Double Standards in Judging Collective Action*

Nils K. Reimer[1], Marija Branković[2], Iniobong Essien[3], Jin X. Goh[4], Sébastien Goudeau[5], Nóra A. Lantos[6], and Jenny Veldman[7]

[1]University of California, Santa Barbara, United States
[2]Singidunum University, Serbia
[3]Leuphana University of Lüneburg, Germany
[4]Colby College, United States
[5]University of Poitiers, France
[6]Eötvös Lorónd University, Hungary
[7]KU Leuven, Belgium

May 23, 2022

Abstract

Collective action is a powerful force driving social change but, at the same time, often sparks contention about what are acceptable forms of collective action. In two studies, we first develop an instrument of 25 controversial protest actions, based in item response theory, to capture double standards in judging collective action. In two preregistered experiments, we then use this instrument to test for double standards in judging protest actions for workers' rights in the United Kingdom and for or against defunding the police in the United States. We find evidence for ideology-based, but not for identity-based, double standards: People judge the same protest actions to be more acceptable when the protesters' cause aligns with their own ideological positions—but show no ingroup bias when judging collective action by ingroup and outgroup members.

Protest movements often spark contention about what actions are acceptable means of protest. Reactions to Black American athletes kneeling during the national anthem to protest racist police violence are a case in point. Kneeling during the national anthem is not violent, disruptive, or illegal. And yet, only 29% of White Americans (66% of Black Americans) and 11% of Republicans (59% of Democrats) considered it appropriate for Black athletes to protest in this way (YouGov, 2017). Indeed, Black athletes who had participated in the protests faced a backlash in public opinion (Lacina, 2020). This and other examples suggest that *who* the protesters are and *what* they are protesting influences how acceptable observers judge their actions to be.

In this paper, we examine double standards in judging collective action—that is, whether observers judge the same protest actions as more or less acceptable depending on their own and the protesters' group memberships (*identity-based double standards*) or on the protesters' cause and how it aligns with their own ideological positions (*ideology-based double standards*). In two studies, we first develop an instrument of 25 controversial protest actions, based in item response theory, to capture double standards in judging collective action. In two preregistered experiments, we then use this instrument to test for double standards in judging protest actions for workers' rights in the United Kingdom and for or against defunding the police in the United States. We find evidence for ideology-based, but not for identity-based, double standards: People judge the same protest actions to be more acceptable when the protesters' cause aligns with their own ideological positions—but show no ingroup bias when judging collective action by ingroup and outgroup members.

Double Standards in Judging Collective Action

Collective action—that is, any action taken by group members to advance a shared political goal (for similar definitions, see Becker, 2012; van Zomeren, 2016)—is a powerful force driving social change. For example, Black Lives Matter protests lastingly shifted public discourse about racial inequity toward antiracist ideas (Dunivin et al., 2022).

Collective action can take many forms. Psycholo-

*M.B.–J.V. are listed in alphabetical order. This research was supported by a Seedcorn Research Grant from the European Association of Social Psychology.

gists distinguish between *normative* collective action that seeks to achieve a political goal while conforming to the norms of the existing social system and *non-normative* collective action that violates those norms (Wright et al., 1990). Recent research has shown that this distinction matters for how people respond to collective action. Shuman et al. (2021) showed that non-normative, non-violent collective action is more effective than either normative or violent collective action at gaining concessions from those most resistant to social change. Feinberg et al. (2020) demonstrated, however, that observers are less supportive of social movements that use extreme protest actions. Similarly, Teixeira et al. (2020) found that advantaged-group members perceive non-normative collective action by disadvantaged-group members as more damaging to their ingroup's social image and are thus less supportive of such action. This means that activists face the dilemma that non-normative collective action might be most effective at gaining concessions but that it also risks reducing popular support for a cause. Together, these studies show that the distinction between normative and non-normative collective action is psychologically and societally consequential.

Research has, for the most part, relied on ad-hoc distinctions between what researchers themselves considered normative and non-normative collective action. In liberal democracies, researchers tend to consider actions such as signing petitions, voting in elections, or peaceful protest to be normative and actions such as blocking traffic, damaging property, or violent protest to be non-normative. But, as the examples in the first paragraph show, the distinction between normative and non-normative collective action might instead be in the eye of the beholder.

In this research, we move this distinction from the researcher's intuition into the realm of scientific investigation and test for double standards in where people draw the line between acceptable and unacceptable forms of collective action. For that purpose, we define a double standard as judging the same action as more or less acceptable depending on who is performing the action and for what reason (for an analogous definition, see Foschi, 2000).[1] In this section, we derive predictions from social psychological theories about how identity-based and ideology-based double standards could lead people to judge the same protest actions as more or less acceptable depending on who the protesters are and what they are protesting.

Identity-Based Double Standards

Social Identity Theory (Tajfel & Turner, 1979; for a recent review, see Reimer et al., 2022) argues that just as people show self-serving biases to achieve positive self-esteem, they show ingroup-serving biases to achieve positive social identities. In other words, they think about ingroup and outgroup in "me"–"not me" terms and favor ingroup members ("us") over outgroup members ("not us," Brewer, 2007).

One domain in which ingroup bias manifests is judgements about other people's actions. Hewstone (1990) reviewed research showing that people make ingroup-serving causal attributions when judging actions by ingroup and outgroup members, for example, by attributing negative behavior by outgroup members to internal causes but attributing negative behavior by ingroup members to external causes. Valdesolo & DeSteno (2007) demonstrated that participants judged the same selfish action as less unfair when performed by themselves or an ingroup member than when performed by an outgroup member. Other studies (Abrams et al., 2013; Endevelt et al., 2021; for exceptions, see Mendoza et al., 2014; Pinto et al., 2010) provided further evidence for ingroup bias in judging moral transgressions by ingroup and outgroup members.

In the same vain, we propose that ingroup bias results in identity-based double standards in judging collective action by ingroup and outgroup members. That is, we hypothesize that people will judge the same protest actions as more acceptable if the protesters are ingroup members (*Hypothesis 1a*) or if the cause of the protest aligns with the ingroup's interests (*Hypothesis 1b*). This hypothesis could explain why, for example, far more Black than White Americans considered it appropriate for Black athletes to kneel down to protest police violence against Black Americans (YouGov, 2017). Notably, this hypothesis

[1] Feinberg et al. (2020) provided incidental evidence for double standards in judging collective action as, in a manipulation check, Black participants rated Black Lives Matter protests as less extreme than White participants and liberal participants rated protest actions for progressive causes as less extreme than conservative participants.

applies equally to historically disadvantaged groups mobilizing against social injustice and to historically advantaged groups defending their group's position.

Ideology-Based Double Standards

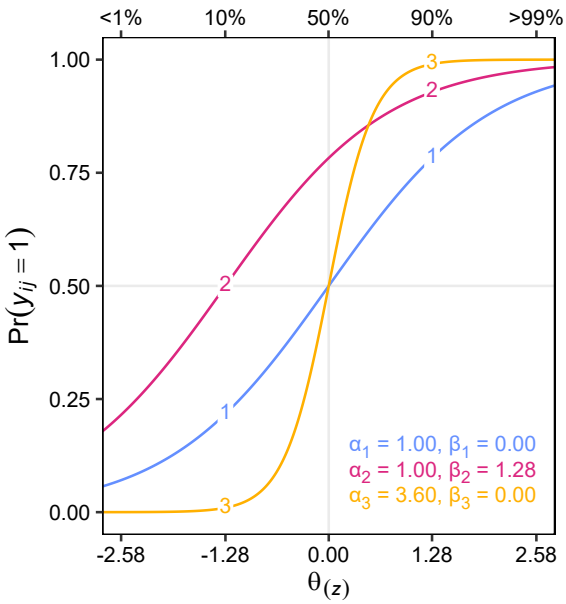
System Justification Theory (Jost & Banaji, 1994; for a recent review, see Jost, 2020) argues that people are motivated to defend, justify, and bolster the prevailing social, economic, and political system because doing so serves basic epistemic, existential, and relational needs. Both advantaged and disadvantaged groups are thought to be motivated to justify the existing system, although the strength of this motivation and its expression vary across individuals and situations.

While system justification often leads people to resist social change, its relationship to collective action depends on the goal of the action. Jost et al. (2017) argued that research on collective action needs to distinguish between system-challenging protest aimed at changing an unequal status quo and system-supporting protest aimed at maintaining or defending an unequal status quo. Osborne et al. (2019) showed that, for members of both advantaged and disadvantaged groups, system justification is associated with supporting system-supporting actions but with opposing system-challenging actions.

Just as system justification shapes support for, and opposition to, collective action, we propose that it results in ideology-based double standards in what actions people consider acceptable forms of collective action. First, we hypothesize that people will judge the same protest actions as more acceptable if the protest supports, rather than challenges, the system (*Hypothesis 2a*). This hypothesis reflects the assumption that the motivation to justify the system is, to some extent, universal. Second, we hypothesize that people will judge the same protest actions as more acceptable if they endorse system-justifying beliefs and the protest supports the system or if they reject system-justifying beliefs and the protest challenges the system (*Hypothesis 2b*). This hypothesis implies an symmetry in how people with different ideological orientations judge system-supporting and system-challenging collective action.

As system-justifying beliefs are closely related to political conservatism (Jost et al., 2003), this hypothesis could explain partisan differences in what actions liberals and conservatives consider acceptable

Figure 1
Item response curves for three hypothetical protest actions



Note. $\theta_{(z)}$ follows a standard normal distribution and is shown as both z-scores (bottom) and percentiles (top).

means of protest for progressive and conservative causes. Ideology-based double standards could, for example, explain why far more Democrats than Republicans considered it appropriate to kneel during the national anthem to protest racist police violence (YouGov, 2017).

Using Item Response Theory to Detect Double Standards

Item response theory is a a conceptual and statistical framework for understanding how the characteristics of both items and respondents shape responses to a set of items (DeMars, 2010). When respondents judge whether each of a set of actions is an acceptable means of protest (1 = *yes*, 0 = *no*), a two parameter logistic item response theory model estimates responses as a function of several latent (unobserved) parameters:

$$\Pr(y_{ij} = 1) = \text{logit}^{-1}(\alpha_i(\theta_j + \beta_i))$$

where $\Pr(y_{ij} = 1)$ is the probability that respondent j considers action i an acceptable means of protest, θ_j estimates how *accepting* respondent j is of various protest actions, β_i estimates how *acceptable* action i is, and α_i estimates how *discriminating* action i is.

Figure 1 illustrates those relationships for three hypothetical protest actions. $\theta_{(z)}$ is the z-standardized tendency for a participant to be more accepting of various actions so that β_i determines the probability that the average respondent ($\theta_{(z)} = 0$) considers an action an acceptable means of protest. Action 2 ($\beta_2 = 1.28$) is more acceptable than Actions 1 and 2 ($\{\beta_2, \beta_3\} = 0$) as the average respondent is more likely to consider the former (Pr = .78) than the latter (Pr = .50) acceptable means of protest. Action 3 ($\alpha_3 = 3.60$) is more discriminating than Actions 1 and 2 ($\{\alpha_1, \alpha_2\} = 1$) as the slope for the relationship between how accepting a respondent is and how likely they are to consider an action acceptable is steeper for the former action. This means that knowing whether someone considers Action 3 acceptable provides more information about them than knowing whether they consider Actions 1 or 2 acceptable.

In this research, item response theory serves two purposes. First, item response theory provides a formal and statistical definition of double standards in judging collective action as respondents being more accepting of the same protest actions depending on who the protesters and what they are protesting. In Experiments 1 and 2, we operationalize double standards as the differences in $\theta_{(z)}$ between conditions which, as $\theta_{(z)}$ is z-standardized, correspond to Cohen's d effect sizes. Second, item response theory provides a statistical framework for scale development. In Studies 1 and 2, we select the most discriminating and informative actions to build an instrument for capturing double standards in the experiments.

Purpose of the Present Research

Our research serves two purposes. The first purpose is to develop an instrument to measure where people draw the line between acceptable and unacceptable forms of collective action. In Study 1, we ask participants to generate more and less extreme protest actions and compile a pool of protest actions for scale development. In Study 2, we ask participants to rate how acceptable they consider each of those protest action to be and use item response theory to select the most discriminating and informative protest actions for our instrument. In so doing, we build an instrument that enables both present and future research to capture double standards in judging collective action. In this way, our research situates the distinction between normative and non-normative collective action in the eye of the beholders and opens it to scientific investigation.

The second purpose of our research is to test for double standards in judging collective action—that is, whether people judge the same protest actions as more or less acceptable depending on their own and the protesters' group memberships (Hypothesis 1a, 1b) or on the protesters' cause and how it aligns with their own ideological positions (Hypotheses 2a, 2b). In Experiment 1, we use the instrument developed in Studies 1 and 2 to test for double standards in how acceptable participants consider collective action for workers' rights in the United Kingdom. By varying both the participants' and protesters' group memberships (working/middle class), Experiment 1 compares the relative evidence for Hypotheses 1a and 2a. Extending Experiment 1, Experiment 2 considers both system-challenging and system-defending collective action in the context of the 2020 Black Lives Matter protests in the United States. By varying the protest's cause (for/against defunding the police) as well as the participants' and protesters' group memberships (Black/White), Experiment 2 compares the relative evidence for Hypotheses 1a, 1b, 2a, and 2b. Together, the preregistered experiments provide a comprehensive test of the hypothesized identity- and ideology-based double standards in judging collective action.

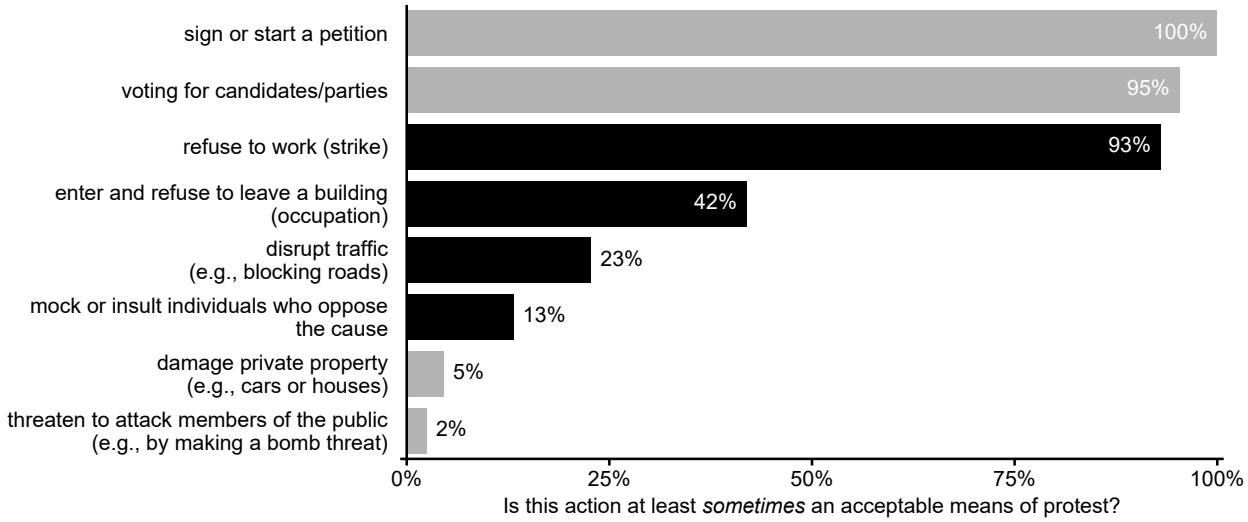
Scale Development

Study 1

In Study 1, we compiled protest actions from participants' responses and other sources. We recruited 60 participants from the Prolific subject pool, all of whom were citizens of the UK or the US. To increase the socioeconomic diversity of our sample, we recruited 30 non-students without a university degree, 15 non-students with a university degree, and 15 current university students.

Participants first read an accessible definition of what a social group is and that collective action is any action group members take to promote the interests of their social group. Participants were then asked to name between five and ten actions that fit that definition. Participants were encouraged to think of actions that varied in how acceptable they were in their opinion. We recoded responses into a smaller

Figure 2
Examples of protest actions rated in Study 2



Note. Percentages reflect the proportion of participants who thought that an action was *sometimes*, *often*, or *always* an acceptable means to a advance a cause. Darker bars mark actions that were included in the final scale.

set of unique actions, which we supplemented with protest actions from the psychological and political science literature (e.g., Sharp, 1973). This process resulted in 72 actions that varied in how acceptable we would expect them to be. For details, see Supplemental Online Material (SOM).

Study 2

In Study 2, we measured how acceptable participants judged the actions from Study 1 to be and applied item response theory to develop an instrument to capture double standards in judging collective action. We recruited 158 participants (*Mdn* = 30 years, age range: 18–68 years; 103 women, 52 men, 2 other, 1 prefer not to say) from the Prolific subject pool, all of whom were citizens of the UK or the US. To increase the socioeconomic diversity of our sample, we recruited 80 non-students without a university degree, 37 non-students with a university degree, and 41 current university students. We excluded 15 participants who failed an attention check, leaving a final sample of 143 participants for our analyses.

Participants again read an accessible definition of collective action. Participants were then asked to think of different causes and circumstances and to rate how often a given action would be an acceptable means for a group to advance one of these causes (1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*, 5 = *always*). In addition, participants rated how disruptive, violent, and extreme they considered an action to be (1 = *not at all*, 4 = *very*) and how positive or negative they felt, in general, about an action (1 = *very positive*, 5 = *very negative*). Each participant rated 20 of the 72 actions from Study 1 so that each action was rated by 29–53 participants.

We estimated a graded response model (Bürkner, 2021; Samejima, 1997)—an item response theory model for ordinal response variables—for participants' ratings of how often an action would be an acceptable form of collective action.[2] Based on the results, we selected the 25 most discriminating, informative, and relevant protest actions to form an instrument for measuring double standards in judging collective action in Experiments 1 and 2. We selected controversial, and thus diagnostic, actions (e.g., disrupting traffic) over actions that almost all respondents considered acceptable (e.g., signing petitions) or unacceptable (e.g., political violence; Figure 2). For detailed ratings and results, see SOM.

[2] Ratings of how often a given action would be an acceptable form of collective action were strongly and negatively correlated with how disruptive, violent, and extreme participants considered the action to be and how negative they felt about it (Table S3).

Experiment 1

...

Method

We preregistered the sample size as well as all hypotheses, inclusion/exclusion criteria, measures, and manipulations.[3] We made all materials, data, and analysis scripts available online.[4] We followed sample size recommendations for item response theory models (DeMars, 2010, p. 36), planning to recruit 500 participants.

Study Design

We used a 2 (quasi-experimental: higher-status/lower-status participants) × 2 (experimental: higher-status/lower-status protesters) between-subjects design to test our hypotheses.

Participants

We recruited 515 participants from the Prolific subject pool who were UK citizens, 25 years old or older, and not current students.[5] As preregistered, we excluded 71 participants who failed an attention check. This resulted in a final sample of 443 participants (*Mdn* = 41 years, age range: 25–76 years; 272 women, 171 men, 1 non-binary). Of these, 210 participants considered their past, current, or future jobs to be working-class jobs. Participants in this lower-status group did not have a university degree and placed themselves on the bottom three ranks of the subjective socioeconomic status ladder. Another 233 participants considered their past, current job, or future jobs to be middle-class/professional jobs. Participants in this higher-status group had at least an undergraduate degree and placed themselves on the top four ranks of the subjective socioeconomic status ladder.

Procedure

We used a screening survey to recruit participants who satisfied our preregistered inclusion criteria for the lower-status and higher-status groups. For the lower-status group, we recruited 475 participants who did not have a university degree and placed themselves on the bottom three ranks of a subjective socioeconomic status ladder. For the higher-status group, we recruited 400 participants who had at least an undergraduate degree and placed themselves on the top four ranks of the subjective socioeconomic status ladder.

In the screening survey, participants read an accessible definition of what working-class and middle-class/professional jobs are (for details, see SOM). Participants then answered, among other questions, whether they considered their current job—or the jobs they had had in the past or expected to have in the future—to be a working-class job or a middle-class/professional job. As preregistered, we excluded participants from the lower-status group who did not respond "working-class job" and participants from the higher-status group who did not respond "middle-class/professional job".

We recruited 500 participants from the remaining 687 participants, 250 from the lower-status group and 250 from the higher-status group. Participants were randomly assigned to read a vignette about a government bill affecting either people in working-class jobs (lower-status protesters) or people in professional jobs (higher-status protesters). Participants in both conditions were instructed to carefully read the vignette and to try to imagine what it would be like if this situation was real. Participants in the lower-status protestprs condition read the following introduction:

> The government, though not necessarily the current government, is going to introduce a bill that will mostly affect people in working-class jobs. Working-class jobs, in this case, are jobs done by skilled, semi-skilled, unskilled manual workers or by casual workers. These are jobs that do not usually require a university degree. Other jobs are unlikely to be affected.

Participants in the higher-status protesters condition instead read the following introduction:

> The government, though not necessarily the current government, is going to introduce a bill that will mostly affect people in

[3] `https://osf.io/24wrx/?view_only=8560eb60286149498f8da48bc9f9d99b`

[4] `https://osf.io/d3yev/?view_only=40782034017c40f0bcecb1cc87760b62`

[5] We had preregistered a sample of 500 participants, before exclusions, but included another 15 participants who completed the study without returning an approval code to the Prolific platform. Participants received, on average, £9.00 ($10.93) per hour of participation.

> professional jobs. Professional jobs are administrative, managerial, or other jobs that usually require a university degree. Other jobs are unlikely to be affected.

Participants in both conditions then read an almost identically worded paragraph:

> This government measure would make it easier for companies to hire workers during economic growth and to lay off workers during an economic crisis. As a consequence, companies would be able to fire employees with little notice and without giving a reason. Trade unions are opposed to the measure. They argue that the bill would compromise job security, and prevent employees from challenging harassment or other abuse without the fear of being fired. People in [working-class/professional] jobs are particularly at risk, and there is a rise in tension and outrage among them.

On the next pages, participants completed all remaining measures. On the final page, we asked participants to recall who the people most affected by the fictitious government bill were. As preregistered, we excluded all participants whose response did not qualitatively match their experimental condition.

Measures

We measured the outcome variable by asking participants to decide, for each of 25 protest actions presented in a randomized order, whether they thought this action was "an acceptable means for people in [working-class/professional] jobs to protest against the government bill" (1 = *yes*, 0 = *no*; see Table A1).

We assessed reactions to the vignette by asking participants how outraged they would be if the government were to introduce this bill in real life, to what extent it would affect them personally, and to what extent the it would affect people like them (1 = *not at all*, 7 = *very much*). We also asked participants to what extent they identified with people with the kinds of jobs most affected by the proposed bill (1 = *not at all*, 7 = *very much*) and how often, if at all, they had participated in protest actions such as the ones we asked about (1 = *never*, 5 = *very often*).

We measured social dominance orientation with the eight-item $SDO_{7(s)}$ scale (Ho et al., 2015), for example, "it is unjust to try to make groups equal" (1 = *strongly oppose*, 7 = *strongly favour*; McDonald's ω = .89). A confirmatory factor analysis model in which all items loaded onto a single factor showed acceptable fit, $\chi^2(20) = 108.69$; CFI = 0.92; TLI = 0.88; RMSEA = 0.11, [0.09, 0.14].

We measured system-justifying beliefs with eight items (adapted from Kay & Jost, 2003), for example, "in general, I find society to be fair" (1 = *strongly disagree*, 7 = *strongly agree*; McDonald's ω = .89). A confirmatory factor analysis model in which all items loaded onto a single factor showed acceptable fit, $\chi^2(20) = 77.37$; CFI = 0.94; TLI = 0.92; RMSEA = 0.09, [0.07, 0.12].

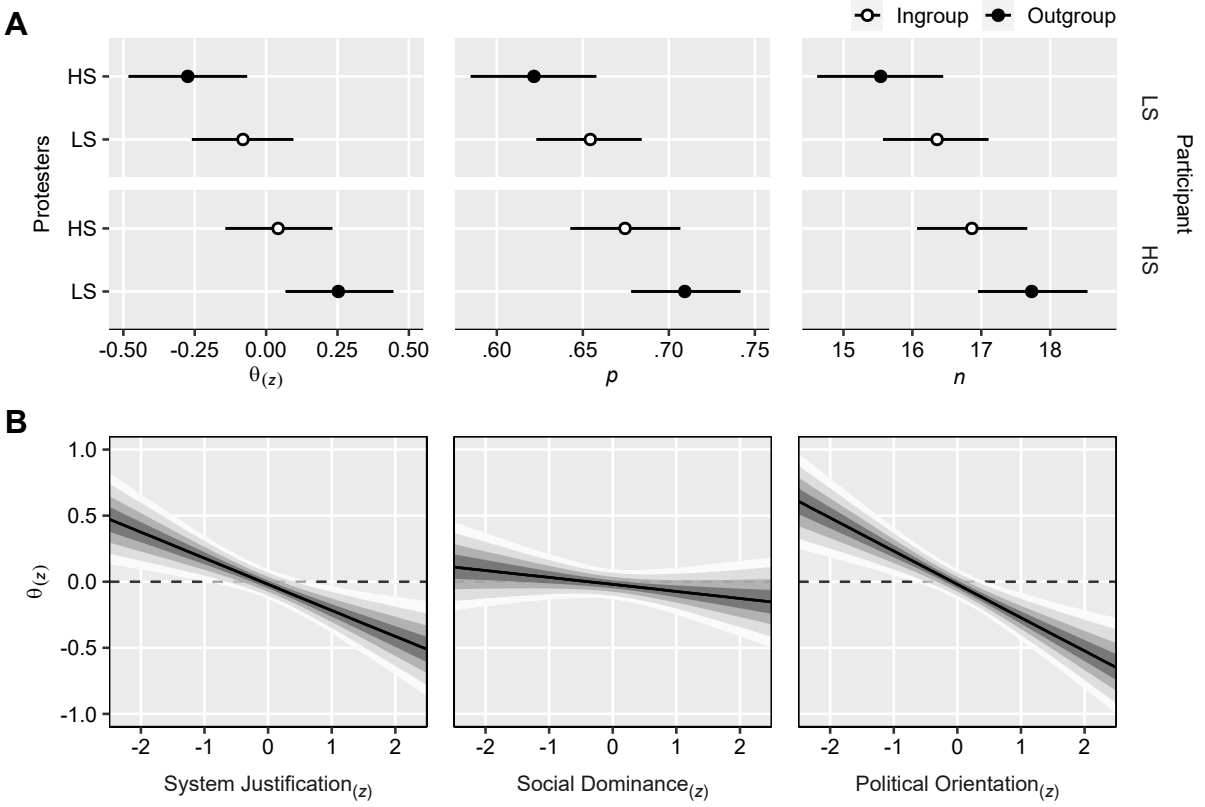
In the screening survey, we recorded participants' gender, age, nationality, student status, and employment status. We also included two three-item scales measuring social identification with people in working-class and middle-class/professional jobs (adapted from Becker et al., 2011) and a one-item semantic differential scale measuring political orientation ("People often describe their political orientation as left-wing or right-wing. On a scale from left to right, where would you position yourself?"; 1 = *left*, 7 = *right*).

Results

Reactions to the Manipulation

Participants with professional jobs thought that they would be more outraged if the government were to introduce a bill affecting people with similar jobs (M = 6.00, SD = 1.05) than by a bill affecting people with working-class jobs (M = 5.38, SD = 1.28; Cohen's d = 0.50). Conversely, participants with working-class jobs thought that they would be more outraged by a bill affecting people in similar jobs (M = 6.26, SD = 1.05) than by a bill affecting people in professional jobs (M = 5.61, SD = 1.47; d = 0.52). Participants thought that a bill affecting people with similar jobs would affect them personally (d = 1.14) and people like them (d = 1.33) more than a bill affecting people with other jobs. Participants identified to a greater extent with people in similar jobs (M = 6.21, SD = 1.12) than with people in other jobs (M = 4.06, SD = 1.65; d = 1.22). Overall, partici-

Figure 3
Results from the preregistered (**A**) and non-preregistered (**B**) analyses for Experiment 1



Note. HS = Higher Status, LS = Lower Status. $\theta_{(z)}$ is the z-standardized tendency to consider more controversial actions acceptable means of protest. (**A**) p and n are, respectively, the predicted proportion and number of actions a participant would consider acceptable means of protest in each condition. Bars enclose the 95% most plausible estimates. (**B**) Ribbons enclose, from the darkest to the lightest shade, the 50%, 80%, 95%, and 99% most plausible estimates.

pants' reactions suggested that the experimental design worked as intended and that participants in the lower-status and higher-status groups understood the vignette in ingroup–outgroup terms.

Preregistered Analyses

To test our hypotheses, we estimated a two-parameter logistic item response theory model (Bürkner, 2021) with participants' responses to the question whether they thought each action was an acceptable means of protest as the outcome variable. For each action i, the model estimated how acceptable (β_i) and discriminating (α_i) that protest action was. For each participant j, the model estimated their unique propensity to consider protest actions acceptable (θ_j). In addition, the model estimated how accepting participants were of controversial protest actions as a function of three dummy-coded variables that encoded the group status of the protesters and the participant.

We estimated this model in CmdStan (Gabry & Cesnovar, 2021; Stan Development Team, 2021) using Bayesian statistical methods. Bayesian inference involves choosing a likelihood function and prior distributions. A likelihood function links the observed data to the model parameters and states how likely the observed data are given different values of said model parameters. Prior distributions state how plausible different values of said model parameters are before considering the observed data. Bayesian inference applies Bayes' theorem to update prior distributions in light of the observed data to produce posterior distributions. In contrast to p-values and confidence intervals, posterior distributions have a

straight-forward interpretation as stating how plausible different values of the model parameters are given the observed data.

Our model derived the likelihood of participants' responses from a Bernoulli likelihood function with a logistic regression equation linking the two item parameters (α_i, β_i), the one participant parameter (θ_j), and the three regression coefficients to the observed data. To identify the model, we constrained θ_j to have a mean of zero and constrained α_i to have a fixed mean and to be non-negative. We used partial pooling to estimate α_i, β_i, and θ_j. Our model assigned weakly informative prior distributions (Gelman et al., 2017) to all model parameters.[6] We report point estimates, based on the median of posterior samples, and uncertainty intervals, based on the quantiles of posterior samples, that enclose the 95% most plausible estimates.

Figure 3 (A) shows estimates for each combination of the protesters' and the participants' group membership. Overall, we found that participants' responses depended on both the protesters' and the participants' group status—but not in the directions predicted by our hypotheses. Contradicting Hypothesis 1, participants did not consider protest actions performed by their ingroup to be more acceptable, on average, than the same actions performed by the relevant outgroup (Cohen's $d = 0.00, [-0.20, 0.20]$). Instead, we found that participants from higher-status backgrounds considered protest actions performed by both lower-status ($d = 0.34, [0.07, 0.59]$) and higher-status ($d = 0.33, [0.03, 0.63]$) protesters to be, on average, more acceptable than participants from lower-status backgrounds. Contradicting Hypothesis 2, participants considered protest actions performed by higher-status protesters to be less acceptable, on average, than the same actions performed by lower-status protesters ($d = -0.20, [-0.40, -0.00]$).

Non-Preregistered Analyses

We explored to what extent participants' ideological orientations influenced how acceptable they considered various protest actions to be. To that end, we estimated another two-parameter logistic item response model that estimated participants' responses as a function of the participant's and the protesters' group status and of the participants' political orientation, social dominance orientation, and system-justifying beliefs. We used factor scores to quantify social dominance orientation and system-justifying beliefs and standardized all new predictor variables. We report standardized regression coefficients that quantify by how many standard deviations a participant's propensity to consider more collective actions acceptable increases for each additional standard deviation of the predictor variable.

Figure 3 (B) the z-standardized propensity to consider more controversial protest actions acceptable as a function of the three ideological orientation variables. We found that participants who reported a more right-wing political orientation ($\beta_{xy} = -0.25, [-0.37, -0.15]$) and who expressed more agreement with system-justifying beliefs ($\beta_{xy} = -0.20, [-0.30, -0.10]$) tended to find fewer collective actions to be acceptable. In contrast, we found that, after controlling for the other two variables, social dominance orientation was not associated with participants' judgements about how acceptable various collective actions are ($\beta_{xy} = -0.05, [-0.15, 0.05]$). Overall, these findings suggest that people who are right-wing and endorse system-justifying beliefs tend to find various collective actions to be less acceptable than people who are left-wing and do not endorse system-justifying beliefs.[7]

Discussion

Experiment 2

- Explain why defunding the police (public support for BLM, so needed to be more controversial)

In Experiment 2, we tested five hypotheses. We tested two predictions derived from social identity theory. First, we hypothesize that observers are more likely to judge an action as an acceptable means of protest when the protesters are ingroup members than when they are outgroup members (Hypothesis 1a). Second, we hypothesize that observers are more

[6] Our model assigned Half-Cauchy$(0, 3)$ prior distributions to the standard deviations of α_i, β_i, and θ_j and Normal$(0, 3)$ prior distributions to all other model parameters.

[7] We ran additional analyses to explore how these associations differed across experimental conditions. We found uncertainty intervals for these associations to overlap across conditions, suggesting that we did not have enough data to differentiate these varying effects.

likely to judge an action as an acceptable means of protest when the goal of the protests would benefit the observers' ingroup (Hypothesis 1b). We will test two predictions derived from system justification theory. First, we hypothesize that observers are more likely to judge an action as an acceptable means of protest when the goal of the protest is to support rather than challenge the system (Hypothesis 2a). Second, we hypothesize that observers who endorse system-justifying beliefs are more likely to consider system-supporting actions acceptable means of protest-and less likely to consider system-challenging actions acceptable means of protest-than observers who do not endorse system-justifying beliefs (Hypothesis 2b). In addition, we will test an alternative hypothesis. We hypothesize that observers are more likely to consider actions as acceptable means of protest when they support the cause of the protesters than when they oppose their cause (Hypothesis 3). We note that Hypotheses 1a, 1b, and 2a make competing predictions about differences between conditions while Hypotheses 2b and 3 need not contradict each other or any of the other hypotheses.

Method

We preregistered the sample size as well as all hypotheses, inclusion/exclusion criteria, measures, and manipulations.[8] We made all materials, data, and analysis scripts available online.[9] As reported in the preregistration, we ran simulations, using data from Experiment 1, to determine that a sample size of $N = 1,600$ ($n = 200$ per condition) was sufficient to detect even small differences between conditions ($0.09 <$ Cohen's $d < 0.16$).

Study Design

We used a 2 (quasi-experimental: Black/White participants) × 2 (experimental: Black/White protesters) × 2 (experimental: for/against defunding the police) between-subjects design to test our hypotheses.

Participants

We recruited 1,773 Black and White American participants from the Prolific subject pool who were 18 years old or older, lived in the US, and were US citizens.[10] As preregistered, we excluded 173 participants who failed at least one of three attention checks or who reported a different ethnic background than they had reported in the Prolific prescreening questionnaire. This resulted in a final sample of 1,600 participants (*Mdn* = 31 years, age range: 18–84 years; 864 women, 708 men, 27 sex/gender diverse) of whom 800 identified as Black and 800 identified as White.

Procedure

Participants read the following paragraphs:

> In 2020, police officers killed Breonna Taylor and George Floyd. Many were outraged that police officers had, once again, killed unarmed Black Americans. Across the United States, people called for changes to prevent future police violence.
>
> Some argue that, to end police violence, we should take money away from police departments. Reducing police funding would mean fewer police officers on the street. Fewer police officers would mean fewer opportunities for them to turn violent. Reducing police funding would also leave more money for other services. Proponents argue for reallocating police funding to social services, housing, and education. Doing so would keep communities safer with fewer police officers. We refer to this position as "defunding the police". This position differs from "reforming the police" which might mean increasing police funding and also differs from "abolishing the police" which means disbanding police departments altogether.

Participants were then asked to answer whether the text had been about "reforming the police", "defunding the police", or "abolishing the police". If they selected the wrong answer, they were instructed to reread the text and select the right answer. On the next page, participants stated whether they supported or opposed the proposed solution.

[8] https://osf.io/skxjt/?view_only=d8ce44a700884b5ab36b64ef08f833a1

[9] https://osf.io/d3yev/?view_only=40782034017c40f0bcecb1cc87760b62

[10] Data were collected between January 15 and 28, 2021. Participants received, on average, $12.89 per hour of participation.

Participants in the system-challenging protest condition then read a text about protesters in support of defunding the police:

> Earlier, you read about defunding the police as a possible solution to end police violence. Some local residents want to protest for defunding the police. They argue that reducing police funding would prevent police violence.

Participants in the system-supporting protest condition instead read about protesters rallying against defunding the police:

> Some local residents want to protest against defunding the police. They argue that reducing police funding would mean fewer police officers serving their community.

Participants then read either that "most of the protesters are Black" or that "most of the protesters are White". Participants again had to correctly answer multiple choice questions about the text ("Are the protesters for or against defunding the police?", "Who are the protesters?") before being able to proceed.

On the next pages, participants completed all remaining measures. On the final page, participants responded to three attention checks: "In this study, you first read about a proposed solution to police violence. What was it?" (*reforming the police*, *defunding the police*, *abolishing the police*); "In this study, you then read about protesters. Were these protesters for or against the proposed solution?" (*for*, *against*); and "Were most of the protesters Black or White?" (*Black*, *White*). As preregistered, we excluded participants who gave an answer inconsistent with their assigned experimental condition.

Measures

We measured the outcome variable by asking participants to think about the protesters they had read about and to decide, for each of 25 protest actions presented in a randomized order, whether they thought this action was "an acceptable means for them to protest [for/against] defunding the police" (1 = *yes*, 0 = *no*). We replaced some actions from Experiment 1 because they either did not fit the study context or had been considered acceptable by almost all participants (see Table B1).

We measured system-justifying beliefs with eight items (adapted from Kay & Jost, 2003), for example, "in general, I find society to be fair" (1 = *strongly disagree*, 7 = *strongly agree*; McDonald's ω = .91). A confirmatory factor analysis model in which all items loaded onto a single factor showed acceptable fit, $\chi^2(28) = 4309.15$; CFI = 0.95; TLI = 0.93; RMSEA = 0.11, [0.10, 0.12].

We measured support for defunding the police with one item: "Do you support or oppose defunding the police?" (1 = *strongly oppose*, 5 = *strongly support*).

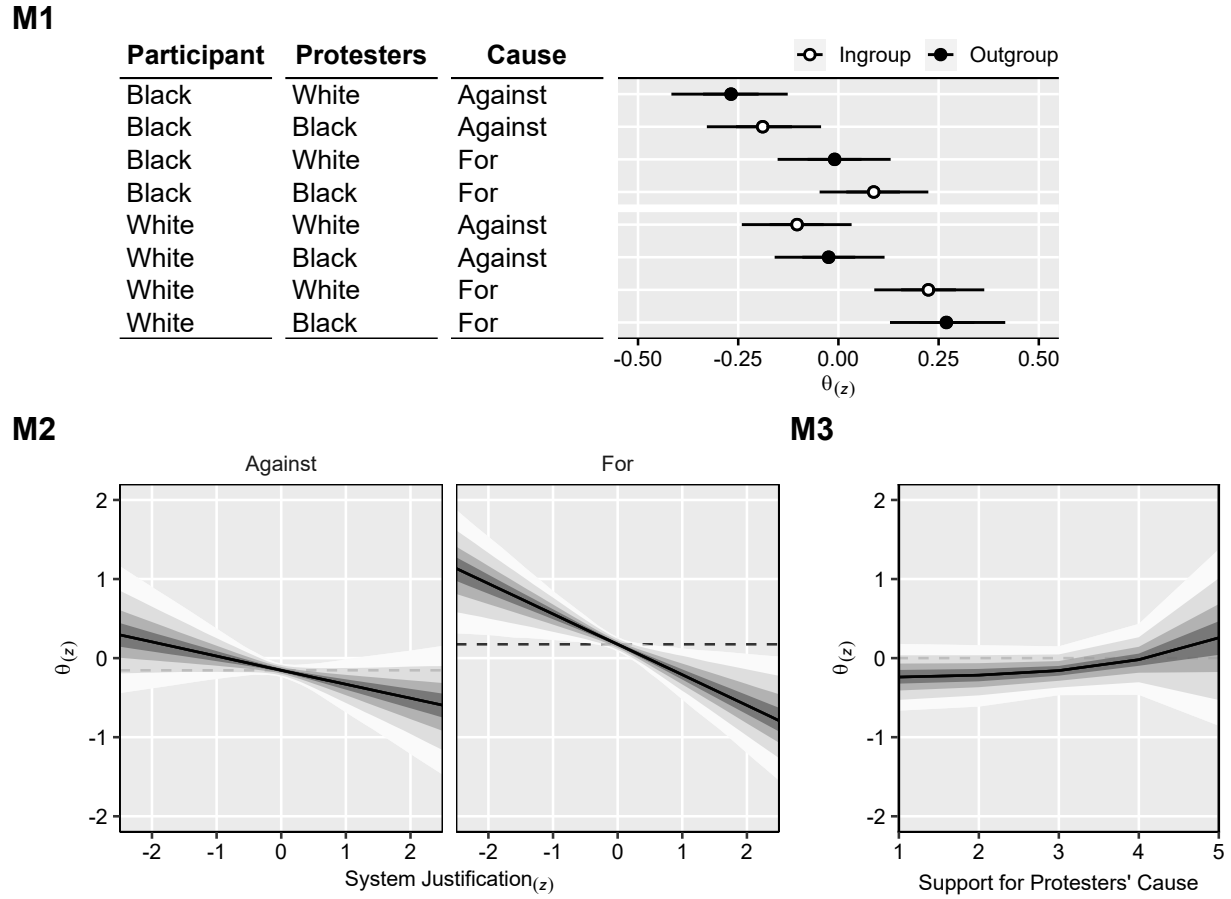
We included additional measures to describe the sample, to describe reactions to the manipulation, or to use in non-preregistered analyses. In addition to demographic questions, we asked participants how outraged they were about recent incidents of police violence against Black Americans, to what extent they identifed with the protesters described in the study, and to what extent they identifed with their racial ingroup (1 = *not at all*, 7 = *very much*). We also asked how often, if at all, participants had participated in protest actions such as the ones we had asked about (1 = *never*, 5 = *very often*) and whether they has participated in protests for reforming, defunding or abolishing the police; against reforming, defunding or abolishing the police; or in neither. We measured political orientation with a one-item semantic differential scale: "People often describe their political orientation as liberal or conservative. On a scale from liberal to conservative, where would you position yourself?"; 1 = *liberal*, 7 = *conservative*).

Results

Reactions to the Manipulation

As expected, Black participants ($M = 6.18, SD = 1.31$) reported being more outraged about recent incidents of police violence than White participants ($M = 5.56, SD = 1.61$; Cohen's $d = 0.42$). Black participants strongly identified with their ingroup ($M = 6.46, SD = 1.09$) and, across experimental conditions, identified more with Black protesters ($M = 4.66, SD = 1.99$) than with White protesters ($M = 4.03, SD = 2.16$; $d = 0.30$). In contrast, White participants identified less strongly with their ingroup ($M = 4.85, SD = 1.53$; $d = 1.21$) and did not identify

Figure 4
Results from the preregistered analyses for Experiment 2



Note. Against = Protesters oppose defunding the police. For = Protesters support defunding the police. $\theta_{(z)}$ is the z-standardized tendency to consider more controversial actions acceptable means of protest. Ribbons enclose, from the darkest to the lightest shade, the 50%, 80%, 95%, and 99% most plausible estimates.

more with White protesters ($M = 3.58, SD = 2.01$) than with Black protesters ($M = 3.81, SD = 1.77$; $d = -0.12$). Both White ($d = 0.67$) and Black ($d = 0.53$) participants tended to identify more with protesters protesting *for* defunding the police. On average, participants tended to describe their political orientation as moderately liberal ($M = 2.92, SD = 1.73$) but, as expected, were divided in their support for defunding the police ($M = 3.37, SD = 1.42$).

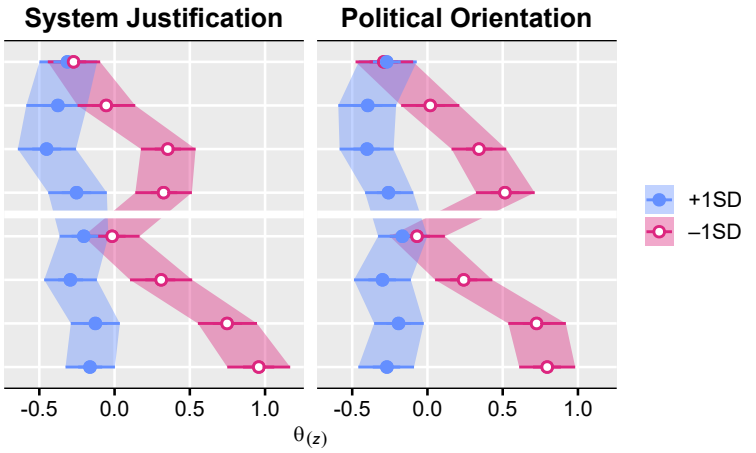
Preregistered Analyses

To test our hypotheses, we estimated a series of two-parameter logistic item response theory models with participants' responses to the question whether they thought each action was an acceptable means of protest as the outcome variable. Our models differed from the models used in Experiment 1 in two ways. First, we estimated the item parameters (α_i, β_i) as *correlated* varying effects. Second, we used varying, rather than fixed, effects to estimate differences between the eight conditions. This resulted in partial pooling—condition-wise estimates were shrunk towards each other—and allowed us to compare conditions without multiple comparison problems (Gelman et al., 2012). Our models assigned weakly informative prior distributions to all model parameters.[11]

[11] Our model assigned LKJ(2) prior distributions to the Cholesky-transformed correlation matrices for varying effects and (Half-)Cauchy(0, 5) prior distributions to all other model

Figure 5
Predictions from the preregistered (system justification) and non-preregistered (political orientation) analyses for Experiment 2

Participant	Protesters	Cause
Black	White	Against
Black	Black	Against
Black	White	For
Black	Black	For
White	White	Against
White	Black	Against
White	White	For
White	Black	For



Note. Against = Protesters oppose defunding the police. For = Protesters support defunding the police. $\theta_{(z)}$ is the z-standardized tendency to consider more controversial actions acceptable means of protest.

Figure 4 shows results from three preregistered models we estimated to test our hypotheses.

Model 1 (M1) estimated varying intercepts for the eight conditions to test whether, in line with Hypotheses 1a, 1b, or 2a, participants' responses depended on their own group membership, the protesters' group membership, or the protesters' cause. Contradicting Hypothesis 1a, participants did not consider protest actions performed by their ingroup to be more acceptable, on average, than the same actions performed by the relevant outgroup ($d = 0.01, [-0.04, 0.06]$). Contradicting Hypothesis 1b, participants did not consider protest actions for a cause that was nominally aligned with their ingroup's interests to be more acceptable, on average, than protest actions for a cause not aligned with their ingroup's interests ($d = -0.01, [-0.06, 0.04]$). Contradicting Hypothesis 2a, participants did not consider protest actions for a system-defending cause to be more acceptable, on average, than protest actions for a system-challenging cause ($d = -0.14, [-0.20, -0.09]$). Instead, we found that, on average, White participants considered all protest actions to be more acceptable than Black participants ($d = 0.09, [0.04, 0.14]$) and both Black ($d = 0.07, [0.03, 0.10]$) and White ($d = 0.08, [0.04, 0.11]$) participants considered the same actions to be more acceptable when protests were for, rather than against, defunding the police. As in Experiment 1, we thus found that participants' responses depended on both the participants' and the protesters' group memberships—but not in the directions predicted by our hypotheses.

Model 2 (M2) extended Model 1 by estimating participants' responses as a function of their z-standardized endorsement of system-justifying beliefs. As preregistered, we modeled this relationship with two fixed effects, one estimating the effect of system-justifying beliefs on judgements about system-defending protest actions and one estimating their effect on judgements about system-challenging protest actions, and one varying effect estimating its variance across conditions. Supporting Hypothesis 2b, participants who *rejected* system-justifying beliefs were *more* likely to consider system-challenging protest actions (for defunding the police) to be acceptable means of protest ($\beta_{xy} = 0.38, [0.16, 0.58]$). We did not, however, find evidence for the ideological symmetry implied by Hypothesis 2b since participants who *endorsed* system-justifying beliefs were *not* more likely to consider system-defending protest actions (against defunding the police) to be acceptable means

parameters.

of protest ($\beta_{xy} = -0.18, [-0.40, 0.02]$).

Figure 5 shows the predicted pattern of condition-wise differences underlying those fixed effects. Participants who endorsed system-justifying beliefs tended to consider system-challenging and system-defending protest actions to be equally unacceptable. In contrast, participants who rejected system-justifying beliefs evinced ideology-based double standards: In line with Hypothesis 2b, they considered the same protest actions to be more acceptable if the protesters challenged the system or, to a lesser extent, if the protesters were from the disadvantaged group.

Model 3 (M3) extended Model 1 by estimating participants' responses as a function of their self-reported support for the cause of the protest. We recoded participants' responses to create a predictor variable that encoded support for defunding the police when protesters supported defunding the police and opposition to defunding the police when protesters opposed defunding the police. As preregistered, we modeled this relationship as a monotonic effect (Bürkner & Charpentier, 2020) that estimated the average change in the outcome variable across predictor categories as well as how much of this change occurred between each of the four pairs of adjacent predictor categories.[12] Contradicting Hypothesis 3, participants who supported the protesters' cause did not, on average, consider the same protest actions to be more acceptable than participants who opposed the protesters' cause ($\beta_y = 0.14, [-0.12, 0.40]$). Ergo, our results did not support the alternative hypothesis that ideology-based double standards can be reduced to support for, or opposition to, the cause of a protest.

Non-Preregistered Analyses

We reran Model 3 with political orientation, instead of system justification, as an alternative predictor variable. Our results mirrored results from the preregistered analyses: More liberal participants were more likely to consider protest actions for defunding the police to be acceptable ($\beta_{xy} = 0.41, [0.17, 0.62]$) but more conservative participants were not more likely to consider protest actions against defunding the police to be acceptable ($\beta_{xy} = -0.16, [-0.41, 0.04]$). As Figure 5 shows, conservative participants tended to consider all protest actions to be equally unacceptable while liberal participants considered the same protest actions to be more acceptable if protesters rallied around a progressive cause. Our non-preregistered analyses thus found evidence for ideology-based double standards in judging collective action with a different operationalization of political ideology.

[12] Our model assigned a Dirichlet prior, $\alpha = 1, 1, 1, 1$, to the proportions of the overall change that was expected to occur between each of the four pairs of predictor categories.

Discussion

General Discussion

- Summary: No evidence for identity-based double standards, but some evidence for ideology-based double standards
- Two plausible interpretations: (1) conservatives oppose controversial protest (no matter the end) *or* (2) the end justifies the mean
- Re (1) it's plausible but what about recent events? (see public polling from grant)
- Re (2) why is there no asymmetry?
- Outline the-end-justifies-the-mean idea, highlighting that just supporting a cause is not enough, it needs moralization
- Discuss why high-status group are more accepting of controversial protest actions
- Discuss limitations (two cultures, two issues, liberal samples; system-defending vs. system-supporting actions; what about other conservative causes?)
- Invite researchers to use our paradigm

References

Abrams, D., Randsley de Moura, G., & Travaglino, G. A. (2013). A double standard when group members behave badly: Transgression credit to ingroup leaders. *Journal of Personality and Social Psychology*, *105*(5), 799–815. https://doi.org/10.1037/a0033600

Becker, J. C. (2012). Virtual special issue on theory and research on collective action in the European Journal of Social Psychology [Editorial]. *European Journal of Social Psychology*, *42*(1), 19–23. https://doi.org/10.1002/ejsp.1839

Becker, J. C., Tausch, N., Spears, R., & Christ, O. (2011). Committed dis(s)idents: Participation in radical collective action fosters disidentification with the broader in-group but enhances political identification. *Personality and Social Psychology Bulletin*,

37(8), 1104–1116. https://doi.org/10.1177/0146167211407076

Brewer, M. B. (2007). The social psychology of intergroup relations: Social categorization, ingroup bias, and outgroup prejudice. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 695–715). Guilford Press.

Bürkner, P.-C. (2021). Bayesian item response modeling in R with brms and Stan. *Journal of Statistical Software*, *100*(5). https://doi.org/10.18637/jss.v100.i05

Bürkner, P.-C., & Charpentier, E. (2020). Modelling monotonic effects of ordinal predictors in Bayesian regression models. *British Journal of Mathematical and Statistical Psychology*, *73*(3), 420–451. https://doi.org/10.1111/bmsp.12195

DeMars, C. (2010). *Item response theory*. Oxford University Press.

Dunivin, Z. O., Yan, H. Y., Ince, J., & Rojas, F. (2022). Black Lives Matter protests shift public discourse. *Proceedings of the National Academy of Sciences*, *119*(10), e2117320119. https://doi.org/10.1073/pnas.2117320119

Endevelt, K., Schori-Eyal, N., & Halperin, E. (2021). Everyone should get the same, but we should get more: Group entitlement and intergroup moral double standard. *Group Processes & Intergroup Relations*, *24*(3), 350–370. https://doi.org/10.1177/1368430219896618

Feinberg, M., Willer, R., & Kovacheff, C. (2020). The activist's dilemma: Extreme protest actions reduce popular support for social movements. *Journal of Personality and Social Psychology*, *119*(5), 1086–1111. https://doi.org/10.1037/pspi0000230

Foschi, M. (2000). Double standards for competence: Theory and research. *Annual Review of Sociology*, *26*(1), 21–42. https://doi.org/10.1146/annurev.soc.26.1.21

Gabry, J., & Cesnovar, R. (2021). *cmdstanr: R interface to CmdStan* (Version 0.4.0). https://mc-stan.org/cmdstanr

Gelman, A., Hill, J., & Yajima, M. (2012). Why we (usually) don't have to worry about multiple comparisons. *Journal of Research on Educational Effectiveness*, *5*(2), 189–211. https://doi.org/10.1080/19345747.2011.618213

Gelman, A., Simpson, D., & Betancourt, M. (2017). The prior can often only be understood in the context of the likelihood. *Entropy*, *19, 10*, 555. https://doi.org/10.3390/e19100555

Hewstone, M. (1990). The "ultimate attribution error"? A review of the literature on intergroup causal attribution. *European Journal of Social Psychology*, *20*(4), 311–335. https://doi.org/10.1002/ejsp.2420200404

Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO-7 scale. *Journal of Personality and Social Psychology*, *109*(6), 1003–1028. https://doi.org/10.1037/pspi0000033

Jost, J. T. (2020). *A theory of system justification*. Harvard University Press.

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, *33*(1), 1–27. https://doi.org/10.1111/j.2044-8309.1994.tb01008.x

Jost, J. T., Becker, J., Osborne, D., & Badaan, V. (2017). Missing in (collective) action: Ideology, system justification, and the motivational antecedents of two types of protest behavior. *Current Directions in Psychological Science*, *26*(2), 99–108. https://doi.org/10.1177/0963721417690633

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*(3), 339–375. https://doi.org/10.1037/0033-2909.129.3.339

Kay, A. C., & Jost, J. T. (2003). Complementary justice: Effects of "poor but happy" and "poor but honest" stereotype exemplars on system justification and implicit activation of the justice motive. *Journal of Personality and Social Psychology*, *85*(5), 823–837. https://doi.org/10.1037/0022-3514.85.5.823

Lacina, B. (2020). *National anthem protests and whites' views of black NFL players* [Unpublished manuscript]. Department of Political Science, University of Rochester. http://www.bethanylacina.com/docs/Lacina_NFL_paper.pdf

Mendoza, S. A., Lane, S. P., & Amodio, D. M. (2014). For members only: Ingroup punishment of fairness norm violations in the ultimatum game. *Social Psychological and Personality Science*, *5*(6), 662–670. https://doi.org/10.1177/1948550614527115

Osborne, D., Jost, J. T., Becker, J. C., Badaan, V., & Sibley, C. G. (2019). Protesting to challenge or defend the system? A system justification perspective on collective action. *European Journal of Social Psychology*, *49*(2), 244–269. https://doi.org/10.1002/ejsp.2522

Pinto, I. R., Marques, J. M., Levine, J. M., & Abrams, D. (2010). Membership status and subjective group dynamics: Who triggers the black sheep effect? *Journal of Personality and Social Psychology*, *99*(1), 107–119. https://doi.org/10.1037/a0018187

Reimer, N. K., Schmid, K., Hewstone, M., & Al Ramiah, A. (2022). Self-categorization and social identification: Making sense of us and them. In D. Chadee (Ed.), *Theories in social psychology* (2nd ed., pp. 273–295). Wiley-Blackwell.

Samejima, F. (1997). Graded response model. In W. J. van der Linden & R. K. Hambleton (Eds.), *Handbook of modern item response theory* (pp. 85–100). Springer.

Sharp, G. (1973). *The politics of nonviolent action*. Porter Sargent.

Shuman, E., Saguy, T., van Zomeren, M., & Halperin, E. (2021). Disrupting the system constructively: Testing the effectiveness of nonnormative nonviolent collective action. *Journal of Personality and Social Psychology*, *121*(4), 819–841. https://doi.org/10.1037/pspi0000333

Stan Development Team. (2021). *Stan modeling language users guide and reference manual* (Version 2.27.0). http://mc-stan.org/

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The psychology of intergroup relations* (pp. 33–48). Brooks/Cole.

Teixeira, C. P., Spears, R., & Yzerbyt, V. Y. (2020). Is Martin Luther King or Malcolm X the more acceptable face of protest? High-status groups' reactions to low-status groups' collective action. *Journal of Personality and Social Psychology*, *118*(5), 919–944. https://doi.org/10.1037/pspi0000195

Valdesolo, P., & DeSteno, D. (2007). Moral hypocrisy: Social groups and the flexibility of virtue. *Psychological Science*, *18*(8), 689–690. https://doi.org/10.1111/j.1467-9280.2007.01961.x

van Zomeren, M. (2016). Building a tower of babel? Integrating core motivations and features of social structure into the political psychology of political action. *Political Psychology*, *37*, 87–114. https://doi.org/10.1111/pops.12322

Wright, S. C., Taylor, D. M., & Moghaddam, F. M. (1990). Responding to membership in a disadvantaged group: From acceptance to collective protest. *Journal of Personality and Social Psychology*, *58*(6), 994–1003. https://doi.org/10.1037/0022-3514.58.6.994

YouGov. (2017). *HuffPost: NFL (Sept. 25–26, 2017)* [Data set]. https://perma.cc/3Q3V-4GC4

Appendix A

Table A1
List of protest actions used in Experiment 1

#	Action	Pr
1	participate in a public meeting of representatives and elected officials	97%
2	hold meetings to inform the public	96%
3	make a public speech	96%
4	hold meetings to influence the public	93%
5	attend or organise a protest march	93%
6	attend or organise a protest rally	92%
7	use social media (e.g., Facebook, Twitter, Instagram) to influence the public	92%
8	do not buy goods or services from companies who support the bill (consumers' boycott)	92%
9	paste up posters with political messages in places where it is allowed and encouraged	89%
10	join or form a group of activists who oppose the bill	87%
11	refuse to accept honours or awards in protest	82%
12	donate to political parties who oppose the bill	80%
13	refuse to work (strike)	80%
14	pay for adverts on social media (e.g., Facebook, Twitter, Instagram) to influence public opinion	78%
15	donate to activist groups who oppose the bill	77%
16	visit people in their homes to convince them about the issue (canvassing, door knocking)	54%
17	stand or sit in a building and refuse to leave (stand-in, sit-in)	51%
18	refuse to honour national symbols and traditions (e.g., refusing to sing the national anthem) until the bill is abandoned	47%
19	enter and refuse to leave a building (occupation)	38%
20	paste up posters with political messages in places where it is not allowed or encouraged	35%
21	disrupt traffic (e.g., blocking roads)	22%
22	refuse to cooperate with the police and other government agencies	19%
23	mock or insult individuals who support the bill	14%
24	spray paint political messages in public places	14%
25	deface flags or other national symbols	12%

Note. Actions are ordered by the proportion of participants, across all conditions, who considered it to be an acceptable means of protest in Experiment 1.

Appendix B

Table B1
List of protest actions used in Experiment 2

#	Action	Pr
1	make a public speech	94%
2	*hand out flyers, leaflets, or pamphlets*	93%
3	use social media (e.g., Facebook, Twitter, Instagram) to influence the public	91%
4	hold meetings to influence the public	91%
5	paste up posters with political messages in places where it is allowed and encouraged	91%
6	attend or organise a protest march	91%
7	donate to activist groups	89%
8	join or form a group of activists	89%
9	*wear or display political symbols (e.g., patches, flags, bumper stickers)*	86%
10	refuse to buy goods or services from companies that advocate [against/for] defunding the police (boycott)	85%
11	pay for adverts on social media (e.g., Facebook, Twitter, Instagram) to influence public opinion	83%
12	donate to politicians who advocate [for/against] defunding the police	82%
13	refuse to accept honors or awards in protest	80%
14	refuse to work (strike)	61%
15	visit people in their homes to convince them about the issue (canvassing, door knocking)	61%
16	stand or sit in a building and refuse to leave (stand-in, sit-in)	55%
17	*attend a protest march even though it might turn violent*	44%
18	*attend a protest march even though it might be unlawful*	42%
19	*attend a protest march while carrying a firearm (where legal)*	35%
20	enter and refuse to leave a building (occupation)	34%
21	paste up posters with political messages in places where it is not allowed or encouraged	29%
22	*refuse to pay fees, fines, or taxes in protest*	29%
23	disrupt traffic (e.g., blocking roads)	25%
24	spray paint political messages in public places	23%
25	mock or insult individuals who are [against/for] defunding the police	15%

Note. Actions are ordered by the proportion of participants, across all conditions, who considered it to be an acceptable means of protest in Experiment 2. Actions in *italics* replaced actions used in Experiment 1 that were either redundant or did not fit the context of Experiment 2.