The Barriers to and Facilitators of System Challenging Collective Action Across Group Lines

by

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Dedication

To my Mom (Ziba) & Dad (Shapour),

there are no words that capture what you both mean to me, but there are a couple expressions of love in Farsi that come close:

جیگر طلا
(golden liver)
نفسم
(my breath)

You both have been vital to my existence, well-being, and growth. I am so grateful to have you as my parents.

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Abstract

In social psychology the predominant focus in collective action research has been on how social identity motivates collective action on behalf of one's ingroup (see Agostini & van Zomeren, 2021, for a review). Although such research furthers our understanding of the psychological underpinnings of collective action engagement, there has been a lack of research explaining the psychological processes that motivate (or demotivate) system-challenging collective action *across* socially salient group lines (e.g., across racial groups; Radke et al., 2020). This is the case even though such cross-group collective action has historically been critical to positive social change (e.g., see Gilmore & Nham, 2022). To address this gap in the literature, this dissertation examines the role ideology and perceived group commitments play in motivating collective action across group lines.

In the first chapter of this dissertation, I briefly summarize the state of social psychological research on collective action, before introducing the two empirical chapters of the dissertation.

The first of these empirical chapters (Chapter 2) examines whether egalitarian ideology (i.e., one's preference for intergroup equality) can motivate support for system-challenging collective action, despite, and even in opposition to, one's group-based interests. Across three studies (n = 2,890), we find support for our proposition, such that across racial groups with various social statuses in the U.S., egalitarianism is related to support for collective action to challenge racial inequality. Moreover, the relationship between egalitarianism and collective action holds even among White people when it is salient that their group stands to lose power

from such action, and even among those relatively identified with White people. Thus, we provide the most stringent test to date of egalitarianism as a motivator of collective action that *transcends group interests*.

In the second empirical chapter (Chapter 3), I turn my attention to the state of alliances between people who racially self-identify as Black-White multiracial and Black monoracial, an alliance of great historical and contemporary importance in the United States. Specifically, in Chapter 3, across three studies (n = 2,449), I measure Black-White multiracial people's reported racial group commitments to each of Black people and White people. Additionally, I examine Black people's perceptions of Black-White multiracial people's racial group commitments and whether such perceptions impact Black people's inclusion and trust of Black-White multiracial people as dependable allies in challenging anti-Black racism. We find that Black-White multiracial participants are more in alignment with Black people than with White people. However, they are not in complete alignment with Black people (e.g., Black participants report higher levels of commitment to Black people and Black social movements than Black-White multiracial participants do). Similarly, Black participants also perceive that Black-White multiracial people have more solidarity with them than with White people but that they are not in complete alignment with Black people. Moreover, increasing Black participants' perceptions of Black-White multiracial people's solidarity with Black people leads Black participants' to be more inclusive of Black-White multiracial people into the ingroup and more trusting of them to advocate for Black rights. Therefore, the second chapter in this dissertation expands our understanding of the state of alliances between Black and Black-White multiracial people and highlights the potential importance of perceived group commitments in maintaining intraminority alliances.

Lastly, in Chapter 4, I outline some directions for future research on collective action across group lines, focusing on how such alliances unfold over time, can be undermined, and the impact of structural factors.

Taken together, this dissertation elucidates how two critical variables—egalitarian ideology and solidarity concerns—can facilitate or hinder system-challenging collective action across group lines. It also identifies fruitful avenues for research on collective action across group lines.

Chapter 1 Introduction

Cross-racial coalitions and collective action have been a vital part of social movements to challenge inequality. Examples of such movements can be seen within the United States, such as the first Rainbow Coalition[1] which started in 1969 in Chicago, Illinois and consisted of the Black Panther Party (primarily Black American membership), the Young Lords (primarily Puerto Rican American membership), the Young Patriots (primarily White American membership), and other community-based organizations, all of whom formed a coalition to collectively confront issues such as police brutality and substandard housing (Public Broadcasting Station, 2020). Throughout history, scholars and activists have also theorized that sustained cross-racial/ethnic solidarity is necessary for any mass movement to challenge the existing global-hierarchy (Du Bois, 1946; Fanon, 1961; Fields, 2021; Hampton, 1969).[2] While such cross-racial coalitions can be impactful, they can also be quite difficult to build and sustain in-part due to competing group interests, including interests among relatively advantaged groups to maintain the status-quo (Bobo & Hutchings, 1996; Tuck & Yang, 2012; Radke et al., 2020).

Given the historical and current importance of cross-racial coalitions and collective action for challenging the societal status-quo, my dissertation focuses on psychological factors that facilitate and hinder the likelihood of collective action across group lines. In the following

[1] Not to be confused with Jesse Jackson's use of the term Rainbow Coalition, or his Rainbow PUSH Coalition organization (Jackson, 1984; Rainbow PUSH Coalition, 2021).

[2] Note each of these authors discussed/advocated for different forms of cross-racial/ethnic solidarity from focusing primarily on intraminority solidarity to solidarity between People of Color and poor/working-class White people.

sections I briefly overview the predominant focus of collective action research in social psychology and then proceed to discuss how my dissertation builds on this body of research.

Social Identity Perspective on System Challenging Collective Action

One of the most prominent models of collective action in social psychology, the Social Identity Model of Collective Action or SIMCA, expands on social identity theory (Tajfel & Turner, 1979) by proposing that social identity predicts collective action directly as well as indirectly through perceived injustice and efficacy. In this model, social identity is argued to be at the center of collective action because it allows for group-based perceptions and emotions that are shared with fellow group members. Thus, social identities should have a direct influence on collective action but also influence the way in which group members appraise and feel about a particular situation or social structure (van Zomeren et al., 2008). Indeed, social identity has been demonstrated as a motivator of collective action on behalf of one's ingroup among both disadvantaged and advantaged groups (albeit, the specific aims of collective action vary such that among disadvantaged groups collective action is aimed at challenging the system, whereas the advantaged group is concerned with bolstering the system; Thomas et al., 2020).

System-Challenging Collective Action Across Group Lines

SIMCA has been empirically well supported and furthers our understanding of the psychological underpinnings of collective action engagement (for reviews, see Agostini & van Zomeren, 2021; van Zomeren et al., 2008). However, there has been a lack of research explaining the psychological processes that motivate (or demotivate) system-challenging collective action across group lines (Radke et al., 2020; Agostini & van Zomeren, 2021). For instance, what factors motivate advantaged group members to support system-challenging collective action even when their ingroup benefits from the hierarchical status-quo? And what

factors influence the success of intraminority coalitions? There has been an emerging body of research on cross-group coalitions and collective action which has demonstrated that 1) shared experiences of discrimination can foster intraminority coalitions (Cortland et al., 2017; Craig & Richeson, 2016); 2) advantaged group members' moral convictions can motivate them to engage in collective action on behalf of disadvantaged groups (van Zomeren et al., 2012); and 3) disadvantaged group members are more likely to accept outgroup members (both from the advantaged group and different disadvantaged groups) as allies in collective action if outgroups exhibit low influence (e.g., they do not try to lead the movement; Park et al., 2022; Radke et al., 2021). We add to this literature by examining the role ideology and perceived group commitments play in motivating collective action across group lines.

Across two research projects, comprising of six studies, we focus on: 1) Whether egalitarian ideology (i.e., one's preference for intergroup equality) can motivate support for system-challenging collective action, despite one's group-based interests (Chapter 2).; and 2) The state of alliances between Black-White multiracial and Black people, paying particular attention to how perceived group commitments impact Black people's perceptions of Black-White multiracial people as dependable allies in challenging anti-Black racism (Chapter 3).

In the second chapter we examine the role of egalitarian ideology in motivating support for hierarchy-challenging collective action *across* group boundaries, heeding recent calls to consider the role of ideology in models of collective action (Agostini & van Zomeren, 2021; Ho & Kteily, 2020; Jost et al., 2017). We propose that because egalitarianism represents an abstract preference for egalitarian intergroup relations, irrespective of one's group membership, it should predict support for hierarchy-attenuating collective action among members of higher and lower status groups alike (Ho et al., 2012; Kteily et al., 2012).

Therefore, in the second chapter, we test whether egalitarianism is a predictor of hierarchy-challenging collective action (including behavior) that can transcend one's group status or interest in two ways: First, we examine the relationship between egalitarianism and collective action among groups that *vary in how much their ingroup stands to benefit from such action*. Specifically, we test the relationship between egalitarianism and collective action to combat racial discrimination among (1) monoracial Americans belonging to racially marginalized groups (Black and Asian Americans), (2) multiracial Americans (Black-White and Asian-White Americans), and (3) monoracial Americans belonging to the dominant racial group (White Americans). Second, among White Americans, we further examine if egalitarianism relates to collective action even when it is salient that reducing inequality necessitates power and status concessions from their ingroup—i.e., when it is clear that collective action will result in ingroup losses. We find support for our proposition and, across all racial groups sampled, demonstrate that egalitarianism is related to support for collective action to challenge racial inequality, even among White people when it is apparent their group stands to lose power from such action. In doing so, we provide the most stringent test to date of whether egalitarianism is a motivator of collective action that *transcends group interests*.

In addition, we also demonstrate that the relationship between egalitarianism and support for collective action is partially mediated by egalitarians' increased perceptions of injustice (with the notable exception of Black participants where this indirect effect does not hold). In examining this indirect effect, we propose one way in which egalitarianism can be integrated into existing models of collective action, which often feature perceptions of injustice to be a proximate predictor of collective action (Diemer et al., 2016; Smith et al., 2012; van Zomeren et al., 2008).

Taken together, the second chapter in this dissertation expands our understanding of the role of ideology (specifically egalitarianism) in system-challenging collective action across group lines and provides insights into how egalitarianism can be integrated into existing models of collective action.

While the second chapter outlines the role of individual differences in ideology in predicting collective action across group lines, the third chapter focuses on how perceived group loyalty impacts intraminority alliances. Specifically, in the third chapter we focus on the strength of system-challenging alliances between Black and Black-White multiracial people.

Both historically and in the present day, Black-White multiracial people have been categorized and treated as Black, which (among other implications) has contributed to a sense of linked fate between Black and Black-White multiracial people (Davis, 1991; Ho et al., 2017). At the same time, Black-White multiracial people have a relatively privileged status compared to Black people and have some options in how they choose to racially identify and the racial group(s) they align themselves with (Garay et al., 2022; Khanna & Johnson, 2010). Given that Black-White multiracial people both have shared experiences with Black people and at the same time are in a relatively privileged position, how do Black-White multiracial people racially align themselves? Do they align themselves with Black people and challenge the existing racial hierarchy, or do they align themselves more with White people in an attempt to escape racial marginalization? The second paper attempts to shed light on these questions by measuring Black-White multiracial people's reported racial group commitments to each of Black and White people as well as their support for policies and collective action to improve social conditions for Black people.

As important as Black-White multiracial people's solidarity with Black people is to any political alliance between the groups, such an alliance also depends on Black people's perceptions of Black-White multiracial people. While Black people may generally be accepting of Black-White multiracial people given their shared history (Ho et al., 2017), Black-White multiracial people's relatively privileged status and identity options may raise concerns for Black people. Thus, we also examine Black people's perceptions of Black-White multiracial people's racial group commitments to each of Black and White people. Moreover, we test whether Black people's perceptions of Black-White multiracial people's commitments to each of Black and White people are consequential for Black people's inclusion of Black-White multiracial people as ingroup members and trust of Black-White multiracial people to promote Black rights – i.e., to be faithful members of a coalition.

We find that Black-White multiracial participants are more in alignment with Black people than with White people. However, they are not in complete alignment with Black people (e.g., Black participants report higher levels of commitment to Black people and Black social movements than Black-White multiracial participants do). Black participants also perceive that Black-White multiracial people have more solidarity with them than with White people. However, Black participants perceived that they have more solidarity with Black people than they think Black-White multiracial people do. Moreover, increasing Black participants' perceptions of Black-White multiracial people's solidarity with Black people leads Black participants' to be more inclusive of Black-White multiracial people into the ingroup and more trusting of them to advocate for Black rights. Therefore, the second chapter in this dissertation expands our understanding of the state of alliances between Black and Black-White multiracial

people and highlights the importance of monoracials' perceptions of multiracials' commitments in maintaining such alliances.

As a whole, the work featured in this dissertation contributes to our understanding of the psychological processes that facilitate and hinder collective action to challenge racial inequality across racial-group lines. It does so at a moment in U.S. history where cross-racial coalitions are as important as ever but seem tenuous and difficult to sustain (Chudy & Jefferson, 2021).

Chapter 2 Egalitarian Ideology: A Predictor of Collective Action that Transcends Group Interests

Throughout the 1970s, the Black Liberation Army (BLA), a group comprised largely of former Black Panthers, fought for Black people's right to self-determination in the United States (U.S.). The BLA strived to obtain land in the U.S. South to form a Black nation-state and to obtain reparations from the U.S. government for damages done by centuries of slavery and racial subjugation. In service of this goal, a group of BLA members planned to rob a series of banks and armored cars to gain the necessary funds to build an army and a sovereign Black nation in the south (Davenport, 2015; Odinga's testimony, 1983; Rosenau, 2021). However, they did not act alone. The May 19th Communist Organization (M19CO), a far-left organization comprised of White women, was critical to BLA's success. M19CO was able to rent safe houses, buy weapons, and drive getaway cars on the BLA's behalf without attracting the attention of law enforcement, who had a history of surveilling BLA members. Acting collectively, the BLA and M19CO netted nearly one million dollars from armed robberies to finance the BLA's activities (Rosenau, 2021).

At first glance this may seem like an unlikely partnership. Whereas the BLA was motivated by advancing the interests of their own group—Black Americans—the White women of M19CO did not have ingroup interests at stake. Indeed, they were arguably working against White American dominance. Yet, the two groups, though stratified by race, shared a common *ideological* motivation: both self-described as anti-racist, anti-imperialist, anti-sexist, and anti-classist (BLA Coordinating Committee, N.D.; Rosenau, 2021). Thus, the BLA's egalitarian

ideology complemented and operated in conjunction with their group interests, whereas M19CO's ideology allowed them to *transcend* parochial group-based interests in solidarity with an ideological ally.

Despite the historical importance of solidarity and collective action across group lines, exemplified by the alliance between the BLA and M19CO, most research on collective action focuses on how group identification motivates collective action (for reviews, see Agostini & van Zomeren, 2021; van Zomeren et al., 2008). In contrast, the present studies examine the role of egalitarian ideology in motivating support for hierarchy-challenging collective action *across* group boundaries, heeding recent calls to consider the role of ideology in models of collective action (Agostini & van Zomeren, 2021; Ho & Kteily, 2020; Jost et al., 2017).

Research on the role of ideology in collective action is limited, but the available research to date has primarily focused on system justification beliefs, or the motivation to maintain the status quo. This work illustrates that the association between endorsing system justifying beliefs and collective action depends on the implications of that action for the status quo, correlating negatively with support for system-challenging collective action but positively with support for collective action that upholds the status quo (e.g., Osborne et al., 2019; see Agostini & van Zomeren, for a meta-analysis). Here, we build on the nascent literature on ideology and collective action, moving beyond system justification motives to focus specifically on egalitarian ideology; that is, beliefs about the desirability of equality between groups.

We suggest that egalitarian ideology may be particularly important for understanding why both marginalized and dominant group members alike may be motivated to engage in collective action together to challenge the system (Ho & Kteily, 2020). Indeed, intergroup egalitarianism, typically indexed by low levels of *social dominance orientation*, captures an

individual's opposition to group-based hierarchy and interest in group-based equality (e.g., Ho et al., 2017; Kteily et al., 2017; Waldfogel et al., 2021). Thus, egalitarians should be keenly interested in hierarchy-attenuating behaviors, including hierarchy-attenuating collective action (Sidanius & Pratto, 1999, Chapter 2). Furthermore, because egalitarianism represents an abstract preference for egalitarian intergroup relations, irrespective of one's group membership, it should predict support for hierarchy-attenuating collective action among members of higher and lower status groups alike (Ho et al., 2012; Kteily et al., 2012).

Egalitarianism and Hierarchy-Attenuating Attitudes

In fact, research demonstrates that egalitarians are more likely than their anti-egalitarian counterparts to support hierarchy attenuating social policies, such as social welfare policies (e.g., Azevedo et al., 2019; Ho et al., 2012; Ho et al., 2015; Kteily et al., 2017; see Ho & Kteily, 2020 for a review). A small body of research has also begun to examine the relationship between egalitarianism and collective action specifically, finding that egalitarians (relative to anti-egalitarians) are more likely to express positive attitudes about social justice movements (Holt & Sweitzer, 2020; Forscher & Kteily, 2020) and intentions to engage in collective action to reduce racial and gender inequality (Choma et al., 2020; Stewart, 2017; Stewart & Tran, 2018).

Although prior research has begun to uncover the importance of egalitarianism in predicting intentions to engage in system-challenging collective action, it remains unclear if egalitarianism is a predictor of collective action that can *transcend* group interests. First, studies have typically combined participants from higher and lower status groups (e.g., Choma et al., 2020 utilized a general sample), or only included participants with a dominant group status (e.g., Stewart & Tran, 2018 sampled White Americans only). Thus, it remains unclear whether relatively egalitarian members from each of higher and lower status groups will support

collective action, holding constant the form of action under consideration (i.e., the attitude object). To our knowledge, only one study has examined the relation between egalitarianism and collective action support, taking into consideration whether the relation holds among each of a lower and a higher status group, and holding constant the form of collective action (Stewart, 2017). This study showed that that for both women and men, there was a positive relationship between egalitarianism and willingness to engage in collective action to reduce gender-based income inequality (Stewart, 2017).

Moreover, prior research has not examined if dominant group members will support collective action even if ingroup interests are clearly at stake – i.e., when it is made salient that collective action will lead to the ingroup losing power. In other words, prior research has found that egalitarianism relates to collective action among dominant group members (Stewart, 2017; Stewart & Tran, 2018), but has not considered whether this remains true even when dominant group members believe that such action would hurt their group's standing (i.e., when the action is costly).

Finally, we are not aware of any studies that have examined the relation between egalitarian ideology and collective action *behavior* (as opposed to intentions). Thus, it is unclear whether egalitarian members of dominant groups will actually engage in collective *action*, above and beyond expressing *intentions* to do so.

To address these gaps in our understanding, the current studies examine whether egalitarianism is a predictor of hierarchy-challenging collective action (including behavior) that can transcend one's group status or interest in two ways:

First, we will examine the relationship between egalitarianism and collective action among groups that *vary in how much their ingroup stands to benefit from such action*.

Specifically, we test the relationship between egalitarianism and collective action to combat racial discrimination among (1) monoracial Americans belonging to racially marginalized groups (Black and Asian Americans), (2) multiracial Americans (Black-White and Asian-White Americans), and (3) monoracial Americans belonging to the dominant racial group (White Americans).

Monoracial Americans belonging to racially marginalized groups (Black and Asian Americans), frequently experience discrimination in the U.S., and thus stand to benefit from system-challenging collective action *on behalf of their group*.[3, 4] White Americans, who have the most status and power in the U.S., may lose some privilege from system-challenging collective action, and thus may be expected to resist it from the lens of group-based interests (Horowitz et al., 2019). Finally, relative to their monoracial counterparts, multiracial Black-White and Asian-White Americans tend to perceive that they experience less racial discrimination compared to Black and Asian Americans, respectively, but more discrimination compared to White people (Parker et al., 2015; Vossoughi et al., 2022 unpublished data set).[5] Thus, they may perceive less

[3] Though members of lower status groups are more egalitarian on average compared to members of higher status groups (Lee et al., 2011; Sidanius & Pratto, 1999), past research has shown that they vary meaningfully in their levels of egalitarianism, and that this variation relates to other sociopolitical attitudes (e.g., Ho et al., 2015; Kteily et al., 2017).

[4] This is not to suggest that Black Americans and Asian Americans experience the same amount of racial discrimination, or both similarly benefit from challenging discrimination and inequality, broadly defined, in the United States. Indeed, in the United States (and globally) anti-Black racism is particularly severe and people perceive Black people to be at the bottom of the racial hierarchy (Bonilla-Silva, 2004; Kahn et al., 2009). However, in the current paper, in Study 1 we examine Black, Black-White multiracial, and White people's intentions to combat anti-Black racism, whereas in Study 2 we examine Asian, Asian-White multiracial, and White people's intentions to combat anti-Asian racism. Therefore, Black Americans should have group interests at stake in challenging anti-Black racism, and Asian Americans should have group interests at stake in challenging anti-Asian racism.

[5] In the datasets utilized in Study 1 and Study 2 of this paper we measured perceptions of racial discrimination. Specifically, we found that Black-White multiracial participants reported that Black-White multiracial people experience more discrimination (M = 4.89, 95% CI [4.68, 5.10]) than White people experience (M = 2.37, 95% CI [2.16, 2.59]), but less than Black people experience (M = 5.88, 95% CI [5.65, 6.11]), of note none of the confidence intervals overlap. Moreover, we found that Asian-White multiracial participants felt that Asian Americans experience more discrimination (M = 4.77, 95% CI [4.62, 4.91]) than Asian-White multiracial people do due to their Asian background (M = 4.00, 95% CI [3.81, 4.18]), of note the confidence intervals do not overlap.

direct ingroup benefit from collective action compared to their monoracial minority counterparts, but more so than their dominant parent group.

Second, among White Americans, we further examine if egalitarianism relates to collective action even when it is salient that reducing inequality necessitates power and status concessions from their ingroup (e.g., if increasing representation of racially minoritized group members in the U.S. Congress entails decreasing the number of White congresspersons)– i.e., when it is clear that collective action will result in ingroup losses. In short, we examine whether egalitarian ideology is a motivator of collective action that can transcend group interests.

Connecting Egalitarianism to Perceptions of Injustice

On average, racially marginalized individuals are more likely to perceive racial injustice than White individuals (as noted above), and perceiving injustice is a powerful motivator of collective action (van Zomeren et al., 2008; Agostini & van Zomeren, 2021). For instance, nationally representative surveys of White and Black Americans from the Pew Research center found that 78% of Black Americans feel that the U.S. has not done enough to give Black people racial equality compared to only 37% of White Americans (Horowitz et al., 2019), and 83% of Black Americans support the Black Lives Matter movement compared to only 47% of White Americans (Horowitz, 2021). However, because egalitarians are motivated to reduce group-based hierarchy, egalitarianism tunes one to the presence of inequality or injustice (Kteily et al., 2017; Waldfogel et al., 2021), which could be one reason that egalitarian ideology may facilitate collective action despite one's group status. We propose that egalitarians may support system-challenging collective action in part because they are more attuned to discrimination against marginalized group members. By connecting egalitarianism to perceptions of injustice, we connect egalitarian ideology to dominant models of collective action, which specify perceptions

of injustice as a key proximate predictor of collective action (Ho & Kteily, 2020; for meta-analyses, see Smith et al., 2012 and van Zomeren et al., 2008).

Indeed, prior research supports this proposed pathway. First, with respect to the egalitarianism-perceived discrimination link, among low-status groups, egalitarianism is related to perceiving discrimination perpetrated against one's ingroup (Thomsen et al., 2010; Ho et al., 2017), and among high-status groups egalitarianism is related to increased perceptions of discrimination against low-status groups (Ho et al., 2015; Karunaratne & Laham, 2019; Mifune et al., 2019). Egalitarians (compared to anti-egalitarians) are even more likely to perceive and recall novel examples of discrimination (Kteily et al., 2017; Waldfogel et al., 2021). Second, with respect to the perceived discrimination-collective action link, meta-analyses provide a large body of evidence that perceived injustice predicts collective action (van Zomeren et al., 2008; Agostini & van Zomeren, 2021).

In sum, previous research has shown, *separately*, that 1) egalitarianism predicts perceived injustice and 2) perceived injustice predicts collective action. Putting these independent strands of research together, the present studies test whether egalitarians (vs. anti-egalitarians) are more likely to engage in collective action, in part because they are more likely to perceive injustice (egalitarianism $\rightarrow$ perceptions of injustice $\rightarrow$ collective action). In addition to the gaps in knowledge discussed above, the emerging research on egalitarianism and collective action has not examined the mediating role of perceptions of injustice, despite the fact that such perceptions are theorized to be a central underpinning of collective action (Diemer et al., 2016; Smith et al., 2012; van Zomeren et al., 2008). In examining this potential indirect effect, the current research explores one way in which egalitarianism can be integrated into existing models of collective action.

Current Studies

In Study 1, we examined the direct relationship between egalitarianism and collective action, and whether this relationship is mediated by perceptions of injustice. We recruited Black American, Black-White multiracial American, and White American participants, to examine if the relationship between egalitarianism and collection action holds across groups varying in the extent to which system-challenging collective action benefits the ingroup.

In Study 2, we replicated Study 1, with Asian American, Asian-White multiracial American, and White American participants. Furthermore, we extended Study 1 by testing whether egalitarianism relates to collective action support, even among White participants who perceive their group can *lose* status because of collective action. We also examined collective action *behavior* (in addition to behavioral intentions) among Asian American and White American participants.

In a final experiment (Study 3), we examined whether egalitarian White American participants will still support and engage in collective action to reduce racial inequality when the possibility of in-group loss (from racial equality) is experimentally made salient. Thus, this experiment provided a still more stringent test of whether individual differences in egalitarianism can predict system-challenging collective action, even when such action *conflicts with* ingroup interests.[6]

Study 1

[6] Egalitarianism should be related to support for both hierarchy attenuating social movements and hierarchy attenuating policies. In Study 1 and Study 3, we also measure support for hierarchy attenuating social policies (e.g., affirmative action). Analyses with these outcomes show the same patterns as our primary outcomes. For Study 1, see Supplement, Section 3 for the text of the social policy measures assessed and Section 4 for the analyses with the policy measures. For Study 3, see Supplement, Section 17 for the text of the social policy measures assessed and Section 18 for the analyses with the policy measures.

The primary aim of Study 1 was to test whether egalitarianism is related to support for collective action to improve social conditions for Black people, and if this relationship is partly explained by egalitarians perceiving greater levels of discrimination towards Black people. We examine these questions among Black, Black-White multiracial, and White participants to test whether egalitarianism is a predictor of collective action irrespective of how much a group stands to benefit from that action. We sought to test three hypotheses in Study 1: 1) Among all three groups, egalitarianism will relate to support for collective action to improve social conditions for Black people. 2) Among all three groups, egalitarianism will relate to increased perceptions of anti-Black discrimination. 3) Among all three groups, we will observe a significant indirect effect between egalitarianism and collective action via egalitarians perceiving greater levels of discrimination towards Black people.

Method

Participants

We contracted YouGov, an industry leader in fielding surveys on social and political attitudes that approximate nationally representative samples, to collect data from U.S. born citizens who self-identify as Black, White, or Black-White multiracial.[7] As per their standard procedure, YouGov overrecruited participants to identify a sample of Black, Black-White multiracial, and White participants whose demographics match that of a national sample and who were identified as providing high-quality responses as determined by YouGov's proprietary software. All participant exclusions were handled by YouGov before we received the data, also per their usual practice. This resulted in a final sample of 150 Black participants (M_{age} = 44.75, SD_{age} = 17.18; 55.3% Women), 150 White participants (M_{age} = 50.79, SD_{age} = 18.06; 52.7%

[7] For more information on how YouGov approximates a nationally representative sample see: https://www.colorado.edu/lab/aprl/sites/default/files/attached-files/yougov_sampling_2018_0.pdf

Women), and 153 Black-White multiracial participants (M_{age} = 40.99, SD_{age} = 15.66, and 69.3% Women). Sample size was determined by the maximum number of Black-White multiracial people who could be recruited.[8] With a sample of 150 per group, we were powered to detect between a small to moderate size correlation of r = .23 per sample (G*Power; Faul et al., 2009) and powered to detect indirect effects with both an a and b path between a small to moderate size of β = .26 (Cohen, 1988; Fritz & MacKinnon, 2007; Kenny, 2017).

YouGov also created survey weights to correct for deviations from national representativeness, allowing us to make inferences about the general population of U.S. born citizens from each racial group. The interpretation of results remained the same regardless of whether survey weights were used. Therefore, in the main text, we present results without using survey weights and present results using survey weights in the Supplement, Section 2 (note that the use of weights in model estimation inflates standard errors; Heeringa et al., 2017).

Measures

Social dominance orientation (SDO). We measured endorsement of egalitarian ideology through the social dominance orientation scale (SDO) since low scores on this scale indicate a preference for group-based equality and opposition to hierarchy whereas high scores indicate a preference for group-based hierarchies (also see Ho et al., 2017; Kteily et al., 2017; Waldfogel et al., 2021; for a review, see Ho & Kteily, 2020). Respondents completed the eight

[8] Our sample of Black-White multiracial people represents all the Black-White multiracial respondents that are part of the YouGov panel and is more than double the size of samples available from other survey vendors. Many survey vendors do not ask participants if they identify with more than one race, or as Multiracial. Black-White multiracial was defined as anyone who self-identified as Black and White or as Black-White multiracial in both a demographics survey administered by YouGov and in our survey. Davenport (2016) found that 70.7% of Americans with one Black and one White parent identify as Multiracial, 24.8% identify as Black alone, and 4.5% identify as White alone. In this survey, we only included those who self-identified as Multiracial or both Black and White in our Black-White multiracial sample, and we can therefore only make inferences about this population. Of note, for the purposes of the current study, where we examine collective action across group lines, it was important not to include individuals with Black and White ancestry who identify as Black only in the Black-White multiracial participant group.

item short-version of the social dominance orientation measure (SDO_7; e.g., "We should do what we can to equalize conditions for different groups;" 1 = *Strongly oppose* to 7 = *Strongly favor*; Ho et al., 2015). Refer to Table 2.1 to see the descriptive statistics and measure reliabilities (Cronbach's α) by sample for each measure used. The full text of all measures analyzed across studies is available in the supplemental materials (see Supplement, Section 1 for Study 1, Section 6 for Study 2, and Section 12 for Study 3). A list of all variables that were also part of the omnibus survey in Study 1, including those not relevant for the current paper, is also included with the supplemental materials (see Supplement, Section 5).

Anti-Black Discrimination. To assess perceptions of injustice, respondents completed a five-item scale about the extent to which they believe Black people face discrimination (e.g., "How much does discrimination affect the lives of Black people in the US?"; 1 = *Not at all* to 7 = *A lot*; Ho et al., 2017). Higher scores on the scale indicate greater perceptions of injustice towards Black people.

Collective Action Support. In Study 1, we focused on participants' support for collective action to improve social conditions for Black people as our outcome of interest. Therefore, we measured participants' support for the Black Lives Matter movement. Among our Black-White multiracial sample we also measured their willingness to engage in collective action with Black people to fight against discrimination:

Black Lives Matter (BLM). Support for the Black Lives Matter movement was assessed with three items (e.g., "I have considered being actively involved or am actively involved with the Black Lives Matter organization."; 1 = *Strongly disagree* to 7 = *Strongly agree*).

Collective Action with Black people. Black-White multiracial people's willingness to engage in collective action with Black people was measured with eight items adapted from

Becker, 2012 (e.g., "To achieve racial equality and fight against discrimination, Black people and individuals with one Black parent and one White parent should participate in demonstrations or protests together.;" 1 = *Strongly disagree* to 7 = *Strongly agree*).

Results and Discussion

We present the results for each of our subsamples (Black, Black-White multiracial, and White) in turn. We first present the zero-order correlations between SDO, anti-Black discrimination, and our proposed outcome variables. We then conduct mediation analyses to assess whether the relationship between egalitarianism and support for collective action to improve conditions for Black people is partially explained by egalitarians' increased perceptions of anti-Black discrimination (notwithstanding the limitations of cross-sectional mediation analysis; see Fiedler et al., 2011). For mediation analyses, predictors are mean centered.

Relation between Social Dominance Orientation and each of Collective Action and Perceptions of Injustice

The zero-order correlations (see Table 2.2) showed that among Black, Black-White multiracial, and White participants, SDO was significantly and negatively related to support for the BLM movement and to perceiving anti-Black discrimination. Perceiving anti-Black discrimination was also related to support for the BLM movement among all three groups. In addition, among Black-White multiracial participants (the only group among which we assessed this outcome), SDO was significantly and negatively related to support for engaging in collective action with Black people; moreover, support for collective action with Black people was positively and significantly associated with perceiving anti-Black discrimination.

Is the Relationship between Social Dominance Orientation and Collective Action Explained by Perceptions of Injustice?

For Black participants, the mediation analysis showed that perceived anti-Black discrimination was not significantly related to BLM support when controlling for SDO (i.e., non-significant b path), and thus the indirect effect was also not significant. In other words, although relatively egalitarian (vs. anti-egalitarian) Black participants were both more likely to support BLM *and* more likely to perceive anti-Black discrimination, their support for BLM was not statistically mediated by their perceptions of discrimination (see Table 2.3).

However, for Black-White multiracial and for White participants, mediation analyses showed a significant indirect effect, such that the relationship between SDO and each of the outcome variables was partially accounted for by increased perceptions of anti-Black discrimination (see Table 2.3). Results suggest that relatively egalitarian Black-White multiracial and White participants' commitment to collective action stems in part from their greater perceptions of anti-Black discrimination.

Overall, as predicted, results from study 1 suggest that among Black, Black-White, and White participants alike—that is, among groups spanning positions in the racial hierarchy—egalitarianism is related both to support for collective action and perceptions of injustice. Furthermore, among relatively egalitarian Black-White and White (but not Black) participants, support for collective action was mediated in part by perceptions of discrimination. In sum, Study 1 begins to establish the role of egalitarian ideology in collective action, among dominant and marginalized group members alike.

Study 2

In Study 2, we aimed to replicate and extend our primary findings from Study 1. We did so by recruiting Asian American, Asian-White multiracial American, and White American participants, and examined collective action to address anti-Asian discrimination. We built on

Study 1 by adding a *behavioral* measure of collective action for the Asian American and White American participant samples. Of note, this builds on the collective action literature more generally, since most studies focus on collective action attitudes, retrospective self-reports of behavior, or behavioral intentions, rather than actual behavior (Agostini & van Zomeren, 2021).

Furthermore, we began testing the limits of egalitarian ideology among White American participants. That is, we tested whether egalitarian ideology would predict collective action support among White American participants, even when they perceived that White American people would lose power if greater intergroup equality were achieved, and even if they felt relatively more (vs. less) solidarity with White people. In other words, will egalitarian ideology motivate collective action when such action is costly to the ingroup, and even among those who feel relatively aligned with the ingroup?

In sum, we tested four primary hypotheses: 1) Among all three groups, egalitarianism will relate to support for collective action to improve social conditions for Asian American people. 2) Among all three groups, egalitarianism will relate to increased perceptions of anti-Asian American discrimination. 3) Among all three groups, the relationship between egalitarianism and collective action occurs in part because egalitarians perceive greater levels of discrimination towards Asian American people. 4) Egalitarianism will predict support for collective action to challenge racial inequality even among White American participants who

perceive that the ingroup stands to lose from increasing equality, and even among those who feel relatively solidaristic with White people.[9, 10]

The hypotheses, method, and analyses for the Asian American sample and the White American sample were preregistered. The data from the Asian-White multiracial American sample was collected as part of an omnibus survey, and thus specific hypotheses for the current study were not preregistered.

Method

Participants

We recruited Asian American, Asian-White multiracial American, and White American students (including graduate and professional students) from a large U.S. midwestern university who are U.S. citizens. We first sent out an email to a random sample of 808 Asian-White multiracial American students (April 2020), and left our survey open for eligible students for a 2-week period. A total of 297 participants attempted to take the survey. Participants needed to identify as Asian-White multiracial American or as having an Asian and White racial background in our prescreening survey before proceeding to the full survey (n = 18 screened out based on this criteria). An additional six participants were excluded from analyses because they indicated they were not U.S. citizens in our survey, or they dropped out of the study prior to completing the SDO scale (n = 20) leaving a final sample of n = 253 Asian-White multiracial participants (M_{age} = 21.49, SD_{age} = 3.62; 60.5% Women).

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[9] System justification is proposed to be an ideological predictor of collective action (Jost et al., 2017). Therefore, we wanted to test whether egalitarianism is also an ideological predictor that can explain collective action behavior beyond the predictive utility of system justification. As a secondary hypothesis, we test whether the relationship between egalitarianism and support for collective action remains controlling for system justification. We find egalitarianism is still related to collective action when controlling for system justification (see Supplement, Section 9 and Section 10).

[10] Although our primary interest was to examine whether egalitarianism relates to collective action even among participants who perceive that power needs to be redistributed in order to achieve greater equality, we also measured White identity to test whether effects of egalitarianism only hold among those who identify weakly with Whites.

In November 2020, we sent messages to a random sample of 1,900 Asian U.S. citizens and 2,500 White U.S. citizens at the same university, with the goal of recruiting 300 students from each group to try and match the number of Asian-White multiracial American participants.[11] A total of 357 Asian American participants and 413 White American participants attempted to take the survey (the survey was open for less than two weeks). Participants needed to identify as Asian/White American and as US citizens in our prescreening survey before proceeding to the full survey (n = 7 Asian American participants and n = 50 White American participants were screened out based on these criteria).[12] In both samples, we also included two attention checks throughout the survey (example item: Please select likely for this statement). Participants who either failed or did not complete attention checks were excluded from analyses (n = 63 Asian American sample, n = 74 White American sample), leaving a final sample of n = 287 Asian American participants (M_{age} = 20.33, SD_{age} = 2.91; 62% Women) and n = 289 White American participants (M_{age} = 21.41, SD_{age} = 3.91; 66% Women).[13]

For each sample, we were powered to detect between a small to moderate size correlation of r = .18 (Faul et al., 2009) and an indirect effect with an a-path of β = .5 and b-path β = .2,

[11] The University registrar had restrictions on how many students within a certain demographic could be targeted for recruitment. Therefore, we sent an email to the total number of Asian-White multiracial American participants we were able to target for recruitment and estimated the portion of Asian American students and White American students to contact based on that. We also sent a targeted email to a smaller number of Asian American students than White American students because there was a much smaller population of Asian American students at the University, and we wanted the preserve the pool for future studies (the university does not allow researchers to send multiple recruitment emails to the same students).

[12] The largest portion of our White sample was screened out prior to taking the survey because in our internal survey they identified as Middle Eastern/North African (n = 26, which the University does not allow as a race/ethnicity option), or because they did not answer the pre-screening questions (n = 13).

[13] Most respondents were excluded from analyses for dropping out of the survey prior to completing attention checks (as opposed to failing attention checks). Sixty White participants dropped out of the survey prior to answering attention checks and forty-seven Asian participants dropped out of the survey prior to answering attention checks.

(Fritz & MacKinnon, 2007; Kenny, 2017). A-priori power analyses with these effect size estimates were conducted based on the observed relationships we saw in Study 1.

Measures

Social dominance orientation (SDO). The SDO_7 scale was used again to assess egalitarian ideology. The current study used the full 16-item version of the scale. Refer to Table 2.4 to see the descriptive statistics and measure reliabilities (Cronbach's α) by sample for each measure used. A list of all variables that were part of the omnibus survey in Study 2 for Asian-White multiracial American respondents, including those not relevant to the current paper, is also included in the supplement (see Supplement, Section 11).

Anti-Asian Discrimination. To assess perceptions of injustice, participants completed the same discrimination scale as in Study 1, except the scale was modified to be about perceptions of anti-Asian American discrimination.

Collective Action Support. In Study 2 we focused on participants' support for collective action to improve social conditions for Asian American people as our outcome of interest:

Collective Action Intentions (Asian American participants and White American participants only). Intentions to engage in collective action to fight against anti-Asian discrimination was assessed with seven items (e.g., "In order to address anti-Asian discrimination, how likely is it that you would participate in demonstrations and protests?; 1 = *Very unlikely* to 7 = *Very likely*; adapted from Becker, 2012).

Donation to Asian American Rights Organization (Asian American participants and White America participants only). Participants were given a $2 bonus at the end of the survey. They were given the opportunity to donate (or keep) any portion of their bonus they wished to an organization that promotes Asian American rights (see Supplement, Section 7 for details on how

an organization was selected; adapted from Kteily et al., 2015). We converted the amount donated to percentage of bonus donated.

Collective Action with Asian American People (Asian-White multiracial American participants only). We modified the scale used in Study 1 to refer to collective action between Asian American and Asian-White multiracial American people.

Perceived Power Redistribution (White participants only). We used five items to assess the perception that to achieve greater power for Asian Americans, White Americans would have to cede some power (e.g., "Achieving greater representation for Asian Americans in positions of power probably means that White Americans would have to give up some of their power"; 1 = *Strongly disagree* to 7 = *Strongly agree*).[14]

White Identity (White American participants only). We measured participants' solidarity with White people using three items. We chose to measure the solidarity component of identity, since it is theorized to be a core component of one's investment in the ingroup and should be associated with commitment to advancing ingroup interests (e.g., "I feel a bond with White people"; 1 = *Strongly disagree* to 7 = *Strongly agree*; Leach et al., 2008).

Results & Discussion

Again, as in Study 1, we present results for each of our samples: Asian American, Asian-White multiracial American, and White American. We first present the zero-order correlations

[14] Our measure is conceptually similar to zero-sum beliefs (i.e., advantaged group members perceiving intergroup relations as a zero-sum game where gains by the disadvantaged must necessarily come at the expense of their own advantaged group, Esses et al, 1998). However, zero-sum beliefs are typically operationalized in measures as also involving the advantaged group's perception that disadvantaged groups are actively engaged in a competition with them and trying to get ahead (e.g., some examples of zero-sum belief measures "Minorities gain special privileges at the expense of the majority" in Stefaniak et al., 2020; and "Many (Asian, Black, and Hispanic people) have been trying to get ahead economically at the expense of other groups" in Bobo & Hutchings, 1996). Our items do not capture the perception that Asian Americans are competing to get ahead of White Americans, but instead our items intend to capture the perception that Asian Americans achieving equality in positions of power relative to White Americans necessitates power and status loss on the part of White Americans, thus we call this measure perceived power redistribution (distinguishing it from how zero-sum beliefs are operationalized).

between SDO, anti-Asian discrimination, and our collective action support outcome variables. Next, we present mediation analyses to assess whether the relationship between egalitarianism and our proposed outcome variables is partially accounted for by egalitarians' increased perceptions of anti-Asian discrimination. Lastly, among White American participants, we conducted moderated multiple regression analyses to test whether SDO predicts support for collective action even among participants who perceived that their ingroup would lose power from greater intergroup equality, and even among participants who were relatively more (vs. less) identified with White people.

Relation between Social Dominance Orientation and each of Collective Action and Perceptions of Injustice

Among Asian American participants and White American participants, SDO was significantly and negatively related to self-reported intentions to engage in collective action to address anti-Asian discrimination; similarly, for Asian-White multiracial American participants SDO was significantly and negatively related to support for Asian American and Asian-White multiracial American people engaging in collective action together to combat discrimination (see Table 2.5). For Asian American participants and for White American participants (the only groups among which this was assessed), SDO was also significantly and negatively related to the amount donated to an Asian American rights organization. For all three groups, SDO was significantly and negatively related to perceptions of anti-Asian discrimination. Perceiving anti-Asian discrimination was significantly and positively related to the outcome variables for all three groups.

Is the Relationship between Social Dominance Orientation and Collective Action Accounted for by Perceptions of Injustice?

Among each of Asian American, Asian-White multiracial American, and White American participants, mediation analyses showed a significant indirect effect of SDO on lower self-reported intentions to engage in collective action via lower perceptions of anti-Asian discrimination (see Table 2.6).

Turning to the donation measure, we again found among White participants that SDO was indirectly associated with donating less to an Asian American rights organization via reduced perceptions of anti-Asian discrimination. Among Asian American participants, whereas SDO was significantly related to decreased perceptions of discrimination (a path) perceptions of discrimination were only marginally related to increased donations (b path), and thus, the indirect effect was marginally significant. Overall, these analyses suggest that the relationship between egalitarianism and support for collective action may be partially explained by egalitarians' increased perceptions of injustice.

Effect of Social Dominance Orientation at Higher (vs. Lower) Levels of Perceived Power Redistribution and White Identity

Among White American participants, we also conducted moderated multiple regression analyses to test whether SDO predicted support for collective action on behalf of Asian American people even among (a) participants who perceived that White American people would need to concede power and status to Asian American people to increase the representation of Asian American people in high status positions; (b) among participants who were relatively more (vs. less) identified with White people; and (c) participants who were high in *both* perceived power redistribution and White identity. That is, we regressed collective action intentions and (separately) donation behavior on SDO, perceived power redistribution, White solidarity, their

two-way interaction terms, and the three-way SDO x perceived power redistribution x White solidarity interaction. All predictor variables were mean centered.

With self-reported willingness to engage in collective action to combat anti-Asian discrimination as the dependent variable, we observed a significant negative main effect of SDO, a significant positive main effect of perceived power redistribution, and a significant negative main effect of White solidarity.[15] Whereas none of the two-way interactions were significant, the three-way interaction was (see Table 2.7 and Figure 2.1). To probe this significant three-way interaction, simple slopes analyses were conducted to examine the relationship between SDO and collective action at low and high levels of perceived power redistribution and White identification (low and high values defined as -/+ 1 SD below and above the mean, respectively; see Table 2.8). This revealed that the magnitude of the effect of SDO differed somewhat depending on the combination of perceived power redistribution and White identity (with the effect weakest among those relatively low in White identity and high in perceived power redistribution b = -.33, *S.E.* = .16, t = -2.04, p = .043). However, consistent with our prediction that egalitarianism would relate to collective action, for all combinations of perceived power redistribution and White identity, SDO was negatively related to collective action. Moreover, and of greatest relevance to our hypotheses, egalitarianism was related to greater collective action intentions on behalf of Asian American people even among White American participants who perceived that White American people would lose power from greater intergroup equality and who were relatively identified with White people (b = -.78, *S.E.* = .17, t = -4.56, $p < .001$).

[15] Though a positive main effect of perceived power redistribution on collective action intentions was unexpected, this measure still allows us to examine whether SDO predicts collective action among participants who perceive that Whites stand to lose power from greater intergroup equality (as the items directly ask about perceived power and status loss for White Americans).

Thus, egalitarianism motivated collective action among those who recognized that such action might be costly to the ingroup, and among those who were relatively committed to the ingroup.[16]

For the donation outcome, a significant, negative main effect of SDO, no effect of perceived power redistribution, and no effect of White solidarity emerged. None of the two-way interactions were significant, and the three-way interaction between SDO, perceived power redistribution, and identification was also non-significant (see Table 2.9). Furthermore, even among those who perceived the need for power redistribution and who were highly identified with White people, egalitarianism was still related to increased donations (simple slope of SDO for those +1SD above the mean on perceived power redistribution and White solidarity, b = -.17, *S.E.* = .06, t = -2.97, p = .003). Thus, relatively egalitarian (vs. anti-egalitarian) White participants were more likely to donate to an Asian American rights organization regardless of whether they perceived that White American people would have to cede power for Asian American people to gain power, and regardless of whether they were more (vs. less) identified with White people.

Overall, results from study 2 supported our hypotheses. Replicating and extending Study 1, among each of Asian American, Asian-White multiracial American, and White American participants (i.e., racial groups with different positions in the racial hierarchy), egalitarianism was related to perceptions of injustice and support for collective action. Moreover, among Asian American participants and White American participants we demonstrated that not only was egalitarianism related to collective action intentions but was also related to actual behavior (in

[16] Secondarily, simple slopes analyses were conducted to examine the relationship between White identity and collective action at low and high levels of perceived power redistribution and SDO (see Supplement, Section 8). These analyses revealed that when perceived power redistribution was high, White solidarity negatively predicted collective action intentions among those high in SDO, but not among those low in SDO (there was also no significant effect of White solidarity when perceived power redistribution was low).

the form of donations to an Asian American rights organization). Therefore, we extend past research by demonstrating that egalitarians not only espouse support for reducing racial inequality through collective action, but also *act* in line with their ideological commitments.

Moreover, Study 2 further supported the notion that egalitarians support system-challenging collective action in-part because they are more apt to recognize injustice. Among each group, perceptions of discrimination partially mediated the relationship between egalitarianism and collective action support. The only exception to these general patterns was that among Asian American participants, the relationship between egalitarianism and donations was not significantly mediated by perceptions of discrimination.

Furthermore, among White American participants, SDO was related to collective action attitudes and behavior even among those who recognized the potential for ingroup losses from such action, even if they were highly identified with White people. That is, dominant group members were still willing to engage in system-challenging collective action, even when it was seen as disadvantageous to one's group status, thereby providing a stringent test of egalitarian ideology's ability to transcend group interest. In sum, Study 2 further supports the notion that egalitarian ideology transcends group interests in relating to support for system-challenging collective action.

Study 3

In Study 3, we provided an even stronger test of the potential for egalitarianism to motivate dominant group members to support system challenging collective action on behalf of marginalized group members, even when doing so goes against ingroup interests. We used an experimental manipulation that we piloted to ensure that we made very clear that the dominant group (White Americans) would have to give up some power for multiple marginalized groups

(Asian, Black, and Latinx Americans) to gain power. Complementing this experimental manipulation, we examined support for collective action in solidarity with racially marginalized group members in general (vs. specific racial groups). Furthermore, we used multiple validated measures of White identity to more thoroughly examine whether egalitarianism would motivate system-challenging collective action to benefit multiple racially marginalized groups when the potential for White losses is experimentally made salient, even among those who are more (vs. less) identified with White people. In other words, we examined whether egalitarianism would motivate collective action, under conditions where it is very clear that collective action would *counter* ingroup interests, even among those who should be relatively concerned with group interests.

We tested two primary hypotheses: 1) Among dominant group members, egalitarianism is related to support for collective action to reduce intergroup inequality, even when it is salient that reducing racial inequality necessitates that White American people concede some power. 2) The first hypothesis will be supported, even among dominant group members who are more (vs. less) identified with their ingroup. The hypotheses, method, and analyses of Study 3 were all preregistered.

Method

Participants

Through the sampling platform Prolific Academic, we recruited 1,802 people who identified as White and as having U.S. nationality on a Prolific prescreening survey. Participants were excluded from analyses if within our internal survey, they did not self-identify as White only (n = 64), did not identify as U.S. born (n = 30), or failed an attention check (select the

number equal to 5 - 3, $n = 49$).[17] In addition, participants in the experimental condition answered six additional attention check items to ensure they read the experimental stimuli (e.g., Please indicate whether White people are overrepresented or underrepresented as U.S. Fortune 500 CEOs; *Overrepresented, Underrepresented, I don't know*). Following our preregistered exclusion criteria, we excluded $n = 74$ participants from this condition for failing any of the six attention checks. To ensure that excluding inattentive participants from the experimental condition did not change any conclusions, we conducted analyses without this exclusion in the Supplement, Section 13 (all conclusions remained the same). After implementing exclusion criteria, we were left with a final sample of $n = 1{,}608$ participants (our sample consisted of 49% Women, 49% Men, and 2% of people indicated additional gender categories). An a-priori power analysis determined 1,600 participants would leave us with 80% power to detect a small regression coefficient effect size of $f^2 = .005$.

Experimental Procedure

After consenting to participate in the study, participants completed the SDO measure. Afterwards, participants were randomly assigned to either an experimental or control condition. In the experimental condition, participants were presented with the most recent factual information available about the representation of Asian, Black, Latinx, and White American people in high-status positions in government, business, and education. Importantly, participants were given information about how much White representation would need to decrease, and representation of racially minoritized groups would need to increase, for representation in these positions to match the representation of each group in the overall U.S. population. In order to make the necessity of power redistribution to reduce racial inequality highly salient in the

[17] The majority of participants (67%) who were excluded for not identifying as White only, identified as White and another race.

experimental condition, we focused on positions where there are a fixed number of slots, so that any changes towards more equal racial representation would necessitate White American people conceding power and status to other groups (i.e., U.S. Senators, Fortune 500 CEOs, and college and university presidents). After exposure to the experimental stimuli, participants answered attention check questions to ensure they attended to and understood the main takeaways from the manipulation, and then completed measures of collective action support, including an opportunity to send an actual letter to government representatives advocating for voting rights. Participants in the control condition proceeded directly to these measures.

Pilot testing (n = 187 participants) revealed participants who read the experimental information (compared to no information) were more likely to believe that achieving greater representation for members of marginalized racial groups in positions of power overall would require loss of power for White American people ($M_{control}$ = 4.83, $SD_{control}$ = 1.53; $M_{experimental}$ = 5.79, $SD_{experimental}$ = 1.12; t-test: t = -4.94, $p < .001$, d = .72). Participants exposed to the experimental stimuli were also more likely to believe that increasing representation of Asian, Black, and Latinx American people in CEO, government, and college administration positions (the domains of focus in the experiment) would require a loss of representation for White people ($M_{control}$ = 5.10, $SD_{control}$ = 1.32; $M_{experimental}$ = 5.90, $SD_{experimental}$ = .93; t-test: t = -4.81, $p < .001$, d = .70). Of note, this latter manipulation check demonstrated that the manipulation affected perceptions of losses in White representation beyond the relatively narrow domains mentioned in the manipulation (e.g., in government broadly, rather than in the U.S. Senate specifically). Refer to Supplement, Section 12 to see all the experimental stimuli materials and Section 14 for a more detailed description of the pilot test results.

Measures

Social dominance orientation (SDO). The full 16-item SDO_7 scale was used to assess endorsement of egalitarian ideology (α = .95, M = 2.26, SD = 1.31).

Collective Action Support. We surveyed participants on their self-reported support for collective action to reduce racial inequality generally and a behavioral measure of collective action support:[18]

Collective Action Intentions. Participants' willingness to engage in collective action to reduce racial discrimination was measured with six items. (e.g., "In order to address discrimination towards racial minority people, how likely is it that you would participate in demonstrations and protests"; 1 = *Strongly disagree* to 7 = *Strongly agree*; α = .92, M = 3.47, SD = 1.66; Sidanius et al., 2004).

Advocating for voting rights. We again measured collective action *behavior*. Specifically, we gave participants the opportunity to send a letter to their state representatives, through the American Civil Liberties Union website, to advocate for the John Lewis Voting Rights Act. This behavioral measure was connected to our experimental manipulation by highlighting for participants that when people of color have diminished voting power, this can affect the likelihood that racial minority people will be elected to government positions (full text of measure in Supplement, Section 12). Participants were first asked if they were interested in sending a letter to their state representatives (response options were yes, no, or "already sent letter prior to taking this survey"). Those who were interested were directed to a webpage to send the letter, and they were asked to write the confirmation message they received on ACLU's submission page after sending the letter (to confirm that the letter was sent). Participants who

[18] Secondarily, we also measured support for policies to reduce racial inequality in the domains highlighted in the experimental manipulation, where the necessity of power redistribution was highly salient. These outcomes also showed the predicted patterns (see supplement, Section 17 for further details of these measures and Section 18 for analyses with them).

explicitly indicated they did not want to send a letter of support were categorized as declining to do so (received code of 0). Participants who indicated they wanted to send a letter of support and provided the correct confirmation information or reported *having already sent a letter* of support prior to taking the survey were coded as showing behavioral support for the voting rights act (received code of 1). There were some participants who indicated an interest in sending a letter to their representatives, but when asked to provide confirmation information, indicated that they intended to send the letter at a later time for various reasons (e.g., didn't feel comfortable providing address on ACLU website), or reported that they sent the letter but did not take note of the message on the confirmation page. These participants were excluded from analyses presented in the main text (n = 84), but analyses including these participants showed the same results (see Supplement, Section 15). Out of those included in analyses in the main text, 66% declined to send the letter (n = 1007) and 34% sent the letter in our survey or reported doing so previously (n = 517). Refer to the Supplement, Section 14 for details about how this behavioral measure was selected.[19] It is important to note that this experiment was completed prior to the U.S. House of Representatives voting on this act.

White Identity. We measured participants' level of White identification with four items (e.g., "How important is being White to your identity?; 1 = *Not at all* to 5 = *A great deal*; α = .76; M = 2.81, SD = .85; Jardina, 2019). We also included additional validated measures of White identification, to comprehensively assess the effects of this variable. Conclusions remained the same regardless of which measure was used in analyses, including when we used the solidarity measure used in Study 2 (see Supplement, Section 17 for description of additional

[19] In the Supplement, Section 15 we conducted analyses with those who reported previously signing the letter excluded from analyses. We also conduct additional analyses with those who reported future intentions to sign the letter or claimed they sent the letter but did not provide confirmation information included in the analyses (scored as 1). Conclusions remained the same regardless of how the measure was coded.

White identification measures and Section 19 for analyses with those measures). We featured the measure by Jardina (2019) in the main text because it was developed to measure White identity in particular (as opposed to racial identity generally) and was developed to be a predictor of Whites' group-based political interests.

Results and Discussion

To test whether the relationship between egalitarianism and collective action support remains when the need for power redistribution to reduce racial inequality is made salient among White participants, and even when they are more (vs. less) identified with their racial group, we conducted moderated multiple regression analyses separately for both collective action support outcomes (for the behavioral outcome, a moderated multiple logistic regression analysis was conducted). SDO, condition (power redistribution), White identity, their two-way interaction terms, and the three-way interaction were simultaneously entered in the regressions. All predictor variables were mean centered.

For both self-reported willingness to engage in collective action and advocating for voting rights (sending a letter to one's congressperson), these analyses showed a significant, negative main effect of SDO, a null effect of condition, and a null effect of White identity (see Tables 2.10 and 2.12). In support of our first hypothesis, for both dependent variables, the main effect of SDO was not qualified by the two-way SDO × condition interaction. That is, egalitarian (vs. anti-egalitarian) White participants were just as likely to support collective action when the potential for power redistribution and thus losses for the ingroup were salient (compared to when such losses are not salient). Importantly, this was the case despite pretesting to confirm that participants in the experimental condition did indeed become more likely to understand gains in power for racially marginalized groups comes at the expense of their White ingroup.

For both dependent variables, there were significant two-way interactions between SDO × White identity, such that the relation between SDO and collective action was attenuated—though still negative and significant—among those one standard deviation above the mean of White identity (see Tables 2.11 and 2.13).

In support of our second hypothesis, the three-way SDO × Condition × White identity interaction was not statistically significant for either of the outcomes.[20] Furthermore, even among those assigned to the experimental condition who were highly identified with White people, egalitarianism was still related to both increased collective action intentions (simple slope of SDO in experimental condition and +1SD above the mean on White identity, $b = -.45$, *S.E.* = .05, $t = -8.49$, $p < .001$) and advocating for voting rights ($b = -.74$, *S.E.* = .13, $z = -5.92$, $p < .001$). Therefore, relatively egalitarian (vs. anti-egalitarian) White participants were more likely to engage in collective action regardless of whether the need for power redistribution was made salient, and even if they were more (vs. less) identified with White people. Study 3 thus further underscored the power of egalitarian ideology to motivate system challenging collective action even under conditions that militate against such action.

General Discussion

Building on extant theories of collective action, the current studies help to understand why members of both marginalized and dominant groups may participate in system challenging action, even when doing so does not benefit the ingroup, and indeed, even when it may come at a cost to the ingroup. In Study 1, we examined the direct relationship between intergroup

[20] There was, however, a marginal three-way interaction with the dependent variable collective action intentions (p = .083). Refer to the Supplement, Section 16 to see a plot of this interaction and the simple slopes analyses that examine the relationship between egalitarianism and collective action in both conditions at high (+1 SD) and low (-1 SD) levels of White identity. For all combinations of condition and White identity, egalitarianism is significantly related to collective action intentions.

egalitarianism and support for the Black Lives Matter movement and whether this relationship was partially explained by perceptions of injustice. Among Black, Black-White multiracial, and White participants alike, egalitarianism was related both to support for collective action and perceptions of injustice. Furthermore, among relatively egalitarian Black-White multiracial and White (but not Black) participants, support for collective action was mediated in part by perceptions of discrimination.

In Study 2, we replicated the main findings from Study 1 among Asian, Asian-White multiracial, and White American participants, including with a behavioral outcome measure in the form of donations to an Asian American rights organization. Furthermore, we found that egalitarian White American participants supported collective action even among those who perceived that White Americans would lose power from achieving greater racial equality, and even among those who identified more (vs. less) with White people.[21]

In Study 3, we provided a more stringent test of whether egalitarianism motivates collective action among dominant group members, under conditions that militate against collective action. We used an experimental manipulation to make salient the fact that White Americans would have to give up power for marginalized group members to gain power, and found that under such conditions, and even among those who are relatively strongly (vs. weakly)

[21] In Studies 1 and 2 our primary interest was to test whether egalitarianism was significantly related to collective action support across levels of group status (i.e., across the racial group hierarchy). Future research could more specifically focus on group differences in the *relative strength* of the relationship between egalitarianism and collective action across levels of group status. In the current project, there is some indication that the relationship between egalitarianism and BLM support is weakest among Black participants compared to Black-White multiracial and White participants (see Table 2 for correlations). This may be because Black participants had the highest level of BLM support (See Table 1 for means) compared to White ($t = 9.81$, $p < .001$) and Black-White multiracial participants ($t = 2.96$, $p = .003$). Moreover, the Levene's equality of variances test indicated that Black participants had the least variability on their support for BLM compared to White ($F = 28.17$, $p < .001$) and Black-White multiracial participants ($F = 8.25$, $p = .004$). This may indicate that among Black participants there is strong group interests at stake for supporting BLM (indicated by high mean support and low variability within the group) and thus less opportunity for variability in egalitarian ideology to play a role in explaining support (however, it did to some extent).

identified with White people, egalitarianism was related to collective action, including sending a real letter to one's congressperson to advocate for voting rights.

Contributions to the Collective Action Literature

Our findings extend the emerging body of research on the role of ideology in collective action, as well as emerging research on the underpinnings of hierarchy-challenging collective action among dominant group members (Agostini & van Zomeren, 2021; Jost et al., 2017). This research has focused on system justification motives, which predict support for collective action movements that seek to *maintain* the current system, and opposition to system-challenging collective action (e.g., Osborne et al., 2019). In the current studies, we proposed and demonstrated that egalitarian ideology may be particularly important to consider as an ideological underpinning of system-challenging collective action, as egalitarians are specifically motivated to challenge the hierarchical status quo and bring about greater equality between groups. Thus, egalitarianism may be important for understanding why dominant group members may participate in system-challenging collective action that opposes their group interests.[22]

Beyond advancing the role of egalitarian ideology in collective action, these studies connect this ideology to dominant models of collective action, which specify perceptions of injustice as an important proximate predictor of collective action (such as relative deprivation theory, see Smith et al., 2012; and SIMCA, see van Zomeren et al., 2008). We drew on prior studies that revealed a link between egalitarianism and perceptions of injustice (e.g., Ho et al.,

[22] Egalitarianism may complement system justification motives in explaining collective action. Low levels of system justification motives indicate a lack of the epistemic, existential, and relational motives thought to underpin system *defense*, but unlike egalitarianism, lack of system justification motives does not necessitate a desire to *challenge* the hierarchical status quo per se. In support of this, our supplemental analyses (Supplement, Section 10) show that egalitarianism was related to support for collective action to fight for racial equality, even when controlling for system justification.

2017), combining that research with extant models of collective action to propose and demonstrate that egalitarians may participate in collective action in part because they perceive discrimination, and are thus compelled to act.

Contributions to the Egalitarianism Literature

Although social dominance theory has long suggested that egalitarianism (low SDO) should predict hierarchy-attenuating attitudes and behavior, most work has examined the proclivities of those who are anti-egalitarian, rather than egalitarian (Ho & Kteily, 2020). Moreover, the emerging research on the downstream consequences of egalitarianism has primarily focused on relatively proximate social cognitive consequences, such as greater attention to inequality (e.g., Kteily et al., 2017; Waldfogel et al., 2021), as opposed to the downstream behaviors egalitarians may pursue. Thus, we build on the small body of research that has started to examine the motivated social-cognitive tendencies of egalitarians (rather than anti-egalitarians), and extend this research by documenting some downstream behavioral consequences of egalitarian ideology.

A few prior studies have examined the relation between egalitarianism and collective action; however, this prior research has focused on collective action intentions as opposed to behavior (e.g., Choma et al., 2020; Stewart, 2017; Stewart & Tran, 2018).[23] By demonstrating that egalitarians (relative to anti-egalitarians) are more likely engage in behaviors to challenge inequality, we begin to show that egalitarians act in line with their ideological commitments and their espoused concerns for equality may not be simply performative (see Cabrera & Montoya, 2017; Dennis, 2019; Wellman, 2022 for concerns about performative allyship).

[23] Indeed, the literature on collective action generally tends to focus on collective action attitudes, retrospective self-reports of behavior, and behavioral intensions, as opposed to actual behavior (e.g., Jost et al., 2017; Van Zomeren et al., 2012).

Additionally, prior research has not consistently included members of marginalized and dominant groups alike (however see Stewart, 2017). Thus, the current studies help to establish egalitarianism's importance in motivating collective action among actors across the social status hierarchy. Moreover, we demonstrate that among dominant group members, egalitarianism predicts collective action behavior even when there is the possibility for group status loss, and even when one is relatively identified with their group. We thus provide the most stringent test to date of whether egalitarianism is a motivator of collective action that *transcends group interests*.

Future Directions

In the current studies we look at whether perceptions of discrimination partially explain the relationship between egalitarianism and collective action, but future research could examine additional ways egalitarianism might lead to collective action. For instance, future researach could examine other forms of injustice perceptions. Awareness of systemic forms of inequality and their pervasiveness (as opposed to individual biases) is theorized to be an important motivator of collective action to reduce inequality (Richeson & Rucker, 2021; Diemer et al., 2021; Freire, 1970). In our studies we used measures that defined discrimination broadly (i.e., How much does discrimination affect the lives of Black people in the U.S.?), however egalitarians (compared to anti-egalitarians) may have more knowledge about structural forms of inequality, or at least should be more open to learning about such information, which should have downstream implications for collective action to fight against systemic forms of inequality. Relatedly, given that egalitarians are more attuned to evidence of inequality—particularly when it affects societally disadvantaged groups (Kteily et al., 2017; Waldfogel et al., 2021)—egalitarianism may predict recognizing shared experiences of discrimination among those

marginalized along different dimensions of identity which could result in increased support for intergroup coalitions (Craig & Richeson, 2016; Ho et al., 2017).

Future research should also examine mediators beyond perceived injustice. For example, consistent with the dual chamber model of collective action (Agostini & van Zomeren, 2021), it is possible that egalitarianism might lead to stronger identification with marginalized groups, or with social justice movements, and this identity can in turn motivate collective action. Whereas the current studies were focused on establishing the relationship between egalitarianism and collective action, and on examining whether egalitarianism might enable dominant group members to look beyond their ingroup interests, future research would do well to examine additional mediators of egalitarianism's effect of collective action.

Future work would also do well to further test the limits of egalitarianism's ability to motivate collective action behavior. In the current study, we showed that egalitarianism is related to collective action even when it is salient that reducing racial inequality necessitates power concessions among White people (i.e., when group interests are at stake). However, it remains to be seen if egalitarianism might motivate collective action even when such action is costly in other ways, such as when collective action is costly to the self. Some research suggests that self-interest ordinarily does not have a large effect on sociopolitical attitudes (Sears & Funk, 1991). At the same time, other research suggests if the costs are substantial, self-interests may shape sociopolitical attitudes (Kinder, 1998; Taber, 2003; Weeden & Kurzban, 2017). Therefore, further work could benefit from testing whether egalitarianism still predicts collective action when substantial self-interest is at stake, such as if an egalitarian individual resides in a context where one might be ostracized or sanctioned for participating in social justice efforts (e.g., a climate where protesting is illegal). Future work could also examine whether egalitarians are

more likely to engage in more costly forms of collective action, such as being heavily involved in a social justice organization (i.e., costly to the self in terms of time and resources).

Future research will no doubt reveal additional mechanisms by which egalitarianism affects collective action and establish limits to egalitarianism's effects. For now, the current studies begin to establish egalitarianism as a predictor of collective action that transcends group interests, and in doing so, contributes to the emerging literature on the critical role of ideology in collective action.

Tables (Chapter 2)

Table 2.1. Descriptive Statistics by Participant Racial Group in Study 1

	Black		Black-White		White	
	M(SD)	α	M(SD)	α	M(SD)	α
Anti-Black discrimination	6.15 (1.09)	.81	5.88 (1.44)	.94	4.61 (1.48)	.92
Social dominance orientation	2.55 (1.05)	.80	2.32 (1.19)	.86	2.98 (1.15)	.82
Collective action with Black people	-	-	4.76 (1.37)	.93	-	-
Black Lives Matter	4.92 (1.40)	.69	4.38 (1.78)	.90	3.06 (1.87)	.90

Note. - symbol represents that the measure was not administered to the corresponding sample.

Table 2.2. Correlations for Black, Black-White multiracial, and White samples in Study 1

Black Sample			
	Social dominance orientation	Anti-Black discrimination	Black Lives Matter
Social dominance orientation	-		
Anti-Black discrimination	-.48***	-	
Black Lives Matter	-.23**	. 23**	-

Black-White multiracial Sample				
	Social dominance orientation	Anti-Black discrimination	Black Lives Matter	Collective action with Black people
Social dominance orientation	-			
Anti-Black discrimination	-.67***	-		
Black Lives Matter	-.55***	. 66***	-	
Collective action with Black people	-.59***	.61***	.65***	-

White Sample			
	Social Dominance Orientation	Anti-Black discrimination	Black Lives Matter movement support
Social dominance orientation	-		
Anti-Black discrimination	-.51***	-	

Black Lives Matter	-.63***	.65***	-

Note. *p<.05, **p<.01, ***p<.001

Table 2.3. Indirect Effects for Black, Black-White multiracial, and White samples in Study 1

	A		**B**		**C'**		**total**		**AB**	
	b (se)	*β*	*b (se)*	*β*	*b (se)*	*β*	*b (se)*	*β*	*b (se), [95% CI of b]*	*β*
Black sample										
Social dominance orientation → anti-Black discrimination → Black Lives Matter	-.49 (.09) ***	-.48	.20 (.13), NS	.16	-.21 (.12) †	-.16	-.31 (.10) **	-.23	-.10 (.07), NS, [-.24, .02]	-.08
Black-White multiracial sample										
Social dominance orientation → anti-Black discrimination → Black Lives Matter	-.81 (.09) ***	-.67	.66 (.08) ***	.53	-.29 (.11) *	-.20	- .82 (.10) ***	-.55	- .53 (.09) ***, [-.71, -.37]	-.36
Social dominance orientation → anti-Black discrimination → Collective action with Black people	-.81 (.09) ***	-.67	.37 (.08) ***	.39	-.38 (.09) ***	-.33	-.68 (.08) ***	-.59	-.30 (.08) ***, [-.46, -.14]	-.26
White sample										
Social dominance orientation → anti-Black discrimination → Black Lives Matter	-.65 (.08) ***	-.51	.55 (.09) ***	.44	-.67 (.11) ***	-.41	-1.03 (.09) ***	-.63	-.36 (.07) ***, [-.51, -.23]	-.22

Note. *†p<.10*, **p<.05, **p<.01, ***p<.001.* Standard errors calculated with 10,000 bootstrap samples. Social dominance orientation and anti-Black discrimination are mean centered.

Table 2.4. Descriptive Statistics by Participant Racial Group in Study 2

	Asian		Asian-White		White	
	M(SD)	α	M(SD)	α	M(SD)	α
Anti-Asian discrimination	4.84 (1.00)	.86	4.77 (1.16)	.91	5.00 (1.25)	.94
Social dominance orientation	2.05 (.82)	.88	1.88 (.79)	.86	1.87 (.85)	.88
Collective action intentions	4.34 (1.20)	.82	-	-	4.28 (1.39)	.89
Donations to Asian American rights organization	.48 (.41)	-	-	-	.67 (.41)	-
Collective action with Asian American people	-	-	4.91 (1.09)	.86	-	-
White identity	-	-	-	-	3.52 (1.49)	.86
Perceived power redistribution	-	-	-	-	4.66 (1.26)	.84

Note. – symbol represents measure not administered to corresponding sample

Table 2.5. Correlations for Asian American, Asian-White multiracial, and White American samples in Study 2

Asian American Sample

	Social dominance orientation	Anti-Asian discrimination	Collective action intentions	Donations to Asian American rights organization
Social dominance orientation	-			
Anti-Asian discrimination	-.26***	-		
Collective action intentions	-.34***	.41***	-	
Donations to Asian American rights organization	-.16**	.15**	.12*	-

Asian-White multiracial American Sample

	Social dominance orientation	Anti-Asian discrimination	Collective action with Asian American people
Social dominance orientation	-		
Anti-Asian discrimination	-.36***	-	
Collective action with Asian American people	-.40***	.37***	-

White American Sample

	Social dominance orientation	Anti-Asian discrimination	Collective action intentions	Donations to Asian American rights organization	White identity	Perceived power redistribution

Social dominance orientation	-					
Anti-Asian discrimination	-.47***	-				
Collective action intentions	-.50***	.62***	-			
Donations to Asian American rights organization	-.32***	.30***	.34***	-		
White identity	.22***	-.18**	-.22***	-.11†	-	
Perceived power redistribution	-.33***	.33***	.33***	.10†	-.18**	-

Note. $^{\dagger}p<.10$, *$p<.05$, **$p<.01$, ***$p<.001$

Table 2.6. Indirect Effects for Asian American, Asian-White multiracial American, and White American samples in Study 2

	A		**B**		**C'**		**total**		**AB**	
	b(se)	*β*	*b(se)*	*β*	*b(se)*	*β*	*b(se)*	*β*	*b(se)*, [*95% CI of b*]	*β*
Asian American sample										
Social dominance orientation → anti-Asian discrimination → collective action intentions	-.32 (.08) ***	-.26	.41 (.07) ***	.34	-.37 (.07) ***	-.26	-.50 (.07) ***	-.34	-.13 (.04) **, [-.21, -.06]	-.09
Social dominance orientation → anti-Asian discrimination → donations to Asian American rights org.	-.32 (.08) ***	-.26	.05 (.03) †	.12	-.07 (.03) *	-.13	-.08 (.03) **	-.16	-.02 (.01) †, [-.03, .00]	-.03
Asian-White multiracial American sample										
Social dominance orientation → anti-Asian discrimination → collective action with Asian	-.54 (.10) ***	-.36	.24 (.06) ***	.25	-.29 (.12) *	-.20	-.43 (.09) ***	-.31	-.13 (.04) **, [-.22, -.06]	-.09

American people										
White sample										
Social dominance orientation → anti-Asian discrimination → collective action intentions	-.68 (.11) ***	-.47	55 (.06) ***	.49	-.44 (.10) ***	-.27	-.82 (.09) ***	-.50	-.38 (.07) ***, [-.52, -.24]	-.23
Social dominance orientation → anti-Asian discrimination → donations to Asian American rights org.	-.67 (.11) ***	-.46	.07 (.02) **	.20	-.11 (.03) **	-.23	-.15 (.03) ***	-.32	-.05 (.02) **, [-.08, -.02]	-.09

Note. $^{\dagger}p<.10$, $*p<.05$, $**p<.01$, $***p<.001$. Standard errors calculated with 10,000 bootstrap samples. Social dominance orientation and anti-Asian discrimination are mean centered.

Table 2.7. Moderated Multiple Regression Analysis with Collective Action Intentions Dependent Variable in Study 2

	b(se)	***β***	***t***	***p***
Social dominance orientation	-.66 (.09)	-.40	-7.11	<.001
Perceived power redistribution	.19 (.06)	.18	3.25	.001
White identity	-.12 (.05)	-.13	-2.37	.019
Social dominance orientation × perceived power redistribution	.09 (.05)	.09	1.63	.105
Social dominance orientation × White identity	-.07 (.06)	-.07	-1.23	.219
Perceived power redistribution × White identity	-.01 (.04)	-.01	-.15	.884
Social dominance orientation × perceived power redistribution × White identity	-.07 (.03)	-.14	-2.47	.014

Table 2.8. Effect of Social Dominance Orientation on Collective Action Intentions Dependent Variable at Various Levels of Perceived Power Redistribution and White Identity in Study 2

	High (+1SD) perceived power redistribution		Mean of perceived power redistribution		Low (-1SD) perceived power redistribution	
	b(se)	*t*	*b(se)*	*t*	*b(se)*	*t*
High (+1SD) White identity	-.78 (.17)	-4.56***	-.77 (.12)	-6.44***	-.75 (.12)	-6.55***
Mean of White identity	-.55 (.13)	-4.35***	-.66 (.09)	-7.11***	-.78 (.10)	-7.54***
Low (-1SD) White identity	-.33 (.16)	-2.04*	-.56 (.13)	-4.35***	-.80 (.15)	-5.33***

Note. p<.05, **p<.01, ***p<.001

Table 2.9. Moderated Multiple Regression Analysis with Donation to Asian American Rights Organization Dependent Variable in Study 2

	b(se)	***β***	***t***	***p***
Social dominance orientation	-.16 (.03)	-.33	-5.13	<.001
Perceived power redistribution	.00 (.02)	.01	.15	.878
White identity	-.01 (.02)	-.04	-.70	.484
Social dominance orientation × perceived power redistribution	-.02 (.02)	-.07	-1.11	.266
Social dominance orientation × White identity	.01 (.02)	.03	.50	.619
Perceived power redistribution × White identity	-.02 (.01)	-.10	-1.68	.095
Social dominance orientation × perceived power redistribution × White identity	.00 (.01)	.01	.13	.898

Table 2.10. Moderated Multiple Regression with Collective Action Intentions Dependent Variable in Study 3

	b(se)	***β***	***t***	***p***
Social dominance orientation	-.65 (.03)	-.51	-20.42	<.001
Condition	-.12 (.08)	-.04	-1.62	.106
White identity	-.04 (.05)	-.02	-.88	.382
Social dominance orientation × condition	.04 (.06)	.02	.656	.512
Social dominance orientation × White identity	.15 (.03)	.11	4.77	<.001
Condition × White identity	-.04 (.09)	-.01	-.412	.680
Social dominance orientation × condition × White identity	.11 (.06)	.04	1.73	.083

Table 2.11. Effect of Egalitarianism on Collective Action Intentions Dependent Variable at Various Levels of White Identity in Study 3

	b(se)	*t*
High (+1SD) White identity	-.53 (.03)	-15.45***
Mean of White identity	-.65 (.03)	-20.44***
Low (-1SD) White identity	-.76 (.05)	-16.34***

Note. *p<.05, **p<.01, ***p<.001

Table 2.12. Moderated Multiple Logistic Regression with Advocating for Voting Rights Dependent Variable in Study 3

	b(se)	***β***	***z***	***p***	***Odds Ratio***
Social dominance orientation	-1.06 (.08)	-1,39	-13.51	<.001	.35
Condition	-.13 (.16)	-.06	-.82	.410	.88
White identity	-.11 (.09)	-.09	-1.21	.228	.90
Social dominance orientation × condition	.11 (.16)	.07	.69	.493	1.11
Social dominance orientation × White identity	.21 (.08)	.23	2.60	.009	1.24
Condition × White identity	-.17 (.18)	-.07	-.91	.363	.85
Social dominance orientation × condition × White identity	.21 (.16)	.12	1.28	.199	1.24

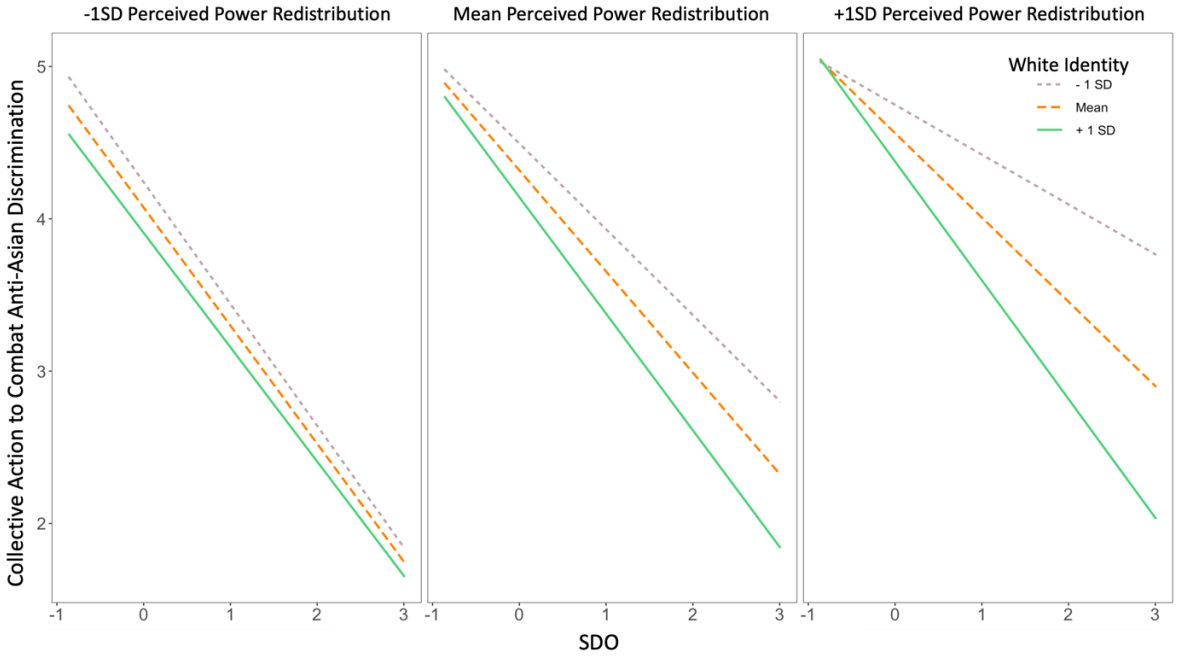
Table 2.13. Effect of Egalitarianism on Advocating for Voting Rights Dependent Variable at Various Levels of White Identity in Study 3

	b(se)	*z*
High (+1SD) White identity	-.89 (.09)	-9.98***
Mean of White identity	-1.06 (.08)	-13.52***
Low (-1SD) White identity	-1.24 (.12)	-10.46***

Note. *p<.05, **p<.01, ***p<.001

Figures (Chapter 2)

Figure 2.1. Plot of SDO × Perceived Power Redistribution × White Identity Interaction with Collective Action Intentions Dependent Variable in Study 2 among White Sample



Chapter 3 Alliances Between Black, Black-White Multiracial, and White People

Black-White multiracial people can racially identify in a multitude of ways ranging from self-identifying as Black, White, both Black and White, multiracial, and various other conceptualizations of one's racial identity (e.g., Davenport, 2016; Rockquemore & Brunsma, 2002; Roberts et al., 2022). In light of this reality, against the backdrop of a rapidly growing Black-White multiracial population, and in an urgent moment for Black political mobilization, the current studies examine Black-White multiracial people's racial group commitments, and Black monoracial people's perceptions of those commitments. That is, do Black-White multiracial people tend to stand in solidarity with Black people (i.e., their marginalized parent group), or align themselves with White people (i.e., their dominant parent group)? And do Black people think Black-White multiracial people stand in solidarity with Black people, or with White people? Beyond mapping the identity landscape, the current studies examine whether Black people's perceptions of Black-White multiracial people's group commitments affects their inclusion of multiracial people into their ingroup, and trust of multiracial people to participate in social justice movements—i.e., monoracial-multiracial intraminority intergroup relations.

Black-White Multiracial People's Racial Identity

Identification with a group is composed of multiple dimensions that have distinct psychological and social consequences (Leach et al., 2008; Sellers et al., 1997; Sellers et al., 1998). Leach et al., (2008) proposes there are two general components of identity. One component, self-definition, captures individuals' perceptions of themselves as similar to an in-group prototype (individual self-stereotyping) and individuals' perceptions that their in-group

shares commonalities (in-group homogeneity). The other component, self-investment in the group, captures positive feelings about one's group membership (satisfaction), a sense of a bond with and commitment to one's ingroup (solidarity), and the importance and salience of one's group membership (centrality). These distinctions are important for understanding how one will interact with and on behalf of one's in-group. For example, individuals may *define* themselves as a member of a group but may not be significantly *invested in* and *committed* to that group.

Some research has started to examine how Black-White multiracial people *define* their racial identity, and specifically, has focused on self-stereotyping, showing that Black-White multiracial people see themselves as more similar to Black people than White people (Vinluan & Remedios, 2020). Relatedly, other research has found that Black-White multiracial people are more likely to label themselves as Black than White (Davenport, 2016). However, there has been less examination of Black-White multiracial people's group commitments and specifically, their *solidarity* with each of Black and White people, despite solidarity's importance for collective action and social change (Leach et al., 2008).

Davenport et al. (2022a; 2016) starts to capture Black-White multiracial people's solidarity with their parent groups by measuring feelings of closeness, which captures one's bond with a group, and by measuring support for race relevant policies and social attitudes, which can represent one's commitment to in-group relevant causes. This research finds that Black-White multiracial people feel less close to White people than White people report feeling, but also feel less close to Black people than Black people report feeling (Davenport et. al, 2022a). In terms of perceiving racial bias in policing, support for affirmative action, and perceiving racism as a problem, Black-White multiracial people are more likely to endorse these views than White people and endorse these views at a similar rate as Black people (Davenport, 2016; Davenport,

2022b). Overall, this research indicates that Black-White multiracial people are highly committed to, but not fully aligned with Black people in that they report lower levels of closeness to Black people than Black people report.

Although the aforementioned research has been informative, additional studies are needed to fully examine Black-White multiracial people's solidarity with each of Black and White people. First, whereas closeness (Davenport et al., 2022a) captures one's bond with a group, it does not explicitly indicate an investment of the self in, or *commitment* to, a group. Second, Davenport et al. (2016; 2022b) examined race and racial policy attitudes (e.g., perceiving racism as a problem), but they did not additionally examine support for policies and social movements that are specific to Black people. Thus, it remains unclear whether Black-White multiracial people would support equality-promoting policies to the same extent as Black people, if those policies and social movements pertained to Black people specifically versus people of color more generally (e.g., support for the Black Lives Matter movement). The uncertainty around Black-White multiracial people's commitment to Black racial politics per se is compounded by the finding that Black-White multiracial people do not feel as close to Black people as Black people feel.

Building on emerging research on Black-White multiracial people's racial identity, the current research focuses centrally on Black-White multiracial people's *solidarity* with Black and White people, as well as their support for policies and collective action to improve social conditions for Black people per se. We also compare Black-White multiracial people's group commitments to monoracial Black (and White) people's commitments to assess whether Black-White multiracial people and Black (White) monoracial people express the same degree of solidarity with Black (White) people. In doing so, we characterize the Black-White multiracial

identity landscape, and illuminate the role the growing Black-White multiracial population may play in Black racial politics, during a critical moment for the U.S. racial justice movement.

Black People's Perceptions of Black-White Multiracial People's Group Commitments

As important as Black-White multiracial people's solidarity with Black people is to any political alliance between the groups, such an alliance also depends critically on Black people's perceptions of Black-White multiracial people's racial group commitments, and perhaps relatedly, Black people's acceptance of Black-White multiracial people. The small body of research on Black people's perceptions of Black-White multiracial people finds that Black people categorize Black-White multiracial people as more Black than White in part because Black people feel that Black-White multiracial and Black monoracial people share a common destiny or linked fate rooted in shared experiences with racial discrimination (Ho et al., 2017). Relatedly, Black people perceive that Black-White multiracial people prefer to identify as Black as opposed to White and believe that they are more loyal to Black people compared to White people (Chen et al., 2019, Study 2). Moreover, perceiving that Black-White multiracial people prefer to identify as Black and are loyal to Black people is related to categorizing Black-White multiracial people as ingroup members (in supplement of Chen et al., 2019).

Despite these findings, Black people may still have some concerns about Black-White multiracial people's relatively privileged status and question their status as ingroup members. Indicative of this, a sizable proportion of Black-White multiracial people (42%) report feeling not accepted or only somewhat accepted by Black people (Parker et al., 2015). Related to such feelings of exclusion, one study suggests that people who identify with a single group in a given dimension of social categorization (*single group members*; e.g., monoracial people or individuals with a single nationality) may doubt the loyalty of individuals holding multiple group

memberships in that dimension (*dual group members*; e.g., multiracial people or dual nationals), and under some circumstances, may be exclusionary of dual group members (Fine et al., in press). Overall, this research suggests that: 1) single group members may have concerns about the group commitments of dual group members and 2) that these concerns have downstream implications for trust and acceptance of dual group individuals in the ingroup.

In the current studies, we build on prior research on dual group members' perceptions of single group members by examining Black people's perceptions of Black-White multiracial people's solidarity with each of Black monoracial and White monoracial people. Furthermore, we examine whether Black people's perceptions of Black-White multiracial people's solidarity with each of Black and White people are consequential for inclusion of Black-White multiracial people as ingroup members and trust of Black-White multiracial people to promote Black rights – i.e., to be faithful members of a coalition. Of note, examining perceptions of solidarity with each of Black and White people separately (as opposed to perceptions of relative loyalty to one group versus the other, as some past research has done, e.g., Chen et al., 2019) allows for the possibility that perceivers do not view such group commitments as zero-sum—that perceivers acknowledge that others can be strongly and equally committed to multiple groups at the same time. It also allows us to examine whether each of perceptions of solidarity with Black and with White people uniquely affect Black people's inclusion of Black-White multiracial people. Relatedly, measuring perceptions of solidarity with each group separately allows for an examination of interactive effects: For example, might perceptions of Black-White multiracial people's solidarity with White people only matter when their solidarity with Black people is perceived to be low, but not when their solidarity with Black people is perceived to be high? In answering these questions, we build on the emerging body of research that examines predictors

of positive (vs. negative) monoracial-multiracial intraminority intergroup relations, and in particular, that identifies perceptions of multiracial people's racial group commitments as a critical factor in monoracial people's acceptance of them.

Current Studies

In Study 1, we assess Black-White multiracial participants' solidarity with Black and White people. We also begin to examine Black participants' perceptions of Black-White multiracial people's commitments and whether these perceptions relate to inclusion of Black-White multiracial people as ingroup members. In Study 2, we again assess Black-White multiracial participants' solidarity with Black and White people. We also more thoroughly assess Black participants' perceptions of Black-White multiracial people's solidarity with Black and White people and whether these perceptions relate to inclusion of Black-White multiracial people into the ingroup. In Study 3, we experimentally manipulate Black participants' perceptions of Black-White multiracial people's solidarity with Black and with White people to test whether this affects inclusion of Black-White multiracial people into the ingroup.

Study 1

The primary aim of Study 1 is to examine Black-White multiracial participants' group commitments to Black and White people. Specifically, we examine Black-White multiracial participants' self-reported level of solidarity with Black people and with White people, and we compare Black-White multiracial participants' reported levels of solidarity to Black participants' and White participants' self-reported solidarity with their respective racial ingroup. We also look at whether Black-White multiracial participants report more loyalty to Black or White people.

In addition to racial identification, we examine Black-White multiracial participants' group commitments by examining their support for policies and social movements intended to

improve social conditions for Black people (e.g., support for BLM), and compare their support to Black and White participants' reported support.

Finally, in Study 1 we begin to assess Black participants' perceptions of Black-White multiracial people's group loyalties and whether this relates to inclusion of Black-White multiracial people in the ingroup.

Method

Participants

We contracted YouGov, an industry leader in fielding surveys on social and political attitudes that approximate nationally representative samples, to collect data from U.S. born citizens who self-identify as Black, White, and Black-White multiracial.[24] As per their standard procedure, YouGov overrecruited participants to identify a sample of Black, Black-White multiracial, and White participants whose demographics match that of a national sample and who were identified as providing high-quality responses as determined by YouGov's proprietary software.

YouGov also created survey weights to correct for deviations from national representativeness, allowing us to make inferences about the general population of U.S. born citizens from each racial group. Results remain largely the same regardless of whether weights are used in analyses. Therefore, in the main text, we present results using survey weights and present results without survey weights in the Supplement, Section 2.[25] We also note when

[24] For more information on how YouGov approximates a nationally representative sample see: https://www.colorado.edu/lab/aprl/sites/default/files/attached-files/yougov_sampling_2018_0.pdf

[25] To conduct data analysis with survey weights we used the Survey package in R (Lumley, 2021). We also followed the guidelines of Heeringa et al. (2017) as well as guides to using the R survey package software from UCLA's Advanced Research Computing Center (https://stats.oarc.ucla.edu/r/seminars/survey-data-analysis-with-r/) and from Pew Research Analyst Nick Hatley (2018) (https://medium.com/pew-research-center-decoded/how-to-analyze-pew-research-center-survey-data-in-r-f326df360713).

weighted and non-weighted results differ in their statistical significance in the results section. All participant exclusions were handled by YouGov before we received the data, also per their usual practice. This resulted in a final sample of n = 150 Black participants (M_{age} = 44.47, SE_{age} = 1.46; 53% Women), n = 150 White participants (M_{age} = 49.83, SE_{age} = 1.62; 52% Women), and n = 153 Black-White multiracial participants (M_{age} = 31.78, SE_{age} = 1.67, and 53% Women).[26,27] Sample size was determined by the maximum number of Black-White multiracial people who could be recruited. Sensitivity analysis indicated that we were powered to detect effects between small to medium in size (for an independent samples t-test D = .33, a paired-t test D = .24, and correlation r = .23).[28]

Measures

Group Commitments. In Study 1 we assessed participants' racial identification and group commitments. Specifically, we measured participants' solidarity with their racial group(s), and among Black-White multiracial people, we also measured their loyalty to White versus Black people. Refer to Table 3.1 to see the descriptive statistics and measure reliabilities (Cronbach's α) by sample for each measure used. The full text of all measures analyzed across studies is available in the supplemental materials (see Supplement, Section 1 for Study 1

[26] Our sample of Black-White multiracial people represents all the Black-White multiracial respondents that are part of the YouGov panel when we conducted data collection in November 2018 and is more than double the size of samples available from other survey vendors. Many survey vendors do not ask participants if they identify with more than one race, or as Multiracial. Black-White multiracial was defined as anyone who self-identified as Black and White or as Black-White multiracial in both a demographics survey administered by YouGov and in our survey. Davenport (2016) found 70.7% of Americans with one Black and one White parent identify as Multiracial, 24.8% identify as Black alone, and 4.5% identify as White alone. In this survey, we only included those who self-identified as Multiracial or both Black and White in our Black-White multiracial sample, and we can therefore only make inferences about this population. Of note, for the purposes of the current study, where we examine solidarity across group lines, it was important not to include individuals with Black and White ancestry who identify as Black only in the Black-White multiracial participant group.

[27] The reported participant descriptives are also weighted to approximate the characteristics of a nationally representative sample. Of note the Black-White multiracial sample deviates somewhat from a nationally representative sample in that the unweighted mean age was M = 40.99 and unweighted gender distribution was 69.3% women.

[28] The sensitivity analysis refers to unweighted analyses.

measures, Section 5 for Study 2 measures, and Section 10 for Study 3 measures). A list of all variables that were also part of this omnibus survey in Study 1, including those not relevant for the current paper, is included in the Supplement, Section 4.

Solidarity. Participants were asked to indicate their solidarity with their respective racial groups. Black-White multiracial participants completed a three item scale about the extent to which they feel solidarity with Black people, and separately, with White people (e.g., "I feel committed to Black [White] people?"; 1 = *Strongly disagree* to 7 = *Strongly agree*; Leach et al., 2008). Black and White monoracial participants completed the same scale, but regarding solidarity with their respective groups.

Loyalty. Black-White multiracial participants completed a three-item scale to assess which racial group (Black or White) they feel more loyalty towards (e.g., "In general, which group do you take sides with?"; 1 = *White people,* 4 = *White people and Black people equally, to* 7 = *Black people*; Chen et al., 2019).

Race-Relevant Political Attitudes. We assessed participants' support for policies and collective action intended to improve social conditions for Black people. Specifically, we measured participants' support for affirmative action, criminal justice reform, and the Black Lives Matter movement. Among Black and Black-White multiracial people, we also measure their support for engaging in collective action together to fight against racial discrimination.

Affirmative Action. Participants completed a two item scale about their support for affirmative action in schools and companies (e.g., "Do you favor, oppose, or neither favor nor oppose allowing colleges to increase the number of Black students by considering race along with other factors when choosing students?"; 1 = *Strongly oppose* to 7 = *Strongly favor*; ANES, 2012).

Black Lives Matter (BLM). Participants completed a three item scale about their support for the Black Lives Matter social movement (e.g., "I support the Black Lives Matter movement."; 1 = *Strongly disagree* to 7 = *Strongly agree*).

Criminal Justice System Attitudes. Participants completed a four item scale about their support for criminal justice reform (e.g., "The criminal justice system does not treat racial minorities fairly."; 1 = *Strongly disagree* to 7 = *Strongly agree*).

Collective Action. Black participants and Black-White multiracial participants completed an eight item scale about their support for Black and Black-White multiracial people engaging in collective action together to fight against racial discrimination (e.g., "To achieve racial equality and fight against discrimination, Black people and individuals with one Black parent and one White parent should participate in demonstrations or protests together. (1 = *Strongly disagree* to 7 = *Strongly agree*; Ho et al., 2017).

Perceived Loyalty. Black participants completed a three item scale to assess which racial group (Black or White) they perceived that Black-White multiracial people would feel more loyalty towards (e.g., "In general, which group do you think people with one Black parent and one White parent take sides with?"; 1 = *White people*, 4 = *White people and Black people equally*, to 7 = *Black people*; Chen et al., 2019).

Inclusion. Among Black participants, we assessed their inclusion of Black-White multiracial people as ingroup members. Specifically, we measured Black participants' warmth towards Black-White multiracial people and their categorization of Black-White multiracial people as ingroup members (i.e., hypodescent).

Warmth. Black participants completed one item to assess their warmth towards Black-White multiracial people ("Please rate how warm or cold you feel towards people with one Black parent and one White parent (1 = *Very cold* to 7 = *Very warm*).

Hypodescent. Black participants completed a three item scale to assess whether they categorized Black-White multiracial people as relatively more Black or White (e.g., "If a Black American and a White American have a kid do you think of the kid as relatively Black or relatively White?"; 1 = *Relatively Black*; 4 = *Equally Black and White*; 7 = *Relatively White*; Ho et al., 2017).

Results and Discussion

We first examine Black-White multiracial participants' level of group commitment to both their Black and White parent groups and compare multiracial participants' responses to Black and White participants' level of commitment to their respective racial group. Then we compare Black-White multiracial participants' level of support for policies and social movements intended to promote Black rights to Black and White participants' level of support. Finally, we assess Black participants' perceptions of Black-White multiracial people's racial group commitments and whether these perceptions are related to Black participants' inclusion of Black-White multiracial people into the ingroup (See Table 3.1 for means and standard errors for each outcome analyzed by racial group).

Black-White Multiracial People's Group Commitments with Black and White people

Racial Solidarity. First, Black-White multiracial participants' level of solidarity with Black people and White people was compared with a paired t-test, which revealed Black-White multiracial participants reported significantly more solidarity with Black than White people ($t(151) = 4.05$, $p < .001$). Next, Black-White multiracial and Black participants' level of Black solidarity was compared as well as Black-White multiracial and White participants' level of

White solidarity with separate independent samples t-tests. T-tests revealed that Black-White multiracial participants reported significantly less solidarity with Black people than Black participants reported ($t(301) = -5.19$, $p < .001$), but Black-White multiracial and White participants did not significantly differ on their level of solidarity with White people ($t(301) = -.44$, $p = .661$).

Loyalty. The average reported score on the loyalty scale for Black-White multiracial participants was $M = 4.51$, $SE = .10$. and the 95% confidence interval was between 4.32 and 4.70. Notably, the 95% confidence interval was above the scale midpoint (4), indicating that on average Black-White multiracial participants reported feeling more loyalty towards Black than White people.[29]

In sum, Black-White multiracial participants felt more solidarity with and loyalty towards Black people than White people. However, Black-White multiracial participants did not feel as much solidarity with Black people as Black participants reported feeling.

Black-White Multiracial People's Political Alignment with Black and White people

To examine Black-White multiracial participants' race-relevant political attitudes in comparison to Black and White monoracial participants' attitudes using survey weights, we first conducted Wald F tests (an omnibus test), to test for differences between the three groups in general. We then followed these omnibus tests with regression analyses where race was entered as a dummy coded variable (Black-White multiracial as the reference group) to examine planned contrasts between Black-White multiracial participants and each of Black and White monoracial

[29] We did not conduct one-samples t-tests as the Survey package in R does not allow for a one-sample t-test from any specified point (e.g., testing for deviation from 4). However, the 95% confidence interval around the mean of loyalty conveys similar information and allows us to assess if participants significantly deviated from the midpoint.

participants (Heeringa et al., 2017; see Table 3.1 for mean responses and standard errors for each outcome by participant racial group).

Affirmative Action. Results revealed that support for affirmative action significantly varied by participant racial group (Wald's $F(2, 450) = 29.39$, $p < .001$), such that Black-White multiracial participants were significantly more supportive of affirmative action than White participants ($b = 1.00$, $se = .23$, $t = 4.38$, $p < .001$), but were significantly less supportive of affirmative action compared to Black participants ($b = -.45$, $se = .20$, $t = 2.24$, $p = .026$).[30]

BLM. Support for BLM also significantly varied by racial group (Wald's $F(2, 450) = 36.81$, $p < .001$), such that Black-White multiracial participants were significantly more supportive of BLM than White participants ($b = 1.11$, $se = .26$, $t = 4.27$, $p < .001$), but significantly less supportive than Black participants ($b = -.70$, $se = .23$, $t = -2.97$, $p = .003$).

Criminal Justice System Attitudes. In addition, criminal justice system attitudes varied by racial group (Wald's $F(2, 450) = 40.25$, $p < .001$), such that Black-White multiracial participants were significantly more likely to believe the criminal justice system is unfair than White participants ($b = 1.18$, $se = .23$, $t = 5.07$, $p < .001$), but marginally less likely to endorse this attitude than Black participants ($b = -.37$, $se = .21$, $t = 1.77$, $p = .077$).[31]

Collective Action. Finally, an independent samples t-test was conducted to compare Black and Black-White multiracial participants' support for engaging in collective action with each other to combat discrimination. Results revealed that Black and Black-White multiracial participants did not significantly differ from each other ($t(301) = -.91$, $p = .364$).

[30] Note unweighted analyses show the difference between Black participants (M = 4.67, SE = .11) and Black-White multiracial participants (M = 4.33, SE = .13) is marginally significant $t = 1.90$, $p = .058$.

[31] Note unweighted analyses show the difference between Black participants ($M = 5.96$, $S.E. = .09$) and Black-White multiracial participants ($M = 5.71$, $S.E. = .12$) is $t = -1.52$, $p = .128$ (see Supplement, Section 2 for analyses without survey weights).

Overall, results indicated that Black-White multiracial participants were more politically aligned with Black than White participants in their support for policies and movements intended to support Black rights. However, Black-White multiracial participants were not in complete alignment with Black participants, in that they were less supportive of affirmative action and BLM (and there was a similar trend for perceiving the criminal justice system as unfair).

Black People's Perceptions of Black-White Multiracial People's Commitments and the Relationship with Inclusion

Next, we examined Black participants' perceptions of Black-White multiracial people's group loyalties and whether such perceptions were related to inclusion of Black-White multiracial people in the ingroup. The average reported score on the perceived loyalty scale for Black participants was $M = 4.31$, $SE = .10$. and the 95% confidence interval was between 4.12 and 4.50. Notably, the 95% confidence interval was above the scale midpoint (4), indicating that on average Black participants perceived that Black-White multiracial people had stronger allegiances to Black compared to White people.

Correlations revealed that among Black participants the relationship between perceived loyalty and warmth was marginally significant, $r(148) = .16$, $p = .078$,[32] such that perceiving that Black-White multiracial people have stronger allegiances to Black people (than White people) is weakly related to increased warmth towards Black-White multiracial people. Among Black participants, perceived loyalty was not significantly related to hypodescent (or categorizing Black-White multiracial people as Black), $r(148) = .12$, $p = .229$.

Taken together, Study 1 results indicate that Black-White multiracial participants have stronger racial group commitments to Black people than White people and are more politically

[32] For correlations p values are derived from a bootstrap procedure (n = 10,000) in which weights define sampling probability (see "Analysis of Complex Survey Samples" by Lumley, 2021).

aligned with Black than White participants. However, Black-White multiracial participants are not in complete alignment with Black participants. Notably, Black participants reported higher levels of solidarity with Black people than Black-White multiracial participants self-reported and reported more support for some policies and social movements intended to promote Black rights (e.g., BLM) than Black-White multiracial participants.

Relatedly, Study 1 results also indicate that Black participants perceive Black-White multiracial people to be more aligned with them than White people. Specifically, Black participants reported that Black-White multiracial people have more loyalty to Black than White people, but this was only weakly to non-significantly related to their inclusion of Black-White multiracial people in the ingroup.

Study 2

In Study 2, we replicate and extend our primary findings from Study 1. We again examine Black-White multiracial participants' group commitments to Black and White people. Specifically, as in Study 1, we assess Black-White multiracial participants' reported solidarity with their racial groups, their group loyalties, and their attitudes on race relevant policies (again, racial solidarity and support for race relevant policies is compared to Black participants' and White participants' self-reports). In Study 2, we expand on the race relevant political attitudes to assess support for additional policies and social movements that are specific to improving social conditions for Black people (e.g., reparations, level of involvement in collective action to fight against anti-Black racism).

In Study 2, we also more thoroughly assess Black participants' perceptions of Black-White multiracial people's group commitments and whether this relates to inclusion. We examine Black participants' perceptions of Black-White multiracial people's solidarity with

Black people and White people, and whether these perceptions relate to categorizing Black-White multiracial people as ingroup members, accepting Black-White multiracial people as ingroup members, and trusting Black-White multiracial people to advocate for Black rights. Moreover, we examine whether Black participants' perceptions of Black-White multiracial people's solidarity with Black or with White people differentially affect inclusion of Black-White multiracial people into the ingroup, and whether perceptions of racial solidarity interact to predict inclusion (e.g., if Black participants' perceptions of multiracial people's solidarity with White people only matters for inclusion when perceived solidarity with Black people is low, but not when it is high): in other words, do Black people accept Black-White multiracial people even if they have bonds with White people, as long as they are committed to Black people?

Method

Participants

We recruited people who identified as Black, Black-White multiracial, and White and as having U.S. nationality on a Prolific prescreening survey. We recruited a total of 465 Black participants, 425 White participants, and 196 Black-White multiracial participants. Participants were excluded from analyses if in our internal survey Black participants did not self-identify as Black only (n = 26), Black-White multiracial participants did not self-identify as being both Black and White (n = 6), and White participants did not self-identify as White (n = 3).[33,34] Participants were also excluded from analyses if they failed or did not complete an attention

[33] For the Black-White multiracial sample, due to Prolific sampling constraints, we retained participants who self-identified as Black, White, and another race (e.g., Black, White, and Native American) n = 48. In the Supplement, Section 7 we present analyses with participants who only self-identify as Black and White. Interpretation of results remains the same.

[34] Participants who reported additional ancestry at the parent level were not excluded from analyses (e.g., a participant could self-identify as Black only, but report having a parent of another race). In the Supplement, Section 8 we present analyses with Black participants that only reported Black ancestry up to the parent level, White participants who only reported White ancestry up to the parent level, and Black-White multiracial participants who only reported Black and White ancestry up to the parent level. Interpretation of results remains the same.

check (n = 24 Black, n = 10 Black-White multiracial, and n = 19 White participants). This left a final sample of n = 416 Black participants (M_{age} = 33.21, SE_{age} = .56; 51% Women, 48% Men, 1% additional gender identities); n = 181 Black-White multiracial participants (M_{age} = 30.34, SE_{age} = .69; 59% Women, 35% Men, 6% additional gender identities); n = 404 White participants (M_{age} = 36.73, SE_{age} = .65; 52% Women, 46% Men, 2% additional gender identities). We aimed to recruit as many Black-White multiracial participants as possible over the course of two weeks and 400 of each of Black and White participants. With our final samples we had 80% power to detect effects between small to medium in size (for a one-sample t-test D = .25, an independent samples t-test D = .25, a paired-t test D = .21, correlation r = .21, and regression coefficient f^2 = .03).

Measures

Group Commitments. As in Study 1, in Study 2 we assessed participants' racial solidarity and loyalties. Refer to Table 3.2 to see the descriptive statistics and measure reliabilities (Cronbach's α) by sample for each measure used. A list of all variables that were part of this omnibus survey in Study 2, including those not relevant to the current paper, is also included in the Supplement, Section 9.

Racial Solidarity. As in Study 1, participants were asked to indicate their solidarity with their respective racial groups (Black-White multiracial participants indicted their solidarity with both Black and White people).

Loyalty. Black-White multiracial participants completed the same three item loyalty scale as in Study 1 to assess which racial group (Black or White) they feel more loyalty towards.

Race-Relevant Political Attitudes. As in Study 1, in Study 2 we assessed participants' support for policies and collective action intended to improve social conditions for Black people.

We assessed some of the same measures as in Study 1 (i.e., support for BLM, criminal justice reform, and affirmative action). Support for additional policies—such as support for reparations and the removal of confederate monuments—were also included as prior polling data suggests these policies have majority support among Black Americans and low support among White Americans (Marist, 2016; Frankovic, 2020). In addition, in Study 2 we assessed participants' engagement with social justice efforts in the last year to support Black rights.

Affirmative Action. Participants completed the same two item scale as in Study 1 to assess their support for affirmative action in schools and companies, however the items were slightly reworded for concision (e.g., "Colleges should be allowed to increase the number of Black students by considering race along with other factors when choosing students.; 1 = *Strongly disagree* to 7 = *Strongly agree*). Higher scores on the scale indicate greater support for affirmative action.

Black Lives Matter (BLM). Participants completed the same three item scale about their support for the Black Lives Matter social movement as in Study 1. However, the reverse coded item was modified to say "The Black Lives Matter movement goes too far in pursuing its goals".

Criminal Justice System Attitudes. Participants completed the same scale about their support for criminal justice reform as in Study 1, except one of the items was removed and thus participants were only presented with three items.[35]

Support for Reparations. Participants completed two items to assess their support for the government and companies paying reparations to the descendants of enslaved African-Americans for the damages done by/since slavery (e.g., "As a way to make up for the harm caused by slavery and other forms of racial discrimination, the United States government should

[35] The item "The criminal justice system does not treat racial minorities fairly" was removed from the criminal justice reform scale in Study 2 because it was similar to "There is NO racial bias in the criminal justice system".

pay reparations (that is, pay money to African-Americans who are descendants of enslaved people)."; 1 = *Strongly disagree* to 7 = Strongly adapted from Marist, 2016).

Removal of Confederate Monuments. Participants completed three items to assess their support for the removal of confederate monuments from public spaces (e.g., "Confederate statues in public spaces should be removed around the country."; 1 = *Strongly disagree* to 7 = *Strongly agree;* adapted from Frankovic, 2020).

Attention to Racial Inequality. Participants indicated their attention to inequality with one item ("Over the past year, I have been paying a lot of attention to racial inequality." 1 = *Strongly disagree* to 7 = *Strongly agree*).

Effort for Black Rights. Participants indicated how much effort they have put into promoting Black rights with one item ("In general, how much effort have you put in over the past year to fight for the rights of Black people?"; 1 = *Not much effort* to 7 = *A great deal of effort*).

Self-Reported Collective Action Behaviors. Participants completed three items where they reported the number of protests they have attended, number of petitions they have signed, and number of times they have contacted their political representatives to advocate for issues that affect Black people (e.g., "Over the past year, how many protests have you attended to fight against anti-Black racism?"; participants could indicate a number from 0 to 10+*).* Responses on items were added together to create a sum score, such that higher scores represent more reported collective action behaviors.

Self-Reported Donations to Black Organizations/Social Movements. Participants were asked if they had donated any money to organizations or causes in the past year, those who indicated they had, were then asked (n = 521) "Over the past year, approximately what

percentage of the donations you made have gone to organizations or causes that promote racial equality for Black people?" and indicated the percentage donated on a slider scale that went from zero to one-hundred percent (participants who indicated they had not donated any money in the past year were also scored as zero).

Perceived Group Commitments. Like Study 1, in Study 2 we assess Black participants' perceptions of Black-White multiracial people's racial group loyalties. We also expand our measures of perceived group commitments to assess Black participants' perceptions of how much solidarity Black-White multiracial people have with Black people and with White people.

Perceived Loyalty. Black participants completed the same perceived loyalty measure as in Study 1 to assess whether they perceive that Black-White multiracial people are more loyal to Black or White people.

Perceived Racial Solidarity. Black participants were asked to indicate how much solidarity they thought Black-White multiracial people had with Black people with a three item scale (e.g., "Black-White multiracial people feel committed to Black people."; 1 = *Strongly disagree* to 7 = *Strongly agree*) and how much solidarity they thought Black-White multiracial people had with White people on a three item scale (e.g., "Black-White multiracial people feel committed to White people."; 1 = *Strongly disagree* to 7 = *Strongly agree*). Higher scores on the scale indicate more perceived solidarity.

Inclusion. Similar to Study 1, in Study 2 among Black participants, we assessed their inclusion of Black-White multiracial people. As in Study 1, we measured Black participants' warmth towards Black-White multiracial people and their categorization of Black-White multiracial people as ingroup members (i.e., hypodescent). In addition, in Study 2 we measured

Black participants' acceptance of Black-White multiracial people as Black and trust of Black-White multiracial people to advocate for Black rights.

Warmth. Black participants completed the same one item warmth measure as in Study 1 to assess their level of warmth towards Black-White multiracial people.

Hypodescent. Black participants completed the three item hypodescent measure from Study 1 to assess whether they categorize Black-White multiracial people as more Black or White. However, the items were slightly modified to remove phrasing about a Black parent and White parent having a kid (e.g., In general, do you consider Black-White multiracial people to be more Black or more White?).

Acceptance as Ingroup Members. Black participants were asked to indicate the extent to which they accept Black-White multiracial people as Black (i.e., ingroup members) with a four item scale (e.g., "I accept Black-White multiracial people as completely Black."; 1 = *Strongly disagree* to 7 = *Strongly agree*). Higher scores on the scale indicate more acceptance of Black-White multiracial people as Black.

Trust to Advocate for Black Rights. Black participants were asked to indicate the extent to which they trust Black-White multiracial people to advocate for racial justice on behalf of Black people with a five item scale (e.g., "I think that Black-White multiracial people are fighting just as much as Black people for racial justice during this time."; 1 = *Strongly disagree* to 7 = *Strongly agree*). Higher scores on the scale indicate greater trust that Black-White multiracial people are advocating for Black rights.

Results and Discussion

As in Study 1, we first examine Black-White multiracial participants' level of group commitment to their parent groups and compare multiracial participants' responses to Black and

White participants' level of commitment to their respective racial groups. Then we compare Black-White multiracial participants' level of support for policies and social movements intended to promote Black rights to Black and White participants' level of support. Lastly, we assess Black participants' perceptions of Black-White multiracial people's racial group commitments and whether these perceptions are related to Black participants' inclusion of Black-White multiracial people in the ingroup (See Table 3.2 for means and standard errors of each outcome by racial group).

Black-White Multiracial People's Group Commitments with Black and White people

Loyalty. A one sample t-test showed that Black-White multiracial participants significantly deviated from the midpoint (4) on loyalty, indicating that on average Black-White multiracial participants reported feeling more loyalty towards Black than White people (M = 4.80, $t\ (180)$ = 11.10, $p < .001$, *95% CI* [4.66, 4.94]).

Racial Solidarity. First, Black-White multiracial participants' level of solidarity with Black people and White people was compared with a paired t-test, which revealed Black-White multiracial participants reported significantly more solidarity with Black than White people (t (180) = -10.26, p < .001). Next, Black-White multiracial and Black participants' level of Black solidarity was compared as well as Black-White multiracial and White participants' level of White solidarity with separate independent samples t-tests. T-tests revealed that Black-White multiracial participants reported significantly less solidarity with Black people than Black participants reported (Welch's $t(344.50) = -6.70$, $p < .001$)[36], but Black-White multiracial and White participants did not significantly differ on their level of solidarity with White people (Welch's $t(394.97) = .42$, $p = .674$).

[36] The Welch's t-test does not assume equal variances between groups and is automatically applied in the R data analysis software for (unweighted) independent samples t-tests.

Replicating Study 1, Study 2 found that Black-White multiracial participants reported more solidarity with and loyalty towards Black people than White people. However, Black-White multiracial participants did not report as much solidarity with Black people as Black participants reported feeling.

Black-White Multiracial People's Political Alignment with Black and White people

Separate, one-way ANOVAs were conducted with planned contrasts to compare Black-White multiracial participants' support for social policies and movements that are intended to improve social conditions for Black people to each of Black and White participants' support (for means and standard errors of each outcome by racial group see Table 3.2).

Affirmative Action. Results revealed that support for affirmative action significantly varied by participant racial group ($F(2, 998) = 34.88$, $p < .001$). Black-White multiracial participants were marginally more supportive of affirmative action than White participants ($t = 1.90$, $p = .057$), but were significantly less supportive of affirmative action compared to Black participants ($t = -4.54$, $p < .001$).

BLM. Support for BLM significantly varied by racial group ($F(2, 997) = 12.99$, $p < .001$), such that Black-White multiracial participants were significantly more supportive of BLM than White participants ($t = 3.15$, $p = .002$) and did not significantly differ in support compared to Black participants ($t = -.70$, $p = .485$).

Criminal Justice. Attitudes towards the criminal justice system significantly varied by racial group ($F(2, 998) = 25.16$, $p < .001$), such that Black-White multiracial participants perceived that the criminal justice system was more racially biased than White participants did ($t = 5.81$, $p < .001$) and did not significantly differ in perceptions of the criminal justice system compared to Black participants ($t = 1.09$, $p = .274$).

Reparations. Support for reparations significantly varied by racial group ($F(2, 998) = 78.35$, $p < .001$), such that Black-White multiracial participants were significantly more supportive of reparations than White participants ($t = 5.23$, $p < .001$), but Black-White multiracial participants were significantly less supportive of reparations compared to Black participants ($t = -4.57$, $p < .001$).

Removal of Confederate Monuments. Support for the removal of confederate monuments significantly varied by racial group ($F(2, 998) = 9.92$, $p < .001$), such that Black-White multiracial participants were significantly more supportive of confederate monument removal than White participants ($t = 3.97$, $p < .001$) and did not significantly differ in support compared to Black participants ($t = 1.29$, $p = .196$).

Attention to Racial Inequality. Amount of attention to racial inequality significantly varied by racial group ($F(2, 998) = 30.75$, $p < .001$), such that Black-White multiracial participants reported significantly more attention to inequality than White participants ($t = 5.38$, $p < .001$) and did not significantly differ in attention compared to Black participants ($t = -.38$, $p = .707$).

Effort for Black Rights. Reported effort to fight for the rights of Black people also significantly varied by racial group ($F(2, 998) = 28.29$, $p < .001$), such that Black-White multiracial participants reported significantly more effort in fighting for Black rights than White participants ($t = 3.58$, $p < .001$), but significantly less effort in fighting for Black rights than Black participants ($t = -2.28$, $p = .023$).

Self-Reported Collective Action Behaviors. The total number of self-reported collective action behaviors to fight against anti-Black racism significantly varied by racial group ($F(2, 997) = 12.99$, $p < .001$), such that Black-White multiracial participants reported engaging in

significantly more collective action efforts than White participants (t = 3.69, p < .001) and did not significantly differ from Black participants (t = .02, p = .981).

Self-Reported Donations to Black Organizations/Social Movements. Self-reported percent donated to Black organizations and social movements also significantly varied by racial group (F(2, 998) = 6.61, p = .001), such that Black-White multiracial participants reported significantly more donations than White participants (t = 2.22, p = .027) and did not significantly differ from Black participants (t = -.54, p = .589).

Like Study 1, Black-White multiracial participants were more politically aligned with Black than White participants. Black-White multiracial participants were more supportive of policies and engaged in greater efforts to promote Black rights than White people. However, Black-White multiracial participants were not in complete alignment with Black participants, in that Black-White multiracial participants compared to Black participants were less supportive of affirmative action, reparations, and reported less effort in fighting for Black rights (unlike Study 1, in Study 2 Black-White multiracial and Black participants did not significantly differ in their support for BLM).

Black People's Perceptions of Black-White Multiracial People's Commitments

Perceived Loyalty. A one sample t-test showed that Black participants' perceptions of Black-White multiracial people's group loyalties significantly deviated from the midpoint (4), indicating that on average Black participants perceived that Black-White multiracial people have more loyalty towards Black than White people (M = 4.39, t(415) = 5.84, p < .001; 95% CI [4.26, 4.52]).

Perceived Racial Solidarity. Black participants' perceptions of Black-White multiracial people's level of solidarity with Black and with White people was compared with a paired t-test,

which revealed Black participants perceived that Black-White multiracial people have significantly more solidarity with Black than White people ($t(414) = 7.16$, $p < .001$). Another paired t-test was conducted to compare Black participants' self-reported solidarity with Black people to their perceptions of how much solidarity Black-White multiracial people had with Black people. This analysis revealed that Black participants self-reported more solidarity with Black people than they thought Black-White multiracial people had with Black people ($t(414) = -11.86$, $p < .001$; See Table 3.2 for means and standard errors of each outcome by racial group).

Results revealed that Black participants perceived that Black-White multiracial people have stronger group commitments to Black than White people (like Black-White multiracial people's self-reported commitments). At the same time, Black participants also self-reported having more solidarity with Black people than they perceived Black-White multiracial people to have, indicating that Black participants did not think Black-White multiracial people are as strongly committed to Black people as they themselves are.

Relationship Between Black People's Perceptions of Black-White Multiracial People's Racial Solidarity and Inclusion

Finally, we examined whether Black participants' perceptions of Black-White multiracial people's racial solidarity was related to their inclusion of Black-White multiracial people into the ingroup and trust of Black-White multiracial people to advocate for Black rights. First, we examined the relationship between both perceived Black and White solidarity and our inclusion outcomes (i.e., acceptance, warmth, trust) through zero order correlations. Then we conducted multiple regressions that regressed inclusion outcomes on perceived Black solidarity, perceived White solidarity, and their interaction.

Zero-order correlations. Zero-order correlations revealed that among Black participants, perceiving that Black-White multiracial people had greater levels of solidarity with Black people was related to hypodescent (or increased likelihood of categorizing Black-White multiracial people as Black, $r = -.18$, $p < .001$), increased warmth towards Black-White multiracial people ($r = .43$, $p < .001$), more acceptance of Black-White multiracial people as Black ($r = .33$, $p < .001$), and increased trust that Black-White multiracial people are fighting for Black rights ($r = .46$, $p < .001$). In addition, zero-order correlations revealed that among Black participants perceiving that Black-White multiracial people had greater levels of solidarity with White people was related to lower levels of hypodescent (or decreased likelihood of categorizing Black-White multiracial people as Black, $r = .30$, $p < .001$). However, Black participants perceiving that Black-White multiracial people had greater levels of solidarity with White people was not significantly related to acceptance of Black-White multiracial people as Black ($r = .01$, $p = .894$) or to trust of Black-White multiracial people to fight for Black rights ($r = -.04$, $p = .425$). Also, unexpectedly, perceptions of Black-White multiracial people's solidarity with White people was related to increased warmth towards Black-White multiracial people ($r = .10$, $p = .037$).[37]

Regressions. Next, among Black participants separate multiple regressions were conducted that regress inclusion outcomes on perceived Black solidarity, perceived White

[37] In Study 2 we focus on perceived solidarity with Black people and with White people as opposed to perceived loyalty because it allows for Black participants to indicate their perceptions of Black-White multiracial people's group commitments to both Black people and White people, separately (whereas perceived loyalty asks Black participants to indicate which group Black-White multiracial people are more loyal to). However, correlations with loyalty show the same pattern, such that, among Black participants, perceiving Black-White multiracial people to be more loyal to Black people is related to categorizing Black-White multiracial people as Black (i.e., hypodescent, $r = -.45$, $p < .001$), increased warmth towards Black-White multiracial people ($r = .27$, $p < .001$), increased acceptance of them as part of the in-group ($r = .22$, $p < .001$), and increased trust of them to fight for Black rights ($r = .37$, $p < .001$). Correlations with loyalty and inclusion outcomes are also in the same direction as in Study 1, but the strength of the relationship is stronger in Study 2.

solidarity, and their interaction (predictors were mean centered). For hypodescent, results revealed that perceptions of Black-White multiracial people's solidarity with Black people was positively related to hypodescent (i.e., increased categorization as Black), whereas perceptions of White solidarity was negatively related to hypodescent, and there was no significant interaction between perceived Black and White solidarity (see Table 3.3).

For warmth, perceptions of Black-White multiracial people's solidarity with Black people was positively related to warmth towards Black-White multiracial people, perceptions of Black-White multiracial people's level of White solidarity was not significantly related to warmth, and there was a marginally significant interaction between perceived Black and White solidarity (See Table 3.4).

The multiple regression analysis for acceptance revealed that perceptions of Black solidarity was a positive, significant predictor of accepting Black-White multiracial people as Black, whereas perceptions of White solidarity was a negative, significant predictor of acceptance. There was also a significant interaction between perceived Black and perceived White solidarity (see Tables 3.5 – 3.7). Simple slopes analyses were conducted to examine the effect of Black solidarity on acceptance at low (1 standard deviation below the mean) and high (1 standard deviation above the mean) levels of White solidarity, and the effect of White solidarity on acceptance at low and high levels of Black solidarity. This revealed that perceived White solidarity only significantly, negatively predicted acceptance when perceived Black solidarity was low (but not when it was high). In other words, among Black participants, perceiving that Black-White multiracial people have solidarity with White people was related to decreased acceptance of Black-White multiracial people as Black, but only if Black participants also perceived that Black-White multiracial people have low levels of solidarity with Black people.

Importantly, when Black participants perceived that multiracial people have high levels of solidarity with Black people, solidarity with White people did not matter in addition.

Furthermore, simple slope analyses indicated that perceived Black solidarity was a stronger predictor of acceptance when perceived White solidarity was high compared to low. Indicating that, among Black participants, perceiving that Black-White multiracial people have solidarity with Black people was particularly important in predicting acceptance of Black-White multiracial people as Black if Black participants also believed that Black-White multiracial people have high levels of solidarity with White people (see Figure 3.1).

Lastly, multiple regression analysis for trust showed that perceptions of Black solidarity positively predicted trust, whereas perceptions of White solidarity negatively predicted trust. In addition, there was a marginally significant interaction between perceived Black and White solidarity (see Table 3.8).

The zero-order correlations and regressions revealed that, among Black participants, perceptions of Black-White multiracial people's solidarity with Black people was positively related to inclusion of Black-White multiracial people in the ingroup, whereas perceptions of White solidarity was negatively related to inclusion. Results also indicated that perceptions of Black solidarity may be a stronger predictor of inclusion than White solidarity (in that the size of the correlation and regression coefficients were substantially larger for Black than White solidarity, except for the hypodescent outcome). Moreover, the interaction of perceived Black and White solidarity on acceptance revealed that when Black participants perceive that Black-White multiracial people have high levels of solidarity with Black people, solidarity with White people does not matter in addition.

Taken together, Study 2 largely replicates the main findings of Study 1 and extends our knowledge of how Black participants' perceptions of Black-White multiracial people's racial solidarity impacts their inclusion of Black-White multiracial people into the ingroup. As in Study 1, Study 2 found that Black-White multiracial participants have stronger racial group commitments to Black people than White people and are more politically aligned with Black than White participants. However, Black-White multiracial participants are not in complete alignment with Black participants, in that they reported less solidarity with Black people than Black participants self-reported and reported less support than Black participants for some social policies intended to support Black rights (e.g., reparations).

Like Study 1, Study 2 also finds that Black participants perceive Black-White multiracial people to have stronger racial group commitments to Black than White people. Extending Study 1, Study 2 further reveals that although Black participants perceive that Black-White multiracial people have more solidarity with Black than White people, Black participants do not perceive that Black-White multiracial people are fully aligned with them. This was evidenced by Black participants' self-reports that they have more solidarity with Black people than they thought Black-White multiracial people had. Furthermore, among Black participants, perceiving that Black-White multiracial people have solidarity with Black people is important for including Black-White multiracial people into the in group, whereas perceptions of solidarity with White people is related to excluding Black-White multiracial people as ingroup member.

Study 3

The primary goal of Study 3 is to experimentally demonstrate that Black participants' perceptions of Black-White multiracial people's solidarity with Black people predicts inclusion of Black-White multiracial people into the ingroup. Therefore, we expose Black participants to

either an experimental manipulation that emphasizes Black-White multiracial people's high level of solidarity with Black people or we provide no information about Black-White multiracial people's racial solidarity (i.e., control). We then assess participants' inclusion of Black-White multiracial people into the ingroup (using the same inclusion measures as Study 2). In other words, in Study 3 we examine whether indicating to Black participants that Black-White multiracial people are highly committed to Black people can increase their inclusion of Black-White multiracial people into the ingroup.

Secondarily, in Study 3, we follow up on the finding (in Study 2) that when Black participants perceive that Black-White multiracial people have high levels of solidarity with Black people, Black-White multiracial people's solidarity with White people does not matter for acceptance of Black-White multiracial people as Black. Thus, in addition to a condition where participants are primed with Black-White multiracial people's high level of Black solidarity alone, we include two other conditions with the same level of high Black solidarity, but also manipulating, multiracial people's level of White solidarity (as either high or low). This allows us to examine whether Black perceivers are concerned about multiracial individuals' commitments to White people, assuming that such individuals are committed to Black people. The hypotheses, method, and analyses for Study 3 were all preregistered.

Method

Participants

We recruited people who identified as Black and as having U.S. nationality on a Prolific prescreening survey. We recruited a total of 1,227 Black participants. Participants were excluded from analyses if in our internal survey, they did not self-identify as Black only (n = 159) or failed an attention check (select the number that is equal to four minus one; n = 35). Participants

assigned to conditions where information about Black-White multiracial people was presented (i.e., all conditions except the control) answered an additional attention check item to ensure they attended to key information in the experimental stimuli (Our survey results indicated that most Black-White multiracial people reported engaging in efforts this past year to fight against anti-Black racism and bring awareness to issues that affect Black people.; *True, False, I don't remember*). We excluded 47 participants for failing this attention check. This left a final sample of N = 995 Black participants (M_{age} = 30.22, SE_{age} = .36; 67% Women, 30% Men, 2% additional gender identities, <1% preferred not to disclose). Our goal was to recruit a total of 1,576 Black participants; however, this was determined as not feasible after data collection was left open for one month (no data were analyzed prior to the completion of data collection). With a sample of 995 participants (distributed across four experimental conditions) we had 80% power to detect an effect size of between small to medium (D = .25) for an independent samples t-test.

Experimental Procedure

After consenting to participate in the study, participants were randomly assigned to one of four conditions where different (factual) information about Black-White multiracial people's group commitments was presented: high Black solidarity, high Black and some White solidarity, high Black and low White solidarity, or control.

In the high Black solidarity condition, participants were presented with information that we obtained from our sample of Black-White multiracial participants in Study 2 that highlighted their high levels of solidarity with Black people, such as that most Black-White multiracial participants surveyed reported feeling solidarity with Black people. We also emphasized that Black-White multiracial people's actions and political activities indicate high levels of solidarity with Black people, such as highlighting that most Black-White multiracial participants surveyed

have engaged in political activities (such as protests) in the last year to fight for the rights of Black people and most also indicated support for the Black Lives Matter movement.

In the high Black and some White solidarity condition we presented the same information in the high Black solidarity condition and we also emphasized that in addition to having high levels of solidarity with Black people, many Black-White multiracial people share a close bond with White people. To support this claim, we shared information from a 2015 survey conducted by the Pew Research Center which found that most Black-White multiracial participants sampled indicated having at least some close friends that are White.

In the high Black and low White solidarity condition we presented the same information in the high Black solidarity condition, but included additional information from our Study 2 sample of Black-White multiracial participants that showed most Black-White multiracial participants surveyed reported having low levels of solidarity with White people.

Finally, in the control condition participants were presented with no information about Black-White multiracial people's group commitments.

All the information presented to participants was based on actual data collected from Black-White multiracial samples (no deception was involved in this study). However, different information was highlighted (or omitted) to manipulate perceptions of Black-White multiracial people's level of solidarity with their respective racial groups. As we aimed to provide both factual and believable information, we did not have conditions that indicated Black-White multiracial people have low levels of Black solidarity or high levels of White solidarity.

After exposure to the experimental stimuli (in all conditions except the control), participants answered an attention check question to ensure they attended to and understood the main takeaways from the manipulation (see above). Following the experimental manipulation,

participants completed measures to assess their level of inclusion and trust of Black-White multiracial people as ingroup members. Participants in the control condition proceeded directly to these measures.

The manipulation was pilot tested (n = 269) and results supported that the conditions influenced perceptions of Black-White multiracial people's Black and White solidarity as intended. Specifically, participants perceived that Black-White multiracial people had more solidarity with Black people in all three conditions that emphasized high Black solidarity relative to the control condition. In addition, participants perceived that Black-White multiracial people had more solidarity with White people in the high Black some White solidarity condition relative to the other three conditions and perceived that Black-White multiracial people had less solidarity with White people in the high Black low White solidarity condition relative to the other three conditions. Refer to the Supplement, Section 10 to see all the experimental stimuli materials and Section 11 for a more detailed description of the pilot test results.

Measures

As in Study 2, the extent to which Black participants include Black-White multiracial people as ingroup members was assessed.

Warmth. Participants completed the same one item warmth measure as in Study 1 and 2 to assess their level of warmth towards Black-White multiracial people (M = 5.86, SE = .04).

Hypodescent. Participants completed the same three item hypodescent measure as in Study 1 and 2 to assess whether they categorize Black-White multiracial people as more Black or White (M = 3.03, SE = .04, α = .91).

Acceptance as Ingroup Members. Participants completed the same four item acceptance measure as in Study 2 to assess whether they accept Black-White multiracial people as Black (M = 5.42, SE = .04, α = .78).

Trust to Advocate for Black Rights. Participants completed the same five item trust measure to assess whether they trust that Black-White multiracial people are advocating for Black rights (M = 5.57, SE = .04, α = .89).

Results and Discussion

We first examine whether presenting participants with information about Black-White multiracial people's solidarity with Black people increases inclusion of Black-White multiracial people into the group by conducting independent-samples t-tests that compare the high Black solidarity to the control condition for each outcome. Next, we assess whether additional information about Black-White multiracial people's solidarity with White people influences inclusion of Black-White multiracial people into the ingroup. Therefore, we conduct independent-samples t-tests that compare the high Black solidarity to the high Black some White solidarity condition for each outcome, and independent-samples t-tests that compare the high Black solidarity to the high Black low White solidarity condition for each outcome (See Figure 2 for means and 95% confidence intervals of the mean by condition for each outcome).

Highlighting Black-White Multiracial People's Solidarity with Black People Leads Black People to be More Inclusive of Black-White Multiracial People

Analyses revealed that participants who were exposed to information that highlighted Black-White multiracial people's high levels of solidarity with Black people compared to those presented with no information about Black-White multiracial people were significantly more likely to categorize Black-White multiracial people as Black (i.e., hypodescent; Welch's

$t(508.20) = 2.56$, $p = .011$), marginally more likely to accept Black-White multiracial people as Black (Welch's $t(505.10) = 1.90$, $p = .058$), and were significantly more likely to trust that Black-White multiracial people are advocating for the rights of Black people (Welch's $t(492.78) = 3.88$, $p < .001$). However, participants in the high Black solidarity and the control condition did not significantly differ on their reported level of warmth towards Black-White multiracial people (Welch's $t(505.32) = -.04$, $p = .967$). Overall, results indicated that emphasizing that Black-White multiracial people have high levels of solidarity with Black people can increase Black participants' inclusion of Black-White multiracial people into the ingroup.

Including Information about Black-White Multiracial People's Solidarity with White People Does Not Change Black People's Inclusion of Black-White Multiracial People

Next, participants in the high Black solidarity and the high Black some White solidarity condition were compared on each of the inclusion outcomes with separate independent samples t-tests. Analyses revealed that participants who were exposed to information that highlighted Black-White multiracial people's high levels of solidarity with Black people compared to participants who were exposed to the same information and additional information that indicated Black-White multiracial have some solidarity with White people did not significantly differ on their categorization (hypodescent) of Black-White multiracial people (Welch's $t(470.59) = -.27$, $p = .789$), acceptance of Black-White multiracial people as Black (Welch's $t(481.24) = .28$, $p = .775$), trust of Black-White multiracial people to fight for Black rights (Welch's $t(465.54) = .89$, $p = .376$), or their warmth towards Black-White multiracial people (Welch's $t(475.18) = -.11$, $p = .916$).

Finally, participants in the high Black solidarity and the high Black low White solidarity condition were compared on each of the inclusion outcomes with separate independent samples

t-tests. Analyses revealed that participants who read information emphasizing Black-White multiracial people's high levels of solidarity with Black people compared to participants who read the same information and additional information that indicated Black-White multiracial people have low levels of solidarity with White people did not significantly differ on their categorization (hypodescent) of Black-White multiracial people (Welch's $t(505.41) = -.09$, $p = .926$), acceptance of Black-White multiracial people as Black (Welch's $t(506.68) = -.11$, $p = .914$), and trust of Black-White multiracial people to fight for Black rights (Welch's $t(505.19) = .17$, $p = .869$). However, participants in the high Black and low White solidarity condition were marginally more likely to report higher levels of warmth toward Black-White multiracial people compared to those in the high Black solidarity only condition (Welch's $t(506.2) = -1.69$, $p = .091$). Taken together, results showed that when Black-White multiracial people are presented as having high solidarity with Black people their additional allegiances (or lack thereof) to White people did not impact Black participants' inclusion of Black-White multiracial people in the ingroup.

Overall, results from Study 3 indicate that Black participants' inclusion of Black-White multiracial people in the ingroup can be increased by highlighting that Black-White multiracial people have high levels of solidarity with Black people, using factual data. Moreover, assuming high levels of Black solidarity, it does not appear that Black perceivers are concerned about multiracial people's associations with White people.

General Discussion

As the Black-White multiracial population continues to be one of the fastest growing populations in the United States (Jones et al., 2021), a complete understanding of the future of U.S. intergroup relations needs to take seriously the nature of alliances between Black-White

multiracial and Black people. The current studies expand our understanding of Black-White multiracial people's racial group allegiances, and Black people's perceptions of those allegiances. Furthermore, it builds on an emerging body of research that examines the importance of solidarity and loyalty perceptions in monoracial-multiracial intraminority intergroup relations.

In Study 1, we examined Black-White multiracial participants' commitments to their parent groups and began to examine Black people's perceptions of Black-White multiracial people's group commitments. Study 1 results indicated that Black-White multiracial participants were more aligned with Black than White people both in terms of their self-reported group commitments and support for race-relevant policy attitudes. However, Black-White multiracial participants were not in complete alignment as they reported lower levels of solidarity with Black people than Black participants self-reported and indicated less support for some social policies intended to promote Black rights (e.g., affirmative action for Black people) than Black participants indicated. Black participants also perceived that Black-White multiracial people have more loyalty to Black than White people, but loyalty perceptions were only weakly related to inclusion of Black-White multiracial people.

Like Study 1, Study 2 also showed that Black-White multiracial participants have stronger group commitments to Black than White people, but again, Black-White multiracial participants reported lower levels of solidarity with Black people and less support for some race relevant policies (e.g., reparations) than Black participants reported. Furthermore, Study 2 more thoroughly assessed Black participants' perceptions of Black-White multiracial people and showed that Black participants perceived that Black-White multiracial people have more solidarity with Black than White people. Still, Black participants reported that they have more

solidarity with Black people than they think Black-White multiracial people do. Moreover, among Black participants perceptions of Black-White multiracial people's solidarity with Black people was positively related to inclusion of Black-White multiracial people into the in group, whereas perceptions of solidarity with White people was negatively related to inclusion.[38] There was also a significant interaction between perceived Black and perceived White solidarity on acceptance of Black-White multiracial people, such that perceptions of Black-White multiracial people's solidarity with White people was only related to decreased acceptance of Black-White multiracial people as Black, if Black participants also perceived that Black-White multiracial people have low levels of solidarity with Black people.

In Study 3 we manipulated Black participants' perceptions of Black-White multiracial people's solidarity with Black and White people to causally demonstrate the importance of perceived solidarity for inclusion. Study 3 revealed that increasing Black participants' perceptions of Black-White multiracial people's solidarity with Black people increased Black participants' inclusion of Black-White multiracial people into the ingroup and trust of them to

[38] It bears noting that although results were generally consistent between Study 1 and Study 2, there were some slight differences between studies. In particular, in Study 1 Black-White multiracial people were significantly less supportive of BLM than Black people (and there was a marginally significant trend in the same direction for criminal justice support). In Study 2, this difference was not significant. In addition, in Study 1 there were only weak relationships between Black people's perceptions of Black-White multiracial people's loyalty and both hypodescent and warmth towards Black-White multiracial people, whereas these relationships were statistically significant and moderate in size in Study 2. One possible reason for these differences is the time at which data collection was conducted. Data collection for Study 1 was conducted in 2018 whereas data collection for Study 2 occurred in 2021—shortly after the increased attention to the BLM movement and racism in policing following the highly publicized police killings of Breonna Taylor and George Floyd. The increased attention on anti-Black racism in policing could have reduced the level of group-based differences in attitudes and support for social movements that directly touch on such issues (support for BLM and perceiving racial bias in the criminal justice system was higher for all three groups in Study 2 compared to Study 1, and especially among Black-White multiracial and White people). Moreover, during times of intense conflict (i.e., advocating for Black racial justice was met with intense pushback) Black people may be particularly concerned with the racial group commitments or alliances of others. In other words, when commitments really matter the relationship between perceived commitments and inclusion may be stronger (i.e., the difference between Study 1 and Study 2 correlations). However, we cannot make any conclusions about differences with certainty as Study 1 and Study 2 employed different samples utilizing different survey vendors.

advocate for Black rights. Moreover, when it is apparent that Black-White multiracial people have high levels of solidarity with Black people, their bonds with White people did not further impact Black participants' inclusion of Black-White multiracial people.

The Black-White multiracial Identity Landscape

Both historically and in the present day, Black-White multiracial people have been categorized and treated as Black, which (among other implications) has contributed to a sense of linked fate and alliances between Black and Black-White multiracial people (Davis, 1991; Ho et al., 2017). At the same time, Black-White multiracial people have a relatively privileged status compared to Black people and have some options in how they choose to racially identify and the racial group(s) they align themselves with (Garay et al., 2022; Khanna & Johnson, 2010). Given this juxtaposition of having shared experiences with Black people but at the same time being in a relatively privileged position, how do Black-White multiracial people racially align themselves?

The emerging body of research on how Black-White multiracial identify with their parent groups has focused on how Black-White multiracial people define themselves and finds that Black-White multiracial people are highly identified with Black people and less identified with White people (Davenport, 2016; Vinluan & Remedios, 2019). However, there has been less examination of Black-White multiracial people's solidarity or commitment to each of Black and White people, despite solidarity's importance for collective action and social change (Leach et al., 2008). Thus, the current studies provide insights into Black-White multiracial people's group commitments by showing that although Black-White multiracial people are more aligned with Black than White people—in line with prior research—they do not stand in complete solidarity with Black people (in terms of their self-reported solidarity and some political attitudes). The current studies provide the most comprehensive picture to date concerning Black-White

multiracial people's racial group commitments, during a critical moment in the ongoing fight for racial justice in the U.S.

Whereas the current studies highlighted Black-White multiracial people's alliances with Black and with White people—given the historical and contemporary importance of these relationships, as highlighted in the introduction—it is important to note that many Black-White multiracial people also identify strongly with their Multiracial identity. Indeed, in Study 1 we found that Black-White multiracial people reported high levels of solidarity with other Multiracial people (M = 5.43, SE = .11, note this is higher than their reported solidarity with Black people M = 4.89, SE = .87). Related research finds that Black-White multiracial people consider other Black-White multiracial individuals as ingroup members and also consider, but to a lesser extent, Black people and part-Black multiracial people (e.g., Black-Asian) as ingroup members (Vinluan & Remedios, 2019). Future research could further explore the sociopolitical implications of identifying strongly with one's multiracial background. For instance, does being highly identified with one's Black-White multiracial background detract from supporting Black rights (e.g., if one is focused on issues affecting multiracial people specifically), or can one's identification with Black-White multiracial people bolster one's commitment to Black rights? To the extent that Black-White multiracial people identify with being Black and with being multiracial, this could be related to advocating for Black rights in unique ways such as using one's relatively privileged status to speak up for Black lives in White spaces (for instance, some of the op-eds that Black-White multiracial authors wrote about their role in the Black Lives Matter movement highlighted that they can use their multiracial identity to speak to their White family members and friends about the importance of supporting Black rights; e.g., Gaither, 2020).On the other hand, multiracial identification could represent feelings of alienation from

one's monoracial parent groups, or attempts to escape marginalization. Just as additional research was needed to understand Black-White multiracial people's solidarity with their monoracial parent groups, more work will be needed to understand their solidarity with other Black-White multiracial people, or with multiracial people more generally.

The Importance of Perceived Group Commitments

In addition to expanding our understanding of Black-White multiracial people's group commitments, we also highlight Black people's perceptions of Black-White multiracial people's racial group commitments, which is also critically important to understanding the state of intergroup alliances between the groups. The small body of research on Black people's perceptions of Black-White multiracial people finds that Black people categorize Black-White multiracial people as ingroup members and as more loyal to Black than White people, again, indicating that relations between Black and Black-White multiracial people are overall positive (Chen et al., 2019; Ho et al., 2017). However, we reveal that this is only part of the picture. While Black people perceive that Black-White multiracial people are more committed to Black than White people, Black people do not perceive that Black-White multiracial people have as much solidarity with Black people as they themselves report having. We also demonstrate that among Black people, perceiving that Black-White multiracial people have high levels of solidarity with Black people results in increased inclusion of Black-White multiracial people into the ingroup and trust of Black-White multiracial people to advocate for Black rights. Thus, we add to the nascent literature documenting the importance of loyalty perceptions for monoracial-multiracial intraminority intergroup relations (Chen et al., 2019; Fine et al., in press), demonstrating more clearly than before that such perceptions may affect the success of coalition-building and collective action between multiracial people and their marginalized parent group.

In the current studies we highlighted that Black people's perceptions of Black-White multiracial people's solidarity with them is malleable and has implications for inclusion. However, Black people's perceptions are not necessarily inaccurate to begin with. In fact, our studies did reveal that Black-White multiracial people are not in full solidarity with Black people (which is also what Black people perceived). Therefore, in practice, strengthening alliances between Black-White multiracial and Black people may require that, on average, Black-White multiracial people demonstrate higher levels of commitment to Black people. If this is a desired goal, future research could leverage research showing that highlighting shared experiences with discrimination can promote positive relations among different racially marginalized groups (e.g., Cortland et al., 2017).

Moreover, in our studies Black participants were asked about their perceptions of Black-White multiracial people *on average,* yet there is a wide range of factors—such as, gender, class, and phenotype—that shape Black-White multiracial people's experiences and racial identification (Davenport, 2016; Parker et al., 2015). While not explored in the current studies, future research could explore if various differences within Black-White multiracial people shape Black people's inclusion and trust of them as ingroup members and interact with perceived group commitments to jointly influence inclusion. For instance, variation in skin tone and phenotype among Black-White multiracial people may play a role in Black people's inclusion and trust of Black-White multiracial people. Specifically, Black people may question if Black-White multiracial people who are perceived to be phenotypically more White (compared to those perceived to be phenotypically more Black) can be counted on as dependable allies in challenging anti-Black racism, as Black-White multiracial people who "look Whiter" may be less affected by anti-Black racism (Parker et al., 2015) and there could be a greater likelihood

that they will be accepted by White people (i.e., pass into the higher status group). Phenotype may also interact with perceptions of Black-White multiracial people's group solidarity, such that solidarity perceptions become especially important for predicting Black people's inclusion and trust of Black-White multiracial people who can physically pass as White, but less so when they cannot.

Alliances between Other Multiracial and Monoracial Groups

Future research would also do well to examine alliances between other multiracial and monoracial groups. Whereas alliances between Black and Black-White multiracial people are overall strong (likely due to a shared history of discrimination in the U.S. and the ongoing practice of hypodescent, Davis, 1991), this may not be the case between other multiracial people and their minoritized parent group. For instance, more Asian-White multiracial people report feeling very accepted by White Americans than Asian Americans (62% report feeling very accepted by White Americans and 47% report feeling very accepted by Asian Americans; Parker et al., 2015), and Asian Americans are more skeptical of Asian-White multiracial people's loyalties than Black people are of Black-White multiracial people (Chen et al., 2019). Therefore, this raises questions about Asian-White multiracial people's group commitments, and Asian monoracial people's acceptance of Asian-White multiracial people.

Similarly, alliances between Native American and Native American-White multiracial people might also be different in nature as most Native American-White multiracial people report having a lot in common with White people (61%) compared to Native American people (22%) (Parker et al., 2015). Therefore, do Native American-White multiracial people demonstrate high levels of solidarity with Native American people, and what do Native American people think about Native American-White multiracial people's group commitments?

Continuing to examine the nature of alliances between various part-White multiracial people and their parent groups is particularly informative for our understanding of the future of intergroup relations[39] because although the White alone population has decreased by 8.6% between 2010 to 2020, those who identify as White in combination with a racially marginalized group saw a 316% increase during that same time period (Jones et al., 2021). If, on average, part-White multiracial people demonstrate a commitment to their racially marginalized parent group (or people of color more generally), they can lend support to social movements intended to challenge the racial hierarchy. If, however, part-White multiracial people choose to align themselves with White people, attempting to avoid racial marginalization, they may inadvertently help to maintain White dominance.

In brief, understanding the nature of multiracial-monoracial intraminority coalitions and ultimately their likelihood of challenging the existing racial hierarchy will require much additional research. The current work attempted to contribute to our understanding of these alliances by providing the most complete picture to date of the Black-White multiracial-Black monoracial sociopolitical alliance—an alliance of great historical and contemporary importance—and adds to emerging research on how loyalty perceptions can affect multiracial-monoracial intraminority intergroup relations.

[39] Future research should also focus on the state of intergroup relation between multiracial people with multiple marginalized identities (e.g., Black-Native American) and their parent groups. Indeed, most of the research on multiracial people has focused on those with part-White ancestry (Garay & Remedios, 2021).

Tables Chapter 3

Table 3.1. Descriptive Statistics by Participant Racial Group in Study 1

	Black		Black-White		White	
	M (SE)	α	M (SE)	α	M (SE)	α
Loyalty	-	-	4.51 (.10)	.85	-	-
Black solidarity	5.62 (.11)	.86	4.66 (.15)	.86	-	-
White solidarity	-	-	3.86 (.15)	.90	3.95 (.13)	.93
Affirmative action	4.64 (.11)	r = .63	4.19 (.17)	r = .65	3.19 (.15)	r = .89
Black Lives Matter	4.91 (.13)	.70	4.21 (.20)	.89	3.10 (.17)	.90
Criminal justice system attitudes	5.91 (.10)	.75	5.55 (.18)	.93	4.37 (.14)	.90
Collective action	4.93 (.09)	.89	4.75 (.17)	.94	-	-
Perceived loyalty	4.31 (.10)	.85	-	-	-	-
Warmth	5.89 (.15)	NA	-	-	-	-
Hypodescent	3.27 (.11)	.91	-	-	-	-

Note. – symbol represents that the measure was not administered to or presented in the main-text for the corresponding sample. When a scale only has two items the correlation coefficient, r, is presented. Alphas and correlation coefficients are weighted.

Table 3.2. Descriptive Statistics by Participant Racial Group in Study 2

	Black		Black-White		White	
	M (SE)	*α*	M (SE)	*α*	M (SE)	*α*
Loyalty	-	-	4.80 (.07)	*.87*	-	-
Black solidarity	5.70 (.07)	*.93*	4.89 (.10)	*.87*	-	-
White solidarity	-	-	3.48 (.10)	*.88*	3.42 (.08)	*.95*
Affirmative action	5.09 (.08)	*r = .88*	4.41 (.12)	*r = .92*	4.12 (.09)	*r = .96*
Black Lives Matter	5.13 (.08)	*.75*	5.03 (.12)	*.84*	4.55 (.09)	*.89*
Criminal justice system attitudes	6.20 (.05)	*.70*	6.32 (.07)	*.85*	5.71 (.07)	*.88*
Support for reparations	5.38 (.09)	*r = .86*	4.61 (.15)	*r = .84*	3.73 (.10)	*r = .85*
Removal of confederate monuments	5.45 (.07)	*.73*	5.63 (.11)	*.84*	5.07 (.09)	*.90*
Attention to racial inequality	5.96 (.06)	NA	5.92 (1.29)	NA	5.28 (.07)	NA
Effort for Black rights	4.01 (.10)	NA	3.64 (.13)	NA	3.06 (.08)	NA

Collective action behaviors	5.03 (.30)	NA	5.04 (.46)	NA	3.16 (.26)	NA
Self-reported donations to Black organizations	23.98 (1.67)	NA	22.44 (2.55),	NA	16.10 (1.42),	NA
Perceived loyalty	4.39 (.07)	*.95*	4.80 (.07)	*.87*	5.04 (.05)	*.93*
Perceived Black solidarity	4.79 (.06)	.92	-	-	-	-
Perceived White solidarity	4.23 (.07)	.93	-	-	-	-
Warmth	5.50 (.06)	NA	-	-	-	-
Hypodescent	3.39 (.06)	*.92*	-	-	-	-
Acceptance as ingroup members	5.26 (.07)	*.85*	-	-	-	-
Trust to advocate for Black rights	5.34 (.06)	*.89*	-	-	-	-

Note. – symbol represents that the measure was not administered to or presented in the main-text for the corresponding sample. When a scale only has two items the correlation coefficient, r, is presented.

Table 3.3. Multiple Regression Analysis with Hypodescent Dependent Variable Regressed on Perceived Black Solidarity, Perceived White Solidarity, and their Interaction in Study 2 among Black Sample

	b(se)	***β***	***t***	***p***
Perceived Black solidarity	-.26 (.05)	-.27	-5.71	< .001
Perceived White solidarity	.31 (.04)	.36	7.38	< .001
Perceived Black solidarity × Perceived White solidarity	.00 (.02)	.01	.18	.854

Table 3.4. Multiple Regression Analysis with Warmth Dependent Variable Regressed on Perceived Black Solidarity, Perceived White Solidarity, and their Interaction in Study 2 among Black Sample

	b(se)	***β***	***t***	***p***
Perceived Black solidarity	.45 (.05)	.42	9.23	< .001
Perceived White solidarity	-.02 (.04)	-.02	-.37	.712
Perceived Black solidarity × Perceived White solidarity	.05 (.03)	.08	1.73	.084

Table 3.5. Multiple Regression Analysis with Acceptance as Ingroup Members Dependent Variable Regressed on Perceived Black Solidarity, Perceived White Solidarity, and their Interaction in Study 2 among Black Sample

	b(se)	***β***	***t***	***p***
Perceived Black solidarity	.40 (.06)	.34	7.25	< .001
Perceived White solidarity	-.10 (.05)	-.10	-2.02	.044
Perceived Black solidarity × Perceived White solidarity	.06 (.03)	.10	1.98	.049

Table 3.6. Simple Slopes Reflecting the Relationship between Perceived White Solidarity and Acceptance as Ingroup Members, at Low (-1SD), Mean, and High (+1SD) Levels of Perceived Black Solidarity in Study 2 among Black Sample

	Low (-1SD) Perceived Black Solidarity		Mean Perceived Black Solidarity		High (+1SD) Perceived Black Solidarity	
	b (se)	t	b (se)	t	b (se)	t
Slope of Perceived White Solidarity	-.17 (.07)	-2.51*	-.10 (.05)	-2.02*	-.03 (.05)	-.59

Note. *p<.05, **p<.01, ***p<.001

Table 3.7. Simple Slopes Reflecting the Relationship between Perceived Black Solidarity and Acceptance as Ingroup Members, at Low (-1SD), Mean, and High (+1SD) Levels of Perceived White Solidarity in Study 2 among Black Sample

	Low (-1SD) Perceived White Solidarity		Mean Perceived White Solidarity		High (+1SD) Perceived White Solidarity	
	b (se)	t	b (se)	t	b (se)	t
Slope of Perceived Black Solidarity	.32 (.07)	4.57***	.40 (.06)	7.25***	.48 (.07)	7.19***

Note. *p<.05, **p<.01, ***p<.001

Table 3.8. Multiple Regression Analysis with Trust to Advocate for Black Rights Dependent Variable Regressed on Perceived Black Solidarity, Perceived White Solidarity, and their Interaction in Study 2 among Black Sample

	b(se)	***β***	***t***	***p***
Perceived Black solidarity	.51 (.05)	.49	11.01	< .001
Perceived White solidarity	-.16 (.04)	-.17	-3.80	<.001
Perceived Black solidarity × Perceived White solidarity	.04 (.02)	.08	1.76	.079

Figures Chapter 3

Figure 3.1. Plot of Perceived Black Solidarity × Perceived White Solidarity interaction with Acceptance of Black-White multiracial People as Black Dependent Variable in Study 2 among Black sample

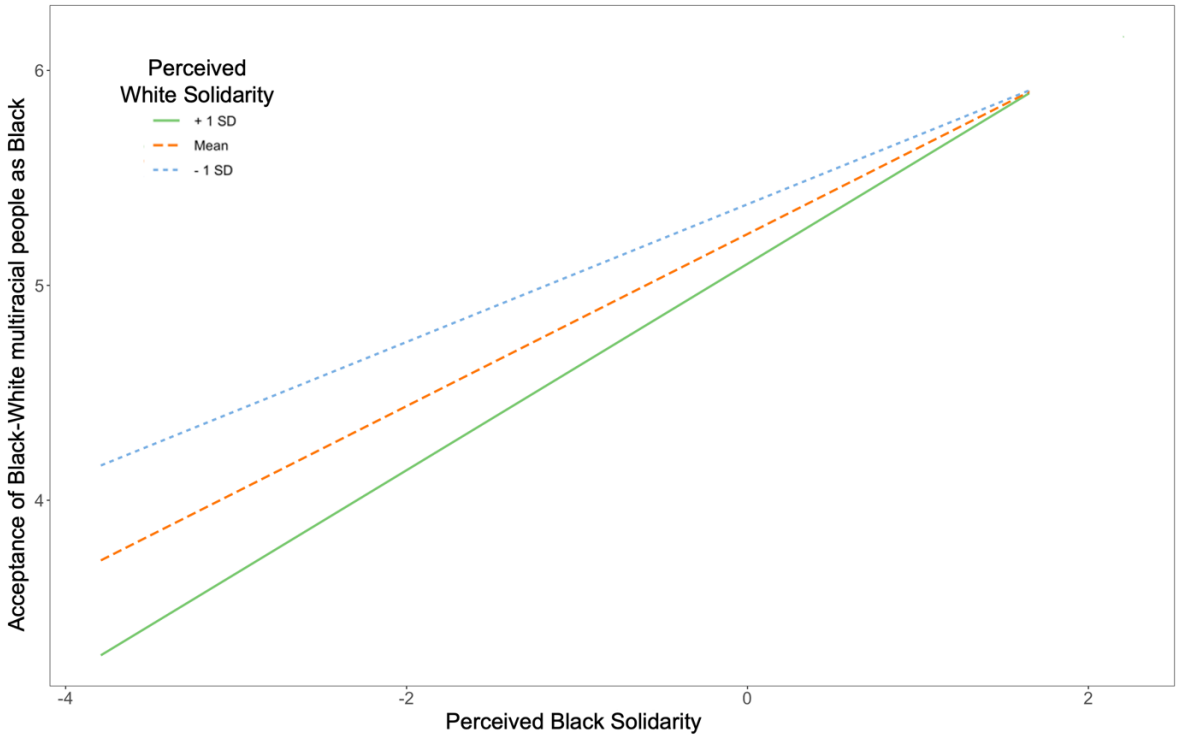
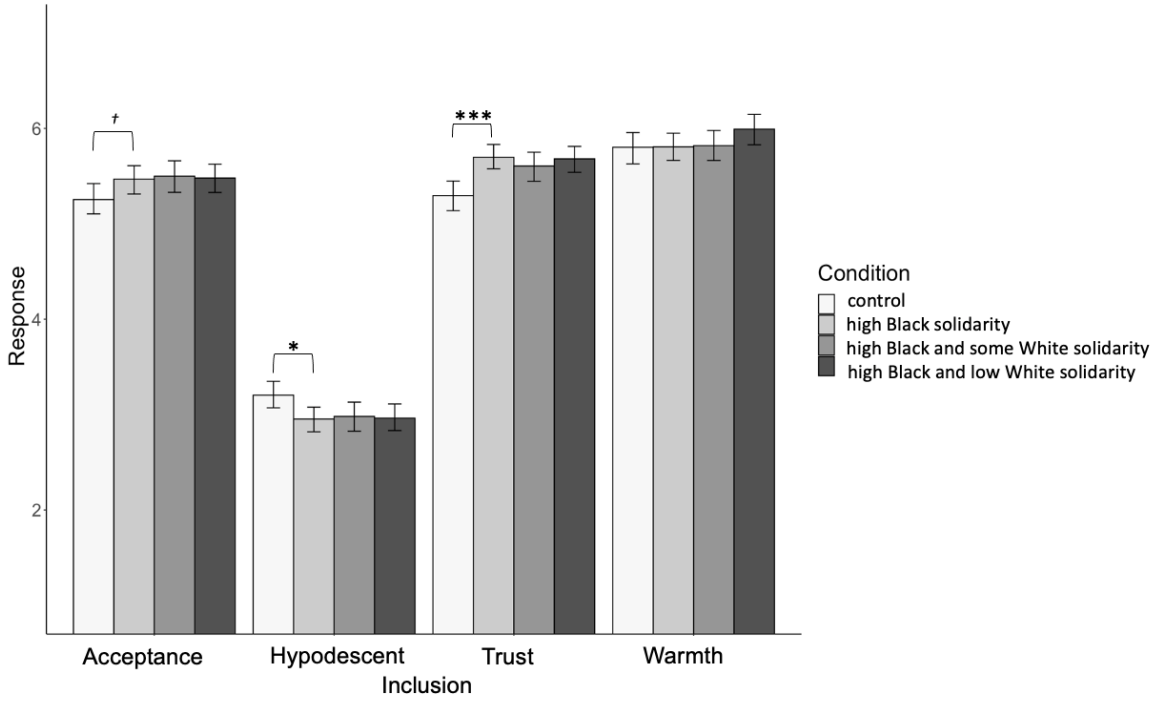


Figure 3.2. Mean and 95% Confidence Intervals of Inclusion Outcomes by Condition



Note. Only significant differences between control relative to the high Black solidarity condition are denoted with $^{\dagger}p<.10$, $*p<.05$, $**p<.01$, $***p<.001$. Error bars represent 95% confidence intervals. For hypodescent higher numbers mean higher likelihood of categorization as White (as opposed to Black).

Chapter 4 Discussion

Across two research projects, this dissertation examined social psychological processes that influence the likelihood and success of collective action across group lines. In the first chapter, I introduced the focus of my dissertation, broadly overviewed social-psychological research on collective action, and discussed the importance of focusing on the psychological processes that promote collective action across group lines. In the second chapter, I showed that egalitarianism motivates support for system-challenging collective action among members of both marginalized and dominant groups, even when doing so comes at a cost to the dominant group's social standing. In the third chapter, I focused on extending our understanding of the state of alliances between Black and Black-White multiracial people. I found that while Black and Black-White multiracial people are mostly in alignment, there is room to increase the strength of their alliances. I also highlighted the importance of Black people's perceptions of Black-White multiracial people's group commitments in maintaining such alliances. In each of these empirical chapters, I have outlined the importance of this research for our understanding of cross-group collective action and coalitions and proposed future research following from each of these research projects. Thus, in this final chapter, I discuss some additional, broader future directions that focus on how psychological processes may combine with contextual factors to impact the success (or failure of) cross-group collective action.

Processes Over Time

Relationship between SDO and Collective Action

The current research projects utilized cross-sectional data to gain insights into the barriers and facilitators to collective action across group lines. For instance, in chapter 1 I demonstrate, cross-sectionally, a relationship between egalitarianism (low SDO) and collective action across group lines, however it remains to be seen whether this relationship would hold longitudinally. Related research has demonstrated longitudinal effects of egalitarianism on support for hierarchy attenuating social policies (Kteily et al., 2017). Thus, extending this previous research, it would be informative to test whether egalitarianism predicts sustained participation, across group lines, in system-challenging collective action behaviors (e.g., long-term organizing/participation in coalitions for racial justice). Not only would this provide causal support for the relationship between egalitarianism and collective action, but would test whether egalitarianism can predict sustained, collective action behavior (as opposed to intentions, and low-investment behaviors such as donations).

Additionally, longitudinal research can examine whether participation in collective actions in turn impacts egalitarianism (and related ideological beliefs, such as system justification). In support of this reverse pathway, it is theorized that participation in collective action should influence one's thoughts about the way society is and ought to be (Freire, 1970; Diemer et al., 2020). Moreover, social dominance theorists have treated SDO as both influencing contexts and being influenced by the context (Sidanius et al., 2017; Zubielevitch et al., 2021; Damburn et al., 2009). Thus, it may be that participating in collective action can increase one's egalitarian values (thus further bolstering one's commitment to collective action) as activist spaces may promote hierarchy attenuating social norms and participating in collective action could make the prevalence of injustices highly apparent.

Strength of Intraminority Alliances

In chapter 2, we also employed cross-sectional data to highlight the current state of alliances between Black and Black-White multiracial people. However, the state of alliances between Black and Black-White multiracial people may change over time depending on the challenges such coalitions face. Indeed, some research with minimal groups suggest that individuals with permeable group boundaries (i.e., increased ability to gain membership into a higher status group) may be inclined to pursue individual mobility strategies, such as distancing from the low-status group, when social change seems unfeasible (Ellemers et al., 1988; Ellemers et al., 1990). This points to the possibility that intraminority multiracial-monoracial coalitions could be tenuous across time in the face of challenges because multiracial people (who have some permeability in group boundaries) may perceive that they have the option to forgo their commitments to the low-status group. Thus, future research should examine how intraminority multiracial-monoracial coalitions unfold over time. For example, if a collective movement between Black and Black-White multiracial people to challenge racial inequality was unsuccessful, would some Black-White multiracial people become disengaged and increase their ties with White people as an attempt to avoid marginalization? How would this in turn impact Black people's trust of Black-White multiracial people's group commitments?

More generally, future research should examine the state of intraminority alliances over time between groups with varying statuses within a group-based hierarchy (e.g., alliances between Black and Asian Americans). Indeed, Bonilla-Silva (2004; Bonilla-Silva & Dietrich, 2009) argues that the U.S. is turning to a tri-racial/pigmentocracy system more in line with the Latin Americas. In this system, there is a clearly defined middle group (e.g., some East Asian Americans, light-skinned Latinos) that is given more social value and opportunities than the low-status group (e.g., Black Americans, darker-skinned Latinos), but less than the high-status group

(e.g., White Americans). It is argued that this middle-group, to gain further access into Whiteness and avoid placement into the low-status group, will generally support the maintenance of the racial hierarchy thus ensuring its stability. If this is the case, we may generally expect intraminority alliances between middle and low-status groups to be quite vulnerable to disintegration if collective action fails, as under such conditions the middle-status group may be particularly interested in gaining further access into Whiteness.

Undermining Collective Action

In addition to examining how cross-group collective action unfolds over time, future research should also illuminate the strategies that those who seek to maintain group-based hierarchies use in an attempt to undermine collective action across group lines. Among those motivated to maintain hierarchy, social dominance theory specifies we should expect to see disproportionate amounts of force used to maintain arbitrary group-based hierarchy when such hierarchies are challenged (Sidanius & Pratto, 1999). However, some social and political theorists have proposed dominant groups who are intending to maintain hierarchy effectively do so by giving concessions to (some) marginalized groups, at times, to prevent bigger upsets to the hierarchy. Doing so is proposed to be more effective than solely ruling through force (which can provoke collective action from opponents; Fanon, 1961; Jackman, 1994; Marx & Engels, 1848). A small body of psychological research also supports the notion that high-status group members are sometimes concerned about upsetting low-status groups and thereby motivating them to engage in collective action, and do engage in appeasement strategies at times. For instance, White people high in SDO are supportive of policies that appear egalitarian (e.g., affirmative action) under conditions where the hierarchy is perceived to be unstable and supporting such policies is believed to restabilize the hierarchy (Chow et al., 2013).

Therefore, those high in SDO may give concessions or a higher status to some marginalized groups in an attempt to undermine cross-group collective action (i.e., engage in appeasement strategies). As mentioned earlier, researchers have theorized that giving certain privileges to "middle-status" groups can be a hierarchy stabilizing force (Bonilla-Silva, 2004). Indeed, in South Africa, during much of apartheid mixed-race people occupied a more clearly defined intermediate position between Black and White South Africans, which prevented alliances between Black and multiracial people for some time during apartheid (Bonilla-Silva, 2004; Clark & Worger, 2013).

In the U.S. context, while the White only population is declining over time, those who identify as White and another race is rapidly increasing (Jones et al., 2021). Thus, White people who seek to maintain racial hierarchy may be increasingly interested in forming alliances with part-White multiracial people and disrupting alliances between part-White multiracial people and their minoritized parent group. To test this possibility, future research should examine if under conditions where alliances between part-White multiracial people and their minoritized parent group has the potential to challenge racial hierarchy: will high SDO White people be inclined to be more inclusive of/ingratiate themselves with part-White multiracial people (compared to conditions of hierarchy stability)? More generally, future research should explore the ways that various racial groups are strategically categorized as having a "middle status" to stabilize racial hierarchies and whether such strategies do have the intended effect of undermining system-challenging coalitions among minoritized groups. This research could further illuminate the ways that racial categorization (inclusion versus exclusion) continues to be a tool to maintain and stabilize racial hierarchy.

How Social Institutions Impact Collective Action

Lastly, future research should also consider how social systems impact collective action to gain a better understanding of the contexts in which collective action is most likely to flourish versus languish (Bou Zeineddine & Leach, 2021; Thomas et al., 2022). Relatedly, such research could uncover the systemic mechanisms that tend to stabilize hierarchy (Sidanius et al., 2017). One such social institution is likely our educational institutions, which could shape people's propensity for collective action. Currently, the predominant approach to education in the United States is to ignore the experiences of minoritized communities and to minimize any discussion regarding systemic forms of discrimination (Pinedo et al., 2021). Moreover, any approaches to education that center the experiences of minoritized communities or seek to shed light on the ways systemic forms of discrimination shape the state of affairs in the United States is (and historically has been) met with resistance and is often suppressed (Cammarota, 2016; Givens, 2021).

However, critical approaches to education[40] are theorized to promote system-challenging collective action (Diemer et al., 2021). Similarly, educational curricula that highlight systemic forms of discrimination are related to support for policies intended to reduce racial inequality (Salter & Adams, 2016), and educational institutions that highlight egalitarian social norms are related to increased intentions to speak out against racism (Bennett & Sekaquaptewa, 2014). Thus, future research would do well to examine the ways education promotes/dissuades system-challenging collective action across group lines. For instance, if students of color are exposed to critical analyses of history (e.g., ethnic studies) that highlight the interconnected ways different racial groups are marginalized within the U.S., will they be more likely to organize and participate in intraminority collective movements (compared to students who take traditional

[40] Meaning, educational approaches that center the experiences and knowledge of marginalized groups and discuss the social systems that contribute to their marginalization (Freire, 1970).

history classes; see also Cortland et al., 2017)? Furthermore, future research should consider how individual differences and group-status interact with institutional messaging. Will students of color, compared to White students, or students high in egalitarian beliefs, compared to anti-egalitarian students, be more motivated to participate in system-challenging collective action in response to receiving critical forms of education?

In sum, the current dissertation attempted to examine psychological processes that shape system-challenging collective action across group lines by highlighting the role of ideology and perceived group commitments. Thus, this research moves away from the focus on social identity promoting collective action on behalf of one's ingroup. Nonetheless, much future research is needed to further unpack the processes that promote and disrupt system-challenging collective action across group lines. Such research may contribute to our understanding of whether cross-group collective action has the potential to disrupt group-based hierarchies, or if cross-group coalitions are too fragile or susceptible to manipulation by dominant group members to produce lasting change.

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