

# Social Class, Group-Based Anger, and Collective Action Intentions in China

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This research examines the anger and collective action intentions among different social classes in China. Based on social cognition theory with respect to social class, we proposed that the relationship between group-based anger and collective action intentions would be moderated by social class. To test this hypothesis, two studies were conducted. First, using data collected from a sample of 100 residents of Hubei Province, China, Study 1 found that the relationship between group-based anger and collective action intentions was moderated by social class: group-based anger can predict collective action intentions among the upper social class but not among the lower social class. Then, Study 2 employed a 2 × 2 completely randomised design. Its 118 participants were manipulated to experience a momentary change in their subjective social class and the level of their group-based anger before measuring their collective action intentions. The results were consistent with Study 1. Taken together, the findings suggest that social class does moderate the relationship between group-based anger and collective action intentions.

**Keywords:** social class, group-based anger, collective action intentions

In recent years, due to imbalanced regional economic development and financial innovation, Chinese society is undergoing dramatic social changes, characterised by sharp contrasts between how different groups' interests are served. In these circumstances, collective action has become a serious issue that is having a profound impact on Chinese society. Many social psychologists have recently uncovered the mechanisms underlying collective action in the West, finding that group-based anger, group identity, and group efficacy are key influencers of peoples' collective action (e.g., van Zomeren, 2013; van Zomeren, Postmes, & Spears, 2008; van Zomeren, Leach, & Spears, 2012). In China, a primary cause of many collective actions is the gap between the rich and the poor, and previous research has also found that social class may influence collective action (e.g., Brandt, 2013; Fritsche et al., 2017). However, the relationship between social class and collective action needs further study.

According to relative deprivation theory (RDT; see Crosby, 1976; Folger, 1987; Runciman, 1966), group-based anger has a significant predictive effect on collective action (Christensen, Rothgerber, Wood, & Matz, 2004; van Zomeren et al., 2008). Previous research has also suggested that when people feel angry at perceived unfair treatment, they may engage in collective behaviours to improve their

group situation (Fritsche et al., 2017; Leach, Iyer, & Pedersen, 2006; Petersen, 2002; Smith & Huo, 2014). For example, Zhang and Yang (2015) observed that collective action often happens in regions that are lagging economically, while Li, Tang, and Qin (2012) found that the sense of conflict is stronger among the lower than the upper social class. It is widely known, however, that many people who perceive they are being treated unfairly nonetheless shun collective action, especially in the culture of peace and harmony promoted in China. The relationship between group-based anger and collective action in China needs more empirical data. Aiming to fill this gap in the literature, we propose and test the hypothesis that group-based anger is positively correlated with the collective action in China (Hypothesis 1).

The positive relationship between group-based anger and collective action may not always hold, since different groups may interact with the world in different ways. For example, social class, or socioeconomic status (SES), is an important variable to consider. Social class describes an individual's relative position based on his or her access to material and social resources (Kraus, Piff, Mendoza-Denton, Rheinschmidt, & Keltner, 2012). It can be indexed by objective markers, such as income, educational attainment, and occupation prestige (Lareau & Conley, 2008;

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Oakes & Rossi, 2003). Alternatively, it can be framed subjectively; for example, social status may be depicted as a ladder with 10 rungs, where the top rung represents the highest income, maximum education, and the most respected job (Adler, Epel, Castellazzo, & Ickovics, 2000).

Since members of different social classes have different material conditions and available resources, the way they think about and interact with the world also differs (Manstead, 2018). According to social cognition theory, individuals of the lower social class cannot do as they want due to constraints and limited resources; consequently, they adopt 'contextualist' social cognitive tendencies. By contrast, members of the upper social class can usually act as they wish and have a high belief that what they do will succeed, leading them to adopt 'solipsistic' social cognitive tendencies (Kraus et al., 2012). The upper social class has sufficient resources and a high sense of control and thus has stronger beliefs about what they can do to achieve their desires. Conversely, the lower social class lives in an environment lacking resources and has fewer opportunities to control and influence things happening around them; thus, the people from this class have weaker beliefs about their ability to realise their goals (Kraus, Piff, & Keltner, 2009). On these bases, even among people angered by perceived unfair treatment, only the upper social class will engage in collective action, as its members have enough resources during their formative years and develop solipsistic social cognitive tendencies. Since members of the upper social class always believe they can achieve their goal by taking action (Kraus et al., 2012), they will engage in collective behaviours to improve their group situation when angered by perceived unfair treatment. By contrast, despite more frequently perceiving unfair or unjust treatment (Simandan, 2018), members of the lower social class will not take collective action (Becker, Kraus, & Rheinschmidt-Same, 2017; Paulsen, 1991).

Thus, based on the discussed theories and empirical evidence, we hypothesise that the relationship between group-based anger and collective action intentions is moderated by social class (Hypothesis 2). Specifically, we predict that lower social class members tend not to participate in collective action even when angered by perceived unfair treatment (Hypothesis 2a). In contrast, upper social class members similarly angered do tend to participate in collective action (Hypothesis 2b).

## The Present Research

Aiming to test our hypotheses, two studies were conducted: one in a real-world social context (Study 1) and the other in an artificial context (Study 2). These two studies tested the same hypotheses using two different research methods, so as to test whether our conclusions are reliable and repeatable. The present research expands on previous studies in three important ways. First, we consider how social class influences the social psychology of collective action, since the gap between the rich and the

poor is a primary cause of collective action. Second, it broadens the scope of collective action research beyond Western, educated, industrialised, rich, and democratic (WEIRD) samples (Henrich, Heine, & Norenzayan, 2010). Third, we adapt simultaneously correlational and experimental methods to investigate the relationship between social class and collective action intentions, which is an important methodological contribution to this topic.

## Study 1

The aim of Study 1 was to examine whether the relationship between collective action intentions and group-based anger differs in different social classes. The context for this investigation was controversy over the site selection for a garbage station, causing the residents of communities near the proposed site to contemplate taking collective action against the garbage station's construction. In China, the siting of garbage stations is a key trigger of collective action in cities. We considered this an ideal real-world social context to test our hypothesis with potentially high external validity.

## Method

### Participants

To obtain a medium power test (effect size  $F^2 = .15$  in a linear multiple regression analysis), a G\*power analysis suggested a total sample size of 89 participants would be needed to obtain a power of .95 (Faul, Erdfelder, Buchner, & Lang, 2009). Therefore, 113 residents of a community near a proposed garbage station in Hubei Province were invited to complete our questionnaire survey. After excluding the data of 13 participants who did not complete the questionnaire, the final sample comprised 100 participants. Four did not complete primary school, 11 were middle school graduates, 26 were high school graduates, 26 held associate degrees, 27 held bachelor's degrees, and 6 held postgraduate degrees. There were 47 men and 53 women, with a mean age of 28.43 years ( $SD = 6.05$ ).

### Procedure and materials

We asked participants to complete a battery of items related to their social class, group-based anger, and intentions to collectively protest the construction of the garbage station after they learned the site had been selected. All questionnaire items were paper-based, and completing the questionnaire took about 10 minutes. All participants were informed that their survey data would remain anonymous and be analysed holistically. After completing the questionnaire, they were compensated with USD 0.79 or a small gift of equivalent value.

### Measures

**Social class.** Following previous research (e.g., Snibbe & Markus, 2005, see also Kraus, Côté, & Keltner, 2010), we selected educational attainment as an effective indicator of social class (Grossmann & Varnum, 2011). Using a

**Table 1**  
Descriptive Statistics and Intercorrelations Between Variables ( $n = 100$ )

	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Age	28.43	6.05	1				
2. Gender	.47	.50	.00	1			
3. Social class	3.79	1.24	-.23*	.16	1		
4. Group-based anger	6.21	1.11	.14	-.27**	-.14	1	
5. Collective action intentions	5.29	1.22	.15	.22*	-.12	.46**	1

Note: For gender, 0 = male, 1 = female. \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

6-point Likert scale (1 = *did not complete primary school*, 2 = *middle school graduate*, 3 = *high school graduate*, 4 = *associate degree*, 5 = *college graduate*, 6 = *postgraduate degree*), we asked every participant to report the highest level they had attained. In our subsequent analysis, higher scores were taken to indicate higher social class.

**Group-based anger.** Three items ( $\alpha = .91$ ) were adapted from Alberici and Milesi (2016), reworked for the current context to the following: ‘I get angry when I think about the fact there will be a garbage station near our community’; ‘I feel angry about the building of the garbage station’; ‘I feel angry when I think about environment of the residential area we will face.’ Participants were asked to evaluate what degree to which each item described their feelings (1 = *not at all*; 7 = *extremely well*).

**Collective action.** Three items were used to assess collective action intentions (van Zomeren, Spears, Fischer, & Leach, 2004) and formed a reliable scale ( $\alpha = .87$ ). These items were: ‘Would you like to sign a petition to protest against the construction of the garbage station?’; ‘Would you like to leave comments under the official micro-blog of our government?’; and ‘Would you like to share news about protesting the construction of the garbage station?’ (7 point scale: 1 = *not at all*; 7 = *absolutely*).

After completing the scales, participants were required to record their gender and age, since both have been identified in previous research as potential predictors of collective action intentions (e.g., van Zomeren et al., 2004). Finally, we informed the participants of the true aims of our study.

## Results and Discussion

### Preliminary Analyses

To examine the potential influences of gender and age on the measured variable, we first conducted several preliminary analyses. Descriptive statistics for all the variables are presented in Table 1. The results revealed significant correlations between gender and group-based anger ( $r = -.27$ ,  $p = .006$ ) and collective action intentions ( $r = .22$ ,  $p = .026$ ); the correlation between age and social class is also significant ( $r = -.23$ ,  $p = .020$ ). Based on these results, we included gender and age as control variables in all the following analyses.

As shown in Table 1, there was a significant positive correlation between group-based anger and collective action intentions ( $r = .46$ ,  $p < .001$ ), but neither the cor-

relation between social class and group-based anger ( $r = -.14$ ,  $p = .168$ ) nor that between social class and collective action intentions ( $r = -.12$ ,  $p = .238$ ) is significant.

### Multiple Regression Analyses and Moderating Analyses

To examine the interactive effects of group-based anger and social class on collective action intentions, we mean-centred the group-based anger and social class and conducted a hierarchical regression analysis. In the first step, gender and age (as control variables) were entered into the regression equation to control for their influences on collective action intentions (the dependent variable). In the second step, group-based anger and social class (as independent variables) were entered into the regression equation to predict collective action intentions. In the third step, the interaction term (group-based anger  $\times$  social class, using their mean-centred values) was introduced. Thus, we found that group-based anger had a significant effect on collective action intentions ( $\beta = .46$ ,  $p < .001$ ), which is consistent with Hypothesis 1, but the effect of social class on collective action intentions was not significant ( $\beta = -.02$ ,  $p = .83$ ). Consistent with Hypothesis 2, social class did moderate the relationship between group-based anger and collective action intentions ( $\beta = .20$ ,  $p = .033$ ): the interaction term explained 3.6% of the variance in this intentions. The final model accounted for 27.0% of the total variance in collective action intentions (see Table 2).

To explain this moderated relationship in more detail, a simple slope test for the association between group-based anger and collective action intentions was conducted for low ( $-1$  *SD*) and high ( $+1$  *SD*) social class. The results revealed a significant positive relationship between group-based anger and collective action intentions for the upper social class ( $\beta = .68$ ,  $p < .001$ ), which is consistent with Hypothesis 2b, whereas this relationship was not significant for the lower social class ( $\beta = .24$ ,  $p = .21$ ), which supports Hypothesis 2a.

## Discussion

First, based on correlational research in a real-world social context in China, Study 1 demonstrated that social class moderates the relationship between group-based anger and collective action intentions, so that anger is associated with higher intentions for the upper social class, but not the lower social class. This was consistent with Hypotheses 2a and 2b. The results of Study 1 were similar to

**Table 2**  
Hierarchical Multiple Regression on Collective Action Intentions

Variables	Step 1		Step 2		Step 3	
	$\beta$	$p$	$\beta$	$p$	$\beta$	$p$
Gender	-.22	.03	-.1	.27	-.04	.69
Age	.15	.13	.09	.36	.10	.30
Group-based anger			.42	.00	.46	.00
Social class			-.02	.80	-.02	.83
Group-based anger × social class					.20	.03
$R^2$	.07		.23		.27	
$\Delta R^2$	.07		.16		.04	
$F$	3.75*		7.24***		6.95***	

Note: For gender, 0 = male, 1 = female. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

that of previous studies about social class. For example, some studies found that members of the lower social class, relative to those of the upper social class, tend to remain politically inactive when faced with an ingroup-related social disadvantage (e.g., Becker et al., 2017; Paulsen, 1991). This is an interesting issue, because some studies suggest that the lower social class is more likely involved in class conflict and expresses more state and behavioural hostility toward the other classes (e.g., Greitemeyer & Sagioglou, 2016; Kraus, Horberg, Goetz, & Keltner, 2011). Therefore, it is necessary to provide further evidence to test the relationships of social class, group-based anger, and collective action intentions under more strictly controlled conditions. At the same time, while the real-world social context of Study 1 guaranteed high ecological validity, its methodology has limitations. Thus, we cannot discern causal relationships because the independent variables were not manipulated in Study 1.

## Study 2

To further examine whether social class moderates the relationship between group-based anger and collective action intentions and whether this moderating effect arises from relative social class rank, and to replicate the general pattern of results found in Study 1, we conducted an experimental investigation in Study 2. Specifically, we sought to examine the interaction effects of group-based anger and social class on collective action intentions by manipulating both the group-based anger and the relative social class of all participants.

## Method

### Participants

A power analysis suggested that to obtain a medium power test (effect size  $F^2 = .25$  in an analysis of variance [ANOVA]), 128 participants were needed. Therefore, we recruited 130 students (who had never participated in similar experiments) from a university in Hunan Province, China, to whom we offered to compensate with USD1.50 or a small gift of equivalent value if they fully completed our survey. Twelve participants did not fully complete the

survey, so their data were excluded. Thus, the final sample comprised 118 participants (64 males, 54 females), whose mean age was 18.72 years ( $SD = 0.75$ ).

### Design and Procedure

We employed a  $2 \times 2$  between-subjects factorial design in which participants were given texts to read and then required to answer questions on paper relating to the described scenario. All participants were asked to read the texts and answer the questions carefully. In our experiment, group-based anger (the angered group and the control group) and social class (high and low) are between-subjects independent variables, and collective action intentions is the dependent variable. Participants were randomly assigned to one of the four conditions (angered group × lower social class, angered group × upper social class, control group × lower social class, control group × upper social class).

**Manipulation of group-based anger.** Participants read a fictional account of a survey of sanitary conditions in the campus dining hall in the past few days (adapted from Shi, Hao, Saeri, & Cui, 2014). The angered group read that our survey found food was being cooked in unsanitary conditions, including staff smoking while cooking, unclean pans, and many cockroaches in the kitchen, but no remedial steps were being taken. By contrast, the control group read that our survey found satisfactory cleanliness, with good sanitary conditions for cooking food, all staff wearing a uniform, very clean pans, and no insects in the kitchen. After reading this material, all participants completed the questionnaire of group-based anger (Shi et al., 2014), which comprised three items ( $\alpha = 0.92$ ): ‘I feel angry about the sanitary conditions of our campus dining hall’; ‘I feel angry about the school’s quality control of the sanitary conditions of our campus dining hall’; ‘I feel angry about the attention the school paid to the sanitary conditions of our campus dining hall.’ Participants rated the level of their agreement with each item on a 7-point scale (1 = *strongly disagree*; 7 = *strongly agree*).

**Manipulation of social class.** We used a 10-rung ladder from the MacArthur Scale of Subjective Socioeconomic Status (Adler et al., 2000) as the tool for manipulating social class (adapted from Piff, Kraus, Côté, Cheng, & Keltner, 2010). This manipulation tool has been widely used in social class psychology (e.g., Anderson, Kraus, Galinsky, & Keltner, 2012; Dubois, Rucker, & Galinsky, 2015; Kraus et al., 2011). It allowed us to temporarily change the experience of social class through comparison with others, which could bring about the same effect as real social class (Kraus et al., 2013). We informed all participants that the ladder represents social class, with those in higher positions having more money, higher educational attainment, and higher occupation status. The subsequent instructions differed for the participants assigned to each social class. Specifically, participants assigned to the upper social class read the following: ‘As you know, the people at

**Table 3**  
Means (and Standard Deviations) of All Variables

	Upper social class		Lower social class	
	Angered group ( <i>n</i> = 28)	Control group ( <i>n</i> = 26)	Angered group ( <i>n</i> = 27)	Control group ( <i>n</i> = 37)
1. Group-based anger	5.30 (1.60)	3.96 (2.16)	4.25 (1.73)	4.05 (2.13)
2. Social class	3.71 (1.15)	3.31 (0.93)	3.19 (1.11)	2.86 (1.25)
3. Collective action intentions	2.96 (0.46)	2.42 (0.45)	2.51 (0.38)	2.35 (0.45)

the bottom of the ladder are worst off: they have almost no money, the least education, and the least-respected jobs.’ Conversely, participants assigned to the lower social class read the following: ‘As you know, the people at the top of the ladder are the best off: they have a lot of money, the most education, and the most-respected jobs.’ Next, we asked participants to think about their life and that of people at the top of the ladder (participants assigned to the lower social class) or at the bottom of the ladder (participants assigned to the higher social class), and then write five sentences on the differences between the two. Finally, we asked participants to report where would they place themselves on this ladder by marking a large X on the applicable rung (10 = top rung; 1 = bottom rung). Previous studies have suggested this is an effective tool to manipulate social class (Kraus et al., 2009).

### Measures

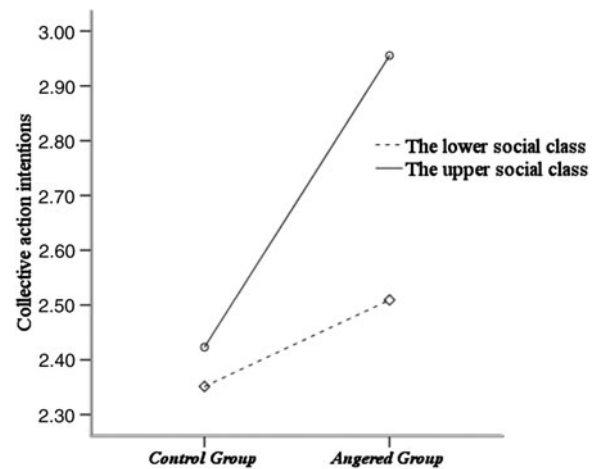
The collective action intentions scale comprised four items ( $\alpha = 0.81$ ): ‘I will support an appeal to the university demanding better checks on sanitary conditions in the dining hall’; ‘I will vote via the Sina<sup>1</sup> micro blog to ask the superintendent of the campus dining hall to urgently upgrade disinfection facilities’; ‘I will vote via the Sina micro blog to ask university leaders to strictly supervise food safety in our campus dining hall’; ‘I will vote on the Sina micro blog to support punishing those who do not conform to sanitary standards.’ Participants were asked to rate their intentions to perform each action on a 7-point scale (1 = *strongly unwilling*; 7 = *strongly willing*).

Finally, all participants reported their age and gender, before being informed that our survey had been fictional and there were no problems with the safety of food served in their campus dining hall.

## Results

### Manipulation Checks

To check the effect of our manipulations of group-based anger and social class, we conducted two between-subjects ANOVAs. The results indicate that there was a significant effect of manipulated group-based anger ( $F_{(1, 114)} = 4.58$ ,  $p = .035$ ,  $\eta^2 = .039$ ) on overall group-based anger, but neither the manipulated social class ( $F_{(1, 114)} = 1.81$ ,  $p = .181$ ,  $\eta^2 = .016$ ) nor the interaction term (group-based anger  $\times$  social class,  $F_{(1, 114)} = 2.49$ ,  $p = .117$ ,  $\eta^2 = .021$ ) had significant effects. Similarly, there was a significant effect of manipulated social class ( $F_{(1, 114)} = 5.35$ ,  $p = .023$ ,



**Figure 1**

Interaction effects on collective action intentions.

$\eta^2 = .045$ ) on participants’ reported social class, but the effects of manipulated group-based anger ( $F_{(1, 114)} = 2.99$ ,  $p = .086$ ,  $\eta^2 = .026$ ) and the interaction term ( $F_{(1, 114)} = .42$ ,  $p = .838$ ,  $\eta^2 = .000$ ) were not significant. These results suggest that the manipulations of group-based anger and social class were successful.

### Hypotheses Testing

We conducted an ANOVA to examine the interaction effects of group-based anger and social class on collective action intentions. The results suggest there was a significant group-based anger  $\times$  social class interaction ( $F_{(1, 114)} = 5.35$ ,  $p = .022$ , partial  $\eta^2 = .045$ ). The effects of group-based anger ( $F_{(1, 114)} = 18.19$ ,  $p < .001$ , partial  $\eta^2 = .138$ ) and social class ( $F_{(1, 114)} = 10.24$ ,  $p = .002$ , partial  $\eta^2 = .082$ ) were also significant. Means (and standard deviations) of perceived anger, social class, and collective action intentions are presented in Table 3. The results of simple effects analysis yielded further interesting findings. For the lower social class, there was no significant difference in collective action intentions when they were angry and not angry ( $F_{(1, 114)} = 2.06$ ,  $p = .154$ , partial  $\eta^2 = .02$ ), and it was low in both cases. On the contrary, for the upper social class, the collective action intentions of different social classes differed significantly ( $F_{(1, 114)} = 20.16$ ,  $p < .001$ , partial  $\eta^2 = .15$ ). Specifically, participation intentions were higher for the upper than for the lower social class (see Figure 1), which was consistent with Study 1.

## General Discussion and Conclusion

Based on the social cognition theory with respect to social class, which suggests there are great differences in terms of thoughts, feelings, and behaviour between the upper social class and the lower social class (Manstead, 2018), we examined the relationship between social class and collective action intentions in China. We found that lower social class members tend not to participate in collective action even when angered by perceived unfair treatment. By contrast, upper social class members who are similarly angered do tend to participate in collective action. These results were consistent with our hypotheses, demonstrating that the relationship between group-based anger and collective action is moderated by social class.

Since most collective action in China is perceived to be caused by inequality, we explored the role of social class in collective action. In Study 1, we used a real-world scenario of opposition to the siting of a garbage station to investigate residents' intentions to participate in collective action. Collecting data on their social class and their degree of anger at the garbage station's impending construction, we observed that group-based anger was positively correlated with collective action intentions, consistent with abundant prior studies of collective action (e.g., van Zomeren et al., 2008). Moreover, social class was found to moderate the relationship between group-based anger and collective action intentions: upper social class members were inclined to take collective action, whereas members of the lower social class were not inclined to do so. Consistent with the social cognition theory, the results of Study 1 suggest that social class is an important variable when we consider the relationship between anger and collective action. When people feel angry at perceived unfair treatment, they may want to take collective action to protest; those who believe they can make a difference will likely take action, as demonstrated by the Study 1 findings for the upper social class; conversely, those who believe their resources are insufficient to make any difference are unlikely to pursue this course of action.

This is also similar to the dual pathway model of van Zomeren et al. (2012), which suggests that group-based anger and group efficacy can coexist as two pathways potentially mobilising individuals to take collective action. To some extent, our study goes beyond the dual pathway model. According to our study's results, social class moderates the relationship between group-based anger and collective action intentions, which suggests a potential cumulative effect between the emotion pathway and the cognition pathway. This moderating effect may be explained by the social cognition theory with respect to social class. In our interpretation, the reason that lower class people are less motivated by their anger to form intentions to act collectively is because they perceive lower efficacy for it and are less empowered to act; it must, however, be acknowledged that this interpretation has not been tested in our present study. Whatever the mechanism, finding that the effect of emotion may be aggravated by social class

is a potentially important contribution to the theory of collective action and may inspire future research.

Study 2 then examined the relationship between social class and collective action intentions through experimental research. Its results also suggested that the relationship between group-based anger and collective action intentions is moderated by social class. Specifically, participation intentions were higher for the upper than for the lower social class, which was consistent with Study 1. Thus, Study 2 not only compensates for Study 1's limitations but also provides further evidence for the relationship between social class and collective action. Regardless of the characteristic traits of one's class, experiencing even a momentary increase or decrease in relative social class will influence an individual's collective action intentions. Of course, one limitation of Study 2 is that there may be confounders in the class manipulation other than social-class-based social cognition differences. For instance, the 'low' class condition might simply be an additional, unrelated distraction or grievance that reduces the extent of participants' intentions to act on anger about the facilities: In effect, it gives them something else to be concerned about. This may be an interesting question for future research to explore.

The results for both studies suggest that lower social class members are unlikely to take action to protect their interests. Thus, a key contribution of our research is the finding that social class influences collective action intentions. Compared with the upper social class, the lower social class experience a greater sense of relative deprivation and have less resources to mobilise (Greitemeyer & Sagioglou, 2016); so, even when angered by perceived unfairness, they are unlikely to take collective action.

Taken together, the present study has expanded understanding of social class and collective action, finding that individuals' social class influences their collective action intentions. Compared with the lower social class, upper social class members are more inclined to participate in collective action to safeguard their rights and interests. This is consistent with previous research on collective action (e.g., Tausch et al., 2011), which has suggested a positive relationship between group efficacy and collective action. In sum, this research identified a difference in behavioural tendency between different social classes, thereby elucidating the relationship between social class and collective action in the unique political and cultural context of China. Such work could enhance understanding of collective action in China, which would be very useful for social management and policy making.

Despite these contributions, our two studies have some limitations. First, we measured collective action intention as a proxy for collective action participation, which is not ideal, though it has been found useful and effective in prior studies (de Weerd & Klandermans, 1999). Future studies should explore implicit or direct measurement of collective action. Second, regarding collective action intentions, our measure only concerned normative collective action, namely that which conforms to social norms

of acceptable behaviour. Some prior studies have demonstrated that lower social class members prefer to take non-normative collective action. For example, its members are more likely to participate in destructive competition and even in protest actions, such as organising a petition, marching, or going on strike (Halevy, Chou, Cohen, & Bornstein, 2010; Schmitt, Maes, & Widaman, 2010). Future studies could investigate the role of collective action type, aiming to provide further evidence about the relationship between social class and collective action. Third, we did not examine the roles of group-based efficacy, frustration, or other emotions, which may be important factors in explaining the moderating role of social class. Future studies could examine whether (and how) group efficacy mediates the relationship between social class and collective action, and what roles are played by frustration or other emotions.

## Endnote

- 1 Sina is similar to Twitter, and is one of the most popular online communication tools in China.

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