Abstract

Collective action is a powerful force driving social change but often sparks contention about what actions are acceptable means to effect social change. In five studies (total N = 2,979), we investigated double standards in judging collective action—that is, whether observers will judge the same protest actions as more acceptable if the protesters are ingroup members and their cause aligns with the ingroup's interests (*identity-based double standards*) or if the protesters' cause aligns with the observers' ideological positions (*ideology-based double standards*). In two studies, we developed an instrument of 25 controversial protest actions, based in item response theory, to measure where people draw the line between acceptable and unacceptable forms of collective action. In three preregistered experiments, we used this instrument to test for double standards in judging collective action for workers' rights in the United Kingdom and for or against defunding the police and for or against restricting abortion in the United States. We found evidence for ideology-based, but not for identity-based, double standards: Participants judged the same protest actions to be more acceptable when the protesters' cause aligned with their own ideological position—but showed no consistent ingroup bias when judging collective action by ingroup and outgroup members. Our findings have theoretical and practical implications for understanding the often divided response to prominent social movements.

Keywords: protest, collective action, double standards, social identity theory, system justification theory, Black Lives Matter

Double Standards in Judging Collective Action

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 (compared to 66% of Black Americans) and 11% of Republicans (compared to 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 three 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 and for or against restricting abortion 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 do not show consistent 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. Psychologists 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 (Becker & Tausch, 2015; Wright et al., 1990). Some instead refer to the two kinds of collective action as moderate and radical collective action (e.g., Jiménez-Moya et al., 2015). Broadly, this distinction captures the intuition that there are some forms of collective action that are generally considered acceptable and others that are not.

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. Verkuyten et al. (2022) found that, in general, the public tends to be intolerant of non-normative collective 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.

These and other studies have, 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 reactions to Black athletes kneeling

in protest suggest, the same action might be considered acceptable by some and unacceptable by others. That is, the distinction between normative and non-normative collective action might 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 (normative) and unacceptable (non-normative) 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 judgments 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 (see Pettigrew, 1979). Valdesolo & DeSteno (2007) demonstrated that participants judged the same selfish action as less

[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.

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 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 et al., 2004; 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 affects 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*). Notably, this hypothesis implies a symmetry in how people with different ideological orientations judge system-supporting and system-challenging collective action.

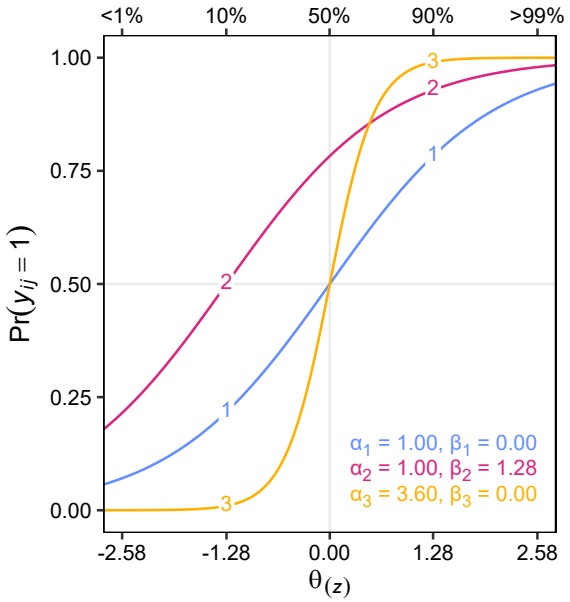
As system-justifying beliefs are closely related to political conservatism (Jost et al., 2003), this hypothesis could explain partisan differences in what actions liberals and conservatives consider acceptable means of protest for progressive and conservative causes. Ideology-based double standards could, 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 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:

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

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).

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 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 judging collective action. Second, 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 are and what they are protesting. In Experiments 1–3, 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.

Purpose of the Present Research

The first purpose of our research 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 actions 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.

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 acceptable if the protesters' are ingroup members or the protesters' cause aligns with the ingroup's interests (*Hypothesis 1a*, *1b*) or if the protesters' cause aligns with their own system-justifying or system-challenging motives (*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 the protesters' group memberships (working/middle class), Experiment 1 compares the relative evidence for identity-based (*Hypothesis 1a*, *1b*) and ideology-based

double standards (*Hypothesis 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 protesters' cause (for/against defunding the police) as well as the participants' and the protesters' group memberships (Black/White), Experiment 2 compares the relative evidence for identity-based (*Hypothesis 1a*, *1b*) and ideology-based double standards (*Hypothesis 2a*, *2b*). Building on Experiments 1–2, Experiment 3 examines how liberal and conservative men and women judge collective action for or against restricting abortion in anticipation of the Supreme Court overturning its *Roe v. Wade* decision on reproductive rights in the United States. By varying the protesters' cause as well as the participants' ideology and gender, Experiment 3 compares the relative evidence for identity-based (*Hypothesis 1b*) and ideology-based (*Hypothesis 2b*) double standards in judging collective action concerning a conservative cause in a sample balanced by gender and ideology. Together, the preregistered experiments provide a comprehensive test of the hypothesized double standards in judging collective action.

Scale Development

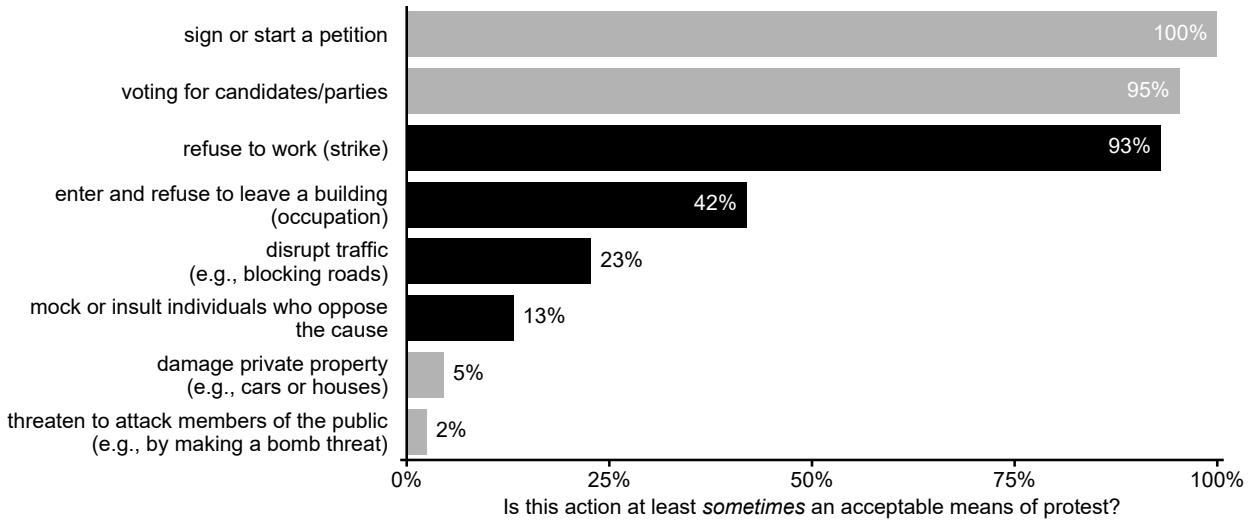
In two studies, we developed an instrument of 25 protest actions to capture double standards in judging collective action.

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

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.

definition. Participants were encouraged to think of actions that varied in how acceptable they were in their opinion. We recoded responses into a smaller 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.

Experiment 1

In Experiment 1, we used the newly developed instrument to test for double standards in judging collective action for workers' rights in the United Kingdom. That is, we tested whether people with either working-class or professional jobs applied different standards when judging collective action taken by people with either working-class or middle-class jobs to protest against a fictitious government bill threatening their rights.

By varying the participants' and the protesters' group memberships, we tested the preregistered hypothesis that, in line with *Hypothesis 1a* and *1b*, participants would judge the same protest actions as more acceptable if the protesters were ingroup members protesting for

[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).

the ingroup's rights than if they were outgroup members protesting for the outgroup's rights. By comparing reactions to working-class and middle-class protesters, we tested how observers judge collective action by lower-status (i.e. working-class) and higher-status (middle-class) group members. Assuming that collective action by lower-status group members is seen as more threatening to the unequal status quo than collective action by higher-status group members and that people are, to same extent, motivated to justify the system, we tested the preregistered hypothesis that, in line with *Hypothesis 2a*, participants would judge the same protest actions as more acceptable if the protesters were from a higher-status group than if they were from a lower-status group. In non-preregistered analyses, we further explored whether participants would judge the same protest actions as more or less acceptable depending on their own ideological positions. In this way, Experiment 1 provided a first test of the hypothesized identity- and ideology-based double standards in judging collective action.

Method

We preregistered the sample size as well as all hypotheses, inclusion/exclusion criteria, measures, and manipulations (`https://osf.io/24wrx/?view_only=8560eb60286149498f8da48bc9f9d99b`). We made all materials, data, and analysis scripts available online (`https://osf.io/d3yev/?view_only=40782034017c40f0bcecb1cc87760b62`). 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.[3] 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, 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

[3]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.

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 protesters 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 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 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 $\text{SDO}_{7(s)}$ scale (Ho et al., 2015), for example, "it is unjust to try to make groups equal" (1 = *strongly oppose*, 7 = *strongly favour*; McDonald's $\omega = .89$). A confirmatory factor analysis model in which all items loaded onto a single factor showed acceptable fit, $\chi^2(20) = 108.69; \text{CFI} = 0.92; \text{TLI} = 0.88; \text{RMSEA} = 0.11, [0.09, 0.14]$.

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 $\omega = .89$). A confirmatory factor analysis model in which all items loaded

onto a single factor showed acceptable fit, $\chi^2(20) = 77.37; \text{CFI} = 0.94; \text{TLI} = 0.92; \text{RMSEA} = 0.09, [0.07, 0.12]$.

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

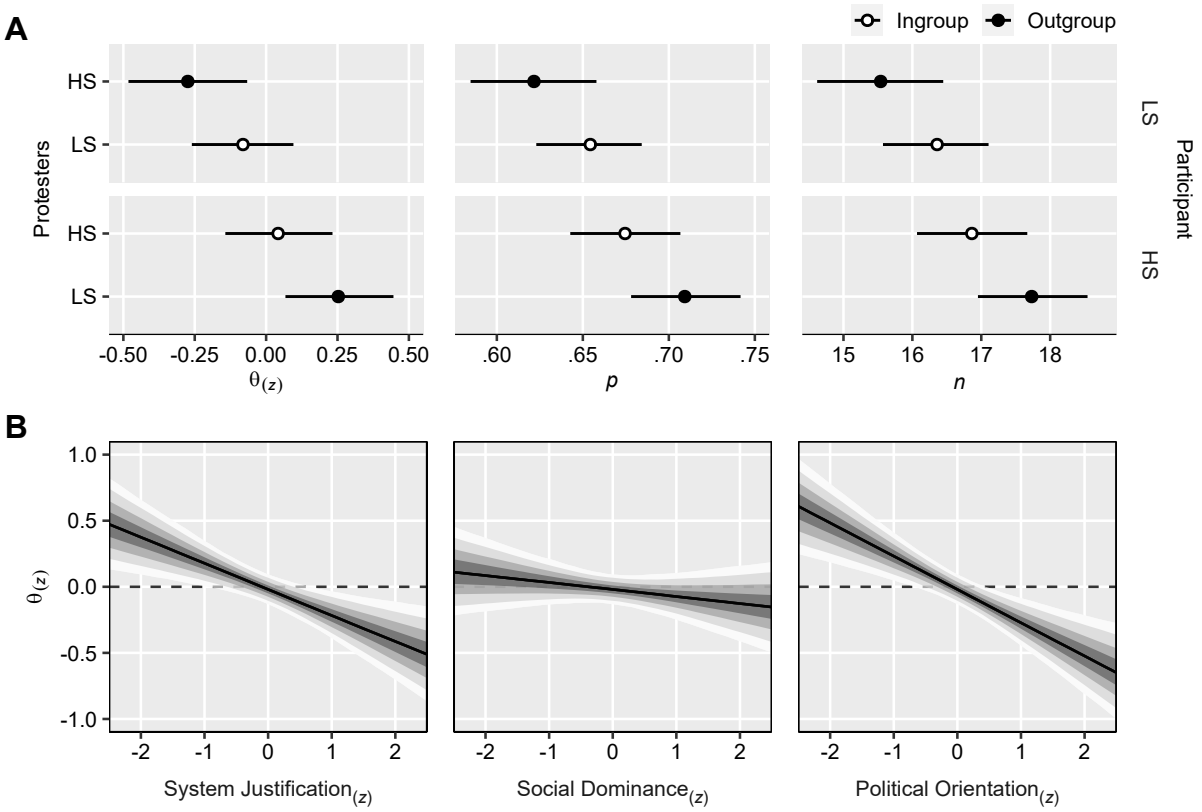
Reactions to the Manipulation

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, participants' 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

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.

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.[4] 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 our first hypothesis, 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 our second hypothesis, participants considered protest actions performed by higher-status

[4]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.

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' judgments 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.[5]

[5]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.

Discussion

Experiment 1 provided a first test of the hypothesized identity- and ideology-based double standards in judging collective action. That is, we tested whether, in line with *Hypothesis 1a* and *1b*, participants would judge the same protest actions as more acceptable if the protesters were ingroup members protesting for the ingroup's rights or whether, in line with *Hypothesis 2a*, participants would judge the same protest actions as more acceptable if the protesters were from a higher-status group. We found that participants' responses depended on both the participants' and the protesters' group memberships—but not in the hypothesized directions. Instead, we found that both lower-status and higher-status participants tended to find the same protest actions more acceptable when lower-status protesters protested a bill threatening their rights. In non-preregistered analyses, we further found that people who were right-wing and endorsed system-justifying beliefs tended to find all protest actions to be less acceptable.

Experiment 1 did not, however, provide a conclusive test of our hypotheses. First, by focusing on fictitious government bills, we might have chosen a scenario too far removed from current affairs to evoke strong ingroup bias in participants' judgments of protest actions. That said, participants' reactions to the experimental manipulation suggested that it evoked outrage and was understood in ingroup–outgroup terms. Second, by focusing on collective action to defend workers' rights, we arguably studied reactions to collective action for a progressive cause. To test for ideology-based double standards, we relied on the assumption that collective action by lower-status group members would be seen as more challenging to the prevailing system than collective action by higher-status group members. This assumption, however, was contradicted by our observation that participants who endorsed system-justifying beliefs tended to find actions by lower-status and higher-status protesters to be less acceptable. Experiment 2 addressed those limitations by focusing on a scenario we expected to evoke stronger responses from participants and by examining reactions to both system-challenging and system-defending collective action.

Experiment 2

In Experiment 2, we investigated potential double standards in judging collective action for or against defunding the police in the United States. That is, we tested whether Black and White Americans applied different standards when judging collective action taken by either Black or White protesters to protest either for or against police divestment as a possible solution to racist police violence. We conducted this study in January 2021, a time when, after months of unprecedented protests for racial justice, most Americans could be expected to be aware of, and have formed an opinion on, the Black Lives Matter movement. We focused on defunding the police as this position remained controversial among both Black and White Americans even as they broadly agreed on the need for police reform.[6]

By varying the participants' and the protesters' group memberships, we tested the preregistered hypothesis that participants would judge the same protest actions as more acceptable if the protesters were ingroup members (*Hypothesis 1a*). By assuming that defunding the police aligns more closely with the interests of Black than White Americans, we tested the preregistered hypothesis that participants would judge the same protest actions as more acceptable if the cause of the protest aligned with their ingroup's interests (*Hypothesis 1b*). By varying whether the protesters protested for or against defunding the police, we tested the preregistered hypotheses that participants would judge the same protest actions as more acceptable if the protest supported, rather than challenged, the system (*Hypothesis 2a*) and if they endorsed system-justifying beliefs and the protest supported the system or if they rejected system-justifying beliefs and the protest challenged the system (*Hypothesis 2b*). In this way, Experiment 2 provided a complete test of the hypothesized identity- and ideology-based double standards in judging collective action. In addition, we tested the simpler, alternative hypothesis that participants, in general, would judge the same protest actions as more acceptable if they supported the protesters' cause (*Hypothesis 3*).

[6]In December 2020, only 34% of Black Americans and 18% of White Americans supported defunding the police while majorities of Black and White Americans supported police reforms such as eliminating qualified immunity (50% and 57%) or banning chokeholds (79% and 61%, YouGov, 2020).

Method

We preregistered the sample size as well as all hypotheses, inclusion/exclusion criteria, measures, and manipulations (`https://osf.io/skxjt/?view_only=d8ce44a700884b5ab36b64ef08f833a1`). We made all materials, data, and analysis scripts available online (`https://osf.io/d3yev/?view_only=40782034017c40f0bcecb1cc87760b62`). 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.[7] 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.

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

> 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.

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 $\omega = .91$). A confirmatory factor analysis model in which all items loaded onto a single factor showed acceptable fit, $\chi^2(28) = 4309.15; \text{CFI} = 0.95; \text{TLI} = 0.93; \text{RMSEA} = 0.11, [0.10, 0.12]$.

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,

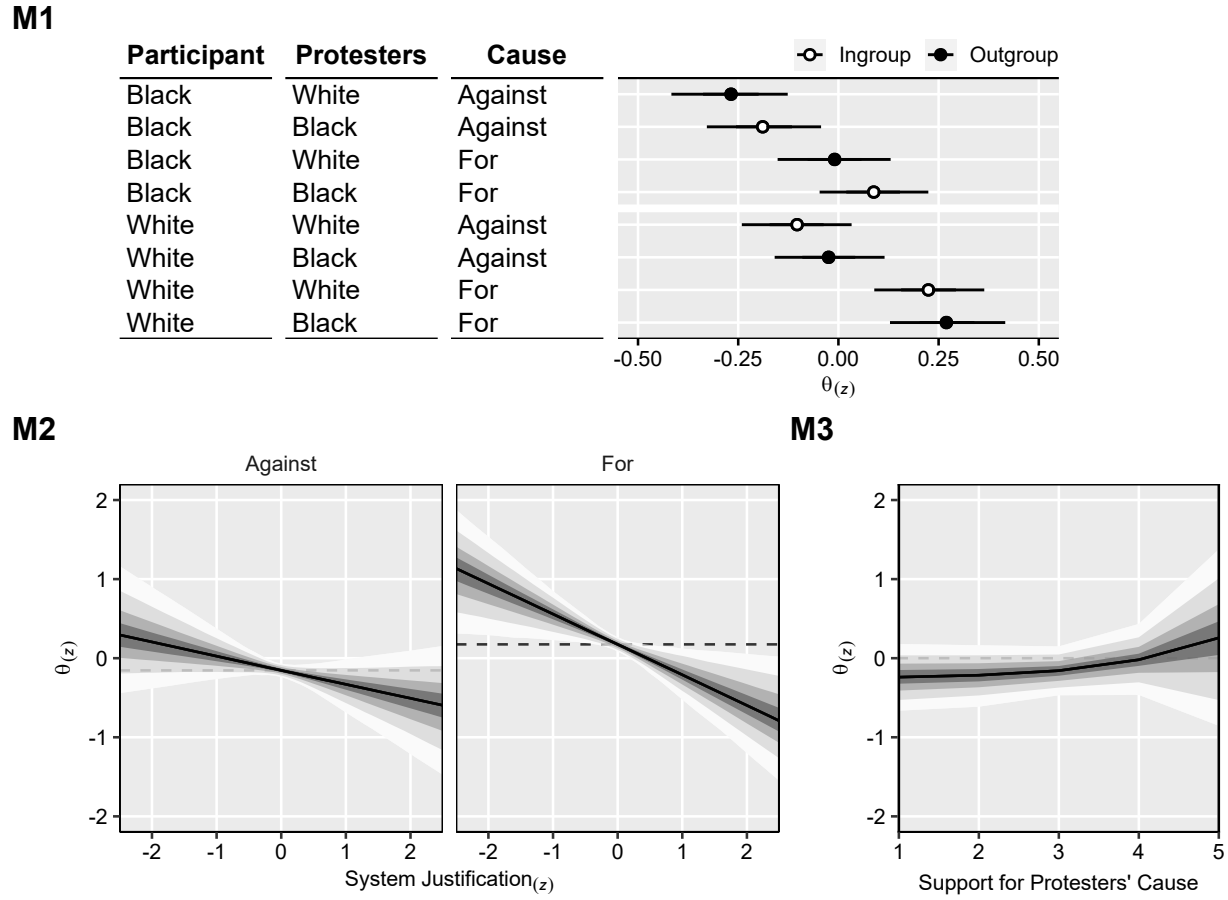
we asked participants how outraged they were about recent incidents of police violence against Black Americans, to what extent they identifed with the protesters described in the study, and to what extent they identifed with their racial ingroup (1 = *not at all*, 7 = *very much*). We also asked how 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 than Black participants ($M = 4.85, SD = 1.53$; $d = 1.21$) and did not identify 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 ($M = 3.37, SD = 1.42$). That is, 56% supported defunding the police, 30% opposed defunding the police, and 14% remained undecided.

Figure 4
Results from the preregistered analyses for Experiment 2

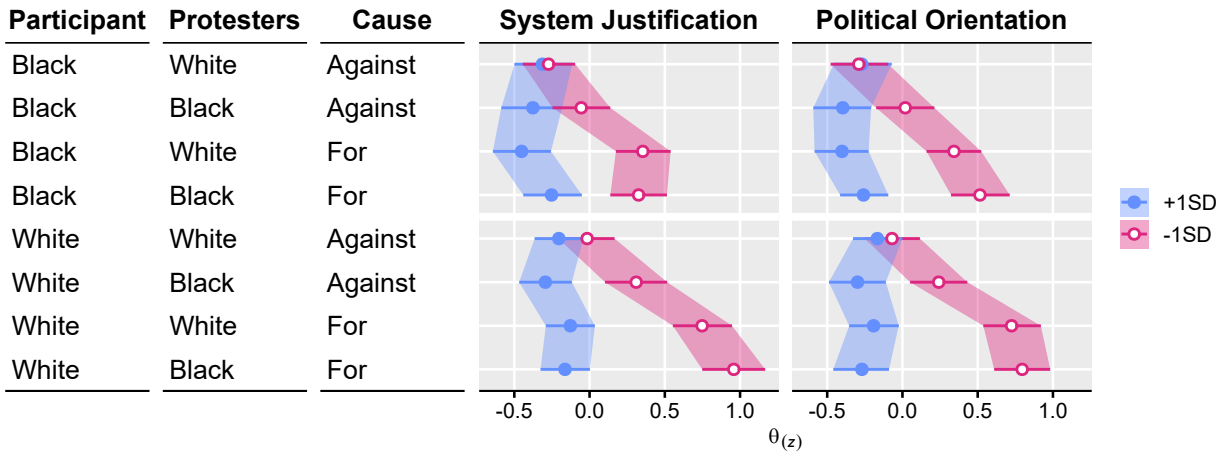


Note. Against = Protesters oppose defunding the police. For = Protesters support defunding the police. $\theta_{(z)}$ is the z-standardized tendency to consider more controversial actions acceptable means of protest. Ribbons enclose, from the darkest to the lightest shade, the 50%, 80%, 95%, and 99%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

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

Figure 5
Predictions from the preregistered (system justification) and non-preregistered (political orientation) 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.

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.[8] 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

[8]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 parameters.

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 ($d = 0.13, [0.06, 0.20]$) and White ($d = 0.16, [0.08, 0.23]$) 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 judgments about system-defending protest actions and one estimating their effect on judgments 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 of protest ($\beta_{xy} = -0.18, [-0.40, 0.02]$).

Figure 5 shows the estimated 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 when the protesters challenged the system or, to a lesser extent, when 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.[9] 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 explored whether group identification moderated how the participants' and the protesters' group memberships affected participants' responses. To that end, we extended Model 1 by estimating participants' responses as a function of their z-standardized identification with their racial ingroup. As in Model 2, we modeled this relationship with a fixed and a varying effect. We found, however, that even participants who strongly identified with their racial ingroup ($+1SD$) did not consider protest actions performed by their ingroup to be more acceptable than the same actions performed by the relevant outgroup ($d = 0.01, [-0.00, 0.02]$) and did not consider protest actions for a cause that was aligned with their ingroup's interests to be more acceptable than protest actions for a cause not aligned with their ingroup's interests ($d = 0.00, [-0.01, 0.01]$). Our non-preregistered analyses thus suggested that group identification did not moderate group differences in judgments about collective action by ingroup and outgroup members.

We also explored whether we would find ideology-based double standards when

[9] 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.

operationalizing ideology as political orientation instead of as system justification. To that end, we reran Model 2 with political orientation as the z-standardized predictor variable. Our results mirrored 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 when protesters rallied around a progressive cause. Our non-preregistered analyses thus replicated the ideology-based double standards from the preregistered analyses with a different operationalization of ideology.

Discussion

Experiment 2 provided a complete test of the hypothesized identity- and ideology-based double standards in judging collective action. As in Experiment 1, we found that participants' responses depended on both the participants' and the protesters' group memberships—but not in the hypothesized directions. We found that, contrary to *Hypothesis 1a*, participants considered protest actions taken by ingroup and outgroup members to be equally acceptable and that, contrary to *Hypothesis 1b*, participants did not consider the same protest actions to be more acceptable when the protesters' cause aligned with their ingroup's interests. Like Experiment 1, Experiment 2 thus found no evidence for identity-based double standards—even though it focused on an issue of direct and current relevance to the participants.

Expanding Experiment 1, Experiment 2 considered reactions to both system-challenging and system-defending collective action and, in so doing, provided a stronger test of the hypothesized ideology-based double standards. Contrary to *Hypothesis 2a* and the underlying assumption of a universal system-justifying motive, we found that participants considered the same protest actions to be *more* acceptable when judging system-challenging collective action (for defunding the police) than when judging system-defending collective action. This

finding might reflect our liberal-leaning sample.

In line with *Hypothesis 2b*, we found that participants who rejected system-justifying beliefs considered the same protest action more acceptable when judging system-challenging collective action (for defunding the police). We did not, however, find evidence for ideological symmetry in this relationship as participants who endorsed system-justifying beliefs considered system-challenging and system-defending collective action to be equally unacceptable. In addition, we did not find evidence for the alternative, simpler *Hypothesis 3* that that participants would judge the same protest actions to be acceptable when they supported the protesters' cause.

One reason why we did not find evidence for ideological symmetry might be that participants judged protests for or against a progressive cause and that *opposing* a progressive cause is not equivalent to *supporting* a conservative cause. Another reason might be that our sample skewed liberal and lacked committed conservatives who might accept more extreme means to oppose a progressive cause. Experiment 3 addressed those limitations by testing for ideology-based double standards in judging collective action for or against a conservative cause in a balanced sample of conservatives and progressives.

Experiment 3

In Experiment 3, we investigated potential double standards in judging collective action for or against restricting abortion in the United States. That is, we tested whether liberal and conservative women and men applied different standards when judging collective action opposing or supporting further restricting abortion. We conducted this study in June 2022 when many expected the Supreme Court to overturn its *Roe v. Wade* decision that hitherto had guaranteed access to legal abortions in the first 20–24 weeks of pregnancy in the United States. We focused on restricting abortion as it is a conservative issue, as it primarily affects women's reproductive rights, and as the anticipated Supreme Court decision would prompt several states to restrict or ban abortion.

By comparing participants of different political orientations and by varying the

protesters' cause, we tested the preregistered hypothesis that, in line with *symmetrical* ideology-based double standards, conservatives would judge the same protest actions to be more acceptable if the protesters supported restricting abortion and that liberals would judge the same protest actions to be more acceptable if the protesters opposed restricting abortion. We tested the alternative hypothesis that, in line with *asymmetrical* ideology-based double standards, conservatives would judge all protest actions to be equally unacceptable while liberals would judge the same protest actions to be more acceptable if the protesters opposed restricting abortion. By comparing male and female participants, we further tested the preregistered hypothesis that, in line with identity-based double standards, women would judge protest actions against restricting abortion to be more acceptable, on average, than men or protest actions for restricting abortion.

Method

We preregistered the sample size, hypotheses, inclusion/exclusion criteria, measures, and manipulations (`https://osf.io/kphyw/?view_only=59f5792a6d3f4fa48516ea9d5f637822`). We deviated from the preregistration in two ways. First, we stopped collecting data before reaching the preregistered sample size. We did so as the Supreme Court decision on reproductive rights, announced on June 24, 2022, rendered the experimental manipulation invalid. Second, we do not report results for two further hypotheses—testing moral conviction as a potential mechanism underlying ideology-based double standards—as those findings are beyond the scope of this manuscript and will be reported in a future publication. We made all materials, data, and analysis scripts available online (`https://osf.io/d3yev/?view_only=40782034017c40f0bcecb1cc87760b62`).

Study Design

We used a 2 (quasi-experimental: conservative/liberal participants) × 2 (quasi-experimental: male/female participants) × 2 (experimental: for/against restricting abortion) between-subjects design to test our hypotheses.

Participants

We recruited 804 participants from the Prolific subject pool who were 18 years old or older and lived in the United States.[10] We balanced the sample's gender and political composition so that half of all participants identified as conservative and the other half identified as liberal and so that roughly half of the participants in each group were women and men. As preregistered, we excluded 71 participants who failed at least one of five attention checks or reported a different political orientation than they had reported in the Prolific prescreening questionnaire. As noted above, we had to stop collecting data before reaching the preregistered sample size of 800 eligible participants. This resulted in a final sample of 733 participants ($Mdn = 37$ years, age range: 18–93 years; 610 White, 55 Asian, 31 mixed, 20 Black, 16 other) of whom 181 were conservative men, 190 were conservative women, 185 were liberal men, and 177 were liberal women.

Procedure

After answering where they would place themselves along the political spectrum, in line with their response in the Prolific prescreening questionnaire, participants read the following paragraph:

> Recent news suggested that the Supreme Court might soon overturn its *Roe v. Wade* decision that, so far, has guaranteed legal abortions in the first 20–24 weeks of pregnancy. Overturning *Roe v. Wade* would allow states to enact laws to further restrict or ban abortions.

In the supporting abortion restrictions condition, participants then read a text presenting arguments for restricting or banning abortion:

> Some people welcome this news because they oppose legal abortions. They argue that life begins at conception and that, therefore, abortion ends the life of an

[10]Data were collected between June 10 and 23, 2022. Participants received, on average, $24.70 per hour of participation.

> unborn child. As human life is sacred, ending an unborn life is wrong and cannot be justified by a pregnant person's right to choose. In this view, restricting or banning abortions is the only way to protect unborn lives. We refer to this position as "supporting abortion restrictions".

In the opposing abortion restrictions condition, participants instead read a text presenting arguments against restricting or banning abortion:

> Some people are alarmed by this news because they support legal abortions. They argue that pregnant people have a right to control their own body and, therefore, have a right to safe and legal abortions. Restricting or banning abortion would lead to more illegal and unsafe abortions. In this view, providing legal abortions is the only way to protect pregnant people's rights and to prevent harm. We refer to this position as "opposing abortion restrictions".

Participants were then asked to select which position the text described and what arguments for that position were presented in the text. If they selected the wrong answer, they were instructed to reread the text and select the right answer. Participants then rated to what extent they support or oppose restricting abortion and to what extent their feelings about this issue are a moral conviction.

Participants then read about protesters protesting either for (in the supporting abortion restrictions condition) or against (in the opposing abortion restrictions condition) restricting or banning abortion:

> Earlier, you read why some people [support/oppose] further restricting or banning abortion. Some local residents who hold this view want to protest [for/against] restricting or banning abortion.

As in the previous experiments, participants rated which of several protest actions they consider acceptable means to protest for or against restricting abortion. On the next pages,

participants completed the remaining measures. On the final page, participants responded to two attention checks that assessed whether they paid attention to the experimental manipulation: "In this study, you read about some people's view on a policy change. What was the policy change?" and "In this study, you then read about some protesters. Were the protesters for or against restricting abortion?".

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] restricting or banning abortion" (1 = *yes*, 0 = *no*; see Table C1).

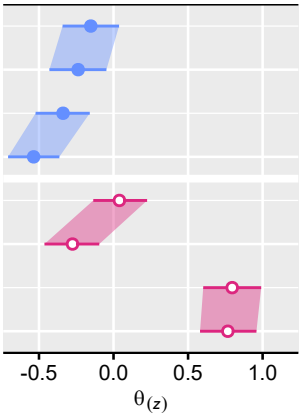
We measured support for restricting abortion with one item: "Do you support or oppose restricting (or banning) abortion?" (1 = *strongly oppose*, 5 = *strongly support*).

In addition to demographic questions, we asked participants to what extent they identified with their gender (1 = *strongly disagree*, 7 = *strongly agree*) and 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*).

We included additional measures, not used in the analyses reported in this paper, including measures of moral conviction (Ryan, 2014), gender-related system-justifying beliefs (Jost & Kay, 2005), and the updated moral foundations questionnaire (Atari et al., 2022, for details, see SOM). Within the latter questionnaire, we embedded three further attention checks (e.g., "To show that you are paying attention and giving your best effort, please select 'moderately describes me'.").

Figure 6
Results from the preregistered analyses for Experiment 3

Ideology	Gender	Cause
Conservative	Man	For
Conservative	Woman	For
Conservative	Man	Against
Conservative	Woman	Against
Liberal	Man	For
Liberal	Woman	For
Liberal	Man	Against
Liberal	Woman	Against



Note. Results show the estimated z-standardized tendency ($\theta_{(z)}$) to consider more controversial actions acceptable means to protest for or against restricting abortion as a function of the participants' ideology and gender.

Results

Reactions to the Manipulation

As intended, participants who identified as conservative reported being far more conservative ($M = 6.05, SD = 0.79$) than participants who identified as liberal ($M = 1.73, SD = 0.80$; Cohen's $d = 5.43$). Likewise, conservative participants tended to endorse system-justifying beliefs ($M = 5.10, SD = 0.95$) while liberal participants tended to reject system-justifying beliefs ($M = 2.86, SD = 1.03; d = 2.26$). As expected, conservative and liberal participants differed in their reactions to the manipulation as the former tended to support restricting abortion ($M = 3.77, SD = 1.48$) while the latter tended to oppose restricting abortion ($M = 1.28, SD = 0.85; d = 2.06$). When comparing politically balanced subsamples of men and women, women ($M = 2.55, SD = 1.76$) did not differ from men ($M = 2.55, SD = 1.72$) in their attitudes toward restricting abortion ($d = -0.02$).

Preregistered Analyses

To test our hypotheses, we used a two-parameter logistic item response theory model, identical to the one used in Experiment 2, to estimate how likely participants were to consider each action an acceptable means of protest as a function of the protesters' cause and of the participants' gender and ideology. Figure 6 shows the results of our preregistered analyses.

As in Experiments 1 and 2, we found evidence for ideology-based double standards: Conservative participants considered the same protest actions to be more acceptable, on average, when protesters *supported* restricting abortion ($d = 0.24, [0.07, 0.43]$) while liberal participants considered the same protest actions to be more acceptable when protesters *opposed* restricting abortion ($d = 0.90, [0.72, 1.08]$). This double standard was more pronounced among liberal participants ($d = 0.66, [0.41, 0.92]$). In this way, Experiment 3 provided evidence for both ideological symmetry and asymmetry in judging collective action for and against restricting abortion.

We found some evidence for identity-based double standards: Female participants considered protest actions *against* restricting abortion to be more acceptable, on average, than male participants or protest actions *for* restricting abortion ($d = 0.14, [0.00, 0.29]$). This pattern was, however, overshadowed by stronger ideology-based double standards that were consistent across subsamples: Conservative women ($d = 0.30, [0.04, 0.55]$) and, to a lesser extent, conservative men ($d = 0.19, [-0.07, 0.46]$) considered the same protest actions to be more acceptable when protesters *supported* restricting abortion and both liberal women ($d = 1.04, [0.78, 1.32]$) and liberal men ($d = 0.76, [0.49, 1.03]$) considered the same protest actions to be more acceptable when protesters *opposed* restricting abortion. In this way, Experiment 3 provided more consistent evidence for ideology-based than for identity-based double standards in judging collective action.

Non-Preregistered Analyses

We explored whether group identification moderated participants' judgments. We found, however, that gender identification neither affected how women judged protesters opposing ($\beta_{xy} = -0.04, [-0.14, 0.07]$) or supporting ($\beta_{xy} = -0.06, [-0.17, 0.03]$) abortion restrictions nor how men judged protesters opposing ($\beta_{xy} = -0.05, [-0.14, 0.04]$) or supporting ($\beta_{xy} = -0.04, [-0.12, 0.06]$) abortion restrictions. Our non-preregistered analyses thus suggested that gender identification did not moderate identity-based double standards in judging collective action concerning reproductive rights.

Discussion

Experiment 3 tested for double standards in judging collective action for and against restricting abortion in a sample balanced by gender and political orientation. As in Experiments 1–2, participants judged the same protest actions to be more acceptable when the protesters' cause aligned with their ideological orientation. While participants in Experiment 2 judged protests opposing or supporting a progressive cause (defunding police), participants in Experiment 3 considered protests opposing or supporting a conservative cause (restricting abortion). As both conservative and liberal participants judged protests for a cause aligned with their ideological orientation to be more acceptable and as this double standard was stronger among liberal participants, Experiment 3 provided evidence for both symmetry and asymmetry in ideology-based double standards in judging collective action.

In contrast to Experiments 1–2, Experiment 3 provided some evidence for identity-based double standards, although any gender differences in judging protests for or against restricting abortion were overshadowed by more consistent ideology-based double standards. Our finding that conservative women considered collective action in support of restricting abortion to be more acceptable while liberal women considered collective action in opposition to restricting abortion to be more acceptable aligned with Mikolajczak et al.'s (2022) argument that, by itself, gender identity is too broad to explain support for collective action. Instead,

we need to consider the content of those identities—for example, identification with feminism or with traditional women—to understand support for, and opposition to, progressive and reactionary collective action.

General Discussion

Our research was motivated by real-world examples that seemed to suggest that where people draw the line between acceptable and unacceptable protest actions depends on *who* the protesters are and *what* they are protesting—in other words, that there are double standards in judging collective action. Our findings, however, showed that it is not so simple. Contradicting our hypothesis of identity-based double standards, participants in three preregistered experiments did not show consistent ingroup bias—in terms of class, race, and gender—when judging controversial protest actions taken by ingroup and outgroup members to advance their group's interests. Instead, supporting our hypothesis of ideology-based double standards, participants judged the same controversial protest actions to be more acceptable when the protesters' cause—protecting workers' rights, defunding the police, restricting abortion—aligned with their own ideological position. In the remainder of this General Discussion, we consider some limiting conditions on our findings and discuss theoretical and practical implications for understanding the often divided response to collective action.

Limitations

Our research applied item response theory to judgments about collective action to investigate whether where people draw the line between acceptable and unacceptable means of protest depends on who the protesters are and what they are protesting. In so doing, we moved the distinction between normative and non-normative collective action from the realm of the researcher's intuition into the realm of scientific investigation, allowing us to test for double standards in judging collective action.

Despite its strengths, our research is qualified by several limitations. First, our research examined the hypothesized relationships for three political causes—protecting workers' rights,

defunding the police, restricting abortion—and thus provided only limited evidence that our findings generalize beyond those causes. Relying on few stimuli to establish an effect threatens the validity and replicability of research findings and constrains the generalizability of psychological research (Yarkoni, 2022). Future research should sample a wider range of causes to address this pervasive but often ignored problem (Judd et al., 2012). This is particularly important when studying collective action as recent theorizing (Jost et al., 2017) and research (Osborne et al., 2019) highlighted the importance of differentiating between progressive and conservative causes. Second, our research was based on samples from two Western, Educated, Industrialized, Rich, and Democratic (WEIRD, Henrich et al., 2010) contexts—the United Kingdom and the United States—which limits the cross-cultural generalizability of our findings.

Implications

Growing evidence shows that, in many situations, observers apply a more lenient standards when judging moral transgressions by ingroup members (Abrams et al., 2013; Endevelt et al., 2021). And yet, our findings suggest that, unlike judgments in other domains, judgments about collective action are not subject to double standards based on group identities such as class, race, or gender. Why did we not find any evidence for identity-based double standards?

One reason for this discrepancy might be that participants did not identify strongly enough with the social categories examined in our studies. This explanation, however, is not plausible because, first, we examined social categories (class, race, gender) that are central to most people's identities and because, second, we did not find evidence for ingroup bias even among highly identified group members. Another reason for this discrepancy might be that participants did not perceive the protesters' causes as relevant to the social identities examined in our studies. This explanation, however, conflicts with participants' reactions to the manipulation which, at least in Experiment 1–2, showed that participants understood the vignette in ingroup–outgroup terms.

A more plausible explanation might be that collective action, even in its controversial forms, is not judged as a moral transgression (as in previous research on identity-based double standards, e.g., Abrams et al., 2013). Instead, observers might understand collective action primarily as a means to an end and judge how acceptable a form of collective action is in relation to its end ("the end justifies the mean"). This aligns with our finding that how acceptable participants judged protest actions to be depended on the protesters' cause, not their group membership.

Our findings showed that progressives and, to a lesser extent, conservatives consider the same controversial protest actions to be more acceptable when the protesters' cause aligns with their ideological position. So far, we explained this ideology-based double standard as resulting from conservatives being motivated to defend the system, progressives being motivated to challenge the system, and both being motivated to support collective action to those effects (Jost et al., 2017; Osborne et al., 2019). Other explanations, however, are plausible.

First, we might instead understand those double standards as an expression of ingroup bias based on an opinion-based (McGarty et al., 2009) or partisan (Finkel et al., 2020) identity. Opinion-based identities are often a stronger predictor of collective action than identities based on other social categories (Bliuc et al., 2007). This aligns with Verkuyten et al.'s (2022) finding that participants were more tolerant of the same transgressive protest actions when taken by their most-liked, rather than their least-liked, political group (e.g., climate activists).

Second, we might argue that their different moral concerns (Graham et al., 2009; Kivikangas et al., 2021) lead progressives and conservatives to see their support of certain causes as a fundamental matter of right or wrong (Skitka et al., 2021) and, by thus moralizing those causes, to accept more extreme means to achieving them. This aligns with Richardson & Conway's (2022) finding that their different moral concerns explained why liberals rated protesting for liberal causes as more moral than conservatives and vice versa. Future research

should seek to disentangle which of those plausible mechanisms best explains partisan differences in judging collective action.

Our findings raised the question why double standards in judging collective action were more pronounced among liberal than among conservative participants. One reason for this ideological asymmetry might be that collective action that violates prevailing norms or laws is seen as inherently threatening to the status quo, even if its aim is to bolster and defend the system. Political conservatism can be understood as having two psychologically related but distinguishable dimensions, resistance to change and justification of inequality (Jost et al., 2003). In this way, conservatives might be expected to condemn disruptive protest even if the protest's cause is to defend inequality. Future research should seek to establish how consistent this ideological asymmetry is across different political causes and cultural contexts.

Most broadly, our findings showed that, for many controversial protest actions, there is no consensus on what is and is not an acceptable means to advance a cause. Instead, this judgment seems to depend on what the cause of a protest is and how it aligns with one's beliefs and values. In this way, our results confirm our contention that the distinction between normative and non-normative forms of collective action should be situated in the eye of the beholder. By developing an instrument for measuring where people draw the line between acceptable and unacceptable forms of collective action, we provide a paradigm that we hope will stimulate research on when and why people differ in making this distinction.

After all, this distinction is often consequential. If people believe that even extreme actions are acceptable means to advance a cause they support, especially if they moralize their support for that cause (Mooijman et al., 2018), they might support violent extremism. In this way, our findings could explain why 45% of Republicans supported the storming of the U.S. Capitol on January 6, 2021 (YouGov, 2021) even though it was illegal, destructive, and violent. If people believe that even non-violent actions are unacceptable means to advance a cause they oppose, they might support stifling dissent. In this way, our findings could explain why Republicans responded to Black Lives Matter protests by seeking to further criminalize

disruptive protest (e.g., blocking highways, Quinton, 2021) that might be most effective at challenging injustice (Shuman et al., 2022, 2021). For those reasons, we encourage researchers to use our paradigm to further investigate when and why people apply different standards when judging collective action for different causes.

Conclusion

Opinion polls show deep divides not only about the ends of protests, but also about the means of protest. For example, only 11% of Republicans and 29% of White Americans—compared to 59% of Democrats and 66% of Black Americans—considered kneeling during the national anthem—a non-violent form of collective action—an appropriate means to protest racist police violence (YouGov, 2017). Our research showed that, in contrast to well-documented double standards in other domains, people do not apply a different standard when judging collective action by members of the same class, race or gender or for a cause aligned with their own group's interests. Instead, our research demonstrated that people consider the same protest actions to be more acceptable when the cause of the protest aligns with their own ideological positions—in other words, that there are partisan double standards in judging collective action.

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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.

Appendix C

Table C1
List of protest actions used in Experiment 3

#	Action	Pr
1	make a public speech	94%
2	hand out flyers, leaflets, or pamphlets	92%
3	wear or display political symbols (e.g., patches, flags, bumper stickers)	92%
4	hold meetings to influence the public	92%
5	attend or organise a protest march	91%
6	use social media (e.g., Facebook, Twitter, Instagram) to influence the public	91%
7	donate to activist groups	90%
8	refuse to buy goods or services from companies that advocate [against/for] restricting or banning abortion (boycott)	90%
9	paste up posters with political messages in places where it is allowed and encouraged	90%
10	join or form a group of activists	90%
11	donate to politicians who advocate [for/against] restricting or banning abortion	89%
12	pay for adverts on social media (e.g., Facebook, Twitter, Instagram) to influence public opinion	84%
13	refuse to accept honors or awards in protest	82%
14	refuse to work (strike)	56%
15	visit people in their homes to convince them about the issue (canvassing, door knocking)	50%
16	stand or sit in a building and refuse to leave (stand-in, sit-in)	41%
17	attend a protest march even though it might be unlawful	40%
18	*protest outside the homes of politicians who advocate [against/for] restricting or banning abortion*	40%
19	attend a protest march even though it might turn violent	40%
20	paste up posters with political messages in places where it is not allowed or encouraged	26%
21	enter and refuse to leave a building (occupation)	25%
22	refuse to pay fees, fines, or taxes in protest	23%
23	mock or insult individuals who are [against/for] restricting or banning abortion	20%
24	spray paint political messages in public places	15%
25	disrupt traffic (e.g., blocking roads)	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 3. Action in *italics* replaced an action used in Experiment 2 because it better fit the context of Experiment 3.