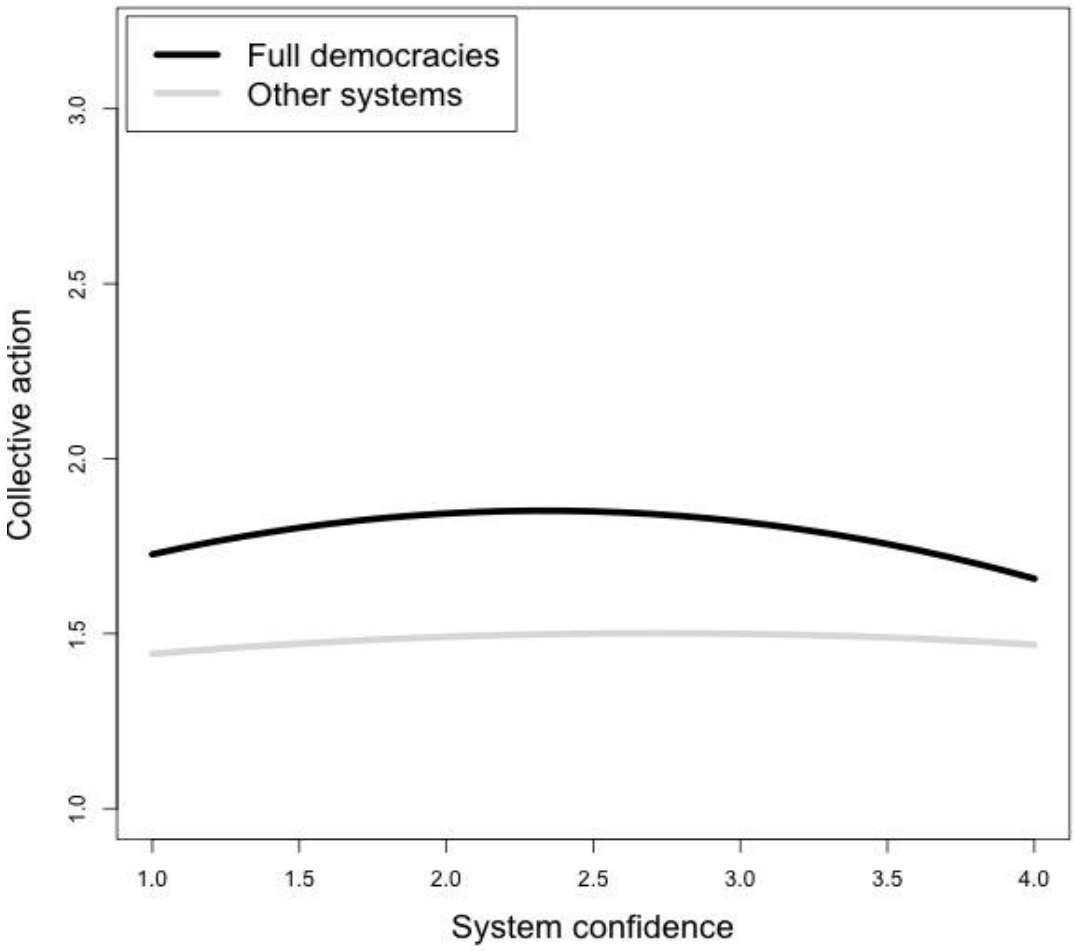

Figure 6. Collective action participation as a function of system confidence and political regime (Study 5). All individual and societal-level adjustment variables equal to 0.

Supplement

Table S1

Results of an Ordered Logistic Regression Predicting Voting Intentions (Study 1)

	Model 1		Model 2		Model 3	
Predictor variable	*B*	95% CI	*B*	95% CI	*B*	95% CI
System confidence	0.28***	[0.14, 0.41]	0.33***	[0.18, 0.48]	0.32***	[0.16, 0.47]
System confidence^2			-0.09	[-0.20, 0.03]	-0.08	[-0.20, 0.04]
Gender					-0.28*	[-0.53, -0.04]
Age					1.56***	[0.80, 2.33]
Education					0.14***	[0.09, 0.18]
Political conservatism					0.23***	[0.12, 0.34]
Thresholds						
Cut 1	-1.14***	[-1.28, -0.99]	-1.21***	[-1.39, -1.03]	-1.30***	[-1.48, -1.11]
Cut2	0.04	[-0.09, 0.17]	-0.03	[-0.19, 0.13]	-0.05	[-0.22, 0.11]
Nagelkerke's R^2	.02		.02		.10	
-2 log-likelihood	157.11		154.93		1877.91	

Parallel slopes assumption test	$\chi^2(1) = 5.78$*	$\chi^2(2) = 14.74$***	$\chi^2(6) = 31.75$***

Note. All continuous predictors were mean-centered prior to conducting analyses. Gender coded -0.5 for men and 0.5 for women. Age divided by 100.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table S2

Results of a Multinomial Logistic Regression Predicting Voting Intentions with Adjustment Variables (Study 1)

Group and predictor variable	*B*	*OR*	*OR* 95% CI
I don't know			
Intercept	0.38		
System confidence	0.52***	1.67	[1.33, 2.11]
System confidence^2	-0.33***	0.72	[0.60, 0.87]
Gender	0.10	1.10	[0.76, 1.59]
Age	-1.10†	0.33	[0.11, 1.05]
Education	0.01	1.01	[0.95, 1.08]
Political conservatism	0.14	1.15	[0.97, 1.36]
I would participate			
Intercept	0.91***		
System confidence	0.48***	1.62	[1.32, 1.99]
System confidence^2	-0.17*	0.85	[0.73, 0.99]
Gender	-0.30†	0.74	[0.53, 1.03]

Age	1.51**	4.54	[1.61, 12.79]
Education	0.16***	1.17	[1.11, 1.24]
Political conservatism	0.28***	1.32	[1.14, 1.53]
Nagelkerke's R^2		.13	
-2 log-likelihood		1848.76	

Note. DV's category of reference = "I would not participate". System confidence, age, education and political conservatism were mean-centered prior to conducting analyses. Gender coded -0.5 for men and 0.5 for women. Age divided by 100.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S3

Results of a Multinomial Logistic Regression Predicting Voting Intentions for Law and Justice (Challenger) and Civic Platform (Incumbent) with Adjustment Variables (Study 1)

Group and predictor variable	*B*	*OR*	*OR* 95% CI
I don't know			
Intercept	0.40**		
System confidence	0.52***	1.68	[1.33, 2.13]
System confidence^2	-0.34***	0.71	[0.59, 0.86]
Gender	0.10	1.10	[0.76, 1.60]
Age	-1.06†	0.35	[0.11, 1.08]
Education	0.02	1.02	[0.96, 1.09]
Political conservatism	0.17^{+}	1.19	[0.98, 1.45]
Challenger			
Intercept	-1.20***		
System confidence	0.28	1.32	[0.92, 1.88]
System confidence^2	-0.29^{+}	0.75	[0.56, 1.00]

Gender	-0.27	0.76	[0.44, 1.33]
Age	2.07*	7.96	[1.38, 45.89]
Education	0.13**	1.14	[1.04, 1.25]
Political conservatism	1.11***	3.05	[2.38, 3.90]
Incumbent			
Intercept	-.13		
System confidence	0.74***	2.09	[1.58, 2.75]
System confidence^2	-0.24*	0.79	[0.65, 0.95]
Gender	-0.49*	0.61	[0.40, 0.94]
Age	1.14†	3.12	[0.85, 11.48]
Education	0.22***	1.24	[1.15, 1.33]
Political conservatism	0.37***	1.45	[1.17, 1.81]
Nagelkerke's R^2		.28	
-2 log-likelihood		1716.02	

Note. DV's category of reference = "I would not participate". System confidence, age, education and political conservatism were mean-centered prior to conducting analyses. Gender coded -0.5 for men and 0.5 for women. Age divided by 100. † $p < .10$. * $p < .05$. **$p < .01$. *** $p < .001$.

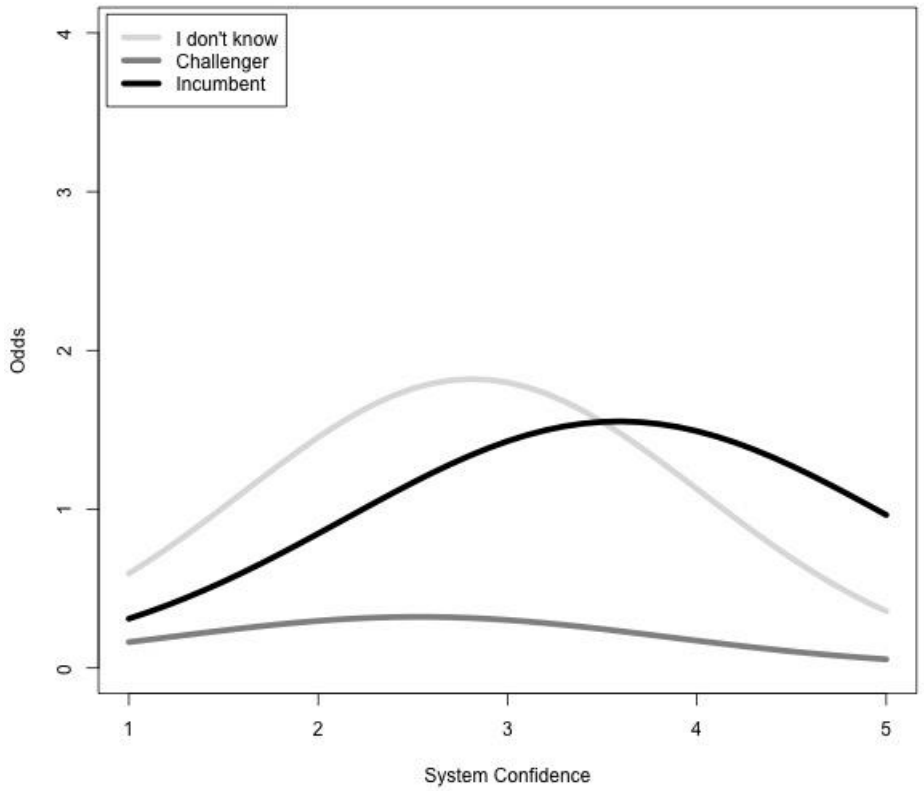

Figure S1. Voting intentions (odds of responding "I don't know" / voting for a challenger (Law and Justice)/incumbent (Civic Platform) political party relative to responding "I would not participate" with respect to upcoming elections) as a function of system confidence (Study 1).

Table S4

Results of a Multinomial Logistic Regression Predicting Voting Intentions for Challenging and Incumbent Parties with Adjustment Variables (Study 1)

Group and predictor variable	*B*	*OR*	*OR* 95% CI
I don't know			
Intercept	0.39**		
System confidence	0.52***	1.69	[1.34, 2.13]
System confidence^2	-0.33***	0.72	[0.59, 0.87]
Gender	0.10	1.11	[0.76, 1.60]
Age	-1.08†	0.34	[0.11, 1.06]
Education	0.02	1.02	[0.96, 1.09]
Political conservatism	0.13	1.13	[0.96, 1.34]
Challenger parties			
Intercept	-0.20		
System confidence	0.29*	1.33	[1.03, 1.73]
System confidence^2	-0.15	0.86	[0.71, 1.05]

Gender	-0.32	0.72	[0.48, 1.10]
Age	2.45***	11.55	[3.19, 41.84]
Education	0.18***	1.20	[1.12, 1.29]
Political conservatism	0.32***	1.37	[1.15, 1.63]
Incumbent parties			
Intercept	-.001		
System confidence	0.77***	2.15	[1.65, 2.80]
System confidence^2	-0.23*	0.80	[0.66, 0.95]
Gender	-0.56**	0.57	[0.38, 0.86]
Age	1.17†	3.23	[0.94, 11.14]
Education	0.19***	1.21	[1.13, 1.30]
Political conservatism	0.25**	1.29	[1.08, 1.53]
Nagelkerke's R^2		.18	
-2 log-likelihood		2137.34	

Note. DV's category of reference = "I would not participate". System confidence, age, education and political conservatism were mean-centered prior to conducting analyses. Gender coded -0.5 for men and 0.5 for women. Age divided by 100. † $p < .10$. * $p < .05$. **$p < .01$. *** $p < .001$.

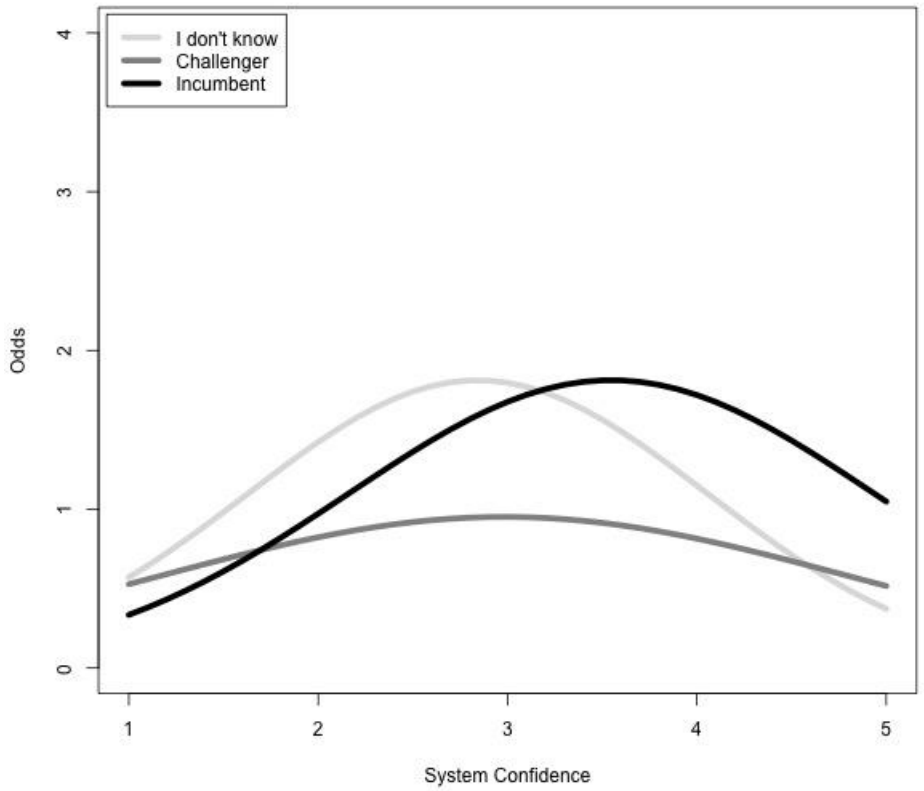

Figure S2. Voting intentions (odds of responding "I don't know" / voting for challenger/incumbent political parties relative to responding "I would not participate" with respect to upcoming elections) as a function of system confidence (Study 1).

Table S5

Results of Linear Regression Predicting Solidarity-Based Collective Action without Adjusting for Attitudes toward the Out-group (Study 2)

	Model 1			Model 2		
Predictor variable	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI
Intercept	3.66***		[3.53, 3.79]	3.72***		[3.55, 3.88]
System confidence	-0.01	-.01	[-0.11, 0.09]	-0.02	-.01	[-0.12, 0.08]
System confidence^2				-0.03	-.04	[-0.08, 0.02]
R^2		.00			.002	
F		$F(1, 929) = 0.06$			$F(2, 928) = 0.71$	
ΔR^2					.001	
ΔF					$F(1, 928) = 1.37$	

Note. System confidence was mean-centered prior to conducting analyses.

*** $p < .001$.

Table S6

Results of Linear Regression Predicting Solidarity-Based Collective Action with Adjustment Variables (Study 2)

Predictor variable	*B*	β	*B* 95% CI
Intercept	3.79***		[3.63, 3.94]
System confidence	-0.03	-.02	[-0.12, 0.07]
System confidence^2	-0.06*	-.07	[-0.11, -0.01]
Gender	-0.32*	-.08	[-0.57, -0.06]
Age	0.39	.03	[-0.36, 1.14]
Education	-0.01	-.01	[-0.04, 0.03]
Political conservatism	0.13**	.09	[0.04, 0.22]
Attitudes toward the out-group	0.55***	.34	[0.45, 0.65]
R^2		.13	
F		$F(7, 915) = 20.05$***	

Note. All continuous predictors were mean-centered prior to conducting analyses. Gender coded -0.5 form men and 0.5 for women. Age divided by 100.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S7

Results of a Binomial Logistic Regression Predicting Participation in the Demonstration with Adjustment Variables (Study 3)

Predictor variable	*B*	*OR*	*OR* 95% CI
Intercept	1.08***	2.95	
Gender system confidence	-0.57**	0.56	[0.38, 0.83]
Gender system confidence^2	-0.39*	0.68	[0.50, 0.94]
Age	-2.59**	0.08	[0.01, 0.47]
Education	-0.31	0.73	[0.43, 1.25]
Social conservatism	-0.10	0.90	[0.73, 1.13]
Economic conservatism	-0.07	0.93	[0.78, 1.11]
Nagelkerke's R^2		.20	
-2 log-likelihood		280.70	

Note. Gender system confidence, age, education, social and economic conservatism were mean-centered prior to conducting analyses. Age divided by 100.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table S8

Results of the Linear Regression Predicting Support for Collective Action with the Influential Case Included (Study 3)

	Model 1			Model 2		
Predictor variable	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI
Intercept	6.29***		[6.17, 6.41]	6.41***		[6.27, 6.55]
Gender system confidence	-0.39***	-0.33	[-0.52, -0.25]	-0.32***	-.27	[-0.46, -0.18]
Gender system confidence^2				-0.15**	-.20	[-0.24, -0.06]
R^2		.11			.15	
F		$F(1, 255) = 31.92$***			$F(2, 254) = 21.84$***	
ΔR^2					.04	
ΔF					$F(1, 254) = 10.57$**	

Note. Gender system confidence was mean-centered prior to conducting analyses.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table S9

Results of the Linear Regression Predicting Support for Collective Action with Adjustment Variables (Study 3)

	B	β	95% CI
Intercept	6.38***		[6.24, 6.52]
Gender system confidence	-0.24**	-.20	[-0.40, -0.08]
Gender system confidence^2	-0.12*	-.16	[-0.22, -0.03]
Age	-0.19	-.01	[-0.90, 0.71]
Education	0.002	.001	[-0.21, 0.22]
Social conservatism	-0.10*	-.14	[-0.19, -0.01]
Economic conservatism	-0.03	-.04	[-0.10, 0.05]
R^2		.16	
F		$F(6, 247) = 8.10$***	

Note. Gender system confidence, age, education, social and economic conservatism were mean-centered prior to conducting analyses. Age divided by 100.

Influential case excluded.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table S10

Results of the Linear Regression Predicting Normative Collective Actions Intentions with the Influential Case Included (Study 3)

	Model 1			Model 2		
Predictor variable	*B*	β	*B* 95% CI	*B*	β	*B* 95% CI
Intercept	5.84***		[5.66, 5.97]	5.84***		[5.66, 6.02]
Gender system confidence	-0.53***	-0.36	[-0.70, -0.36]	-0.51***	-.34	[-0.70, -0.33]
Gender system confidence^2				-0.03	-.03	[-0.15, 0.09]
R^2	.13			.13		
F	$F(1, 255) = 46.66$***			$F(2, 254) = 18.42$***		
ΔR^2				.001		
ΔF				$F(1, 254) = 0.28$		

Note. Gender system confidence was mean-centered prior to conducting analyses.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S11

Results of the Linear Regression Predicting Normative Collective Action Intentions with Adjustment Variables with the Influential Case Included (Study 3)

Predictor variable	*B*	β	95% CI
Intercept	5.81***		[5.63, 5.99]
Gender system confidence	-0.39***	-.26	[-0.60, -0.19]
Gender system confidence^2	-0.01	-.01	[-0.13, 0.11]
Age	-0.51	-.06	[-1.54, 0.53]
Education	-0.08	-.03	[-0.35, 0.20]
Social conservatism	-0.06	-.07	[-0.18, 0.06]
Economic conservatism	-0.14**	-.19	[-0.24, -0.05]
R^2		.17	
F		$F(6, 247) = 8.29$***	

Note. Gender system confidence, age, education, social and economic conservatism were mean-centered prior to conducting analyses. Age divided by 100. Influential case included (Cook's D < 0.50). When the influential case identified for analyses without demographics is excluded, the quadratic effect is still negative but not significant, $B = -.10$ [-0.24, -0.03], $\beta = -.09$, $p = .127$.

**$p < .01$. *** $p < .001$.

Table S12

Results of the Linear Regression Predicting Non-normative Collective Action Intentions with Adjustment Variables (Study 3)

Predictor variable	*B*	β	95% CI
Intercept	2.45***		[2.21, 2.69]
Gender system confidence	-0.21***	-.11	[-0.48, 0.07]
Gender system confidence^2	0.07	0.06	[-0.09, 0.23]
Age	-1.12	-.10	[-2.49, 0.25]
Education	0.09	.03	[-0.27, 0.46]
Social conservatism	0.01	.01	[-0.15, 0.17]
Economic conservatism	-0.21**	-.21	[-0.33, -0.08]
R^2		.08	
F		$F(6, 247) = 3.71$**	

Note. Gender system confidence, age, education, social and economic conservatism were mean-centered prior to conducting analyses. Age divided by 100. No influential cases identified (Cook's $D < 0.10$).

**$p < .01$. *** $p < .001$.

Table S13

Results of a Binomial Logistic Regression Predicting Participation in the Demonstration with Adjustment Variables (Study 4)

Predictor variable	*B*	*OR*	*OR* 95% CI
Intercept	2.14***	8.51	
System confidence	-0.22	0.81	[0.54, 1.20]
System confidence^2	-0.41*	0.66	[0.47, 0.93]
Age	6.53**	687.50	[9.10, 51921.86]
Gender	0.06	1.065	[0.38, 3.01]
Social conservatism	0.11	1.12	[0.87, 1.43]
Economic conservatism	-0.11	0.90	[0.69, 1.17]
Nagelkerke's R^2		.14	
-2 log-likelihood		177.39	

Note. System confidence, age, social and economic conservatism were mean-centered prior to conducting analyses. Age divided by 100. Gender coded -0.5 for men and 0.5 for women.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table S14

Human Development Index, Gini coefficient and the Type of Political Regime for 60 Countries Participating in the 6th Wave of the World Values Survey (Study 5)

Country	WVS Year	HDI	HDI year	Gini	Gini year	Political Regime
Algeria[abc]	2014	0.736[d]	2014	35.3[g]	1995	Authoritarian regime
Argentina[abc]	2013	0.833[d]	2013	42.3[g]	2013	Flawed democracy
Armenia[abc]	2011	0.723[d]	2011	31.3[g]	2011	Hybrid regime
Australia[abc]	2012	0.932[d]	2012	34.9[g]	2010	Full democracy
Azerbaijan[abc]	2011-2012	0.7435[ce]	2011/2012	16.6[g]	2005	Authoritarian regime
Bahrain	2014	0.824[d]	2014	–	–	Authoritarian regime
Belarus[ac]	2011	0.793[d]	2011	26.5[g]	2011	Authoritarian regime
Brazil[abc]	2014	0.755[d]	2014	52.9[g]	2013	Flawed democracy
Colombia[abc]	2012	0.715[d]	2012	53.5[g]	2012	Flawed democracy
Cyprus[abc]	2011	0.852[d]	2011	32.6[g]	2011	Flawed democracy
Chile[abc]	2011	0.821[d]	2011	50.8[g]	2011	Flawed democracy
China	2012	0.718[d]	2012	42.1[g]	2010	Authoritarian regime
Ecuador[ab]	2013	0.730[d]	2013	47.3[g]	2013	Hybrid regime
Egypt	2012	0.688[d]	2012	30.8[g]	2008	Hybrid regime
Estonia[abc]	2011	0.849[d]	2011	32.7[g]	2011	Flawed democracy
Georgia[abc]	2014	0.754[d]	2014	40.0[g]	2013	Hybrid regime

Germany[abc]	2013	0.915[d]	2013	30.1[g]	2011	Full democracy
Ghana[abc]	2011	0.566[d]	2011	42.8[g]	2005	Flawed democracy
Hong Kong[abc]	2013	0.908[d]	2013	53.7[h]	2011	Flawed democracy
India[abc]	2012/2014	0.6045[df]	2012/2014	33.9[g]	2009	Flawed democracy
Iraq[abc]	2013	0.657[d]	2013	29.5[g]	2012	Hybrid regime
Japan[abc]	2010	0.884[d]	2010	32.1[g]	2008	Full democracy
Jordan	2014	0.748[d]	2014	33.7[g]	2010	Authoritarian regime
Kazakhstan[abc]	2011	0.772[d]	2011	27.4[g]	2011	Authoritarian regime
Kuwait	2013	0.816[d]	2013	–	–	Authoritarian regime
Kyrgyzstan[abc]	2011	0.639[d]	2011	27.8[g]	2011	Hybrid regime
Lebanon	2013	0.768[d]	2013	–	–	Hybrid regime
Libya	2013	0.738[d]	2013	–	–	Hybrid regime
Malaysia[abc]	2011	0.772[d]	2011	46.3[g]	2009	Flawed democracy
Mexico[abc]	2012	0.754[d]	2012	48.1[g]	2012	Flawed democracy
Morocco[abc]	2011	0.621[d]	2011	40.7[g]	2007	Authoritarian regime
Netherlands[abc]	2012	0.920[d]	2012	28.0[g]	2012	Full democracy
New Zealand[abc]	2011	0.907[d]	2011	36.2[h]	1997	Full democracy
Nigeria[abc]	2011	0.499[d]	2011	43.0[g]	2009	Authoritarian regime
Pakistan[abc]	2012	0.532[d]	2012	29.6[g]	2010	Hybrid regime
Palestine[abc]	2013	0.679[d]	2013	34.5[g]	2009	Hybrid regime
Peru[abc]	2012	0.728[d]	2012	45.1[g]	2012	Flawed democracy

Philippines[abc]	2012	0.657[d]	2012	43.0[g]	2012	Flawed democracy
Poland[abc]	2012	0.838[d]	2012	32.4[g]	2012	Flawed democracy
Qatar	2010	0.844[d]	2010	–	–	Authoritarian Regime
Romania[abc]	2012	0.788[d]	2012	27.3[g]	2012	Flawed democracy
Russia[abc]	2011	0.790[d]	2011	41.0[g]	2011	Authoritarian regime
Rwanda[abc]	2012	0.476[d]	2012	51.3[g]	2010	Authoritarian regime
Singapore	2012	0.905[d]	2012	46.3[h]	2013	Hybrid regime
Slovenia[abc]	2011	0.877[d]	2011	24.9[g]	2011	Flawed democracy
South Korea[abc]	2010	0.886[d]	2010	30.2[h]	2013	Full democracy
South Africa[abc]	2013	0.663[d]	2013	63.4[g]	2011	Flawed democracy
Spain[abc]	2011	0.870[d]	2011	36.1[g]	2011	Full democracy
Sweden[abc]	2011	0.903[d]	2011	27.2[g]	2011	Full democracy
Taiwan	2012	–	2012	33.8[h]	2012	Flawed democracy
Thailand[abc]	2013	0.724[d]	2013	39.3[h]	2012	Flawed democracy
Trinidad and Tobago[abc]	2010	0.772[d]	2010	40.3[g]	1992	Flawed democracy
Tunisia[abc]	2013	0.720[d]	2013	35.8[g]	2010	Hybrid regime
Turkey[abc]	2011	0.751[d]	2011	40.0[g]	2011	Hybrid regime
Ukraine[abc]	2011	0.738[d]	2011	24.6[g]	2011	Hybrid regime
United States[abc]	2011	0.911[d]	2011	40.5[g]	2010	Full democracy
Uruguay[abc]	2011	0.784[d]	2011	43.4[g]	2011	Full democracy
Uzbekistan[ac]	2011	0.661[d]	2011	35.3[g]	2003	Authoritarian regime

Yemen[abc]	2013	0.498[d]	2013	35.9[g]	2005	Authoritarian regime
Zimbabwe[abc]	2011	0.474[d]	2011	50.1[h]	2006	Authoritarian regime

Note. HDI = Human Development Index. Political regime based on the Economist Intelligence Unit data corresponding to the year of WVS survey.

[a] Country included in the main text descriptive analysis

[b] Country included in the main text analyses of collective action.

[c] Country included in the main text analyses of voting.

[d] United Nations Development Programme estimate.

[e] The average of values for 2011 (0.742) and 2012 (0.745).

[f] The average of values for 2012 (0.600) and 2014 (0.609).

[g] World Bank estimate.

[h] Central Intelligence Agency estimate (World Bank estimate unavailable).

Table S15

Individual-level and Societal-Level Predictors of Collective Action (no adjustment variables, 53 countries; Study 5)

Predictor variable	Model 1	Model 2	Model 3	Model 4
Intercept	1.53 (0.03)***	1.57 (0.05)***	1.35 (0.06)***	1.33 (0.06)***
Individual level effects				
SC		-0.01 (0.01)	0.18 (0.04)***	0.13 (0.05)**
SC^2			-0.04 (0.01)***	-0.03 (0.01)***
Societal level effects				
Political regime type				0.09 (0.14)
SC × Political regime type				0.28 (0.09)**
SC^2 × Political regime type				-0.06 (0.02)***
Variance				
IL variation of DV	0.246 (0.009)***	0.243 (0.009)***	0.242 (0.009)***	0.242 (0.009)***
SL variation of DV	0.063 (0.012)***	0.104 (0.021)***	0.142 (0.035)***	0.140 (0.04)***
SL variation in IL effect of SC		0.007 (0.002)***	0.078 (0.018)***	0.066 (0.017)***
SL variation in IL effect of SC^2			0.002 (0.001)***	0.002 (0.001)**

-2 loglikelihood	109476.92	108734.40	108491.34	108460.91

Note. SC = System confidence. System confidence was grand-mean centered prior to conducting analyses. Unstandardized coefficients reported. Robust standard errors reported in the parentheses. Political regime type coded 1 for full democracies and 0 for other systems. Out of 60 countries participating in the 6th wave of WVS 7 (Bahrain, Belarus, Kuwait, Qatar, Singapore, Uzbekistan, Egypt) were excluded. Only adult (≥ 18) respondents included. Missing data handled with multiple imputation (20 imputed datasets). ICC (Model 1) = .20, 95% CI [.14, .27].

**$p < .01$. *** $p < .001$.

Table S16

Individual-Level and Societal-Level Predictors of Collective Action (No Multiple Imputation, 48 Countries; Study 5)

Predictor variable	Model 1	Model 2	Model 3	Model 4	Model 5
Intercept	1.55 (0.04)***	1.56 (0.04)***	1.57 (0.04)***	1.60 (0.04)***	1.53 (0.04)***
Individual level effects					
SC		-0.01 (0.01)	-0.01 (0.01)	-0.004 (0.013)	0.003 (0.01)
SC^2			-0.04 (0.01)***	-0.03 (0.01)**	-0.02 (0.01)†
Gender				-0.07 (0.004)***	-0.07 (0.004)***
Age				-0.05 (0.01)***	-0.05 (0.01)***
Education				0.04 (0.001)***	0.04 (0.001)***
Political conservatism				-0.02 (0.001)***	-0.02 (0.001)***
Societal level effects					
Political regime type					0.33 (0.03)***
HDI					0.48 (0.32)
Gini					0.01 (0.003)*
Cross-level interactions					
SC × Political regime type					-0.03 (0.03)

SC^2 × Political regime type					-0.06 (0.02)**
Variance					
IL variation of DV	0.249 (0.001)***	0.245 (0.001)***	0.244 (0.001)***	0.230 (0.001)***	0.230 (0.001)***
SL variation of DV	0.065 (0.013)***	0.065 (0.013)***	0.070 (0.015)***	0.068 (0.014)***	0.040 (0.008)***
SL variation in IL effect of SC		0.008 (0.002)***	0.008 (0.002)***	0.007 (0.002)***	0.007 (0.002)**
SL variation in IL effect of SC^2			0.003 (0.001)***	0.003 (0.001)***	0.002 (0.001)**
Deviance (-2 loglikelihood)	96829.08	96192.86	95239.47	76766.04	76737.39

Note. SC = System confidence. Gender coded -.50 for men and .50 for women. Age divided by 100. Political regime type coded 1 for full democracies and 0 for other systems. Continuous individual and societal-level predictors were grand-mean centered prior to conducting analyses. Unstandardized coefficients reported. Standard errors reported in the parentheses. Missing data handled with ML estimation. ICC (Model 1) = .21, 95% CI [.14, .27].

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S17

Individual-Level and Societal-Level Predictors of Collective Action (Different Reference Categories for Political Regime Types, 48 Countries; Study 5)

	Reference category		
Predictor variable	Authoritarian regime	Hybrid regime	Flawed democracy
Intercept	1.42 (0.09)***	1.39 (0.05)***	1.57 (0.05)***
Individual level effects			
SC	0.001 (0.02)	0.02 (0.03)	-0.01 (0.02)
SC^2	-0.03 (0.01)*	-0.01 (0.02)	-0.02 (0.01)†
Sex	-0.08 (0.01)***	-0.08 (0.01)***	-0.08 (0.01)***
Age	-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)
Education	0.04 (0.004)***	0.04 (0.004)***	0.04 (0.004)***
Political conservatism	-0.02 (0.003)***	-0.02 (0.003)***	-0.02 (0.003)***
Societal level effects			
Authoritatian regimes		0.03 (0.09)	-0.15 (0.11)
Hybrid regime	-0.03 (0.09)		-0.18 (0.08)*
Flawed democracy	0.15 (0.11)	0.17 (0.08)*	
Full democracy	0.46 (0.15)**	0.49 (0.11)***	0.32 (0.09)***

HDI	-0.02 (0.37)	-0.002 (0.37)	-0.02 (0.37)
Gini	0.004 (0.003)	0.004 (0.003)	0.004 (0.003)
Cross-level interactions			
SC × Authoritarian regime		-0.02 (0.04)	0.01 (0.03)
SC × Hybrid regime	0.02 (0.04)		0.03 (0.04)
SC × Flawed democracy	-0.01 (0.03)	-0.03 (0.04)	
SC × Full democracy	-0.02 (0.02)	-0.04 (0.04)	-0.01 (0.03)
SC^2 × Authoritarian regime		-0.02 (0.02)	-0.01 (0.02)
SC^2 × Hybrid regime	0.02 (0.02)		0.01 (0.02)
SC^2 × Flawed democracy	0.01 (0.02)	-0.01(0.02)	
SC^2 × Full democracy	-0.04 (0.02)*	-0.06 (0.02)**	-0.05 (0.02)**
Variance			
IL variation of DV	0.232 (0.008)***	0.232 (0.008)***	0.232 (0.008)***
SL variation of DV	0.034 (0.006)***	0.034 (0.006)***	0.034 (0.006)***
SL variation in IL effect of SC	0.005 (0.001)***	0.005 (0.001)***	0.005 (0.001)***
SL variation in IL effect of SC^2	0.002 (0.000)**	0.002 (0.000)***	0.002 (0.000)***

Deviance (-2 loglikelihood)	94141.74	94139.60	94133.85

Note. Gender coded -.50 for men and .50 for women. Age divided by 100. Continuous individual and societal-level predictors were grand-mean centered prior to conducting analyses. Unstandardized coefficients reported. Robust standard errors reported in the parentheses. Missing data handled with multiple imputation (20 imputed datasets).

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S18

Individual-Level and Societal-Level Predictors of Voting (No Adjustment Variables, 57 Countries; Study 5)

Predictor variable	Model 1	Model 2	Model 3	Model 4
Individual level effects				
SC		0.40 (0.04)***	0.37 (0.04)***	0.32 (0.04)***
SC^2			-0.04 (0.03)	0.00 (0.03)
Societal level effects				
Political regime type				1.09 (0.31)***
SC × Political regime type				0.33 (0.07)***
SC^2 × Political regime type				-0.29 (0.10)**
Thresholds				
Cut 1	-1.80 (0.14)***	-1.80 (0.06)***	-1.77 (0.09)***	-1.68 (0.13)***
Cut 2	-0.44 (0.14)**	-0.42 (0.04)***	-0.39 (0.08)***	-0.29 (0.12)*
Variance				

SL variation of DV	1.04 (0.26)***	1.13 (0.27)***	1.18 (0.28)***	0.99 (0.23)***
SL variation in IL effect of SC		0.08 (0.02)***	0.07 (0.02)***	0.05 (0.01)***
SL variation in IL effect of SC^2			0.04 (0.01)**	0.03 (0.01)***
-2 loglikelihood	141635.59	140274.04	140178.11	140151.49

Note. SC = System confidence. System confidence was grand-mean centered prior to conducting analyses. Unstandardized coefficients reported. Robust standard errors reported in the parentheses. Political regime type coded 1 for full democracies and 0 for other systems. Out of 60 countries participating in the 6th wave of WVS three (Bahrain, Egypt and Ecuador) were excluded. Only adult (≥ 18) respondents included. Missing data handled with multiple imputation (20 imputed datasets). ICC (Model 1) = .24, 95% CI [.15, .33].

** $p < .01$. *** $p < .001$.

Table S19

Individual-Level and Societal-Level Predictors of Voting (No Multiple Imputation, 49 Countries; Study 5)

Predictors	Model 1	Model 2	Model 3	Model 4	Model 5
Individual level effects					
SC		0.43 (0.05)***	0.41 (0.04)***	0.35 (0.05)***	0.29 (0.05)***
SC^2			-0.06 (0.03) †	-0.05 (0.04)	0.003 (0.03)
Gender				-0.09 (0.04)*	-0.09 (0.04)*
Age				0.36 (0.03)***	0.36 (0.03)***
Education				0.08 (0.02)***	0.08 (0.02)***
Political conservatism				0.04 (0.01)***	0.04 (0.01)***
Societal level effects					
Political regime type					0.87 (0.46)†
HDI					0.44 (1.40)
Gini					0.02 (0.01)†
Cross-level interactions					
SC × Political regime type					0.30 (0.09)**

SC^2 × Political regime type					-0.24 (0.10)*
Thresholds					
Cut 1	-1.99 (0.14)***	-1.99 (0.08)***	-2.02 (0.06)***	-2.28 (0.09)***	-2.01 (0.17)***
Cut 2	-0.58 (0.14)***	-0.55 (0.06)***	-0.58 (0.03)***	-0.74 (0.08)***	-0.46 (0.16)**
Variance					
SL variation of DV	0.91 (0.20)***	0.94 (0.20)***	0.99 (0.22)***	0.92 (0.18)***	0.80 (0.15)***
SL variation in IL effect of SC		0.10 (0.02)***	0.09 (0.02)***	0.10 (0.03)***	0.09 (0.03)***
SL variation in IL effect of SC^2			0.04 (0.02)**	0.03 (0.01)**	0.03 (0.01)*
Deviance (-2 loglikelihood)	116841.90	114676.94	114589.87	90107.23	90089.60

Note. SC = System confidence. Gender coded -.50 for men and .50 for women. Age divided by 100. Political regime type coded 1 for full democracies and 0 for other systems. Continuous individual and societal-level predictors were grand-mean centered prior to conducting analyses. Unstandardized coefficients reported. Standard errors reported in the parentheses. Missing data handled with ML estimation. ICC (Model 1) = .22, 95% CI [.14, .29], $p < .001$. Because there was no convergence for Models 4 and 5 when MLR estimator was used, we applied ML estimators in these two cases.

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table S20

Individual-Level and Societal-Level Predictors of Voting (Different Reference Categories for Political Regime Types, 49 Countries; Study 5)

	Reference category		
Predictor variable	Authoritarian regime	Hybrid regime	Flawed democracy
Individual level effects			
SC	0.30 (0.08)***	0.28 (0.14)*	0.31 (0.07)***
SC^2	0.02 (0.05)	-0.12 (0.06)†	0.003 (0.05)
Sex	-0.09 (0.04)*	-0.09 (0.04)*	-0.09 (0.04)*
Age	0.35 (0.03)***	0.35 (0.03)***	0.35 (0.03)***
Education	0.08 (0.02)***	0.08 (0.02)***	0.08 (0.02)***
Political conservatism	0.03 (0.01)***	0.03 (0.01)***	0.03 (0.01)***
Societal level effects			
Authoritatian regimes		-0.73 (0.33)*	-1.00 (0.29)**
Hybrid regime	0.64 (0.34)†		-0.15 (0.34)
Flawed democracy	0.91 (0.38)*	0.54 (0.37)	
Full democracy	1.44 (0.57)*	1.14 (0.53)*	0.73 (0.43)†
HDI	-0.98 (1.74)	-2.06 (1.61)	-1.42 (1.60)

Gini	0.01 (0.02)	0.00 (0.02)	0.01 (0.01)
Cross-level interactions			
SC × Authoritarian regime		0.01 (0.17)	-0.01 (0.10)
SC × Hybrid regime	-0.01 (0.16)		-0.02 (0.16)
SC × Flawed democracy	0.01 (0.10)	0.03 (0.16)	
SC × Full democracy	0.28 (0.10)**	0.29 (0.17)†	0.27 (0.09)**
SC^2 × Authoritarian regime		0.14 (0.08)†	0.02 (0.06)
SC^2 × Hybrid regime	-0.14 (0.07)*		0.12 (0.07)†
SC^2 × Flawed democracy	-0.02 (0.06)	0.12 (0.09)	
SC^2 × Full democracy	-0.30 (0.09)***	-0.16 (0.14)	-0.28 (0.10)**
Thresholds			
Cut 1	-1.40 (0.33)***	0.28 (0.14)*	-2.18 (0.19)***
Cut 2	0.10 (0.32)	-0.12 (0.06)†	-0.67 (0.19)***
Variance			
SL variation of DV	0.67 (0.13)***	0.67 (0.14)***	0.66 (0.13)***
SL variation in IL effect of SC	0.07 (0.02)***	0.07 (0.02)***	0.07 (0.02)***

SL variation in IL effect of SC^2	0.02 (0.01)***	0.02 (0.01)	0.02 (0.01)**
Deviance (-2 loglikelihood)	113953.05	113975.62	113960.17

Note. Gender coded -.50 for men and .50 for women. Age divided by 100. Continuous individual and societal-level predictors were grand-mean centered prior to conducting analyses. Unstandardized coefficients reported. Robust standard errors reported in the parentheses. Missing data handled with multiple imputation (20 imputed datasets).

† $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.