Qualified support for normative vs. non-normative protest

Teixeira, Cátia P.; Spears, Russell; Iyer, Aarti; Leach, Colin Wayne

Published in:
Journal of Experimental Social Psychology

DOI:
10.1016/j.jesp.2023.104454

Publication date:
2023

Journal of Experimental Social Psychology 106 (2023) 104454

Contents lists available at ScienceDirect

Journal of Experimental Social Psychology

journal homepage: www.elsevier.com/locate/jesp

Qualified support for normative vs. non-normative protest: Less invested members of advantaged groups are most supportive when the protest fits the opportunity for status improvement☆

Cátia P. Teixeira [a,*], Russell Spears [b], Aarti Iyer [c], Colin Wayne Leach [d]

[a] University of Maastricht, the Netherlands
[b] University of Groningen, the Netherlands
[c] University of Sheffield, United Kingdom
[d] Barnard College, Columbia University, United States

ARTICLE INFO

Keywords:
Normative and non-normative protest
Opportunity for status improvement
Advantaged groups
Self-investment
Support for protest

ABSTRACT

Disadvantaged groups use different means to protest inequality. Normative protest is more likely when the societal context of inter-group inequality signals that there is opportunity for status improvement. Non-normative protest is more likely to occur in systems in which status improvement is unlikely. However, little is known about how *advantaged* groups react to (normative vs. non-normative) protest as a function of the likelihood for status improvement of the disadvantaged offered by the context (high vs. low). Four experiments ($N = 1092$) assessed endorsement of protest among advantaged group members using different operationalizations of likelihood for status improvement and type of protest in four different intergroup contexts. Advantaged group members scoring lower in self-investment in their group identity endorsed protest more when the form of protest matched likelihood for status improvement than when it did not. Specifically, less invested members most supported normative protest (i.e., marches, petitions) when likelihood for status improvement was high and non-normative protest (i.e., hacking, destruction of property) occurring in contexts in which status improvement was unlikely. Highly self-invested individuals tended to be unaffected by the form of protest or type of inequality. Mediated moderation analyses suggested that increased appraisals of illegitimacy of inequality explained why support (i.e. among the less invested) was higher when the form of protest fitted opportunity for societal improvement. Results suggest that those less committed to their advantaged position jointly consider type of protest and its context of occurrence when forming opinions on acceptability of disadvantaged protest.

One way, sometimes the only way, for disadvantaged groups to challenge their position is to protest *en masse*. Recent examples include Black Lives Matter, MeToo, and Occupy. Most societies prescribe what is legal and what is "legitimate" protest.

Indeed, democratic societies prescribe through law and ethics the legitimate means by which people can collectively work towards perfecting the democracy by promoting greater justice and equity (e.g., petitions, peaceful demonstrations, authorized strikes; see Thompson, 2021). Violence, property damage, and the serious disruption of movement or commerce is typically considered illegal, "non-normative," and thus illegitimate protest (Wright, 2009). In this paper we investigate the conditions under which advantaged groups are prepared to offer their support to disadvantaged groups protesting in these two different kinds of ways.

Disadvantaged groups sometimes opt for "non-normative" forms of protest, especially when they believe there to be very little opportunity to change the social order by more widely accepted, means, such as petitions, legal strikes, and marches (e.g., Scheepers, Spears, Doosje, & Manstead, 2006; Tausch et al., 2011; Wright, Taylor, & Moghaddam, 1990; for discussions, see Livingstone, 2021; Wright, 2009). In other words, the disadvantaged are more likely to resort to "drastic measures" under "drastic circumstances" (Scheepers et al., 2006). When members of disadvantaged groups believe that there is genuine opportunity for change within the existing social order, however, they are more likely to use less disruptive forms of protest that do not so obviously call into question the entire societal edifice of law, order, and morality (Wright,

☆ This paper has been recommended for acceptance by Dr Jarret Crawford

* Corresponding author at: Faculty of Psychology and Neurosciences, University of Maastricht, Universiteitssingel 40, 6229 ER Maastricht, the Netherlands.
E-mail address: c.pintoteixeira@maastrichtuniversity.nl (C.P. Teixeira).

https://doi.org/10.1016/j.jesp.2023.104454
Received 5 July 2021; Received in revised form 6 January 2023; Accepted 7 January 2023
Available online 31 January 2023

2009; Wright et al., 1990). Indeed, playing by the rules makes most sense when one can win the game (Merton, 1968).

However, it is less clear what the *advantaged* make of disadvantaged group's decisions to protest in ways designed to take advantage of the "opportunity structure" of the intergroup inequality. By "opportunity structure" we mean the extent to which the status quo is flexible and allows for social change towards more equality to actually take place. Thus, it is unclear whether the advantaged follow a similar process as the disadvantaged in recognizing that desperate circumstances can call for desperate measures. To address these important and under-examined questions, we conducted four experiments to examine advantaged group support for normative vs. non-normative protest by the disadvantaged when the opportunity for improvement of an illegitimate inequality is either high or low.

A first hurdle is that advantaged groups are not typically expected to support challenges to their advantage or privilege. But those from their ranks most likely to do so are arguably the least committed to the ingroup's advantage, namely low identifiers or more specifically those low in *self-investment* (i.e. the most relevant component of identification as explained further below). Because members who are more self-invested in their advantaged group are more psychologically committed to their group's privileged position in society (Leach et al., 2008), we expect these members to be less sensitive to how opportunity for status improvement affects the disadvantaged's choice between normative and non-normative protest. Indeed, more self-invested members are typically more focused on threats to their ingroup (e.g., Leach et al., 2008) and less capable of the perspective-taking needed to sympathize with the disadvantaged and to support whatever strategy of protest they choose (Zebel, Doosje, & Spears, 2009).

In contrast, those who are less self-invested in their advantaged group membership should be more responsive to the disadvantaged's choice of (normative vs. non-normative) protest strategies. Specifically, as less self-invested group members are less psychologically committed to their advantaged group, they should view normative (peaceful, planned, legal) protest by the disadvantaged as more legitimate and thus more deserving of support when opportunity for improvement is higher. More provocatively, this logic also suggests that less self-invested members of an advantaged group should especially support the disadvantaged's *non*-normative protest when the opportunity for improvement is low either because the system of inequality is stable or because the boundaries between the group's positions are "impermeable" (for a review, see Tajfel & Turner, 1979). Indeed, lower opportunity for improvement should make non-normative (disruptive, disorderly, illegal) protest by the disadvantaged appear more legitimate and thus more deserving of support than normative protest by those less self-invested in their advantaged group.

1. When the advantaged support protest by the disadvantaged: Protest-opportunity fit

How the advantaged respond to (normative vs. non-normative) protest by the disadvantaged can be considered in terms of the principle of moral proportionality (for a discussion, see Rai & Fiske, 2011), which is in line with both monist (e.g., Kohlberg, 1981) and pluralist theories of moral reasoning (Haidt, 2012). The principle states that the extent to which a given behavior is considered appropriate in a given situation is a function of the relation between means and ends. For example, neutralizing an enemy by killing them is generally considered wrong, unless the objective is to survive a lethal threat or to win a "just war" against an immoral enemy. Similarly, *normative* protest is generally considered a morally acceptable means of criticizing inequality if the goal is to achieve justice. Normative protest is therefore the most appropriate, and presumably most effective (Chenoweth, Stephan, & Stephan, 2011), means of challenge when the society provides scope for it.

However, when the societal opportunity structure leaves little room for liberation from their plight, desperate circumstances can demand desperate measures. If the end is to force a rigidly unjust system of inequality to improve the lot of the disadvantaged, then disruptive, violent, and other non-normative protest may become legitimate in the eyes of sympathizers (Thomas & Louis, 2014). Indeed, non-normative protest challenges the prevailing societal order itself by being clearly "outside the norms of the larger social system" (Wright, 2009, p. 874). Therefore, according to a moral proportionality principle, the "right" type of protest in the "right" opportunity structure should highlight how unfair the situation is.

In contrast, protest that does not fit the opportunity for change provided by the context might undermine claims for the (illegitimacy of) inequality. On the one hand, normative protest undertaken in contexts in which opportunity for status improvement is low should lead advantaged group members to see the situation as less serious compared to non-normative protest occurring in the same context. Indeed, some degree of disruptiveness might sometimes be needed to call attention for illegitimate inequality in inflexible systems (see Shuman, Saguy, van Zomeren, & Halperin, 2021; Shuman, Hasan-Aslih, van Zomeren, Saguy, & Halperin, 2022, for similar points). On the other hand, when non-normative actions are chosen as means of protest in systems that *do* provide opportunities for status improvement, these should be seen as over the top, disproportionate actions not sufficiently justified by the inequality situation, not least because normative action may be sufficient to bring about change in these circumstances.

In sum, normative protest by the disadvantaged should be viewed as the most appropriate and proportionate course of action if status improvement is possible in the societal structure. Non-normative protest should be viewed as the most appropriate option if structural inequality is rigid and offers little room for status improvement through such protest. We refer to this correspondence between type of protest and opportunity for status improvement within the societal structure as "protest-opportunity fit". Higher appropriateness of protest in the high-fit conditions should be reflected in higher perceived illegitimacy of inequality that, in turn, should lead to higher levels of endorsement of protest (Uluğ & Tropp, 2021).

2. Self-investment in group advantage

As with many moral judgments, the principle of proportionality does not necessarily operate independently of group identity and other personal and social concerns (e.g., Ryan, David, & Reynolds, 2004; for discussions, see Haidt, 2012; Rai & Fiske, 2011). For instance, low-identified advantaged group members confronted with non-normative protest in illegitimate systems supported this type of protest as much as they did normative protest (Teixeira, Spears, & Yzerbyt, 2020). In these studies, only highly identified advantaged group members rejected non-normative protest, because non-normative (compared to normative) protest was seen as more likely to taint the social image of the advantaged by calling attention to their illegitimate domination. Because high identifiers are more concerned with upholding the ingroup's image (e.g., Doosje, Branscombe, Spears, & Manstead, 1998; Ellemers, Spears, & Doosje, 2002), they react more defensively to the idea that others see them as perpetrators of illegitimate domination, as this threatens their reputation (Gausel, Leach, Vignoles, & Brown, 2012).

In contrast, low identifiers are less concerned with maintaining the good image of their ingroup (i.e., they are low in self-investment). They are therefore psychologically freer to take into consideration the experience of the disadvantaged and to accept the ingroup's responsibility for social inequality. For example, when instructed to take the perspective of the disadvantaged low-identifiers report more guilt and higher support for reparations than high-identifiers (Zebel et al., 2009). These results are also in line with the view that an other-focus among the advantaged is a necessary condition for support for social change towards more equality (Iyer, Leach, & Crosby, 2003; Leach, Snider, & Iyer,

2002). Indeed, compared to high identifiers, low identifiers are arguably less focused on their ingroup's position and image because they place less importance on their advantaged group membership (Leach et al., 2008); it is therefore less likely that concerns over the ingroup's image guide low identifiers' behavior (Turner, 1987; Jiménez-Moya, Spears, Rodríguez-Bailón, & de Lemus, 2015).

Taken together, research on the effects of identification with the advantaged group suggest that low identifiers are more open and sensitive to the experience of the disadvantaged. In the context of our research, this would imply that, when forming their views on the collective protest by the disadvantaged, low identifiers (compared to high identifiers) should more strongly consider how the structural context of inequality might have determined the choice of protest among the disadvantaged. By taking the context of protest more into consideration, those less committed to their group and its advantage may therefore show themselves to be understanding allies who operate in solidarity with the disadvantaged.

Lastly, previous research has shown that when a given social identity is made salient, individuals make moral decisions more based on care for the ingroup than on justice concerns especially when these two concerns are not in sync (Ryan et al., 2004; see also Iacoviello & Spears, 2018, 2021). Because social identity is chronically more salient for high than for low identifiers, we can expect high identifiers support for protest to be less sensitive to contextual factors that render inequality illegitimate. In contrast, low identifiers should be more justice-focused and thus more likely to take the type of protest and likelihood of status improvement of the disadvantaged into account when deciding whether to support disadvantaged protest.

This previously reviewed research on identification has however treated the concept in a relatively homogenous manner (e.g., Teixeira et al., 2020). According to Leach and colleague's model of in-group identification, this construct encompasses two different (albeit related) dimensions: the self-investment and self-definition components of identification. The two dimensions are obviously correlated as they are part of the higher order construct of ingroup identification (Leach et al., 2008). In general, (shorter) identification scales measure aspects pertaining to both dimensions (e.g., Doosje, Ellemers, & Spears, 1995) making previous research less informative regarding which aspect of identification accounts for the effects found. There are however reasons to expect self-investment and not self-definition to be the active ingredient responsible for ingroup defensive reactions (or the lack thereof).

Previous research within this framework has provided support for the idea that the likelihood of noticing threats and defending the ingroup's moral image is mainly determined by the level of self-investment in the group as part of the self (Leach et al., 2008; Leach, Mosquera, Vliek, & Hirt, 2010). The self-investment dimension of in-group identification develops out of real or imagined interaction with in-group members (Jans, Leach, Garcia, & Postmes, 2015) and is indicated by satisfaction with group membership, a sense of solidarity with them, and the importance of the group to the self-concept (Leach et al., 2008).

Thus, we predict that, similarly to the disadvantaged themselves, *less self-invested* advantaged group members should show higher levels of endorsement of protest in "fitting" conditions, that is when opportunity for change is high and protest is normative and when opportunity for change is low and protest is non-normative. The self-definition dimension of in-group identification is more about self-categorization (i.e., how similar is the self to the ingroup) and the entitativity of the group itself (i.e., how similar are ingroup members to each other). Self-definition is thus less relevant to how much group members are likely to engage in protection of the ingroup's image and take the disadvantaged outgroup's situation into account (Leach et al., 2008).

3. Methodological strategy

Four experiments were designed to increase the generalizability and robustness of observed effects (see Judd, Westfall and Kenny, 2017; Livingstone et al., 2020) by replicating results across different intergroup contexts (and thus with samples of participants from different populations) as well as operationalizations of opportunity for status improvement. These were the only studies conducted to examine this question and all measures and exclusions are reported. The studies examined different pairs of illegitimately advantaged and disadvantaged groups (more or less privileged students in terms of access to the job market; White and Black Americans; over-weight and typical-weight people). In addition, each of the four studies operationalized opportunity for status improvement in complementary ways: directly (Experiment 1); stability of a system of inequality (Experiment 2), (im) permeability of boundaries between societal positions (Experiment 3) and inevitability of inequality actually happening (Experiment 4). By examining the pattern of our predicted effects across four conceptual replications, we increase the generalizability of the psychological phenomenon examined beyond *one* effect found in *one* specific context (Schmidt, 2009). Furthermore, we acknowledge and take into account heterogeneity of the size of the predicted effect (Kenny & Judd, 2019).

The first three experiments allow for examination of the expected pattern of findings using conceptual replications. The fourth experiment, besides testing the expected effect a fourth time using a different manipulation of opportunity for status improvement, was also well powered and pre-registered. Previous research on advantaged groups support for (non)normative protest by disadvantaged groups has reported small to medium effects (Teixeira et al., 2020; Teixeira, Leach, & Spears, 2022). We therefore performed a power analysis using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) that indicated the need for 528 participants to detect a small R^2 increase for one predictor in a model with 7 predictors (main effects and interactions), alpha = 0.05, and power = 90%. We aimed at getting this overall number of participants in this last pre-registered experiment.[1]

All data and materials are available at https://osf.io/km2gt/?view_only=373da71d6ffa4f099c1487d1dffb765d

4. Predictions and analytical strategy

Generally, we predict higher support for fitting protest compared to less fitting protest among advantaged group members who are less invested in the ingroup's identity. (Experiments 1–4). Specifically, we predict a protest-opportunity fit by self-investment interaction showing that the highest levels of support for protest[2] are found among less self-invested group members when *normative* protest occurs within a context in which opportunity for status improvement is *high,* and when *non-normative* protest occurs in a context in which opportunity for status improvement is *low* (see Table 1).

In addition, higher support for protest should be explained by increases in appraisals of illegitimacy of inequality in the fitting conditions among the less invested (Experiments 3 and 4). These contextual effects should be weaker, or even absent, among *highly self-invested* group members.

To test these specific interaction hypotheses, we created a series of 3 orthogonal contrasts for a more precise and conservative test of the

[1] We would like to thank the Action Editor for suggesting we conduct a last experiment that indeed increased confidence in the previous findings.

[2] We measured other variables for exploratory reasons in the first 3 experiments. The data is available at https://osf.io/km2gt/?view_only=373da71d6ffa4f099c1487d1dffb765d

Table 1
Predictions regarding Endorsement of Disadvantaged's Protest among Less-Invested Advantaged Group Members.

Manipulations *per* Experiment	Opportunity for disadvantaged status improvement	Type of Protest	
		Normative	Non-normative
Exp. 1 – Improvement Likely Exp. 2 – Unstable System Exp. 3 – Permeable Boundaries Exp. 4 - Evitable Inequality	High	+	−
Exp. 1 – Improvement Unlikely Exp. 2 – Stable System Exp. 3 – Impermeable Boundaries Exp. 4 – Inevitable Inequality	Low	−	+

expected pattern of interaction (Rosenthal & Rosnow, 1985; Schad, Vasishth, Hohenstein, & Kliegl, 2020).[3] Concretely, a first contrast, representing the hypothesized "protest-opportunity fit", compared the two *high-fit* conditions (i.e., normative protest/high opportunity for status improvement and non-normative protest/low opportunity for status improvement, coded "1") to the two *low-fit* conditions (i.e., normative protest/low opportunity for status improvement and non-normative protest/high opportunity for status improvement, coded "-1"). This is our critical contrast and it should interact with participants' self-investment in their advantaged in-group identity.

We also examined two orthogonal residual contrasts to allow us to check the theoretical assumption that the two high-fit and the two low-fit conditions do not differ from each other. The first – *within high-fit* residual contrast – compared the two high-fit conditions to each other: normative protest/high opportunity for status improvement (coded 1) vs. non-normative protest/low opportunity for status improvement (coded −1). The second – *within low-fit* residual contrast – compared the two *low-fit* conditions: normative protest/low opportunity for status improvement (coded 1) vs. non-normative protest/high opportunity for status improvement (coded −1). The other conditions were coded zero. We conducted all analyses on our dependent variables using self-investment (+1 and − 1 *SD*), the three orthogonal contrasts and the three interaction terms between self-investment and the contrasts as explanations.[4]

We first describe and report individual experiments and their results before moving on to present meta-analytic findings. Specifically, we first conducted a mini meta-analysis across the four experiments ($N = 1092$) in order to get a better estimate of the effect size and of its heterogeneity. Secondly, an integrative data analysis on the last two experiments ($N = 737$) served to examine the mediating role of believed illegitimacy of inequality.

[3] The critical contrast by self-investment interaction represents the three-way interaction. Whereas this is a more focused and parsimonious way of testing our specific hypotheses, presenting results in this manner does not allow for the reader to see lower-order main effects and interactions. Hierarchical regression models presenting main effects and interactions are available as supplementary materials (Part 2).

[4] As explained earlier, we expect self-investment, and not self-definition, to be the critical moderator of the effect of the protest-opportunity fit on endorsement of protest. We therefore performed the same analyses using the self-definition scale as moderator in the first 3 experiments but no moderation effects emerged (see supplementary materials Part1 for these analyses).

5. Experiment 1

This first experiment was designed to test our hypothesis in a rather minimal intergroup inequality context. The intergroup comparison used involved Erasmus students (the advantaged ingroup) versus Non-Erasmus students. The Erasmus exchange program is a system for student study exchange visits in Europe. Erasmus students' identity is normally very salient but there is not a widespread perception of inequality between them and other students (as for example, in terms of racial inequality). In addition, we directly manipulated opportunity for status improvement (high vs. low) and type of protest (normative vs. non-normative) between participants.

5.1. Method

5.1.1. Sample

University students involved in the Erasmus exchange program were invited to participate in the study; contact was made either via emails sent to university mailing lists or via messages posted on group websites located on social media platforms (e.g., Facebook). Of the 401 Erasmus students who started the study, 189 from 31 different countries successfully completed it (133 women and 56 men; $M_{age} = 22.43$ years, $SD_{age} = 2.33$). The main nationalities represented were Italian ($N = 34$), French ($N = 25$), German ($N = 19$), Spanish ($N = 15$) and Polish ($N = 10$). All participants reported having at least a B1 level of English ("I can understand texts that consist mainly of high frequency every day or job-related language. I can understand the description of events, feelings and wishes in personal letters.").

5.1.2. Procedure

Participants read a fictional newspaper article ostensibly reporting results of a study conducted by independent experts among 80,000 respondents from 34 countries. To establish Erasmus students as an advantaged in-group, the article focused on the long-term benefits of participating in the Erasmus program. Thus, the article reported that Erasmus alumni were 50% less likely to experience long-term unemployment, had a 23% lower post-graduation unemployment rate, and faster rates of career progression.

In order to present Erasmus student's advantage as illegitimate, other equally (or more) valuable international experiences were presented as secondary compared to the prestige related benefits of having Erasmus status. Specifically, the article stated that students who sought equivalent opportunities to enhance their education (such as international internships, extra-curricular studies, or additional language studies) still report worse employment and career outcomes than did Erasmus students. The article concluded that it seemed "highly beneficial to have an Erasmus 'stamp' on one's CV rather than any other type of (international) learning or work experience in order to thrive in the present European context".

The next section of the article on "Voices of concern" reported the creation of a collective protest campaign by non-Erasmus students, called "Zerosmus". This campaign had ostensibly undertaken a series of actions demanding that the E.U. include non-Erasmus students as a protected group in its anti-discrimination laws and require companies to submit monthly reports about their hiring practices of Erasmus and non-Erasmus qualified individuals.

5.1.2.1. Direct manipulation of opportunity for status improvement. A last section of the article was entitled "What could happen?". This section described the opinion of a famous economics researcher on hiring practices and training of high-level management. In the *low opportunity for status improvement* condition participants read that, according to the expert, even if the demands of "Zerosmus" campaign were met status improvement was unlikely:

As job descriptions are always built on required skills, there will be no difficulty for Erasmus to slip through the net. Employers will only need to justify themselves by claiming that students who did Erasmus correspond the best to the job descriptions.

In the *high opportunity for status improvement* condition, the expert's opinion was that implementing the demands of the Zerosmus campaign could prompt substantial improvement in the job market because:

A positive discrimination law targeting students who did not attend the Erasmus program will force companies to give preference in hiring to these candidates when their skills and profile are of equal quality as the ones of Erasmus alumni. This kind of law already exists for other discriminated groups and it works.

5.1.2.2. Manipulation of protest normativity. After reading the newspaper article and answering the opportunity for status improvement manipulation-check, participants saw a series of screenshots exemplifying some of the actions conducted by the Zerosmus campaign. In the *normative protest* condition, participants saw an online petition to be sent to the European Commission demanding a change in the current state-of-affairs and a Twitter account in the name of the movement with messages such as "Aren't you supposed to act against any type of discrimination? @EU_commission".

In the *non-normative protest* condition, the disadvantaged outgroup's actions included hacking into the website of the European commission where E.U. priorities were stated. Anyone accessing this website would find a pop-up error message stating "Priorities? To create discrimination on the job market by favoring job seekers who did Erasmus!". The second alleged action was to spam the email boxes of the European commission workers with emails blaming them for the inequality (a screenshot of an email inbox was presented with dozens of these emails).

After reading the newspaper article, participants answered a manipulation check for the action's normativity and our dependent measures, were debriefed and thanked.

5.1.3. Measures

All items were answered using 7-point response scales (1 = not at all; 7 = very much) and all items within each measure were randomized.

5.1.3.1. Identification with the advantaged ingroup. This variable was measured at the beginning of the experiment using the multi-component 14-item scale by Leach et al. (2008). As in many studies of in-group identification in general (see Leach et al., 2008), the conceptually important and empirically valid distinction here is between the self-investment and self-definition dimensions of identification. Furthermore, according to our hypotheses only self-investment should moderate effects. Thus, we created a self-definition scale with the 4 items measuring individual self-stereotyping and ingroup homogeneity (α = 0.84) and a self-investment scale with the 10 items referring to solidarity, centrality, and satisfaction (α = 0.90).

5.1.3.2. Manipulation checks

5.1.3.2.1. Opportunity for status improvement. Participants expressed their agreement with four statements referring to the intergroup inequality presented in the newspaper article (e.g., "The [difference between ingroup and outgroup] is probably going to remain as it is"; "It is possible that the [difference between ingroup and outgroup] will be reduced in the future", reversed; α = 0.70). One item was excluded of this scale as it substantially reduced reliability. This was the only item referring to hiring patterns in general and not to the specific intergroup context concerning Erasmus students.

5.1.3.2.2. Normativity of the disadvantaged's protest. Participants were asked to indicate, independently of their personal opinion, the extent to which they thought that the actions undertaken by the disadvantaged group were: "frequently used by people in general as a way to collectively protest"; "approved by the general society as means of protest" and "perceived as appropriate ways to protest by the people in general" (α = 0.85, Teixeira et al., 2020).

5.1.4. Support for disadvantaged's protest

This variable was measured using 13 items adapted from prior studies (Teixeira et al., 2020). Participants indicated the extent to which they agreed with a series of statements involving attitudinal support (5 items) and willingness to perform a series of actions on behalf of the disadvantaged group's protest (7 items). Attitudinal support items included "I support [the low-status campaign] in their claims" and "I encourage [the disadvantaged campaign] to fight for its rights". Willingness to support was measured through willingness to engage in specific and concrete behaviors, such as "Sign a petition in favor of the [disadvantaged group movement]", "Join a demonstration supporting the cause of the [disadvantaged group]"; "Display the logo of the [the disadvantaged campaign] on car/bike/backpack". Attitudes and behavioral intentions were designed to measure the same concept of support for protest and were highly correlated ($r = 0.70$, $p < .001$). We therefore computed a general index of support based on the 11 items (α = 0.94).[5]

5.1.5. Legitimacy of disadvantaged's protest

Participants indicated to what extent they thought disadvantaged's *cause* was: legitimate, fair, reasonable, and justified (α = 0.90, Teixeira et al., 2020).

5.2. Results and discussion

5.2.1. Manipulation checks

A one-way ANOVA on perceptions of opportunity for social improvement showed that the predicted main effect of the opportunity for status improvement manipulation was significant, $F(1, 188) = 10.75$, $p = .001$, $r = 0.24$. The system was perceived as less likely to improve in the low ($M = 4.60$, $SD = 1.09$) than the high opportunity for status improvement condition ($M = 4.14$, $SD = 0.83$).

In addition, a 2 (opportunity for status improvement: high vs. low) by 2 (type of protest: normative vs. non-normative) between-participants ANOVA showed that, as expected, non-normative protest ($M = 4.31$, $SD = 1.39$) was perceived as less normative than normative protest ($M = 5.12$, $SD = 1.09$), $F(1, 188) = 39.64$, $p < .001$, $r = 0.42$. Because this manipulation came after the stability one, we checked for independence between the manipulations. Perceived normativity of the disadvantaged's protest was independent of our manipulation of opportunity for status improvement, $F(1, 188) = 0.11$, $p = .736$, $r = 0.03$, and of its interaction with perceived normativity of protest, $F(1, 188) = 0.34$, $p = .561$, $r = 0.04$. Thus, in sum, both manipulations were successful and orthogonal to each other.

5.2.2. Support for disadvantaged's protest

As expected, only the protest-opportunity by self-investment interaction was significant (see Table 2).[6] Among less invested group members, support was higher in the high compared to the low-fit conditions,

[5] Principal axis Factor Analysis with oblique rotation revealed two factors with eigenvalues greater than one. After excluding one poor reverse-coded item (communality = 0.113), the first factor explained >60% of variance and the second <10%.

[6] Inspection of studentized residuals on this analysis showed the presence of one outlier (i.e., residual >|3|SD). Excluding this participant of the analysis did not change the conventional significance threshold (i.e., $p < .05$) of any effects but did however decrease the effect size of the critical interaction, $F(1, 187) = 4.18$, $p = .042$, $r = 0.15$. We opted by keeping this participant in the analysis as they were not an outlier on the other variable of interest (i.e., legitimacy of protest).

Table 2
Effects of self-investment, "Protest-Opportunity Fit", "Within High-Fit" and "Within Low-Fit" contrasts (and their interactions) on support for protest and perceived legitimacy of protest (Experiment 1).

	B	*SE*	Lower 95% CI	Upper 95% CI	*F*	*p*	*r*
Support for Disadvantaged Protest							
Self-Investment	0.084	0.073	−0.059	0.227	1.35	0.246	0.08
C1: "Protest-Opportunity fit" contrast (critical)	0.030	0.165	−0.296	0.357	0.03	0.854	<0.03
C2: "Within High-Fit" contrast (residual)	0.079	0.118	−0.154	0.312	0.45	0.503	0.04
C3: "Within Low-fit" contrast (residual)	0.022	0.116	−0.207	0.250	0.03	0.853	<0.03
C1 x Self-Investment	**−0.377**	**0.145**	**−0.066**	**−0.091**	**6.76**	**0.010**	**−0.19**
C2 x Self-Investment	0.013	0.099	−0.182	0.207	0.02	0.899	<0.03
C3 x Self-Investment	0.016	0.106	−0.194	0.226	0.02	0.879	<0.03
Legitimacy of Protest							
Self-Investment	−0.016	0.086	−0.186	−0.155	0.03	0.857	<−0.03
C1: "Protest-Opportunity fit" contrast (critical)	−0.002	0.197	−0.390	0.387	<0.01	0.993	<−0.03
C2: "Within High-Fit" contrast (residual)	0.195	0.141	−0.082	0.473	1.93	0.167	0.10
C3: "Within Low-fit" contrast (residual)	0.092	0.134	−0.178	0.364	0.45	0.505	0.04
C1 x Self-Investment	**−0.356**	**0.173**	**−0.670**	**−0.015**	**4.24**	**0.041**	**−0.15**
C2 x Self-Investment	−0.038	0.117	−0.269	0.195	0.10	0.748	−0.03
C3 x Self-Investment	−0.058	0.127	−0.308	0.192	0.21	0.645	<−0.03

Note. Bolded text indicates statistically significant effects at $p < .05$.

B = 0.47, SE = 0.24, 95% CI [0.000; 0.931], $t(181) = 1.98$, $p = .050$. More invested members were less affected by the protest-opportunity fit, B = −0.41, SE = 0.24, 95% CI [−0.869; 0.059], $t(181) = -1.72$, $p = .086$, and the effect was in the opposite direction (see Fig. 1).

5.2.3. Legitimacy of disadvantaged's protest

Parallel to support for protest, the believed legitimacy of protest was only affected by the protest-opportunity by self-investment interaction (see Table 2). The pattern of results is very similar to that of support for protest.

However, the protest-opportunity contrast did not reach significance among either less self-invested members, B = 0.41, SE = 28, 95% CI [−0.145; 0.962], $t(183) = 1.46$, $p = .147$, or more invested ones, B = −0.41, SE = 0.28, 95% CI [−0.963; 0.140], $t(182) = -1.47$, $p = .142$.

In sum, this experiment provided first evidence for our hypothesis by showing that less self-invested advantaged group members were most supportive of protest in the high-fit compared to the low-fit conditions. It is also interesting to point out that no other effects reached significance, including the (arguably plausible) negative main effect of self-investment.

6. Experiment 2

Experiment 2 had two main goals: 1) to replicate findings in a more meaningful intergroup inequality context: racial inequality in the United States, and 2) to do so using a conceptual and indirect manipulation of opportunity for status improvement through manipulating stability of the system of inequality. In this sense, a system with a more unstable

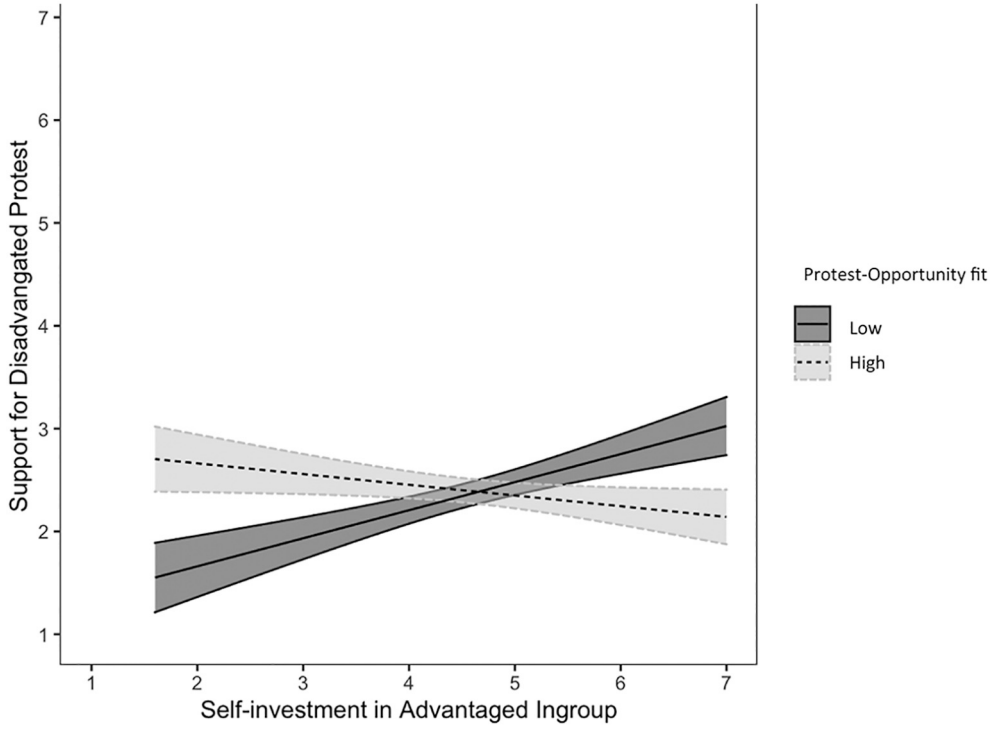

Fig. 1. Support for Disadvantaged Group Protest as a Function of Self-Investment in Advantaged Ingroup Identity and Protest-Opportunity Fit (Experiment 1). Note. Gray areas around the lines represent standard errors.

status quo provides more opportunity for status improvement than a stable one (Tajfel & Turner, 1979).

6.1. Method

6.1.1. Sample and design

Participants were recruited through the Crowdflower website, which is a crowdsourcing online platform in which subscribers are compensated for their participation in surveys. Given the impossibility of prescreening participants based on their ethnicity or nationality, and our wish to avoid highlighting our interest in White American participants, we included these variables among the demographic questions at the end of the study and selected White American participants *post* data collection. The initial sample was composed of 262 participants of which 169 self-identified as White Americans (96 women and 73 men; M_{age} = 35.64 years, SD_{age} = 12.80; $M_{political\ orientation}$ = 4.67, SD = 2.30, on a 9 point-scale where 1 = *left-wing* and 9 = *right-wing*) and therefore constituted our final sample. Participants received US$0.50 for their participation.[7] Opportunity for social improvement and type of protest were manipulated between participants and self-investment was measured.

6.1.2. Procedure

Participants read a fictional online newspaper article about protests following the release of research on racial inequality:

A recent survey conducted by Bureau of Labor Statistics (BLS) shows that African-American employees are less likely to be promoted than Caucasian employees. Results show that this racial disparity in access to promotions is the same across all job sectors. Strikingly, these differences remain even after controlling for employee objective performance. Members of the African-American community have reacted to these results with a series of protests.

The article further explained that,

> *Importantly, the objective performance of employees (evaluated with indexes of quantified productivity or external consultants) does not differ. However, the subjective appreciation by (mainly Caucasian) managers is generally less positive for African-American employees. These results imply that even if equal opportunities measures can help decreasing ethnic differences at the recruitment level, discrimination persists in subtler but arguably equally damaging ways.*

Two separate sections of the article followed and included our experimental manipulations.

6.1.3. Manipulation of opportunity for social improvement through stability of inequality

Stability of inequality was manipulated through a graphical representation of the differences between African-Americans and White Americans concerning the average number of promotions *per* 1000 employees from 1960 to 2015. In the stable condition no major fluctuations were present, that is, differences between the two groups were consistent and clearly favored White employees. In the unstable condition, the graph showed several moments in time in which the two groups were almost equal despite Whites being always favored. This data was ostensibly provided by a famous economics researcher on human resources practices. The manipulation was reinforced by statements from the expert explaining that,

> *As we can see from the chart, the gap in between African-Americans and Caucasians in the job market is relatively unstable (stable) and seems to be dependent on (independent of) different governmental policies. This allows us to predict that (even) if the government approves the bill, the current gap between Caucasians and African-Americans is very (un)likely to disappear or even reverse itself (and can even continue to increase) in the upcoming decade.*

6.1.4. Manipulation of normativity of protest

A section entitled "In action!" described reactions to these statistics among the African-American community. Participants were told that several civil rights groups organized a campaign group called "Black Poor-moted!". The motto of the campaign varied as a function of the experimental condition. In the *normative* condition the collective campaign had the words of Martin Luther King Jr. as motto: "Our lives begin to end the day we become silent about things that matter", whereas in the *non-normative* one it had ostensibly borrowed Malcom X's statement: "Nobody can give you equality or justice or anything. If you're a (wo)man, you take it".

In the *normative protest* condition, the Black Poor-moted movement actions included a demonstration at the Martin Luther King Jr.'s memorial, the rental of advertisement spaces all around the country as a way to spread the word about the campaign and the creation of a website with an online petition. The actions presented in the *non-normative protest* condition included illegally blocking Interstate 495 in Washington DC causing major disruptions in the main entrances and exits of the city, spray painting of the walls of big multinationals all around the country and dressing Malcolm X's statue in a clown outfit as a way of denouncing what they say is a "blatant lack of respect for the Civil Rights movement".

In both conditions this section ended by informing participants that the campaign had introduced a bill in Congress mandating stronger Equal Opportunity Programs in promotion:

> *The new programs would require organizations to (1) actively check their promotions policies and practices for evidence of bias against ethnic minority groups, and (2) to preferentially promote African-American employees over Caucasians when the employee's performance is objectively equal.*

After reading the newspaper article, participants answered our dependent measures, were debriefed, thanked, and compensated.

6.2. Measures

Measures were the same as in the previous experiment. Support was measured with 12 instead of 13 items. We also chose to move the manipulation-checks to the end of the survey to be sure that we were not artificially increasing attention to the aspects of the manipulations that we are interested in (i.e., opportunity for social improvement and type of protest).

Apart from perceived stability of inequality (α = 0.63) all other measures presented good reliability: normativity of the disadvantaged's protest (α = 0.87), support for disadvantaged outgroup's protest (α = 0.96) and legitimacy of disadvantaged protest (α = 0.97).

6.3. Results and discussion

6.3.1. Manipulation checks

A 2 (stability of inequality: high vs. low) by 2 (type of protest: normative vs. non-normative) between-participants ANOVA showed, as predicted, that inequality was perceived as more stable in the stable (M = 4.19, SD = 0.86) than in the unstable conditions (M = 3.56, SD = 0.95), $F(1, 168) = 18.98$, $p < .001$, $r = 0.32$. This manipulation was independent of the manipulation of the normativity of the disadvantaged's protest, as neither the normativity factor, $F(1, 167) = 1.20$, $p = .275$, $r = 0.08$, nor the interaction, $F(1, 168) = 0.072$, $p = .789$, $r < 0.03$, had significant effects on perceived stability of inequality.

As expected, non-normative protest (M = 4.31, SD = 1.39) was perceived as less normative than normative protest (M = 5.12, SD =

[7] Two participants left 90% of the questionnaire blank, and thus were excluded.

1.09), $F(1, 168) = 17.16$, $p < .001$, $r = 0.31$. The perceived normativity of the disadvantaged's protest was independent of our manipulation of stability of inequality, $F(1, 168) = 0.717$, $p = .398$, $r = 0.06$, and of its interaction with perceived normativity of protest, $F(1, 168) = 0.108$, $p = .742$, $r = 0.03$. Thus, both manipulations were successful and orthogonal to each other.

6.3.2. Support for disadvantaged outgroup's protest

The main effect of self-investment was significant and negative. Importantly, as before, the protest-opportunity by self-investment effect was significant (see Table 3). Among less invested group members, support was higher in the high-fit compared to the low-fit conditions, B = 0.74, SE = 0.36, 95% CI [0.041; 1.44], $t(161) = 2.09$, $p = .038$. More invested members were not affected by the protest-opportunity fit, B = −0.30, SE = 0.35, 95% CI [−1.00; 0.404], $t(161) = -0.83$, $p = .406$ (see Fig. 2). None of the other effects were significant (see Table 3).

6.3.3. Legitimacy of disadvantaged protest

Again, the effects for perceived legitimacy of protest were very similar to the ones regarding support (see Table 2). We found a main negative effect of self-investment and the protest-opportunity by self-investment effect was close to significance. Among less invested group members, legitimacy of protest was higher in the high compared to the low-fit conditions, B = 0.768, SE = 0.37, 95% CI [0.034; 1.503], $t(161) = 2.07$, $p = .040$. More invested members were not affected by the protest-opportunity fit, B = −0.23, SE = 0.37, 95% CI [−0.966; 0.502], $t(161) = -0.63$, $p = .533$. None of the other effects were significant.

We again found support for the idea that less self-invested advantaged group members are sensitive to how the type of protest by the disadvantaged fits the opportunity for status improvement of the disadvantaged provided by the system of inequality. Once again, these members supported high-fitting more than low-fitting protest. In contrast to Experiment 1, here we found a negative effect of self-investment. It is possible that the increased meaningfulness of the intergroup inequality made this effect stronger.

Finally, a shortcoming of the present study is that the stability manipulation might also have had an impact in legitimacy of status differentials as the information provided referred not only to the stability of differences *stricto* sensu but also to the fact that they seem (more or less) dependent of governmental policies. Two reasons might however alleviate concerns about this issue. First, we presented the inequality as clearly illegitimate overall (i.e., based exclusively in subjective assessment of employers when controlling for objective performance). Second, we are mainly interested in the impact of likelihood of status improvement implied in the context.

7. Experiment 3

In a third experiment we tested our predictions in another different context of intergroup inequality: weight stigma. This choice allows for generalization to contexts in which the disadvantaged identity (i.e., overweight people) is clearly negative and in which the stigma or disadvantage might be attributed to the behavior of disadvantaged group members themselves. This context provides a test to the robustness of our effects as this is a context in which advantaged group members have more room for justifying inequality as legitimate (see e.g., Kuppens, Spears, Manstead, Spruyt, & Easterbrook, 2018).

In addition, we operationalized opportunity for status improvement through permeability of intergroup boundaries, that is, the possibility of individual mobility across groups. Indeed, contexts in which intergroup boundaries are impermeable provides less opportunity for improving one's status than a permeable one (Tajfel & Turner, 1979).

7.1. Method

7.1.1. Sample and procedure

Two-hundred and thirty-three psychology students from a large European university participated in this experiment in exchange for course credits. After giving their informed consent, participants filled in a demographic section including height and weight. With this information, the program calculated their Body Mass Index (BMI). Participants with a BMI lower than 30 got graphical feedback informing them they belonged to a typical (healthy) weight group. The 12 participants whose BMI was higher than 30 (i.e., clinically obese according to the World Health Organization, WHO) were redirected to a different study unrelated to weight stigma so as to avoid exposing them to the potentially threatening information in the manipulation. In addition, 6 participants participated twice. We kept their first participation record.

Twenty-five participants with a BMI between 25 and 29 were excluded from analyses. We did not anticipate this issue but according to the World Health Organization people with a BMI equal or >25, despite not being technically "obese", are considered "overweight" and not as having a "healthy weight" (WHO). These participants were therefore not part of the "typical weight" referred to in the manipulation. Post-hoc support for this exclusion is the fact that these participants reported significantly lower levels of self-investment with the typical weight group, $M = 3.39$, $SD = 1.22$, than did participants whose BMI was lower than 25, $M = 4.26$, $SD = 1.30$, $F(1, 214) = 10.09$, $p = .002$, $r = 0.21$. Furthermore, among these participants the correlation between BMI and self-investment in the typical weight identity is strongly negative ($r = -0.60$, $p < .001$) whereas among the remainder of the sample this relationship is non-significant ($r = -0.078$, $p = .286$). Taken together, these findings indicate that these participants did not identify with the advantaged ingroup to the same degree as did other participants. Because self-investment is one of our main predictors, the inclusion of these participants is likely to add unexplained variation to the data and therefore we decided to exclude them.

After the afore-mentioned exclusions, the final sample was composed of 190 participants ($Mage = 20.42$, $SD = 2.59$). Of these, 135 reported being women and 55 being male.

After being told that they belonged to a typical healthy weight group, participants indicated their identification with their weight group and then proceeded to read a fictitious article that contained the experimental manipulations. The article informed participants of a new European Union policy called "Redistribution of Health Costs" according to which people with a BMI higher than 30 will pay an extra 10% for their health insurance. This policy was justified by the fact that obese patients cost on average the health system 25% more than non-obese ones. Permeability of group boundaries was manipulated by varying the possibility of moving from the "high risk" to the "basic" (no additional costs) one. In the *permeable* condition it was stated that clinically obese people had the possibility of moving to the cheaper health insurance group if they lost weight and got their BMI down under 30. In the *impermeable* condition participants read that clinically obese people would remain permanently in the most expensive health insurance group, as being overweight at some point in one's life exposed one to irreversible health risks.

In its last section, the article reported a series of protests in response to the policy. The protests were described as part of a movement called 'Fat chance: Give the Fat a chance!'. Members of this movement described the regulation as 'systemic discrimination' and contributing to reinforce stigma and prejudice based on weight, against which overweight people had been fighting for decades. The campaign group had allegedly organized a march in Brussels that had ended in front of the European Commission headquarters. It was further stated that the attendance levels where higher than expected. In the *normative* condition, protest actions included theater, dance, and distribution of free cake. In the *non-normative* condition, protesters marched naked as a way to showcase their body pride.

Table 3
Effects of self-investment, "Protest-Opportunity Fit", "Within High-Fit" and "Within Low-Fit" contrasts (and their interactions) on support for protest and legitimacy of protest (Experiment 2).

	B	*SE*	Lower 95% CI	Upper 95% CI	*F*	*p*	*r*
Support for Disadvantaged Protest							
Self-Investment	**−0.294**	**0.105**	**−0.502**	**−0.087**	**7.86**	**0.006**	**−0.22**
C1: "Protest-Opportunity fit" contrast (critical)	0.223	0.251	−0.272	0.718	0.79	0.375	0.07
C2: "Within High-fit contrast (residual)	−0.205	0.173	−0.547	0.137	1.40	0.238	−0.09
C3: "Within Low-fit" contrast (residual)	0.217	0.181	−0.141	0.575	1.43	0.233	0.09
C1 x Self-Investment	**−0.434**	**0.210**	**−0.849**	**−0.020**	**4.28**	**0.040**	**−0.16**
C2 x Self-Investment	−0.231	0.150	−0.527	0.066	2.35	0.127	−0.12
C3 x Self-Investment	−0.080	0.147	−0.369	0.210	0.30	0.588	−0.04
Legitimacy of Protest							
Self-Investment	**−0.394**	**0.110**	**−0.611**	**−0.177**	**12.80**	**<0.001**	**−0.27**
C1: "Protest-Opportunity fit" contrast (critical)	0.268	0.263	−0.251	0.787	1.04	0.309	0.08
C2: "Within High-fit contrast (residual)	0.019	0.182	−0.339	0.378	0.916	0.916	<0.03
C3: "Within Low-fit" contrast (residual)	0.291	0.190	−0.084	0.666	2.35	0.127	0.12
C1 x Self-Investment	−0.419	0.220	−0.854	0.016	3.62	0.059	−0.15
C2 x Self-Investment	−0.079	0.158	−0.390	0.232	0.25	0.617	−0.04
C3 x Self-Investment	−0.062	0.154	−0.365	0.242	0.16	0.688	−0.03

Note. Bolded text indicates statistically significant effects at $p < .05$.

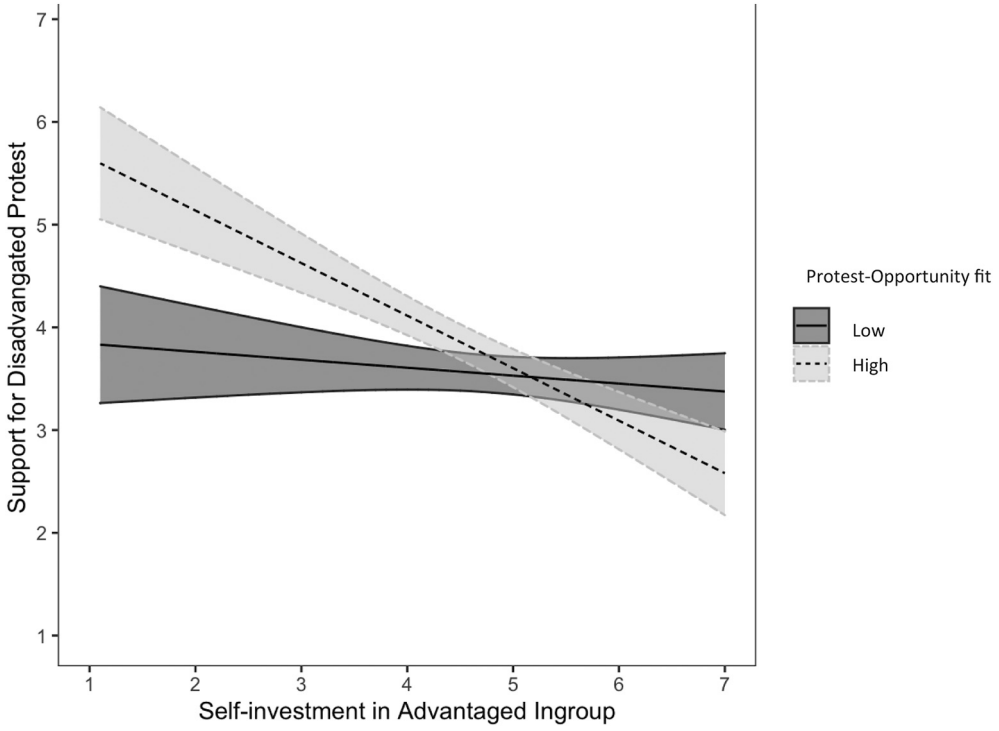

Fig. 2. Support for Disadvantaged Group Protest as a Function of Self-Investment in Advantaged Ingroup Identity and Protest-Opportunity Fit (Experiment 2). Note. Gray areas around the lines represent standard errors.

After reading the article participants were asked to summarize it, answered a series of dependent measures, and were debriefed and thanked.

7.2. Measures

Unless stated otherwise all measures were answered on the 7-point response scales used in the preceding studies. Self-definition (α = 0.83), self-investment (α = 0.86), support for protest (10 items, α = 0.91), legitimacy of protest (α = 0.88) and normativity of protest (α = 0.80) were all reliably measured here.

7.2.1. Perceived permeability of intergroup boundaries

Two questions assessed this variable: "In your opinion, to what extent […] does the 'Fat Tax' regulation allow individuals to change their status within the healthcare system? and […] Is the 'Fat Tax' regulation flexible?" ($r = 0.53$, $p < .001$).

7.2.2. Illegitimacy of the inequality

This measure used the same items as legitimacy of protest in the two previous experiments but targeted the "Redistribution of Health Cost" *policy* (α = 0.91).

7.3. Results

7.3.1. Manipulation checks

We ran 2 (permeability of intergroup boundaries: high vs. low) by 2 (type of protest: normative vs. non-normative) between participants

ANOVAs on the two manipulation-checks. Although the permeable group boundary conditions were viewed as more permeable ($M = 3.52$, $SD = 1.21$) than the impermeable boundary ones ($M = 3.33$, $SD = 1.36$), this difference was small and not reliable, $F(1, 189 = 1.00, p = .319, r = 0.07$. It seems likely that our manipulation check was too subtle and indirect in its wording. Importantly, neither the normativity of protest – $F(1, 189) = 0.185, p = .668, r = 0.03$ – nor the two-way interaction – $F(1, 189) = 619, p = .432, r = 0.05$ – affected this measure.

Normative protest was viewed as more normative, $M = 4.80$, $SD = 1.04$, than non-normative, $M = 4.12$, $SD = 1.30$, $F(1, 189) = 16.21$, $p < .001$, $r = 0.28$. In addition, apparent normativity did not vary as a function of the permeability manipulation ($F(1, 189) = 0.060$, $p = .807$, $r < 0.03$) nor of the interaction between the two experimental manipulations ($F(1, 189) = 1.47$, $p = .228$, $r = 0.08$).

7.3.2. Support for disadvantaged group protest

The Protest-Opportunity fit contrast was significant and this effect was qualified by the predicted interaction with self-investment (see Table 4). Among less self-invested group members support was higher in the high-fit compared to the low-fit conditions, B = 0.86, SE = 0.28, 95% CI [0.304; 1.414], $t(182) = 3.06$, $p = .003$. Highly self-invested group members' support was not affected by the protest-opportunity fit, B = 0.06, SE = 0.28, 95% CI [−0.486; 0.599], $t(182) = 0.21$, $p = .838$ (see Fig. 3). No other effects were significant.

7.3.3. Illegitimacy of the inequality

For ease of interpretation, we reverse coded this variable such that higher scores correspond to more illegitimacy of inequality. The only significant effect was the protest-opportunity fit by self-investment interaction (see Table 4). Less invested group members perceived inequality to be more illegitimate in the high compared to the low-fit conditions, B = 0.76, SE = 0.33, 95% CI [0.123; 1.403], $t(182) = 2.35$, $p = .020$. Again, more invested members were not affected by the protest-opportunity fit, B = −0.22, SE = 0.32, 95% CI [−0.845; 0.408], $t(182) = -0.69$, $p = .493$.

7.3.4. Legitimacy of protest

The only significant effect for this variable was the main effect of the within high-fit contrast (see Table 4) that indicated that normative protest occurring in permeable contexts ($M = 5.52$, $SD = 1.17$) is seen as more legitimate than non-normative protest occurring in impermeable ones ($M = 4.99$, $SD = 1.16$). We were therefore unable to replicate the predicted effect on this variable. Inspection of the pattern of results concerning the non-significant interaction shows the predicted pattern, which suggests a weaker effect than the one found in the previous experiments. This weaker effect might be due to the specific context and manipulations used here or to other issues such as the measurement of illegitimacy of inequality, right before legitimacy of protest that might have diluted the effect.

8. Experiment 4

Experiment 4 had two main goals. First, to replicate the previous experiments in a well-powered pre-registered study. As mentioned before, according to previous research on this topic (Teixeira et al., 2020) we can expect small to medium effects. A power analysis using G*Power (Faul et al., 2007) indicated the need for at least 528 participants in order to detect a small R2 increase for one predictor in a model with 7 predictors (main effects and interactions), alpha = 0.05, and power = 90%. Sampling plan, materials, hypotheses and data analytic plan can be found at https://doi.org/10.17605/OSF.IO/6UJZW.

Second, in preparing this last experiment we wanted to provide a more direct and cleaner manipulation of opportunity for status improvement in yet another country and basing our scenario on actual discussions that have taken place. We manipulated this variable by varying the extent to which the implementation of a health policy disadvantaging of over-weight people was inevitable. Depending on the condition this policy was presented as being in a test phase (low inevitability) or as a in a point of no return (high inevitability).

Table 4
Effects of self-investment, "Protest-Opportunity Fit", "Within High-Fit" and "Within Low-Fit" contrasts (and their interactions) on support for protest, illegitimacy of inequality and legitimacy of protest (Experiment 3).

	B	SE	Lower 95% CI	Upper 95% CI	*F*	*p*	*r*
Support for Disadvantaged Protest							
Self-Investment	−0.016	0.076	−0.167	0.134	0.046	0.831	<−0.03
C1: "Protest-Opportunity fit" contrast (critical)	**0.458**	**0.196**	**0.072**	**0.844**	**5.47**	**0.020**	**0.17**
C2: "Within High-fit" contrast (residual)	0.205	0.138	−0.067	0.478	2.21	0.139	0.11
C3: "Within Low-fit" contrast (residual)	0.027	0.139	−0.247	0.300	0.04	0.849	<0.03
C1 x Self-Investment	**−0.310**	**0.152**	**−0.610**	**−0.009**	**4.13**	**0.044**	**−0.15**
C2 x Self-Investment	−0.091	0.107	−0.303	0.121	0.72	0.398	−0.06
C3 x Self-Investment	0.115	0.109	−0.102	0.325	1.07	0.303	0.08
Illegitimacy of Inequality							
Self-Investment	−0.173	0.088	−0.347	0.000	3.89	0.050	−0.15
C1: "Protest-Opportunity fit" contrast (critical)	0.272	0.226	−0.173	0.718	1.45	0.230	0.09
C2: "Within High-fit" contrast (residual)	−0.075	0.159	−0.389	0.240	0.22	0.640	−0.03
C3: "Within Low-fit" contrast (residual)	0.034	0.160	−0.282	0.350	0.04	0.833	<0.03
C1 x Self-Investment	**−0.378**	**0.176**	**−0.725**	**−0.031**	**4.63**	**0.033**	**−0.16**
C2 x Self-Investment	−0.225	0.124	−0.470	0.019	3.30	0.071	−0.13
C3 x Self-Investment	−0.040	0.125	−0.286	0.206	0.10	0.750	−0.03
Legitimacy of Protest							
Self-Investment	−0.133	0.068	−0.268	>0.001	3.85	0.051	−0.15
C1: "Protest-Opportunity fit" contrast (critical)	0.111	0.175	−0.234	0.456	0.40	0.526	0.04
C2: "Within High-fit" contrast (residual)	**0.299**	**0.123**	**0.056**	**0.542**	**5.88**	**0.016**	**0.18**
C3: "Within Low-fit" contrast (residual)	0.099	0.124	−0.235	0.254	0.01	0.939	<0.03
C1 x Self-Investment	−0.122	0.136	−0.390	0.147	0.80	0.372	−0.06
C2 x Self-Investment	−0.148	0.096	−0.338	0.041	2.39	0.124	−0.11
C3 x Self-Investment	−0.026	0.096	−0.217	0.164	0.07	0.786	<−0.03

Note. Bolded text indicates statistically significant effects at $p < .05$.

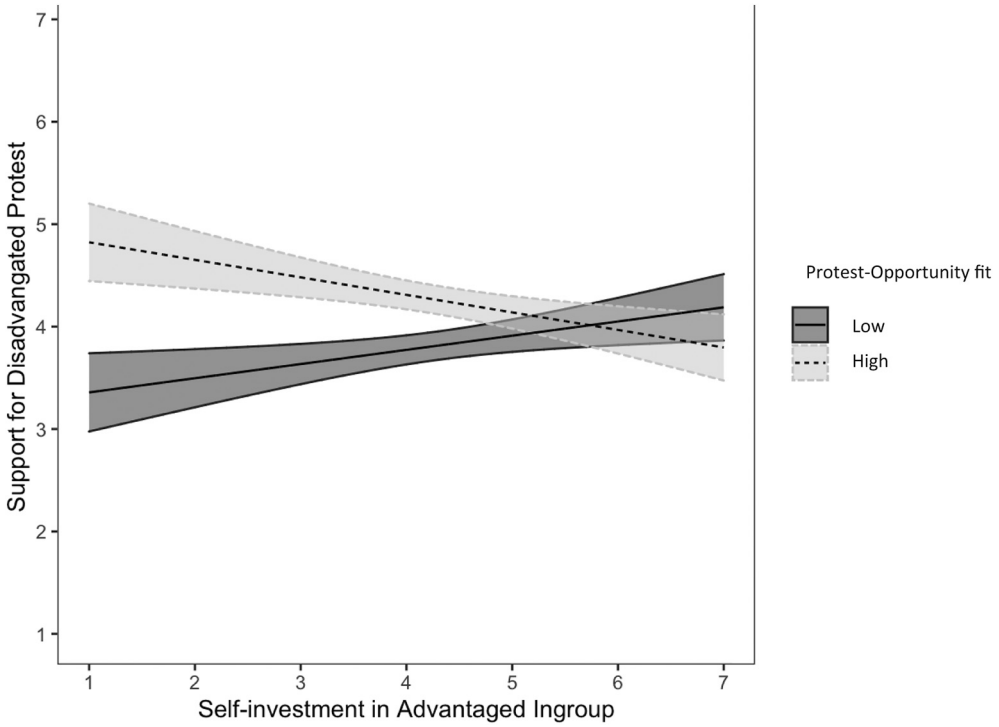

Fig. 3. Support for Disadvantaged Group Protest as a Function of Self-Investment in Advantaged Ingroup Identity and Protest-Opportunity Fit (Experiment 3). Note. Gray areas around the lines represent standard errors.

8.1. Method

8.1.1. Sample and procedure

Participants were recruited through the Prolific Academic website and received 1.25 sterling pounds in exchange for their participation. Three pre-screening criteria were defined in Prolific Academic: age (older than 16 years old), location (live in the United Kingdom) and Body Mass Index (BMI, between 19.9 and 29.9). We aimed at recruiting 540 participants who fitted these criteria. To do so, we opened 570 places for our survey expecting that some participants needed to be excluded mainly due to their present BMI. Indeed, because the BMI criteria is central for defining our intergroup context and could have changed since participants filled in Prolific's pre-screening survey, we asked them for weight and height, calculated their BMI based on this information and excluded those whose BMI did not fit this range. Our final sample consisted of 544 participants (M_{age} = 38.95, SD = 13.33, 330 identified and female, 211 as male and 3 as other gender).

After giving informed consent, responding to demographics (age, gender, nationality, mother tongue) and proving information for calculating their BMI (i.e., weight and height), participants received the same "heathy weight" feedback as in Experiment 3 and answered to the self-investment (α = 0.89; M = 3.77, SD = 1.16) and self-definition (α = 0.87; M = 3.13, SD = 1.22) identification scales framed as referring to their "weight group". They then proceed to read a fictitious article on an alleged new country-wide policy of the British National Health Service (NHS) aimed at restricting access to routine surgeries for obese patients (i.e., patients whose BMI was 30 or higher). This issue has actually been discussed in the UK given the need for rationing of healthcare resources (e.g., Pillutla, Maslen, & Savulescu, 2018). The article briefly described the policy and went on to focus on protests by the "Fat Chance" activist group. The group alleged argued that:

> *(…) many overweight people have already been fighting for decades against body weight stigma. In their view, this policy is a major setback in the fight against anti-fat prejudice.*
>
> *The NHS was blind to everything but medical priority. But once a patient's personal choices can be taken into account, where does that lead! More people on low incomes are obese, and therefore already suffer worse health and discrimination. What about drinking too much wine of an evening, slowly corroding our livers? And what about people bitten by their own dogs! Or idiots tripping over while texting on smartphones?*

8.2. Manipulations

8.2.1. Opportunity for status improvement

This variable was manipulated by varying the *inevitability of implementation of the policy*. In the *high inevitability* condition the article's headline stated: " 'Slim chance for the fat' health policy: no turning around anymore". It was further mentioned that "crossing the t's and dotting the i's is the only thing left to do before the country-wide adoption" of the policy that would happen in the second half of the year. This information was repeated towards the end of the article.

In the *low inevitability* condition, it was emphasized that the policy would start its test phase, which would then lead to a first evaluation in the second half of the year. Specifically, the headline read: " 'Slim chance for the fat' health policy: test phase begins" and it was stated that "an appraisal of this initiative will take place before deciding on the country-wide adoption" of the policy. This information was also repeated towards the end of the article.

8.2.2. Manipulation of type of protest

Type of protest was manipulated similarly to Experiment 3, that is, by having either a march with dance and theater in the normative condition and a naked march in the non-normative condition (see

Materials on OSF for the pictures accompanying the manipulations).[8]

8.3. Measures

Illegitimacy of the policy (α = 0.96; $M = 3.39$, $SD = 1.74$), support for protest (α = 0.86; $M = 4.22$, $SD = 1.17$) and perceived normativity of protest (α = 0.87; $M = 4.26$, $SD = 1.37$) were all measured with the same items as in Experiment 3. As manipulation check for inevitability of policy implementation we asked participants on a scale from 1 to 7 (1 = *not at all*; 7 = *very much*) to what extent they thought that the NHS policy was "certain", "inevitable" and "going to happen" (α = 0.91; $M = 3.50$, $SD = 1.51$). No other dependent measures were included.

8.4. Results and discussion

8.4.1. Manipulation-checks

An ANOVA on perceptions of policy inevitability showed a main effect the inevitability manipulation, $F(1, 543) = 14.50$, $p < .001$, $r = 0.16$, showing that the implementation of the policy was seen as more inevitable in the high, $M = 3.74$, $SD = 1.62$, than in the low inevitability condition, $M = 3.26$, $SD = 1.34$. Type of protest did not affect this variable, $F(1, 543) = 0.03$, $p = .859$ and the interaction was marginal, $F(1, 543) = 3.73$, $p = .054$, $r = 0.08$. This marginal interaction showed that the effect of the inevitability manipulation tended to be stronger in the normative, $F(1, 543) = 16.16$, $p < .001$, $r = 0.17$, $M_{high\ inevitability} = 3.87$, $SD = 1.63$, $M_{low\ inevitability} = 3.14$, $SD = 1.25$, than in the non-normative condition, $F(1, 543) = 1.79$, $p = .181$, $r = 0.05$, $M_{high\ inevitability} = 3.60$, $SD = 1.61$, $M_{low\ inevitability} = 3.36$, $SD = 1.42$.

Perceptions of normativity of protest were only affected by the type of protest manipulation, $F(1, 543) = 67.13$, $p < .001$, $r = 0.33$. As expected, protest was seen as more normative in the normative, $M = 4.73$, $SD = 1.20$, than in the non-normative condition, $M = 3.82$, $SD = 1.38$.

8.4.2. Support for disadvantaged protest

As before, we conducted analyses concerning our main dependent variables using self-investment, the set of contrasts described above and their interactions with self-investment. The only significant effect was the predicted interaction between the protest-opportunity fit contrast and self-investment (see Table 5). This interaction showed that for less invested members the high-fit conditions tended to lead to more support than the low-fit ones, B = 0.22, SE = 0.14, 95% CI [−0.057; 0.503], $t(536) = 1.56$, $p = .119$, and the opposite trend was found among more invested members, B = -0.26, SE = 0.14, 95% CI [−0.543; 0.021], $t(536) = -1.82$, $p = .069$. Despite being in the predicted direction, the simple effect of interest did not reach significance.

8.4.3. Illegitimacy of the inequality

We again reverse coded this variable for ease of interpretation. The predicted interaction between self-investment and the Protest-Opportunity fit contrast did not reach significance (see Table 5). The pattern, however, mimicked the expected one and the Protest-opportunity fit effect was significant among less invested members who judged the policy as more illegitimate in the high-fit compared to the low-fit conditions, B = 0.42, SE = 0.21, 95% CI [0.011; 0.829], $t(536) = 2.02$, $p = .044$. This was not the case among more invested members, B = -0.03, SE = 0.21, 95% CI [−0.445; 0.378], $t(536) = -0.15$, $p = .873$.

[8] We introduced a small change compared to Experiment 3 in order to make the two conditions more balanced: the reference to distribution of free cake in both conditions (we had previously only mentioned it in the normative condition).

9. Meta-Analytic analyses

As a final step in our analyses, we meta-analyzed our studies in two ways.

9.1. Mini-meta analysis

We first conducted a mini-meta analysis in order to estimate the average effect size across experiments and check for heterogeneity between them. We therefore conducted a fixed effect meta-analysis using the unstandardized regression estimates for the Protest-Opportunity Fit x Self-Investment effect weighted by sample size (see Fig. 4).

The overall average effect was B = −0.28, se = 0.06, 95%, Z = −4.38, $p < .001$, two-tailed, and there was no heterogeneity in effects across studies, $Q = 1.68$, $df = 3$, $p = .643$, Tau =0%. This lack of heterogeneity increases confidence in generalizability of the phenomenon under study across conceptual replications in different intergroup contexts.

We performed sensitivity power analyses using two approaches. Given that the homogeneity of effects across experiments, we used the average effect across experiments for these power calculations.

We first conducted a sensitivity analysis using G*Power (Faul et al., 2007) for a multiple regression with one tested predictor (the fit by self-investment interaction) among seven predictors (self-investment, the three contrasts and the interactions among these predictors). This analysis indicated that the smallest effect we are able to detect with the collected sample for 80% power and an alpha level of 0.05 (two-tailed) is f2 = 0.007. The average effect found in our research is f2 = 0.017.

We also used the web application by Klein, n.d. (https://olivierklein.shinyapps.io/forapp/) in order to calculate power involving an interaction between a continuous and a dichotomous predictor. This application computes the proportion of simulations yielding an alpha <0.05 for the interaction term. We set the number of simulations to the highest value in order to achieve a more precise estimate of power (i.e., 2000). Results showed that power for the obtained effect with our sample size is 85%. Both approaches lead us therefore to conclude that our analyses are well-powered.

9.2. Mediated moderation

We used the data from Experiments 3 and 4 to test the hypothesized mechanism through which the protest-opportunity fit (among the less invested) impacts support for protest: illegitimacy of inequality. These were the only experiments in which we measured this variable. As stated in the introduction, high-fit conditions, compared to low-fit ones, should increase appraisals of illegitimacy of inequality. This should be the case according to a principle of moral proportionality in which type of protest is sufficiently justified given the extent to which the system allows for change to actually happen. In Experiments 3 and 4 there was some evidence for illegitimacy of inequality to vary in the predicted direction. There was some variability across experiments concerning the significance of the predicted effect on illegitimacy of inequality. We therefore conducted an integrative data analysis on the data of the experiments 3 and 4 ($N = 734$) using a multi-level approach with Experiment as random intercept so as to get a better powered and more precise test of the indirect effect.

Statistically, this hypothesis implies a mediated moderation in which the protest-opportunity fit by self-investment interaction affects illegitimacy of inequality, which, in turn, has a positive impact on support for protest. In addition, including illegitimacy of inequality on the model on support should lead to a decrease in the protest-opportunity fit by self-investment interaction. Finally, the indirect effect of the protest-opportunity fit by self-investment interaction on support for protest via illegitimacy of inequality should be significant. We tested these predictions using recent recommendations prescribing a component path approach for examining the existence of mediation and Monte

Table 5
Effects of self-investment, "Protest-Opportunity Fit", "Within High-Fit" and "Within Low-Fit" contrasts (and their interactions) on support for protest, illegitimacy of inequality and legitimacy of protest (Experiment 4).

	B	SE	Lower 95% CI	Upper 95% CI	*F*	*p*	*r*
Support for Disadvantaged Protest							
Self-Investment	−0.061	0.044	−0.148	0.025	1.95	0.164	−0.06
C1: "Protest-Opportunity fit" contrast (critical)	−0.019	0.100	−0.216	0.178	0.04	0.847	<0.03
C2: "Within High-fit" contrast (residual)	−0.030	0.071	−0.170	0.110.	0.18	0.673	<0.03
C3: "Within Low-fit" contrast (residual)	−0.062	0.071	−0.200	0.077	0.76	0.383	−0.03
C1 x Self-Investment	**−0.209**	**0.088**	**−0.382**	**−0.036**	**5.62**	**0.018**	**−0.10**
C2 x Self-Investment	−0.030	0.062	−0.151	0.092	0.23	0.628	<−0.03
C3 x Self-Investment	−0.012	0.063	−0.136	0.111	0.04	0.843	<−0.03
Illegitimacy of Inequality							
Self-Investment	−0.302	0.064	−0.429	−0.176	22.10	<0.001	−0.20
C1: "Protest-Opportunity fit" contrast (critical)	0.193	0.146	−0.094	0.481	1.74	0.187	0.05
C2: "Within High-fit" contrast (residual)	0.049	0.104	−0.156	0.253	0.22	0.640	<0.03
C3: "Within Low-fit" contrast (residual)	**−0.206**	**0.103**	**−0.408**	**−0.003**	**3.99**	**0.046**	**−0.08**
C1 x Self-Investment	−0.195	0.129	−0.448	0.057	2.31	0.129	−0.06
C2 x Self-Investment	0.009	0.090	−0.169	0.186	0.01	0.923	<0.03
C3 x Self-Investment	−0.044	0.092	−0.224	0.136	0.23	0.632	<−0.03

Note. Bolded text indicates statistically significant effects at $p < .05$.

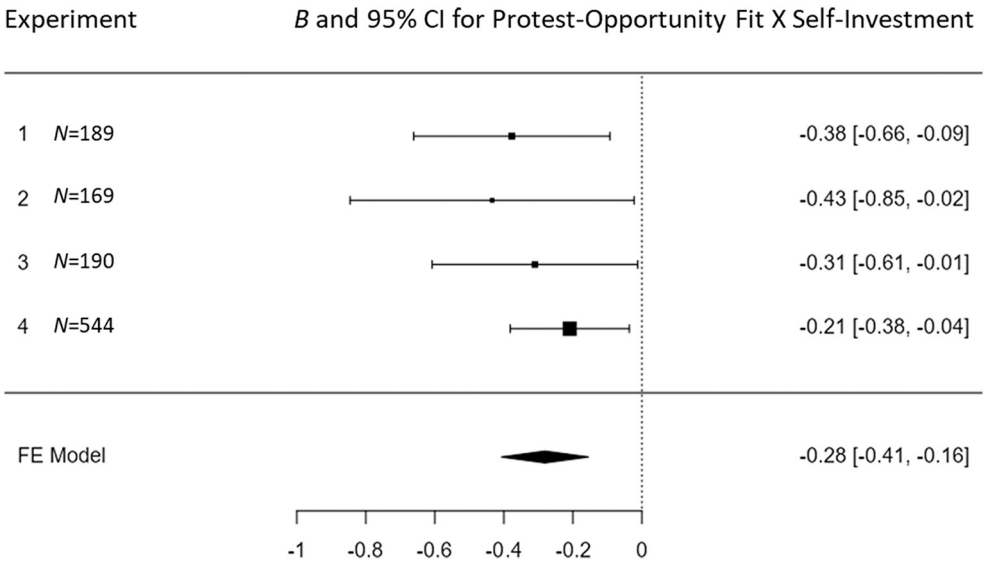

Fig. 4. Forest plot for mini-meta analysis of the Protest-Opportunity Fit by Self-Investment Interaction.

Carlo simulations for the estimation of the indirect effect (Yzerbyt, Muller, Batailler, & Judd, 2018).

Not surprisingly, path *c*, the total effect, was significant (Table 6). Again, this interaction showed more support for the high-fit conditions compared to the low-fit ones among less invested members, B = 0.32, SE = 0.13, 95% CI [0.070; 0.571], $t(726) = 2.51$, $p = .012$ and no effect among more invested ones, B = -0.128, SE = 0.13, 95% CI [−0.380; 0.122], $t(726) = -1.01$, $p = .315$ (Fig. 5).

Path *a,* that is, the C1 by Self-investment interaction on Illegitimacy of the policy, was also significant (Table 6). This interaction (Fig. 6) showed that less invested group members saw the policy as more illegitimate in the high than in the low-fit conditions, B = 0.48, SE = 0.18, 95% CI [0.141; 0.827], $t(726) = 2.77$, $p = .006$. The protest-opportunity fit did not affect more invested members, B = -071, SE = 0.18, 95% CI [0.419; −0.272], $t(726) = -0.41$, $p = .686$.

Including illegitimacy of inequality and its interaction with self-investment in the model showed that illegitimacy strongly predicted support and that the initial total effect (here, *c',* i.e., residual effect) was no longer significant. Finally, a Monte Carlo simulation with 10,000 random samples based on the observed estimates and standard errors of *a* and *b* (see MacKinnon, 2010) showed that the indirect effect of the protest-opportunity fit x self-investment on support via perceived illegitimacy of inequality was significant, indirect effect = −0.06, 97.5% CI [−0.008; −0.108].

We also found a illegitimacy by self-investment interaction, B = -0.033, SE = 0.02, 95% CI [0.002; 0.063], $t(723.27) = -2.12$, $p = .034$, showing that the positive effect of illegitimacy on support was slightly stronger for less invested, B = 0.546, SE = 0.03, 95% CI [0.493; 0.599], $t(723) = 20.3$, $p < .001$, than for more invested group members, B = 0.466, SE = 0.03, 95% CI [0.412; 0.520], $t(723) = 17.0$, $p < .001$. This effect was, however, very weak.

10. General discussion

Citizens of democratic societies are aware that social systems should be open to change, by offering opportunities to influence public policy (e.g., campaigns, referenda) and hold public officials accountable (e.g., elections). As such, the larger system permits (normative) protest aimed

Table 6
Component path analyses for mediated moderation of the effect of "Protest-Opportunity Fit" by Self-Investment on support for protest through appraisals of illegitimacy of inequality (Experiments 3 and 4 as random intercept).

	B	SE	Lower 95% CI	Upper 95% CI	*F*	*p*
Path c: effects on support for protest						
Self-Investment	−0.055	0.038	−0.129	0.019	2.11	0.147
C1: "Protest-Opportunity fit" contrast (critical)	0.096	0.090	−0.081	0.272	1.13	0.287
C2: "Within High-fit" contrast (residual)	0.027	0.064	−0.099	0.152	0.17	0.677
C3: "Within Low-fit" contrast (residual)	−0.040	0.064	−0.164	0.085	0.39	0.533
C1 x Self-Investment	**−0.185**	**0.075**	**−0.331**	**−0.038**	**6.13**	**0.014**
C2 x Self-Investment	−0.030	0.053	−0.133	0.074	0.32	0.575
C3 x Self-Investment	0.031	0.053	−0.073	0.134	0.34	0.561
Path a: effects on illegitimacy of inequality						
Self-Investment	**−0.254**	**0.051**	**−0.354**	**−0.154**	**24.82**	**<0.001**
C1: "Protest-Opportunity fit" contrast (critical)	0.207	0.123	−0.035	0.448	2.81	0.094
C2: "Within High-fit" contrast (residual)	0.014	0.087	−0.157	0.185	0.03	0.873
C3: "Within Low-fit" contrast (residual)	−0.147	0.087	−0.318	0.023	2.88	0.090
C1 x Self-Investment	**−0.228**	**0.102**	**−0.428**	**−0.028**	**5.00**	**0.026**
C2 x Self-Investment	−0.067	0.072	−0.209	0.074	0.86	0.353
C3 x Self-Investment	−0.038	0.072	−0.179	0.104	0.27	0.601
Paths b and c': effects on support accounting for illegitimacy of inequality						
Self-Investment	**0.081**	**0.028**	**0.027**	**0.136**	**8.51**	**0.004**
C1: "Protest-Opportunity fit" contrast (critical)	−0.008	0.065	−0.135	0.120	0.01	0.903
C2: "Within High-fit" contrast (residual)	0.017	0.046	−0.073	0.107	0.14	0.712
C3: "Within Low-fit" contrast (residual)	0.035	0.046	−0.054	0.125	0.59	0.441
C1 x Self-Investment	−0.071	0.054	−0.176	0.035	1.70	0.192
C2 x Self-Investment	0.006	0.038	−0.069	0.080	0.03	0.874
C3 x Self-Investment	0.048	0.038	−0.027	0.123	1.59	0.208
Illegitimacy of Inequality	**0.507**	**0.020**	**0.468**	**0.545**	**669.02**	**<0.001**

Note. Bolded text indicates statistically significant effects at $p < .05$.

at reducing illegitimate inequality. Members of such societies are thus able to recognize what constitutes normative and non-normative protest of the system: "It is the norms of this superordinate category that define actions by subordinate groups as normative and non-normative" (Wright, 2009, p. 873).

The key contribution of this paper is to consider how members of the advantaged group respond to the choice of (normative versus non-normative) protest undertaken by the disadvantaged to challenge contexts of inequality that vary in the extent to which they offer an actual opportunity for status improvement. Four experiments examined advantaged group members endorsement of different types of protest as a function of the "opportunity structure" of the intergroup inequality. Results were consistent across three different intergroup contexts (i.e., Erasmus students in Europe, White Americans and typical weight individuals in the Netherlands and the UK). These results were also consistent across different conceptual replications of "opportunity for status improvement" (high versus low). Experiment 1 manipulated this variable directly by telling participants that the inequality was likely or unlikely to disappear. Experiment 2 varied opportunity for status improvement through system stability and Experiment 3 by manipulating permeability of intergroup boundaries and Experiment 4 by varying how inevitable was the actual implementation of inequality.

We found support for a novel conceptual model in which perceived acceptability of protest among less invested advantaged group members depends on the extent to which the means of protest fit (i.e., addresses, matches) the context of inequality. Specifically, in situations in which the inequality context provided room for the disadvantaged to actually improve their status (in the case of Experiments 2, 3 and 4 when the system was, respectively, unstable, permeable and inequality was not inevitable) normative protest was seen as more acceptable than non-normative protest. When opportunity for status improvement was low (in the case of Experiments 2, 3 and when the system was, respectively, stable, impermeable and inequality was inevitable), non-normative protest was the most endorsed form of protest. Importantly, as predicted, the two "high-fit" conditions did not differ from each other in terms of key processes and outcomes and results did not depend on the intergroup context examined. This general acceptability of the form of protest that matched the type of inequality was found in appraisals of legitimacy of protest (Experiments 1 and 2), support for protest (Experiments 1 to 3) and judgments of illegitimacy of inequality (Experiment 3 and 4). In addition, mediated moderation analyses provided support for a moral proportionality principle (Rai & Fiske, 2011) according to which inequality is seen as more illegitimate when the means to challenge it fit how much the (democratic) context actually allows for the possibility of change towards more equality.

Our findings can be understood simultaneously from both a high and a (flipping the coin) low fit perspective. Because we compare endorsement of protest and illegitimacy of inequality between high and low fit conditions among less invested advantaged group members, it is difficult to know whether a high fit increases endorsement and illegitimacy of inequality or if low fit disrupts otherwise positive attitudes towards the disadvantaged predicament. As mentioned in the introduction, it can be that when normative protest occurs in contexts in which opportunity for change is low (producing low fit in our terms), people underestimate how illegitimate the inequality is ("the disadvantage can't be so bad or unchangeable if people are sticking to the rules") and this leads to less support. Similarly, when non-normative protest occurs in contexts that seemingly allow for change to happen, protests are likely to be seen as disproportionate and the appraisals may switch from the injustice of the situation to internal attributions about how extreme protesters are. Exactly where most action is in this relative comparison between high vs. low fit however remains a highly abstract question, as it is virtually impossible to create a control condition for the type of protest and absence of protest is not an option as it qualitatively changes the situation. Indeed, protest in general is a way of calling attention to inequality. One possible way to address this issue would perhaps be to

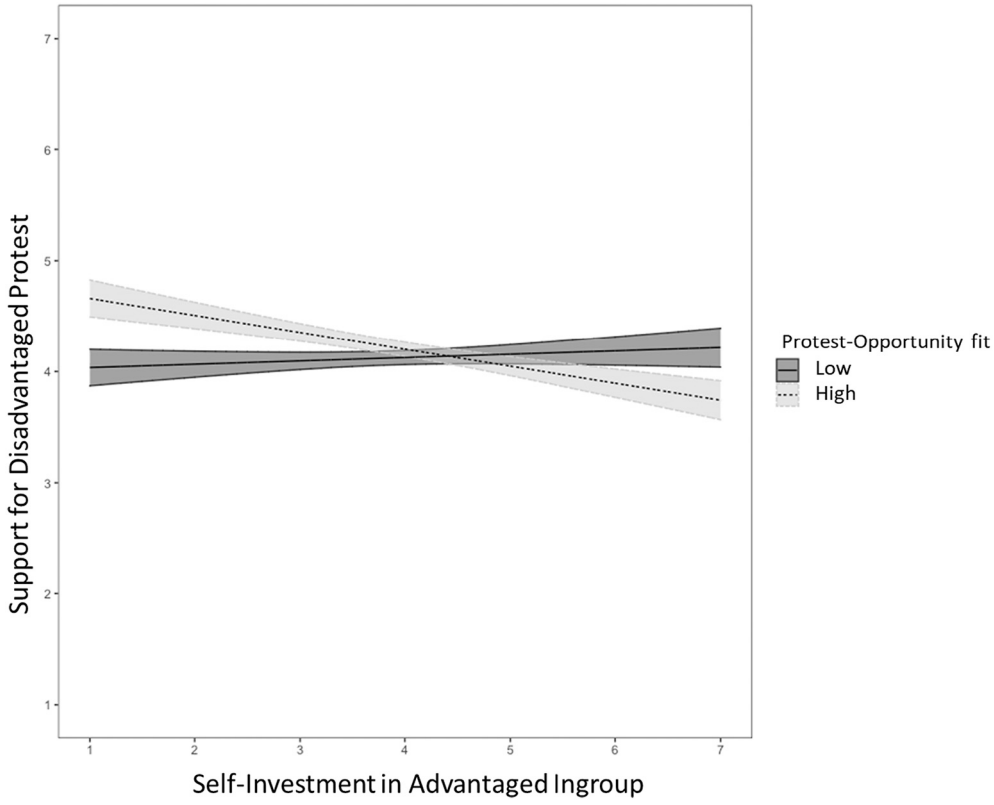

Fig. 5. Support for Disadvantaged Protest as a Function of Self-Investment in Advantaged Ingroup Identity and Protest-Opportunity Fit (Experiments 3 and 4). Note. Gray areas around the lines represent standard errors.

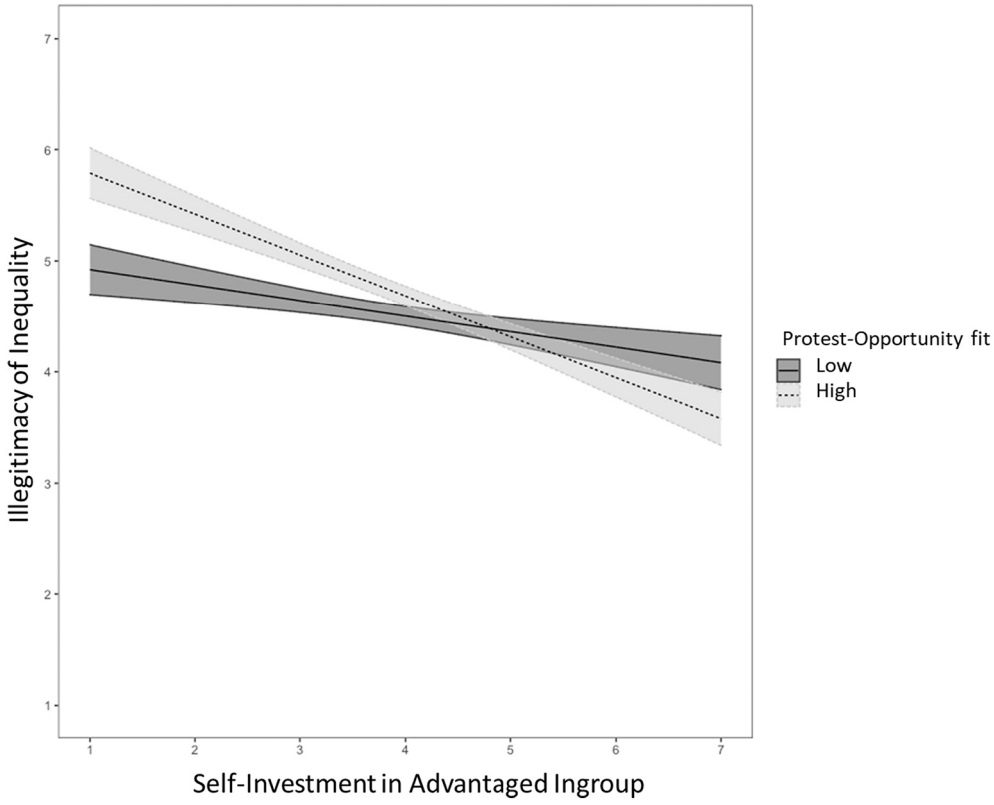

Fig. 6. Appraisals of Illegitimacy of Inequality as a Function of Self-Investment in Advantaged Ingroup Identity and Protest-Opportunity Fit (Experiments 3 and 4). Note. Gray areas around the lines represent standard errors.

conduct a field study in which our independent variables are measured instead of manipulated.

At this stage it is important to point out that in all the contexts examined we tried to present the intergroup inequality as generally illegitimate. This is confirmed by the general mean assessments of legitimacy of protest (Experiments 1 to 3) and inequality (Experiments 3 and 4). This is also the case of intergroup inequality contexts presented in previous research (Teixeira et al., 2020). This methodological choice was deliberate because we believe that these patterns of results would not generalize to contexts in which advantaged group members can psychologically make use of strategies of legitimation of inequality. If inequality can be dismissed as being legitimate, then there is arguably no reason for advantaged group members to endorse protest that not only might question their advantaged position but also thereby tarnish their self-image as perpetrators of unfair inequality (see Teixeira et al., 2022).

A last point worth mentioning concerns the absence of effects found among members who are highly invested in their advantaged group position. Indeed, previous research has shown that high compared to low identifiers are less supportive of non-normative protest because they perceive this type of protest as more likely to cause reputational damage to the advantaged ingroup (Teixeira et al., 2020). This can be the case for multiple reasons that further research should investigate. For example, it is possible that the introduction of an additional manipulation (i.e., opportunity for status improvement) qualitatively changed the responses of highly invested members compared to research that only varied the type of protest (as in Teixeira et al., 2020). It indeed introduces an additional layer of complexity that might, for example, have decreased the natural focus on the ingroup that these high-invested members have and made them more undecided about what to do to reconcile ingroup interests with social equality concerns. In line with this idea, recent research has provided support for a higher variability in responses to protest among the highly (compared to lowly) self-invested advantaged group members (Teixeira et al., 2022).

10.1. Theoretical implications

Protest actions are not perceived in a vacuum. Our findings extend current conceptualizations of protest by underscoring the extent to which people's views of protest are context-dependent. This is, in our view, an important new direction for research. Indeed, research on social protest (especially using the distinction between normative and non-normative protest) has often relied on conceptualizations that do not necessarily take into account how the normativeness of these psychological realities depend on both the context and the audiences of protest (see also, Leach & Teixeira, 2021, 2022; Reimer et al., 2022). Indeed, previous research on reactions to norm violations (e.g., Chekroun & Brauer, 2002; Marques & Yzerbyt, 1988), and predictors of counter-normative behavior (Tausch et al., 2011; Becker & Tausch, 2015) has typically started with the assumption that prevailing norms are universally shared within society, by all individuals in all contexts. This conceptual approach is limited (see van Kleef, Wanders, Stamkou, & Homan, 2015), as particular sub-groups or contexts can develop distinct co-existing or even competing norms. In the present research, for instance, members of advantaged groups adjusted their responses to protest based on the context in which norm adherence or violations occurred. As such, this approach moves away from the "objective" meaning of normative and non-normative protest, and instead focuses on the specific contextual features that shape individuals' understanding of what constitutes a norm violation in the first place.

Our research also points to the need for a person-by-situation analysis of responses to different types of protest. Indeed, reactions to (non-) normative forms of protest depended on the degree to which the perceiver was self-invested in their in-group's advantaged position in society. Members scoring low on this dimension were the ones sharing the perspective of disadvantaged groups who also tend to choose normative protest under conditions of unstable inequality (Tajfel & Turner, 1979) and non-normative protest of stable inequality (Tausch et al., 2011; Wright et al., 1990).

Our results also have implications for theories of protest and, more broadly, social change. We found that illegitimacy of inequality mediated support for protest. This result emphasizes commonalities between models examining engagement in collective protest among disadvantaged groups (van Zomeren, Postmes, & Spears, 2008) and support for protest among advantaged groups. In both cases, appraisals of (il) legitimacy and (un)fairness are predictors of engagement and support for collective protest. Despite these psychological mechanisms being similar between advantaged and disadvantaged groups, we cannot assume that the precise predictors of support will be the same for higher identifiers and lower identifiers across different status groups. The implications of (high versus low) group identification (or more specifically the self-investment component) will vary for groups of higher versus lower status within a system of inequality, given the particular interests and goals associated with these status positions (see Leach et al., 2002). For example, effects found for less self-invested advantaged group members are likely to be the most similar to effects found among *more* self-invested disadvantaged group members themselves (Iyer & Ryan, 2009; Leach et al., 2010).

More generally, our research questions advance the understudied role of advantaged group members in social change (Radke, Kutlaca, Siem, Wright, & Becker, 2020). Indeed, despite collective action promoting greater equality being a quite developed field of research, this research is mainly focused on what motivates the disadvantaged (e.g., SIMCA and its extensions, van Zomeren et al., 2008; van Zomeren, Leach, & Spears, 2012) or sympathetic audiences (e.g., Saab, Spears, Tausch, & Sasse, 2016; Thomas & Louis, 2014) to mobilize on behalf of the disadvantaged. In addition, research examining advantaged group members support for collective action is often conducted in the absence of actual protest from the disadvantaged (for exceptions see Kende et al., 2020; Radke, Kutlaca, & Becker, 2022; Shuman, Saguy, van Zomeren and Halperin, 2021; Shuman et al., 2022; Teixeira et al., 2022; Teixeira et al., 2020). However, one of the big challenges to the attainment of social change.

the resistance to protest actions from the ones who occupy privileged positions. These are not only the ones who are likely to resist change but they are the ones who, given their privileged position, have a vested interest and bigger say in the implementation of measures and policies that are effective in reducing inequality (Teixeira et al., 2020). The handful of studies on protest among advantaged group members has focused on effects of type of protest among members who are highly identified (e.g., Teixeira et al., 2020; Teixeira et al., 2022) and more resistant to change (Shuman et al., 2020; Shuman et al., 2022). By focusing on determinants of support among advantaged group members who are less attached to their advantaged identity and less likely to be threatened by protest from the disadvantaged (and social change in general), the present research has important implications for the understanding of social change. Specifically, by calling attention to the interaction between *who* witnesses, *what* protest in *which* context, we provide a more nuanced perspective of reactions to protest that can elucidate when and why normative or non-normative protest might be more effective in gathering support from different privileged audiences.

10.2. Conclusion

Societies have widely known norms regarding what constitutes legitimate protest. It has often been assumed that only normative (legal) forms of protest, such as petitions and peaceful and orderly demonstrations, can be seen as legitimate (Wright et al., 1990). This analysis has not considered the full societal context within which protest strategies are chosen and deployed. By examining what one group makes of another group's action (in our case, protest) in the context of a particular status inequality, the present research aimed to understand the

relational basis of the normative acceptability of protest. A non-normative form of confrontational and disruptive protest was seen as less legitimate when inequality was seen as likely to change through standard protest, and yet was viewed as more legitimate when the inequality was perceived as unlikely to change. A relational analysis of societal norms may help shed light on the circumstances in which groups in status competition can come to see each other, and society, in compatible ways that foster cooperation to create a more equitable and fair society.

Authors note

This research was supported by the European Union's Horizon 2020 research and innovation program under the Marie Sklodowska-Curie Scheme [grant No 701368] and by the research program Sustainable Cooperation – Roadmaps to Resilient Societies (SCOOP) funded by the Netherlands Organization for Scientific Research (NWO) and the Dutch Ministry of Education, Culture and Science (OCW) in the context of its 2017 Gravitation Program [grant number 024.003.025]. The authors would like to thank Julien Rase and Clara Munderloch for their help in building the experimental materials and collecting the data and Vincent Yzerbyt for help with statistics.

Data availability

Links to available data, materials and code are shared in the paper.

References

Becker, J. C., & Tausch, N. (2015). A dynamic model of engagement in normative and non-normative collective action: Psychological antecedents, consequences, and barriers. *European Review of Social Psychology, 26*, 43–92. https://doi.org/10.1080/10463283.2015.1094265

Chekroun, P., & Brauer, M. (2002). The bystander effect and social control behavior: The effect of the presence of others on people's reactions to norm violations. *European Journal of Social Psychology, 32*, 853–867. https://doi.org/10.1002/ejsp.126

Chenoweth, E., Stephan, M. J., & Stephan, M. (2011). *Why civil resistance works: The strategic logic of nonviolent conflict*. Columbia University Press.

Doosje, B., Branscombe, N. R., Spears, R., & Manstead, A. S. R. (1998). Guilty by association: When one's group has a negative history. *Journal of Personality and Social Psychology, 75*, 872–886. https://doi.org/10.1037/0022-3514.75.4.872

Doosje, B., Ellemers, N., & Spears, R. (1995). Perceived intragroup variability as a function of group status and identification. *Journal of Experimental Social Psychology, 31*, 410–436. https://doi.org/10.1006/jesp.1995.1018

Ellemers, N., Spears, R., & Doosje, B. (2002). Self and social identity. *Annual Review of Psychology, 53*, 161–186. https://doi.org/10.1146/annurev.psych.53.100901.135228

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*, 175–191. https://doi.org/10.3758/BF03193146

Gausel, N., Leach, C. W., Vignoles, V. L., & Brown, R. (2012). Defend or repair? Explaining responses to in-group moral failure by disentangling feelings of shame, rejection, and inferiority. *Journal of Personality and Social Psychology, 102*, 941–960. https://doi.org/10.1037/a0027233

Haidt, J. (2012). *The righteous mind: Why good people are divided by politics and religion*. Vintage.

Iacoviello, V., & Spears, R. (2018). "I know you expect me to favor my ingroup": Reviving Tajfel's original hypothesis on the generic norm explanation of ingroup favoritism. *Journal of Experimental Social Psychology, 76*, 88–99. https://doi.org/10.1016/j.jesp.2018.01.002

Iacoviello, V., & Spears, R. (2021). Playing to the gallery: Investigating the normative explanation of ingroup favoritism by testing the impact of imagined audience. *Self and Identity, 1-27*. https://doi.org/10.1080/15298868.2021.1933582

Iyer, A., Leach, C. W., & Crosby, F. J. (2003). White guilt and racial compensation: The benefits and limits of self-focus. *Personality and Social Psychology Bulletin, 29*, 117–129. https://doi.org/10.1177/0146167202238377

Iyer, A., & Ryan, M. K. (2009). Why do men and women challenge gender discrimination in the workplace? The role of group status and in-group identification in predicting pathways to collective action. *Journal of Social Issues, 65*(4), 791–814. https://doi.org/10.1111/j.1540-4560.2009.01625.x

Jans, L., Leach, C. W., Garcia, R. L., & Postmes, T. (2015). The development of group influence on in-group identification: A multilevel approach. *Group Processes & Intergroup Relations, 18*, 190–209. https://doi.org/10.1177/1368430214540757

Jiménez-Moya, G., Spears, R., Rodríguez-Bailón, R., & de Lemus, S. (2015). By any means necessary? When and why low group identification paradoxically predicts radical collective action. *Journal of Social Issues, 71*, 517–535. https://doi.org/10.1111/josi.12126

Judd, C. M., Westfall, J., & Kenny, D. A. (2017). Experiments with more than one random factor: Designs, analytic models, and statistical power. *Annual Review of Psychology, 68*, 601–625. https://doi.org/10.1146/annurev-psych-122414-033702

Kende, A., Nyúl, B., Lantos, N. A., Hadarics, M., Petlitski, D., Kehl, J., & Shnabel, N. (2020). A needs-based support for# MeToo: Power and morality needs shape women's and men's support of the campaign. *Frontiers in Psychology, 11*, 593. https://doi.org/10.3389/fpsyg.2020.00593

Kenny, D. A., & Judd, C. M. (2019). The unappreciated heterogeneity of effect sizes: Implications for power, precision, planning of research, and replication. *Psychological Methods, 24*, 578–589. https://doi.org/10.1037/met0000209

van Kleef, G. A., Wanders, F., Stamkou, E., & Homan, A. C. (2015). The social dynamics of breaking the rules: Antecedents and consequences of norm-violating behavior. *Current Opinion in Psychology, 6*, 25–31. https://doi.org/10.1016/j.copsyc.2015.03.013

Klein, O.. Retrieved from https://olivierklein.shinyapps.io/forapp/.

Kohlberg, L. (1981). *The philosophy of moral development moral stages and the idea of justice*.

Kuppens, T., Spears, R., Manstead, A. S., Spruyt, B., & Easterbrook, M. J. (2018). Educationism and the irony of meritocracy: Negative attitudes of higher educated people towards the less educated. *Journal of Experimental Social Psychology, 76*, 429–447. https://doi.org/10.1016/j.jesp.2017.11.001

Leach, C. W., Mosquera, P. M. R., Vliek, M. L. W., & Hirt, E. (2010). Group devaluation and group identification. *Journal of Social Issues, 66*, 535–552. https://doi.org/10.1111/j.1540-4560.2010.01661.x

Leach, C. W., Snider, N., & Iyer, A. (2002). "Poisoning the consciences of the fortunate": The experience of relative advantage and support for social equality. *Relative Deprivation: Specification, Development, and Integration, (February)*, 136–163.

Leach, C. W., & Teixeira, C. P. (2021). Some psychological implications of black struggle. *Contention, 9*, 149–154. https://doi.org/10.3167/cont.2021.090108

Leach, C. W., & Teixeira, C. P. (2022). Understanding sentiment toward "black lives matter". *Social Issues and Policy Review, 16*, 3–32. https://doi.org/10.1111/sipr.12084

Leach, C. W., van Zomeren, M., Zebel, S., Vliek, M. L. W., Pennekamp, S. F., Doosje, B., … Spears, R. (2008). Group-level self-definition and self-investment: A hierarchical (multicomponent) model of in-group identification. *Journal of Personality and Social Psychology, 95*, 144–165. https://doi.org/10.1037/0022-3514.95.1.144

Livingstone, A. G. (2021). What social identities can tell us about violence in social movements, and vice versa: A social-psychological response to "violence, social movements, and black freedom struggles: Ten theses toward a research agenda for scholars of contention today". *Contention, 9*, 142–148. https://doi.org/10.3167/cont.2021.090107

Livingstone, A. G., Windeatt, S., Nesbitt, L., Kerry, J., Barr, S. A., Ashman, L., … Wu, J. C. (2020). Do you get us? A multi-experiment, meta-analytic test of the effect of felt understanding in intergroup relations. *Journal of Experimental Social Psychology, 91*, Article 104028. https://doi.org/10.1016/j.jesp.2020.104028

MacKinnon, J. G. (2010). Critical values for cointegration tests(no. 1227). Queen's Economics Department Working Paper. http://hdl.handle.net/10419/67744.

Marques, J. M., & Yzerbyt, V. Y. (1988). The black sheep effect: Judgmental extremity towards ingroup members in inter-and intra-group situations. *European Journal of Social Psychology, 18*, 287–292. https://doi.org/10.1002/ejsp.2420180308

Merton, R. K. (1968). *Social theory and social structure*. Simon and Schuster.

Pillutla, V., Maslen, H., & Savulescu, J. (2018). Rationing elective surgery for smokers and obese patients: Responsibility or prognosis? *BMC Medical Ethics, 19*, 1–10. https://doi.org/10.1186/s12910-018-0272-7

Radke, H. R., Kutlaca, M., Siem, B., Wright, S. C., & Becker, J. C. (2020). Beyond allyship: Motivations for advantaged group members to engage in action for disadvantaged groups. *Personality and Social Psychology Review, 24*, 291–315. https://doi.org/10.1177/1088868320918698

Radke, H. R. M., Kutlaca, M., & Becker, J. C. (2022). Applying the dynamic dual pathway model of approach coping to collective action among advantaged group allies and disadvantaged group members. *Frontiers in Psychology, 13*, Article 875848. https://doi.org/10.3389/fpsyg.2022.875848

Rai, T. S., & Fiske, A. P. (2011). Moral psychology is relationship regulation: Moral motives for unity, hierarchy, equality, and proportionality. *Psychological Review, 118*, 57–75. https://doi.org/10.1037/a0021867

Reimer, N. K., Branković, M., Essien, I., Goh, J. X., Goudeau, S., Lantos, N. A., & Veldman, J. (2022). Double standards in judging collective action. Retrieved from psyarxiv.com.

Rosenthal, R., & Rosnow, R. L. (1985). *Contrast analysis: Focused comparisons*. Boston: Cambridge University Press.

Ryan, M. K., David, B., & Reynolds, K. J. (2004). Who cares? The effect of gender and context on the self and moral reasoning. *Psychology of Women Quarterly, 28*, 246–255. https://doi.org/10.1111/j.1471-6402.2004.00142.x

Saab, R., Spears, R., Tausch, N., & Sasse, J. (2016). Predicting aggressive collective action based on the efficacy of peaceful and aggressive actions. *European Journal of Social Psychology, 46*, 529–543. https://doi.org/10.1002/ejsp.2193

Schad, D. J., Vasishth, S., Hohenstein, S., & Kliegl, R. (2020). How to capitalize on a priori contrasts in linear (mixed) models: A tutorial. *Journal of Memory and Language, 110*, Article 104038. https://doi.org/10.1016/j.jml.2019.104038

Scheepers, D., Spears, R., Doosje, B., & Manstead, A. S. R. (2006). Diversity in in-group bias: Structural factors, situational features, and social functions. *Journal of Personality and Social Psychology, 90*, 944–960. https://doi.org/10.1037/0022-3514.90.6.944

Schmidt, S. (2009). Shall we really do it again? The powerful concept of replication is neglected in the social sciences. *Review of General Psychology, 13*, 90–100. https://doi.org/10.1037/a0015108

Shuman, E., Hasan-Aslih, S., van Zomeren, M., Saguy, T., & Halperin, E. (2022). Protest movements involving limited violence can sometimes be effective: Evidence from the 2020 BlackLivesMatter protests. *Proceedings of the National Academy of Sciences, 119*, Article e2118990119.

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

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In *In The Social psychology of intergroup relations*. https://doi.org/10.1016/S0065-2601(05)37005-5

Tausch, N., Becker, J. C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R. N. (2011). Explaining radical group behavior: Developing emotion and efficacy routes to normative and nonnormative collective action. *Journal of Personality and Social Psychology, 101*, 129–148. https://doi.org/10.1037/a0022728

Teixeira, C. P., Leach, C. W., & Spears, R. (2022). White Americans' belief in systemic racial injustice and in-group identification affect reactions to (peaceful vs. destructive) "black lives matter" protest. *Psychology of Violence, 12*, 280–292. https://doi.org/10.1037/vio0000425

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

Thomas, E. F., & Louis, W. R. (2014). When will collective action be effective? Violent and non-violent protests differentially influence perceptions of legitimacy and efficacy among sympathizers. *Personality and Social Psychology Bulletin, 40*, 263–276. https://doi.org/10.1177/0146167213510525

Thompson, A. K. (2021). Violence, social movements, and black freedom struggles: Ten theses toward a research agenda for scholars of contention today. *Contention, 9*, 1–9. https://doi.org/10.3167/cont.2021.0901OF

Turner, J. C. (1987). A self-categorisation theory. In J. C. Turner, M. A. Hogg, P. H. Oakes, S. D. Reicher, & Wetherell (Eds.), *Rediscovering the social group: A self-categorisation theory* (pp. 42–67). Oxford: Blackwell.

Uluğ, Ö. M., & Tropp, L. R. (2021). Witnessing racial discrimination shapes collective action for racial justice: Enhancing awareness of privilege among advantaged groups. *Journal of Applied Social Psychology, 51*, 248–261. https://doi.org/10.1111/jasp.12731

Wright, S. C. (2009). The next generation of collective action research. *Journal of Social Issues, 65*, 859–879. https://doi.org/10.1111/j.1540-4560.2009.01628.x

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

Yzerbyt, V., Muller, D., Batailler, C., & Judd, C. M. (2018). New recommendations for testing indirect effects in mediational models: The need to report and test component paths. *Journal of Personality and Social Psychology, 115*, 929–943. https://doi.org/10.1037/pspa0000132

Zebel, S., Doosje, B., & Spears, R. (2009). How perspective-taking helps and hinders group-based guilt as a function of group identification. *Group Processes & Intergroup Relations, 12*, 61–78. https://doi.org/10.1177/1368430208098777sympathizer

van Zomeren, M., Leach, C. W., & Spears, R. (2012). Protesters as "passionate economists" a dynamic dual pathway model of approach coping with collective disadvantage. *Personality and Social Psychology Review, 16*, 180–199. https://doi.org/10.1177/1088868311430835

van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin, 134*, 504–535. https://doi.org/10.1037/0033-2909.134.4.504