Beliefs about What Disadvantaged Groups Would Do with Power Shape Advantaged Groups' (Un)Willingness to Relinquish it

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META-DOMINANCE: BELIEFS ABOUT AN OUTGROUP'S INTENTIONS FOR POWER

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Abstract

Dominant groups often resist possible changes to the hierarchical status quo. Might such tendencies be partly rooted in negative—yet potentially malleable—meta-beliefs about how disempowered groups would *use* power if they gained control? We investigate these questions across eight studies (Total $N = 7,460$ analyzed responses) in the context of Black-White relations in the United States. Specifically, we examine White Americans' meta-beliefs about whether Black Americans desire power to structure society into a hierarchy in which they are dominant versus to institute equality for all groups (i.e., *meta-dominance beliefs*). Across 6 cross-sectional studies ($N = 3,383$), we developed and validated a measure of meta-dominance, and found that White Americans varied substantially in their beliefs about how Black Americans would use power. Critically, Whites' meta-dominance beliefs were uniquely related to their opposition to policies empowering Black Americans as well as their support for efforts to maintain Whites' position atop the social hierarchy, even when controlling for a range of relevant constructs. In two pre-registered experiments among White Americans ($N = 4,077$), one of which was a registered report, we tested two possible causal pathways that might explain this relation: (1) "Meta-Dominance Beliefs → Opposition to Black Empowerment" and (2) "Opposition to Black Empowerment → Meta-Dominance Beliefs". We found evidence in support of the "Meta-Dominance Beliefs → Opposition to Black Empowerment" pathway, but not for the latter Opposition to Black Empowerment → Meta-Dominance Beliefs" pathway. We discuss our findings' implications for theories of hierarchy-maintenance.

Race has long been a defining issue in American politics, but it has been particularly dominant in recent discourse, spurred on the one hand by social movements responding to salient examples of police brutality inflicted on Black communities, and on the other by backlash from groups threatened by increasing calls for racial equality. One such movement, the Black Lives Matter (BLM) movement, has gained substantial prominence for speaking out strongly in support of Black empowerment (Carney, 2016; Freelon, et al., 2018; Tillery, 2019; BBC, November 2020). But while many White Americans showed a spike in support for BLM after the murder of George Floyd and the mass protests that followed, many others remained consistently steadfast in their opposition (Ince, et al., 2017; Ilchi & Frank, 2021; Tillery, 2019); indeed, on average, support for BLM has receded substantially since its 2020 peak (Bellamy, 2021; Rahman, 2022). White Americans have posed a variety of objections to BLM and similar movements focused on empowering groups at the bottom of the social hierarchy, ranging from the view that focusing on race is unnecessarily divisive (Brewster, 2021; Kaplan & Owings, 2021) to the view that White Americans are the real targets of discrimination in America today (Solomon & Martin, 2019).

What causes some members of dominant groups to resist disempowered groups' struggle to improve their standing in society? Researchers have uncovered a range of social psychological processes that promote resistance to giving up power among dominant group members, including the adoption of rhetoric centering myths of racial progress (DeBell, 2017; Eibach & Keegan, 2006; Finley et al., 2020; Kraus et al., 2019; Onyeador et al., 2020; Richeson, 2020), appeals to color blindness (Bonilla-Silva, 2015; Knowles et al., 2009; Robertson, 2015), and claims of competitive victimhood (Noor et al., 2012; Saguy et al., 2013; Sullivan et al., 2012).

Yet one theme among White detractors of BLM and associated movements captures a psychology that has received little research attention—the belief that Black Americans want power not in service of social equality at all, but rather so that they can dominate other groups. One White X (formerly Twitter) user posted "When I look at BLM all I see is Black Supremacy!" (@MelodyRhodesian, Jan 9, 2021), while another described "…what I felt [Black woman] wanted was for our roles to be reversed. For black people to be in charge of white people. And for white people to surrender all our riches entirely. In short. for our roles to reverse. Classic: the oppressed become the oppressors" (@kikiorg, Aug 14th, 2021). In line with this logic, another X user argued that White Americans ought not to cede power without verifying that Black people are 'actually' committed to equality: "Until we know black people want equality and not just to take over, [things are] probably not going to change much" (@mentalgurl49, Oct 31, 2021). On the other side of the ledger, some White people dispute the view that BLM is motivated by a desire for dominance: one White X user wrote, "We (white people) have broken the contract over & over & over again. And we are lucky (undeservedly) that black people want equality and not revenge" (@MarryEdge, Oct, 29, 2020).

Dominant groups across intergroup conflicts have a long history of invoking concerns about what disempowered groups might do with power. Former Prime Minister of South Africa, Jan Strydom suggested that Black South Africans would dominate White South Africans if the latter lifted their oppressive apartheid regime: "Either the white man dominates or the black man takes over" (1956). Several years later, Strydom's successor F.W. De Klerk noted: "White domination, insofar as it still exists, must go…but domination by a majority is as unacceptable as domination by a minority". In Israel, anti-Palestinian rhetoric has drawn on similar appeals: as an

X user put it, "Palestine seeks dominance, not equality. It [Palestinian desire for dominance] will not end until the world does" (@jonmaag, Mar 21, 2013).

Here, we empirically investigate this psychology in the context of Black-White race relations in the U.S. Specifically, we examine what we term *meta-dominance beliefs*: a particular type of meta-perception capturing what individuals believe about a disempowered outgroup's *intentions for power*. Dominant group members high in meta-dominance beliefs believe that disempowered groups seek power not because they are committed to equality, but because they desire to restructure society into a new hierarchy in which their group is dominant. In contrast, dominant group members low in meta-dominance beliefs believe that disempowered groups seek power not because of a vested interest to dominate others, but rather, because they are committed to dismantling hierarchy and instituting a system of equality for all.

We propose that these meta-perceptions matter—that meta-dominance beliefs are a unique and under-appreciated factor closely tied to whether dominant group members support empowering members of disempowered groups or whether they instead orient their efforts towards maintaining their own power and privilege. To study this phenomenon, we develop a measure of meta-dominance beliefs, and use it to investigate the prevalence, correlates, and distinctiveness of such beliefs among White Americans. Controlling for a variety of related constructs, we examine the distinct association between meta-dominance and opposition to the empowerment of Black Americans. Lastly, we consider the causal nature of this relationship, exploring two possible causal pathways. Specifically, we test whether (1) meta-dominance beliefs among White Americans' precede their opposition to Black empowerment, with opposition to empowerment reflecting a defensive response aimed at preventing the

disempowered outgroup from dominating; and/or, (2) whether White Americans develop and express meta-dominance beliefs as a way to legitimize a pre-existing desire to hold onto power.

In the sections that follow, we consider meta-dominance's nomological network. We first consider the constructs that we theoretically expect meta-dominance to correlate with. We then consider questions of distinctiveness from conceptually related but different constructs. And finally, we consider theorizing supporting the distinct relationship between meta-dominance and opposition to empowerment.

Meta-Dominance and its Correlates

From American race relations to the Palestine/Israel conflict, there is anecdotal evidence that dominant group members' concerns over the disempowered group's motives for power may go hand-in-hand with their opposition to outgroup empowerment. But we still know little about the psychology of meta-dominance beliefs. Who may be those most likely to hold meta-dominance concerns, and how are meta-dominance concerns different from other negative intergroup attitudes and perceptions known to sustain conflicts over power? We define what meta-dominance beliefs are (and are not) conceptually to set the theoretical groundwork for understanding how meta-dominance beliefs might uniquely relate to dominant group members' willingness to support empowering the dominant group.

There are at least two classes of variables that we might expect to correlate with meta-dominance among dominant group members. First, variables might theoretically be associated with meta-dominance because they are characteristic of the "types" of people most likely to hold meta-dominance perceptions. And second, variables might correlate with meta-dominance because they share conceptual similarity, for example by reflecting associated negative outgroup perceptions and/or perceived threats to the dominant group's status. Showing that both 'classes'

of variables relate to meta-dominance in the way we would predict conceptually helps provide construct validity for the meta-dominance concept.

We consider whether meta-dominance converges with individual difference variables that are associated with dominant group members being more sensitive to potential threats to one's ingroup, which could lead people to fear the worst about disempowered groups' motivations for power. On this basis, we test the relationship between meta-dominance and each of ethnic identification and right-wing authoritarianism, which are both associated with heightened sensitivity to ingroup threats (e.g., Brown et al., 2022; Duckitt & Sibley, 2017; Lisnek et al., 2022; Rasmussen et al., 2022; Riek et al., 2006; van Zomeren et al., 2008;). We also consider individual difference variables specifically associated with concerns over losing power and desires to protect and legitimize the ingroup's privileged position within the current racial hierarchy (e.g., social dominance orientation (SDO), conservatism, zero-sum beliefs, competitive world views; Duckitt et al., 2002; Ho et al., 2015; Esses et al., 1998; Jost et al., 2003; Sidanius et al., 2016). People who are motivated to maintain hierarchy or who are attuned to group competition might be more inclined to see threats in the world around them, which could make them more prone to the perception that another group is seeking to take power and dominate.

Whereas people high in individual difference variables associated with a proneness to threat might come to perceive high levels of meta-dominance as a consequence of their attunement to threats, there are also other reasons why meta-dominance might correlate with these variables. For example, individuals high in the desire to maintain the existing hierarchical social order (i.e., those high in SDO or conservatism) might strategically *claim* that another group would use power to dominate to promote hierarchy-maintenance, even if they did not necessarily believe it (Sidanius et al., 2016).

Lastly, meta-dominance might be associated with individual difference variables like conservatism, group identification and zero-sum perceptions because meta-dominance beliefs themselves heighten levels of these variables. Indeed, research highlights that people sometimes respond defensively to perceived threats (of which meta-dominance could be one example) by shifting their level of identification or their ideological beliefs. For example, perceived terrorist threat has been shown to increase ingroup identification and right-wing authoritarianism (Fritsche et al., 2011), and perceived threats to White Americans' majority demographic status have been shown to lead to greater support for politically conservative parties and policies (Craig & Richeson, 2014b; Wilkins et al., 2015; 2022).

A second class of variables that we would expect to correlate positively with meta-dominance includes variables that share conceptual overlap with the construct. Meta-dominance involves holding a negative view about how another group would act in the intergroup context. Meta-dominance is therefore a negative intergroup perception, and it might reasonably be expected to overlap with other negative intergroup perceptions like prejudicial or dehumanizing attitudes towards an outgroup (Kteily et al., 2016; Vorauer et al., 2000). It is also specifically a *meta-perception* (a belief about how another group views the intergroup relationship), and we might therefore expect it to be even more related to other negative meta-perceptions (like the belief that an outgroup resents the ingroup; Moore-Berg et al., 2020; Vorauer, et al., 2000). It is thus sensible to assume that meta-dominance will be related to other negative intergroup perceptions and meta-perceptions. And whereas there is little theoretical reason to imagine that meta-dominance will be *redundant with* broader individual difference variables like group identification or SDO, this is a more significant concern for variables like intergroup prejudice or meta-prejudice. Thus, we focus below less on establishing why meta-dominance should (as we

expect) positively correlate with these variables but rather on theoretical reasons to expect meta-dominance to nevertheless be *distinct* from them.

Meta-Dominance: Divergence from Other Relevant Constructs

In introducing the meta-dominance construct, it is important to consider (and empirically verify) what meta-dominance is *not*. To begin with, to seek discriminant validity for our construct, we consider individual difference variables that we would *not* expect meta-dominance to strongly or reliably correlate with (i.e., variables for which we expect correlations with meta-dominance < 0.20, typically regarded as a small yet meaningful correlation; Schober et al., 2018). For example, research shows low or non-existent correlations between individual difference variables like SDO and RWA on the one hand and personality constructs like neuroticism and extraversion on the other (correlations with agreeableness and openness are somewhat higher; Kteily & Brandt, 2024; Sibley & Duckitt, 2008). Along similar lines, we expect to find absent or modest correlations between meta-dominance and the Big Five personality inventory.

Despite expecting them to correspond much more closely with meta-dominance than the Big Five, we also conceptualize meta-dominance as being distinct from other negative intergroup meta-perceptions that focus specifically on the relationship between the ingroup and outgroup. This includes the belief that the disempowered outgroup dislikes the ingroup (i.e., meta-prejudice; Kteily, et al., 2016; Moore-Berg et al., 2020; Vorauer, et al., 2000; Waytz, et al., 2014). Indeed, unlike meta-prejudice, meta-dominance captures a broad belief about how the disempowered group would seek to structure society as a whole, with implications that transcend beliefs about the outgroup's feelings towards the ingroup and instead refers to all groups in the

hierarchy. In contrast to meta-dominance, meta-prejudice does not refer in any way to the broader social structure.

We also draw distinctions between meta-dominance and meta-beliefs concerning the outgroup's behavioral intention to show ingroup favoritism (Beck & Landau, 2011; Goldman, 2017, 2018). For example, Goldman (2017) and Beck and Landau (2011) present evidence that White Americans' support for Black politicians was lower to the extent that White Americans believed Black Americans would show ingroup favoritism to the Black community (i.e., meta-favoritism beliefs), a similar pattern to that affecting perception of female elected officials in the case of gender favoritism (Goodman, 2018). Meta-dominance beliefs should correlate with meta-favoritism since part of dominating within society involves reaping benefits for one's own group at the cost of other groups. But meta-dominance goes beyond beliefs about the outgroup's tendency to look out for its own interests by focusing explicitly on beliefs about how the disempowered outgroup would seek to *structure* their society as a whole, including how they would treat third party groups in the societal system. Moreover, there is an important difference between simply preferring or favoring one's group and seeking to use power to dominate or oppress others.

We take a similar approach with other variables that we consider related to but distinct from meta-dominance, including negative outgroup attitudes and fears regarding loss of power and changes to the social hierarchy. Because meta-perceptions of any kind are distinct from people's *own* attitudes towards the outgroup (Kteily et al., 2016; Vorauer et al., 2000), we can distinguish meta-dominance beliefs from people's negative attitudes towards Black Americans (i.e., anti-Black prejudice; anti-Black dehumanization). Indeed, individuals are driven to act towards another group not only by how they feel about that group, but additionally by their

beliefs about how that group sees the ingroup and the intergroup relationship (e.g., Lees &
Cikara, 2021; Moore-Berg et al., 2020). Thus, while perceiving that a disempowered group seeks
to dominate one's ingroup and other groups is likely positively associated with feeling more
negative attitudes towards that disempowered group, we maintain that meta-dominance and
negative outgroup attitudes are theoretically differentiable processes which should each uniquely
relate to whether individuals support empowering the outgroup.

Finally, we draw distinctions between people's meta-beliefs about what the
disempowered outgroup would do if they got power in society (meta-dominance) and their fears
that the current racial hierarchy is (un)stable and their group is at risk of losing out (Hodson et
al., 2022). There are good reasons to assume that these two constructs may be related in certain
important ways: for one, the question of what disempowered groups would want to do with
power should matter the most to dominant group members when the system seems unstable and
it appears most likely that the disempowered group will gain power. Moreover, it is particularly
in unstable contexts where they fear losing power, that dominant groups might be most
incentivized to strategically employ claims about a disempowered group's malign intentions for
dominance to forestall outgroup empowerment (Ho et al., 2015; Sidanius et al., 2016). Still, clear
distinctions can be drawn between meta-dominance beliefs—which focus on the *intentions* of the
disempowered group— and concerns about hierarchy instability—which focuses on the
likelihood of the ingroup and outgroup shifting in their power position. To this end, across our
correlational studies we expected that while meta-dominance would relate to various perceptions
tied to the (in)stability of the power hierarchy such as demographic shifts (e.g., Craig &
Richeson, 2014a, 2014b, 2017, 2018; Major, et al., 2018; Stefaniak & Wohl, 2022; see Craig, et
al., 2018 for review), racial progress (Dover, 2022; Lowery, et al., 2007; Unzueta & Lowery,

2008; see Knowles, et al., 2014 for review), decreases in prejudice towards the disempowered group (Bosson et al., 2012; Kehn & Ruthig, 2013; Norton & Sommers, 2011; Sakong, 2020), and explicit concern about the ingroup losing its power, we did not expect these relations to be fully redundant with meta-dominance. Moreover, we expected the relationship between meta-dominance and opposition versus support for outgroup empowerment to remain robust accounting for these other perceptions.

In validating our measurement of meta-dominance beliefs, we test whether meta-dominance positively and robustly relates to other variables in its nomological network (i.e., construct validity), as we would theoretically expect. But we also seek to ensure that meta-dominance beliefs do not fully overlap with these other constructs, as might be evidenced by overly high correlations (rs >0.75) or redundant factor structures (such that items from both constructs load best onto a unidimensional factor). Thus, across six studies, we investigate correlations and conduct factor analyses both to establish associations with and distinguish meta-dominance from the constructs we discuss above, including SDO, ethnic identification, conservatism, right-wing authoritarianism, zero-sum beliefs, competitive worldviews, meta-prejudice, meta-favoritism, outgroup prejudice, and concerns about hierarchy instability. Another way to establish the importance of meta-dominance is to provide evidence of criterion validity (or incremental predictive utility); that is, to show that it might motivate outcomes we care about beyond other constructs researchers have already pointed to. Thus, across a variety of studies, we also test whether meta-dominance is uniquely related—after accounting for potentially related constructs—to opposition to policies promoting outgroup empowerment (a core set of policy beliefs we expect to be linked to meta-dominance).

Meta-Dominance and Support for Outgroup Empowerment

Above, we proposed that an important reason for introducing the meta-dominance construct is that it might be uniquely associated with an important outcome: namely, dominant group members' willingness to support policies that empower disempowered groups versus policies and actions that maintain the existing hierarchy and their ingroup's dominant place within it. But why might this be the case? And if these two constructs are in fact associated, what is the causal direction of this relationship? We consider theoretical perspectives which support the two possible causal directions in which meta-dominance might relate to dominant group members' opposition (versus support) for outgroup empowerment: (1) that meta-dominance concerns lead to reluctance to support outgroup empowerment and/or (2) that dominant group members' reluctance to cede their power and privilege causes them to invoke meta-dominance concerns as a way to legitimize maintaining the existing hierarchy that favors their group.

The first possible causal pathway— *"Meta-dominance* → *Opposition to Black Empowerment"*— speaks to the idea that dominant group members' reluctance to support empowering the disempowered outgroup is a defensive response stemming from their sincerely held concern that the disempowered group would dominate their group (and other groups) if they had the power to do so. According to this perspective, meta-dominance beliefs should play a unique causal role in dissuading dominant group members from supporting the empowerment of disempowered groups, beyond other relevant factors. Thus, even when accounting for variables like dominant group members' conservative ideology, the negative attitudes they might hold towards the disempowered outgroup, and other potential threats they perceive towards their own power and privilege (Carter, et al., 2019; Craig & Richeson, 2014b; Major, et al., 2018; Wetts & Willer, 2018; Willer, et al., 2016), the belief that the disempowered group seeks dominance (*vs.*

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equality) might further compound dominant group members' opposition to outgroup empowerment. However, just as believing that a disempowered group wants to use power for dominance rather than equality might enhance dominant group members' resistance to empowering them, the reverse should be also true. That is, when dominant group members come to believe that a disempowered group would use power for *equality* (vs. dominance), they might become more likely to support policies that increase the disadvantaged group's power. Moreover, this might even be true among dominant group members otherwise most inclined to protect their privilege and resist social change (e.g., those high in conservative ideology or those highly anxious about losing power).

We also consider a second causal pathway, "*Opposition to Black Empowerment* → *Meta-dominance beliefs.*" This pathway begins from the theoretical assumption that dominant group members are often loathe to relinquish their power and privilege. Indeed, although some dominant group members express support for hierarchy-attenuating policies under certain conditions (e.g., when the hierarchy feels illegitimate; Tyler, 2006), extensive research suggests that dominant group members tend on average to enjoy their privilege and resist change (Blumer, 1958; Ho et al., 2015; Kteily & McClanahan, 2019; see Hodson et al., 2022 for a review). In one illustrative experiment, Scheepers and Ellemers (2005) found members of artificial groups assigned to a dominant position experienced elevated blood pressure at the prospect of having their dominant position reversed (see also Eibach & Keegan, 2006).

As a result of their desire to hold on to power, members of dominant groups may come to employ meta-dominance as a "legitimizing ideology" (Sidanius & Pratto, 1999; Sidanius et al., 2016); that is, they may strategically invoke ideas about the domineering intentions of the disempowered outgroup as a way to rationalize their pre-existing opposition to any policies or

actions that could attenuate the existing hierarchy. That is, the claim that the disempowered group would use power to dominate may *follow* from their desire to hold onto power.

Of course, it is possible that both causal pathways operate at the same time. It could be that changing meta-dominance beliefs has downstream impacts on dominant group members' opposition to hierarchy-attenuating policies and *also* that changing dominant group members' opposition to these policies impacts their meta-dominance beliefs. That said, if it is indeed the case that meta-dominance beliefs merely follow from pre-existing attitudes towards hierarchy-attenuating policies, then attempts to increase dominant group members' support for outgroup empowerment by informing them of an outgroup's genuine desire for equality (rather than domination) may fall flat.

Meta-Dominance: Factor Structure

The main purpose of our work is to introduce the meta-dominance construct, investigate its associations with other relevant intergroup constructs, and determine whether (and how) it might be distinctly associated with supporting the empowerment of disempowered groups. That said, in developing and measuring the meta-dominance construct, we also sought to consider its factor structure. We have defined meta-dominance thus far as the beliefs that an outgroup intends to use power to dominate other groups rather than to create equality between groups. Yet even if the two are closely related, beliefs about an outgroup's desire to use power for dominance might in principle be separable from beliefs about their desire to use power for creating equality (rather than two ends of a single spectrum). For example, individuals might perceive an outgroup as not especially motivated to use power to create equality even as they also perceived them to lack a desire to use power for dominance. Along similar lines, it might be that meta-perceptions about another group's desire for dominance is more determinative of attitudes towards that outgroup

than meta-perceptions about that group's desire for equality. Similar distinctions have been drawn in social dominance theory (SDT; see Sidanius et al., 2016 for review), which recognizes a coherent overarching concept of social dominance orientation (SDO)—individuals' *own* preference for group-based hierarchy—while nevertheless acknowledging subtle differences between people's desire for dominance (SDO-D) versus their opposition to equality (SDO-E); Ho et al., 2015). These distinctions can sometimes be profitable to draw out in the context of specific research questions (e.g., Chow & Knowles, 2016; Kteily et al., 2015).

Paralleling the approach taken by SDT with respect to SDO, we focus in the present research primarily on the overarching concept of meta-dominance (reflecting beliefs regarding the outgroup's intentions to use power for dominance versus equality). However, using factor analysis, we also investigate whether there is support in our data for distinguishing between two substantive sub-dimensions respectively reflecting meta-perceptions about dominance and equality. In our supplemental studies and analyses, we also explore potential differences in their correlates.

Present Research

We tested our hypotheses across three studies and eight samples (and two supplemental studies – See Supplemental Analyses) within the context of relations between White Americans (a dominant group) and Black Americans (a disempowered group).

In studies 1A – 1F (*N*=3, 383) we developed and validated a novel measure with which to assess White Americans' meta-belief that Black Americans are motivated to use power to dominate other groups as opposed to create equality (i.e., meta-dominance). In doing so, we assessed the average levels of meta-dominance beliefs across our six independent samples of White Americans which we collected between the period of 2016 and 2024 in the United States.

Using factor analysis, we explored whether the belief that the disempowered group seeks dominance versus the belief that the disempowered group seeks equality reflects polar ends of the same unidimensional concept or two differentiable sub-concepts. We also validated our meta-dominance scale by testing whether it was significantly correlated with theoretically related concepts (i.e., *construct validity*; e.g., concepts that are either characteristic of the "types" of people most likely to hold meta-dominance perceptions or that share conceptual similarities with the meta-dominance concept); whether meta-dominance was relatively weakly correlated to variables with no clear theoretical link (i.e., *discriminant validity;* Big Five personality traits); and whether meta-dominance uniquely related to variables which may be potential outcomes (i.e., *criterion validity* ; e.g., opposition to policies and actions that promote Black empowerment and support for policies and actions that maintain the existing racial hierarchy and White Americans' dominant position within it).

In Study 2 (*N*=2,080; pre-registered) we began to explore one of the two potential causal pathways between White's meta-dominance beliefs and their support for Black empowerment (i.e., greater meta-dominance → opposition to Black empowerment). Specifically, we experimentally reduced White Americans' meta-dominance levels by providing them with information suggesting that Black Americans actually report strong support for using power to create equality and strong opposition to using power to push for dominance. We tested whether relative to an empty control, reducing White's meta-dominance beliefs could increase White Americans' support for policies empowering Black Americans, and reduce their support for collective action initiatives that protect White American dominance.

Finally, in Study 3 (N = 1,997; a registered report study) we simultaneously tested both possible directions underlying the association between White's meta-dominance beliefs and their

opposition to empowering Black Americans (i.e., *"Meta-Dominance Beliefs → Opposition to Black Empowerment"* and *"Opposition to Black Empowerment → Meta-Dominance Beliefs"*). Testing the first pathway, we sought to replicate Study 2 by testing whether providing information to White Americans that Black Americans strongly favor equality over dominance might increase their support for Black empowerment (relative to those provided with no information). Testing the second pathway, we tested whether experimentally increasing White Americans' support of policies to empower Black Americans (by providing information about how Black empowerment is in fact economically and socially beneficial to White Americans) would reduce their reported belief that Black Americans seek power for dominance versus equality. Given the potential potency of people's pre-existing policy beliefs and intergroup meta-perceptions in shaping their future policy positions and attitudes, we conducted Study 3 in two phases; this allowed us to increase our statistical power to detect experimental effects on our target outcomes at Time 2 by controlling for baseline attitudes assessed one to three weeks prior at Time 1.

All data, analysis scripts, pre-registrations, and study materials are available on the Open Science Framework: https://osf.io/4pcrg/?view_only=59f5fc4312294d1e85f73cc26df6c30f. We did not conduct formal power analyses for Studies 1 and 2, but collected large samples across studies (*Ns* ranging from 278 to 2,080).

Study 1A-Study 1F: Meta-Dominance Scale Development and Cross-Sectional Associations

In Study 1, we collected data from 6 independent samples (*N*= 3,383; Studies 1A through 1F) to develop and validate a measure assessing White American's meta-dominance beliefs—that is, their belief that Black Americans would use power to structure society in a hierarchy that

they dominate versus to create an egalitarian society where all ethnic and racial groups are treated equally.

We addressed four overarching objectives in Study 1: (1) to psychometrically explore the structure of our meta-dominance belief concept (i.e., whether meta-dominance beliefs reflect a unidimensional or bidimensional concept), and to test the distinctness of meta-dominance from conceptually similar constructs via factor analysis; (2) to examine the prevalence and distribution of meta-dominance beliefs among our samples of White Americans; (3) to test for construct validity, discriminant validity, and criterion validity (Crocker & Algina, 1986; Furr & Bacharach, 2008) of our meta-dominance scale; and (4) to test our hypothesis that White American's meta-dominance beliefs concerning Black American's intentions for power would be uniquely associated with their support versus opposition to various measures capturing White American's support of Black empowerment (i.e., constructs reflecting criterion validity), even when controlling for other relevant concepts. We elaborate on and present results pertaining to each of these objectives in turn (please see Table 2 for a summary of all measured constructs across all sub-studies).

Our samples were a mix of convenience samples of White Americans recruited from crowdsourcing platforms including Mechanical Turk ($N_{study1B}$ = 278 ; $N_{study1D}$ =372 ; $N_{study1E}$ = 895) and Prolific ($N_{study1F}$ = 438); a quasi-representative sample of White Americans collected by Qualtrics Panels which approximated the 2010 US census demographics specific to White Americans ($N_{study1C}$ =314) and one sample drawing White Americans from NORC's Amerispeak random probability national sample[1] ($N_{Study1A}$ =1,086). We pre-registered our data collection and

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[1] We used this data in another previously published manuscript (Redacted). We have included a description of this data and sampling approach from our previously published paper: "*NORC uses two-stage probability sampling to construct tracts from about 300 housing groups that broadly represent the broader U.S. regions. The Amerispeak panel attains its representativeness from stratified simple random sampling from this national frame. For Amerispeak*

analysis plan for Study 1E (https://aspredicted.org/blind.php?x=9s48bw)[2] and Study 1F

(https://aspredicted.org/TMT_2LX). Table 1 summarizes details for each sub-sample.

studies that contain custom design features, one may make additional statistical adjustments to improve representativeness, such as using custom survey weights and/or stratification (see the Complex Survey Design section for the additional adjustments we used for this study). Because Amerispeak uses probability sampling, its sampling method allows a stronger claim to representativeness than does quota sampling, a nonprobability sampling method in which people are sampled on the basis of convenience until fixed quotas of specific subgroups are reached (Rivers, 2011). Amerispeak's sampling method also has an inferential advantage (albeit a smaller one) over sample matching, in which the characteristics of people drawn from a large nonprobability sampling frame are matched to the characteristics of a true probability sample; in contrast to these sample matching procedures, no matching is required for an Amerispeak sample to attain representativeness (Rivers, 2011). NORC also has additional procedures to ensure that U.S. groups that are typically suspicious of survey companies (such as conservatives) are adequately represented in Amerispeak (for more details, see Redacted OSF link." (Redacted, pp. Redacted)

[2] In Study 1E, we switched the analysis strategy on the basis of reviewer feedback from the pre-registered SEM path modeling approach to a more straightforward assessment of correlations.

Table 1. Details for all six sub-samples (Studies 1A through 1F) of Study 1

	Sampling Source	Inclusion Criteria	Participants Completed Survey	Participants Passed Inclusion Criteria	Gender and Age
Study 1A (February 2018)	NORC Amerispeak Panel	Identify as White	1348	1086	unweighted: M age = 52.71, SD_{age} =16.40, 50.1% female; weighted: M age = 51.81, SE = .77, 52.4% female
Study 1B (July 2016)	Amazon Mechanical Turk	Born in the United States, identify as White, pass two attention checks (i.e., selecting a specified number requested from question embed in two of our scales)	369	278	M_{age} = 36.27, SD_{age}=12.32; 118 Male, 160 Female
Study 1C (February/March 2017	Qualtrics Panels	Identify as White	314	314	M_{age} = 46.55, SD_{age} =18.03; 50% female
Study 1D (October 2017)	Amazon Mechanical Turk	Born in the United States, identify as White, and pass two attention checks (i.e., selecting a specified number requested from question embed in two of our scales)	403	372	M_{age}=40.20, SD_{age}=13.73; 147 Male, 225 Female
Study 1E (August 2020)	Amazon Mechanical Turk	Born in the United States, identify as White, pass two attention checks (i.e., selecting a specified number requested from question embed in two of our scales), report valid response to an open-ended question (i.e., no copy pasting, blank response, or generic response e.g., "very good")	992	895	M_{age} = 43.83, SD_{age}=13.91; 381 Male, 514 Female
Study 1F (July 2024)	Prolific Academic	Born in the United States, identify as White, pass two attention checks i.e., selecting a specified number requested in a question embed in one of our scales; correctly remembering a piece of information specified in a brief story), report valid response to an open-ended question (i.e., no copy pasting, blank response, or generic response e.g., "very good")	502	438	M_{age} = 43.83, SD_{age}= 12.30, 185 Male, 240 Female, 10 Non-Binary, 2 Transgender, 1 Agender

Table 2. All measures across all sub-studies of Study 1

	Scale Source	Sample Item	Sub-Studies Included	# of Items	Alpha
Meta-Dominance (V1)	Created by researchers	See Table 3 for all items	All studies	5	α_{1A}=.80; α_{1B}=.86; α_{1C}=.77; α_{1D}=.90, α_{1E}=.92, α_{1F}=.92
Meta-Dominance (V2)	Created by researchers	See Table 4 for all items	S1D, S1E, S1F	10	α_{1D}=.95, α_{1E}=.96, α_{1F}=.95
Meta-Dominance (V3)	Created by researchers	See Table 5 for all items	S1E	6	α_{1E}=.95
Construct Validity					
Ethnic Identification	Leach et al., 2008	How strongly do you identify with other members of your ethnic group?	S1B-E	S1B= 4; S1C, S1D, S1E = 3	α_{1B}=.91; α_{1C}=.87; α_{1D}=.94 ; α_{1E}=.90
Social Dominance Orientation	Ho et al., 2015	An ideal society requires some groups to be on top and others to be on the bottom	S1A-S1E	S1A, S1C, S1D, S1E= 8 S1B=16	α_{1A}=.93 ; α_{1B}=.95 ; α_{1C}=.82 ; α_{1D}=.91; α_{1E}=.93
Social Dominance Orientation (Race Specific)	Created by researchers	An ideal society requires White people to be on top and Black people to be on the bottom.	S1F	8	α_{1F}=.90
Zero-Sum Beliefs	Esses et al., 1998	The more good housing and neighborhoods go to Blacks, the fewer good houses and neighborhoods there will be for members of other groups	S1B	3	α_{1B}=.90
Competitive World View	Duckitt et al., 2002	It's a dog-eat-dog world where you have to be ruthless at times	S1E	3	α_{1E}=.74
Authoritarianism	Feldman & Stenner, 1997	Although there are a number of qualities that people feel that children should have, every person thinks that some are more important than others. We will present you with pairs of qualities. For each item pair, please select the quality you think is more important for a child to have: e.g., "independence vs. respect for elders", "obedience v.s., self-reliance"	S1A	4	α_{1A}=.57
Political Conservatism	Created by researchers	How would you describe your political party preference? [1= Strong Democrat ; 7 = Republican]	S1B, S1C, S1E	3	α_{1B}=.89, α_{1C}=.88 α_{1E}=93
Anti-Black Prejudice	Haddock et al., 1993	Feeling thermometer rating scale	S1B, S1D	1	-
Anti-Black Dehumanization	S1A: Kteily et al., 2015; S1B: Bastian et al., 2013	Study 1A: Ascent of (Hu)man slider scale Study 1B: e.g., "savage", "aggressive"	S1A, S1B, S1C	S1A = 1 S1B, S1C= 8	α_{1B}=.93; α_{1C}=.88
Meta-Prejudice	Kteily et al., 2016	Black Americans don't like White Americans very much	S1E	S1E=7	α_{1E}=.94
Meta-Favoritism	Goldman et al., 2017	Black Americans are more likely to support government spending that favors Blacks	S1D, S1E	4	α_{1D}=.87; α_{1E}=.90
Black Racial Progress	Wilkins & Kaiser, 2014	In the last 50-70 years, great progress has been made toward racial equality in the United States	S1C	5	α_{1C}=.67
Perceived Anti-White Discrimination	S1A – author adapted; S1B – Norton & Sommers, 2011	Study 1A: Please rate the extent to which you consider each of the following to be an issue for the United States: Discrimination against White people. Study 1B: Please indicate how much you think Whites are the victims of discrimination in the present day.	S1A, S1B	1	-

Perceived Anti-Black Discrimination	S1A – author adapted; Norton & Sommers, 2011	Study 1A: Please rate the extent to which you consider each of the following to be an issue for the United States: Discrimination against Black people. Study 1B:Please indicate how much you think Blacks are the victims of discrimination in the present day.	S1A, S1B	1	-
Black Population Increase	Craig & Richeson, 2014	To what extent do you expect the population of the following groups (Black) to change between now and 2050 as a percentage of the total U.S. population	S1C	1	-
White Population Increase	Craig & Richeson, 2014	To what extent do you expect the population of the following groups (White) to change between now and 2050 as a percentage of the total U.S. population	S1C	1	-
Anxiety About White Status Loss	Created by Researchers	I believe that White people risking losing out with all the social changes taking place in America	S1F	3	α_{1F}=.90
Divergent Validity					
Extraversion	Gosling et al., 2003	"Extraverted, enthusiastic"; "Reserved, quiet"	S1B, S1C, S1E	2 (Study 1C one item only)	α_{1B}=.79, α_{1E}=.80
Agreeableness	Gosling et al., 2003	"Sympathetic, warm"; "Critical, quarrelsome"	S1B, S1C, S1E	2	α_{1B}=.39, α_{1C}=.26, α_{1E}=.48
Openness	Gosling et al., 2003	"Open to new experiences, complex"; "Conventional, uncreative"	S1B, S1C, S1E	2 (Study 1C one item only)	α_{1B}=.43, α_{1E}=.57
Conscientiousness	Gosling et al., 2003	"Dependable, self-disciplined"; "Disorganized, careless"	S1B, S1C, S1E	2 (Study 1C one item only)	α_{1B}=.66, α_{1E}=.70
Neuroticism	Gosling et al., 2003	"Anxious, easily upset"; "Calm, emotionally stable"	S1B, S1C, S1E	2 (Study 1C one item only)	α_{1B}=.77, α_{1E}=.82
Criterion Validity					
Opposition to (Support for) Black Lives Matter	Created by Researchers	I support the Black Lives Matter movement" (reverse-coded)	S1A, S1C, S1D, S1E, S1F	S1A=2 S1C - S1F = 5	α_{1A}=.79; α_{1C}=.90; α_{1D}=.93, α_{1E}=.95 , α_{1F}=.94
Support for Affirmative Action	Created by Researchers	In general, I support affirmative action for Blacks	S1B, S1C, S1D	3	α_{1B}=.85; α_{1C}=.79; α_{1D}=.87
Support for Reparations	Created by Researchers	I think Black Americans deserve an apology for their historical treatment by Whites	S1B, S1C	3	α_{1B}=.86; α_{1C}=.87
Support Policies to give Black Americans Structural Power	Created by Researchers	I would support increasing the representation of Black judges on courts throughout the country	S1E,S1F	5	α_{1E}=.92 , α_{1F}=.87
Support Policies to give Black Americans Symbolic Power	Created by Researchers	We should put the face of Martin Luther King on the $100 bill	S1E	5	α_{1E}=.91
Complimenting Black Culture	Created by Researchers	Black Americans are very creative	S1E	5	α_{1E}=.93
Support for Removing Confederate Statues	Created by Researchers	I support the removal of confederate statues from public spaces	S1A	1	-
White Americans' Willingness to Give-Up Advantages	Adapted from Unzueta & Lowery, 2008	White Americans should push to ensure that their skin color is no longer an asset in their everyday lives	S1E	4	α_{1E}=.86
Support for Collective Action on Behalf of Whites	Created by Researchers	I think there are good reasons to have organizations that look out for the interests of Whites	All Studies	S1A=3 S1B-S1F = 5	α_{1A}=.87; α_{1B}=.88; α_{1C}=.91; α_{1D}=.92, α_{1E}=.94 , α_{1F}=.92

Conceptualization and Operationalization of Meta-Dominance Beliefs

Our first goal was to empirically test whether meta-dominance beliefs reflect a unidimensional versus two-dimensional concept. Specifically, we explored whether meta-dominance beliefs reflect two sub-facets of dominant group members' beliefs regarding the marginalized outgroup's intentions for power: (1) *dominance* beliefs that the marginalized group (here, Black Americans) would want to use power to restructure society into a new social hierarchy with their group at the top dominating other groups; and (2) *equality* beliefs that the marginalized outgroup would want to use power to create an egalitarian society in which all groups are equal.

Across the six sub-studies of Study 1 we developed and tested three variations of the meta-dominance scale. *Version 1* of the scale (included in Studies 1A-1F) included 3 items tapping into perceived dominance motives and two items tapping into perceived equality motives. However, all items reflecting dominance motives were pro-trait items (i.e., higher scores reflected greater meta-dominance beliefs) while all items reflecting equality motives were con-trait (i.e., lower scores reflected greater meta-dominance beliefs). This made interpretability of factor analysis challenging because it was ambiguous whether a two-factor solution (if obtained) would be due to a conceptual difference between perceptions of the outgroup's dominance and equality motives, or due to method-factors (i.e., driven by distinctions between pro- and con-trait items; Bishop et al., 1978). *Version 2* of the meta-dominance scale (ten items; included in Studies 1D-1F) included all five items of Version 1. However, we added 5 additional items, such that we had an equal number of items that were pro-trait and con-trait, and an equal number of items that assessed perceived dominance motives and equality motives. With Version 2 we more clearly tested whether dominance and equality items reflected separable sub-concepts

while balancing and accounting for method differences. Finally, with a third version of our scale (included in Study 1E; 6 items) we unambiguously tested whether equality and dominance reflected separable concepts by using only pro-trait items to assess equality and dominance beliefs (i.e., in this case different factors could not be driven by imbalanced item valence). For all three versions of the scale, participants rated their agreement to each statement item from 1 "strongly disagree" to 7 "strongly agree".[3]

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[3] We note that when we developed Version 1 of our scale we had initially included a sixth item: "If Black Americans were on top, they would want the groups currently dominating to suffer." However, we dropped this item given concerns from reviewers that rather than clearly reflecting beliefs that the outgroup would seek to create hierarchical versus egalitarian social structures if given power, the item also tapped into concerns about retribution and hostility directed at the ingroup specifically. We note that results of our EFA, CFA, and correlation analyses remain consistent if this item is included. Similarly, when we developed Version 2 of our scale we initially included two additional items: the item we also dropped from version 1 of the scale ("If Black Americans were on top, they would want the groups currently dominating to suffer"), and a similar con-trait item we developed to parallel it: "If Black Americans were on top, they would be compassionate to the groups currently dominating." We dropped these two items given the same reviewer concerns. We note that, here too, results of our EFA, CFA, and correlation analyses remain consistent if these items are included. Finally, when developing Version 3 of the scale we had two additional items initially. However, cross-loadings observed in initial EFA analyses and problematic modification indices from initial CFA analyses suggested dropping these items. These items were likely problematic because of double-negative phrasing in their wording.

Table 3. Version 1 of meta-dominance scale and factor loadings extracted from Exploratory Factor Analysis

Version 1 Items		Study 1A		Study 1B		Study 1C		Study 1D		Study 1E		Study 1F	
		Factor 1 (Var exp. =0.42)	Factor 2 (Var exp. =0.30)	Factor 1 (Var exp. =0.45)	Factor 2 (Var exp. =0.30)	Factor 1 (Var exp. =0.42)	Factor 2 (Var exp. =0.31)	Factor 1 (Var exp. =0.44)	Factor 2 (Var exp. =0.31)	Factor 1 (Var exp. =0.46)	Factor 2 (Var exp. =0.33)	Factor 1 (Var exp. =0.42)	Factor 2 (Var exp. =0.29)
1.	If Black Americans got to the top of the social hierarchy, they would want to keep a greater share of the power for their group at the expense of other groups.	**0.78**	0.04	**0.87**	0.09	**0.91**	0.00	**0.86**	0.02	**0.82**	0.13	**0.82**	0.10
2.	Black Americans are highly motivated to 'turn the tables' on the groups at the top of the social system and enjoy the advantages they've been enjoying.	**0.77**	-0.06	**0.78**	-0.09	**0.72**	-0.18	**0.73**	0.01	**0.81**	-0.03	**0.66**	0.03
3.	If Black Americans got to the top of the social hierarchy, they would want to stay on top and keep other groups down.	**0.94**	0.03	**0.91**	0.04	**0.86**	0.07	**0.87**	0.07	**0.82**	0.15	**0.86**	0.06
4.	If Black Americans got to the top of the social hierarchy, they would put all of their effort towards creating a more egalitarian social system for all groups.	-0.02	**0.86**	-0.02	**0.85**	-.03	**1.08**	-0.03	**0.87**	0.01	**0.85**	-0.03	**0.81**
5.	If Black Americans got to the top of the social hierarchy, they would want to implement a social system where all groups get an equal share of power.	0.04	**0.86**	-0.05	**0.83**	0.16	**0.59**	0.15	**0.81**	0.18	**0.78**	0.18	**0.77**

Note. Number of factors extracted based on parallel analysis with principal axis factor extraction. Item loadings are based on principal axis extraction and Promax rotation. In Study 1A, the two factors were correlated at 0.36. In Study 1B, the two factors were correlated at 0.53. In Study 1C, the two factors were correlated at 0.26. In Study 1D, the two factors were correlated at 0.70. In Study 1E, the two factors were correlated at 0.74. In Study 1F, the two factors were correlated at 0.73. Items 1-3 potentially reflect dominance motives while items 4 and 5 potentially reflect equality motives. "Var exp." is short for "Variance explained."

Table 4. Version 2 of meta-dominance scale and factor loadings extracted from Exploratory Factor Analysis

Version 2 Items	Study 1D		Study 1E		Study 1F	
	Factor 1 (Var exp. 0.39)	Factor 2 (Var exp. =0.36)	Factor 1 (Var exp. =0.39)	Factor 2 (Var exp. =0.36)	Factor 1 (Var exp. =0.37)	Factor 2 (Var exp. =0.35)
1. Black Americans are highly motivated to "turn the tables" on the groups at the top of the social system and enjoy the advantages they've been enjoying.	**0.69**	0.05	**0.80**	-0.02	**0.67**	0.03
2. If Black Americans got to the top of the social hierarchy, they would want to stay on top and keep other groups down.	**0.86**	0.07	**0.83**	0.13	**0.82**	0.10
3. If Black Americans got to the top of the social hierarchy, they would want to keep a greater share of the power for their group at the expense of other groups.	**0.88**	0.00	**0.79**	0.15	**0.87**	0.04
4. If Black Americans got to the top of the social hierarchy, they would put all of their efforts towards keeping society unequal.	**0.73**	0.07	**0.77**	0.06	**0.78**	0.06
5. If Black Americans were on top, they would want to implement a social system where some groups had more power than others.	**0.88**	0.03	**0.78**	0.09	**0.74**	0.13
6. If Black Americans got to the top of the social hierarchy, they would avoid dominating other groups.	0.23	**0.67**	0.14	**0.77**	0.08	**0.83**
7. If Black Americans got to the top of the social hierarchy, they would **not** try to tip the scales in their group's favor at the expense of other groups.	0.25	**0.66**	0.28	**0.51**	0.22	**0.60**
8. If Black Americans were on top, they would treat all groups equally.	0.14	**0.82**	0.18	**0.77**	0.20	**0.78**
9. If Black Americans got to the top of the social hierarchy, they would put all of their effort towards creating a more egalitarian social system for all groups.	-0.13	**0.94**	-0.04	**0.88**	-.04	**0.78**
10. If Black Americans got to the top of the social hierarchy, they would want to implement a social system where all groups get an equal share of power.	0.09	**0.83**	0.09	**0.85**	0.11	**0.82**

Note. Number of factors extracted based on parallel analysis based on principal axis factor extraction. Item loadings based on principal axis extraction and Promax rotation. In Study 1D, the two factors were correlated at 0.76. In Study 1E, the two factors were correlated at 0.79. In Study 1F, the two factors were correlated at 0.78. Items 1, 2, 3, 6, and 7 potentially reflect dominance motives while items 4, 5, 8, 9, and 10 potentially reflect equality motives. "Var exp." is short for "Variance explained."

Table 5. Items of Version 3 of meta-dominance scale and factor loadings as extracted from Exploratory Factor Analysis

Version 3 Items (Study 1E only)	Factor 1
1. If Black Americans got to the top of the social hierarchy, they would want to stay in top position, ahead of other groups.	0.83
2. If Black Americans got to the top of the social hierarchy, they would **not** put all of their effort towards creating a more egalitarian social system for all groups.	0.84
3. If Black Americans got to the top of the social hierarchy, they would **not** want to implement a social system where all groups get an equal share of power.	0.89
4. If Black Americans got to the top of the social hierarchy, they would put all of their efforts towards keeping society **unequal**.	0.85
5. If Black Americans got to the top of the social hierarchy, they would want to implement a social system where their group had more power than other groups.	0.90
6. If Black Americans got to the top of the social hierarchy, they would **not** want to share power equally with their group and all other groups.	0.91

Note. Number of factors extracted based on parallel analysis based on principal axis factor extraction. Item loadings based on principal axis extraction. Only one factor was suggested by parallel analysis. Items 1 and 5 potentially reflect dominance motives while items 2, 3, 4, and 6 potentially reflect equality motives.

Table 6. Summary of CFA analyses exploring factor structure of meta-dominance scale across all three scale versions (Studies 1A-1F)

	Version 1				Version 2				Version 3			
	CFI	SRMR	RMSEA	Chi Square Model Contrast	CFI	SRMR	RMSEA	Chi Square Model Contrast	CFI	SRMR	RMSEA	Chi Square Model Contrast
Study 1A												
One factor model	0.72	0.16	0.38	-	-	-	-	-	-	-	-	-
Two factor model – Dominance and Equality	**1.00**	**0.02**	**0.05**	748.35***	-	-	-	-	-	-	-	-
Study 1B												
One factor model	0.81	0.12	0.35	-	-	-	-	-	-	-	-	-
Two factor model – Dominance and Equality	**0.98**	**0.03**	**0.13**	148.43***	-	-	-	-	-	-	-	-
Study 1C												
One factor model	0.72	0.16	0.36	-	-	-	-	-	-	-	-	-
Two factor model – Dominance and Equality	**0.96**	**0.06**	**0.16**	173.1***	-	-	-	-	-	-	-	-
Study 1D												
One factor model	0.87	0.07	0.29	-	0.88	0.06	0.18	-	-	-	-	-
Two factor model – Dominance and Equality	1.00	0.01	0.00	157.25***	0.88	0.06	0.18	10.78**	-	-	-	-
Two factor model – Pro-trait and Con-trait	-	-	-	-	0.98	0.03	0.08	348.28***	-	-	-	-
Four factor model – Pro-trait, Con-trait, Dominance and Equality	-	-	-	-	**0.990**	**0.055**	**0.021**	49.83***	-	-	-	-
Study 1E												
One factor model	0.92	0.05	0.25	-	0.91	0.05	0.16		0.99	0.01	0.08	-
Two factor model – Dominance and Equality	**1.00**	**0.01**	**0.06**	268.89***	0.92	0.05	0.16	60.42***	**1.00**	**0.01**	**0.06**	20.32***
Two factor model – Pro-trait and Con-trait	-	-	-	-	0.99	0.02	0.06	640.21***	-	-	-	-
Four factor model – Pro-trait, Con-trait, Dominance and Equality	-	-	-	-	**0.995**	**0.041**	**0.017**	77.43***	-	-	-	-
Study 1F												
One factor model	0.929	0.208	0.054	-	0.912	0.151	0.050	-	-	-	-	-
Two factor model – Dominance and Equality	**1.00**	**0.000**	**0.004**	99.039***	0.913	0.152	0.050	6.39*	-	-	-	-
Two factor model – Pro-trait and Con-trait	-	-	-	-	0.99	0.045	0.020	312.81***	-	-	-	-
Four factor model – Pro-trait, Con-trait, Dominance and Equality	-	-	-	-	**0.997**	**0.031**	**0.016**	333.02***	-	-	-	-

Note. Chi-Square model contrasts always compare the focal row and the one preceding it. For version 1 of the scale, the dominance items were all pro-trait while the equality items were all con-trait; thus, although we label this in the table as equality and dominance items, for Version 1 of the scale, the two dimensions can equally be thought of as reflecting pro-trait and con-trait factors. Bolded model fits in a column reflect that for a given version of the scale, that model had the best fit indices.

For all versions of our meta-dominance scale, across all studies, we conducted both data-driven EFA analyses (Tables 3-5) and theory-driven CFA analyses (Table 6) to test the factor structure of the meta-dominance concept and scale.

With respect to Version 1 of the scale (Studies 1A-1F), both data driven exploratory factor analyses (Table 3) and confirmatory factor analyses (Table 6) suggested a two-factor structure of the scale, with the three dominance items loading on a first factor and the two equality items loading on a second factor. These results present the possibility that the broader meta-dominance concept could consist of two distinguishable conceptual sub-components reflecting meta-beliefs about the outgroup's dominance motives and equality motives, separately. However, it is also possible that the two-factor structure may have also been driven by all the dominance items being pro-trait items, and all the equality items being con-trait items (cf. Bishop et al., 1978). It is also worth noting that these two factors were highly correlated (rs > or = .70) in Studies 1D-1F.

With respect to Version 2 of the scale, EFA analyses (See Table 4) suggested a two-factor solution. However, these factors were not *conceptual* factors rooted in the distinction between motives for dominance versus equality, but rather, *method* factors rooted in the distinction between pro-trait versus con-trait item wording. These data-driven results again provide some indication that meta-dominance is a unidimensional concept tapping into beliefs of whether the outgroup is motivated to use power to create a new hierarchical structure in which their group dominates versus to create an egalitarian society for all groups. Moreover, as shown in Table 6, across Study 1D, 1E, and 1F, the two-factor pro-trait versus con-trait model had acceptable CFA fit statistics (CFIs > or = to 0.98; SRMRs < or = to 0.03; and RMSEAs < or = to 0.08), and significantly better fit than a two-factor conceptual model based on dominance vs.

equality (which did not have acceptable fit). That said, we did find some factor analytic evidence

in support of conceptually distinguishing between the dominance and equality items using

Version 2 of the scale when employing a four-factor CFA model. Here, we allowed items to load

both onto the conceptual latent factors of dominance versus equality and the two method factors

reflecting pro-trait versus con-trait items.[4] This model had a significantly better fit than the two-

factor con-trait versus pro-trait model across Studies 1D – 1F (See Table 6 for model

comparisons).

Finally, with respect to Version 3 of the scale—which included *only* pro-trait items and

spanned items capturing each of dominance and equality—EFA analyses suggested a one-factor

model (see Table 5). On the other hand, the CFA results suggested that both a one-factor model

(CFI = 0.99, SRMR = 0.01, RMSEA = 0.08) and a two-factor model (CFI=1.00; SRMR = .01,

RMSEA=0.06) had acceptable fit indices, with the chi-square comparison test suggesting a better

fit of the two-factor model distinguishing dominance from equality ($\Delta\chi^2$ = 20.32, *p* <.001). Thus,

whereas EFA supports a unidimensional solution, CFA provides support for both the

reasonableness of conceptualizing meta-dominance as a single concept with perceived outgroup

intentions for dominance versus equality as two ends of the same scale, while also pointing to the

potential utility of differentiating between dominance and equality focused meta-beliefs.

In sum, taking together the evidence from both our CFAs and EFAs across our six

studies, and three scale versions, we find some evidence of conceptually separable dominance

and equality sub-factors of meta-dominance beliefs (in line with past research on SDO; Ho et al.,

2015). This was clearest when using Version 2 of the scale, in which a 4-factor model containing

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[4] In the model we constrained pathways to be equal for all items within the pro-trait latent factor and separately for all items within the con-trait latent factor. We also set the model such that the latent factors reflecting dominance and equality were orthogonal from the latent factors reflecting pro-trait and con-trait items. The equality and dominance latent factor were set to covary freely (see Eid et al., 2017; Gnambs & Schroeders, 2024).

both conceptual and method factors best fit the data across Studies 1D through 1F; it was also indicated in our CFA results for Version 3.

Still, for all three of our different scale versions, there is also a sensible basis—particularly for researchers invested in parsimony—to support the validity of using a composite score of all scale items to capture the overall meta-dominance belief that the outgroup desires power as a means to create a new hierarchy with their group on top versus to create an egalitarian society for all groups. This is suggested both by the fact that our analyses resulting in two factors may have conflated method and conceptual dimensions, and the fact that both EFA and CFA analyses with V3 of the scale— which avoided the use of con-trait items— supported the validity of a unidimensional solution (even if it had a slightly worse fit than the two-factor conceptual solution). Of note, the approach of forming and analyzing a meta-dominance total score is consistent with research using the SDO scale, which often focuses on a total SDO score despite recognizing subtle distinctions between its SDO-D and SDO-E subcomponents. For the remainder of this paper, we focus on the total meta-dominance score. However, we also report results for the sub-dimensions in supplemental analyses for interested readers (See Supplemental Tables 1 through 7). [5]

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[5] We conducted a supplemental experimental study (See Supplemental Study 2 in Supplemental Analyses; $N = 720$, $M_{age}= 44.98$, SD=13.94; 337 Male, 371 Female, 12 Non-Binary/Bigender) to further investigate whether meta-beliefs about a marginalized group's dominance versus equality motives reflect polar ends of a unidimensional construct versus two conceptually meaningful and separable sub-dimensions. Specifically, we exposed participants to a manipulation similar to that we used in Study 2 and Study 3. We provided participants with a summary of real survey results we obtained suggesting that Black Americans on average agree with items reflecting a commitment to equality and disagree with items reflecting a desire to dominate. Participants were randomly assigned to read results that either (1) only described Black Americans' endorsement of equality motives; (2) only described Black Americans' rejection of dominance motives; (3) describing *both* Black Americans' endorsement of equality motives and rejection of dominance motives; or (4) an empty control in which no information was provided. If items reflecting the equality seeking versus dominance seeking motives of the outgroup reflect two distinct and differentiable concepts, rather than two polar ends of the same unidimensional concept then we would expect that relative to empty control, the manipulation focusing only on equality would have a stronger effect on the equality items of the meta-dominance scale than the manipulation focusing only on dominance. In contrast, we would expect that relative to empty control, the manipulation focusing only on dominance would have a stronger effect on the dominance items of the meta-dominance scale than the manipulation focusing only on equality. More in line with a unidimensional view of meta-dominance, one-way ANOVAs found that all variations of the meta-dominance manipulation significantly reduced (1) perceived meta-dominance, measured as people's total meta-dominance score using Version 2 of our scale ($F (3,716) = 12.14$, $p <0.001$), (2) the dominance sub-dimension ($F (3,716) = 10.99$, $p <0.001$), and (3) the equality sub-dimension ($F (3,716) = 12.75$, $p <0.001$). Moreover, all condition contrasts relative to empty control were significant (p<.001) when assessing people's total meta-dominance score, and when looking at the sub-dimensions. Finally, the 95% confidence intervals of all contrasts across all ways of assessing meta-dominance overlapped with each other, meaning that none of the contrasts differed significantly from each other in magnitude.

Factor analyses to support meta-dominance as a distinct concept

We also used confirmatory factor analysis to ensure that the items we developed to assess meta-dominance perceptions reflected a distinct construct, differentiable from other conceptually related constructs. Specifically, across studies 1A-1F, and the three versions of the scale, we used CFA analyses to test whether we derived a better model fit when the meta-dominance items factored onto a separate factor from items reflecting the potentially overlapping variable in question (versus when we fit a model with all items forced onto the same factor; See Table 7 for results).

Table 7. CFA model comparisons differentiating meta-dominance from other measured concepts

	Meta-Dominance Version 1	Meta-Dominance Version 2	Meta-Dominance Version 3
Study 1A			
SDO items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =2325.50; $\chi^2_{seperatefactors}$ =1347.30; χ^2_{dif}=978.18***	-	-
Study 1B			
SDO items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =1635.10; $\chi^2_{seperatefactors}$ =1092.30; χ^2_{dif}=542.72***	-	-
Zero-Sum Belief Items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =628.07; $\chi^2_{seperatefactors}$ =209.32; χ^2_{dif}=418.74***	-	-
Anti-Black Dehumanization Items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =762.08; $\chi^2_{seperatefactors}$ =1258.50; χ^2_{dif}=496.43***	-	-
Study 1C			
SDO items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =899.82; $\chi^2_{seperatefactors}$ =573.85; χ^2_{dif}=325.97***	-	-
Anti-Black Dehumanization Items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =1395.30; $\chi^2_{seperatefactors}$ =1028.20; χ^2_{dif}=367.09***	-	-
Study 1D			
SDO items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =1158.08; $\chi^2_{seperatefactors}$ =465.72; χ^2_{dif}=692.36***	$\chi^2_{singlefactor}$ =1903.05; $\chi^2_{seperatefactors}$ =837.17; χ^2_{dif}=1065.92***	-
Meta-Favoritism items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =552.49; $\chi^2_{seperatefactors}$ =294.10; χ^2_{dif}=258.39***	$\chi^2_{singlefactor}$ =1009.91; $\chi^2_{seperatefactors}$ =659.66; χ^2_{dif}=350.25***	-
Study 1E			
SDO items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =3105.34; $\chi^2_{seperatefactors}$ =942.68; χ^2_{dif}=2162.70***	$\chi^2_{singlefactor}$ =4610.60; $\chi^2_{seperatefactors}$ =1536.80; χ^2_{dif}=3073.80***	$\chi^2_{singlefactor}$ =3544.64; $\chi^2_{seperatefactors}$ =700.89; χ^2_{dif}=2843.70***
Competitive World View Items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =1232.45; $\chi^2_{seperatefactors}$ =501.25; χ^2_{dif}=731.20***	$\chi^2_{singlefactor}$ =1844.00; $\chi^2_{seperatefactors}$ =1121.30; χ^2_{dif}=722.66***	$\chi^2_{singlefactor}$ =966.84; $\chi^2_{seperatefactors}$ =261.62; χ^2_{dif}=705.22***
Meta Favoritism items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =1409.94; $\chi^2_{seperatefactors}$ =472.35; χ^2_{dif}=937.59***	$\chi^2_{singlefactor}$ =2109.60; $\chi^2_{seperatefactors}$ =1074.30; χ^2_{dif}=1035.30***	$\chi^2_{singlefactor}$ =1247.64; $\chi^2_{seperatefactors}$ =330.02; χ^2_{dif}=917.61***
Meta Prejudice items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =2787.84; $\chi^2_{seperatefactors}$ =698.53; χ^2_{dif}=2089.30***	$\chi^2_{singlefactor}$ =4650.70; $\chi^2_{seperatefactors}$ =1339.50; χ^2_{dif}=3311.20***	$\chi^2_{singlefactor}$ =3611.25; $\chi^2_{seperatefactors}$ =488.56; χ^2_{dif}=3122.70***
Study 1F			
SDO Race Specific Items vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =1361.77; $\chi^2_{seperatefactors}$ =600.94; χ^2_{dif}=760.83***	$\chi^2_{singlefactor}$ =2089.71; $\chi^2_{seperatefactors}$ =968.71; χ^2_{dif}=1120.80***	
Anxiety over Status Loss vs. Meta-Dominance Items	$\chi^2_{singlefactor}$ =2787.84; $\chi^2_{seperatefactors}$ =698.53; χ^2_{dif}=2089.30***	$\chi^2_{singlefactor}$ =410.12; $\chi^2_{seperatefactors}$ =159.86; χ^2_{dif}=250.27***	

Note. Chi square difference statistic reflects the comparison of model fit between two CFA models – a model in which the meta-dominance items and items from the potentially overlapping concept are forced onto a single factor(s) vs. a model in which the meta-dominance items and items from the compared scale are allowed to load on two separate factors. Significant Chi Square tests (which we observed in all cases) indicate superior fit of the forced combination model vs. the model where meta-dominance items were separated from the potentially overlapping variable. *p<.05, **p<.01, ***p<.001

Across all studies and versions of the meta-dominance scale, we found consistent factor analytic support that meta-dominance perceptions are distinct from other conceptually similar constructs, and constructs that might potentially facilitate and/or result from having meta-dominance perceptions. This was true in each possible test for all of the variables tested, namely SDO (Studies 1A-1F), zero-sum perceptions of race relations (1B, 1E), meta-prejudice (1E), meta-favoritism (the perception that Black Americans have a general tendency to prioritize the interests of their ingroup; 1D-E), anti-Black dehumanization (1B-1C), and a measure of White Americans' anxiety about losing their power and status (1F).[6]

Prevalence of White Americans' meta-dominance beliefs concerning Black Americans Intentions for Power

Across all 6 sub-studies and our three variations of the meta-dominance scale, we observed meaningful endorsement among White Americans of the idea that Black Americans would use power to dominate other groups (versus institute equality; see Figure 1 for Raincloud plots (Allen et al., 2021) which show the probability distribution, jittered raw data distribution, and box-plots for meta-dominance across all participants sampled in all studies).

Notably, within each of the six sub-studies, there was heterogeneity among White Americans — in all cases, the mean for the sample was near the midpoint of the scale (4), with relatively symmetric percentages of White Americans falling above and below. Means ranged from 3.55 (SD =1.48) in Study 1F (V2 of scale) to 4.33 (SD = 1.31) in Study 1A (V1 of scale) while skewness also tended to be low across studies ranging from 0.01 in Study 1D (V1 of scale) to .26 in Study 1F (V1 of scale).

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[6] Of note, this was also true when we re-framed the SDO items in Study 1F to be—like the meta-dominance items—specific to Black-White race relations; the same was true when we assessed zero-sum perceptions specifically in terms of Black-White relations in Study 1B.

Figure 1. Distributions of White Americans' meta-dominance beliefs across all cross-sectional studies and versions of the meta-dominance scale.
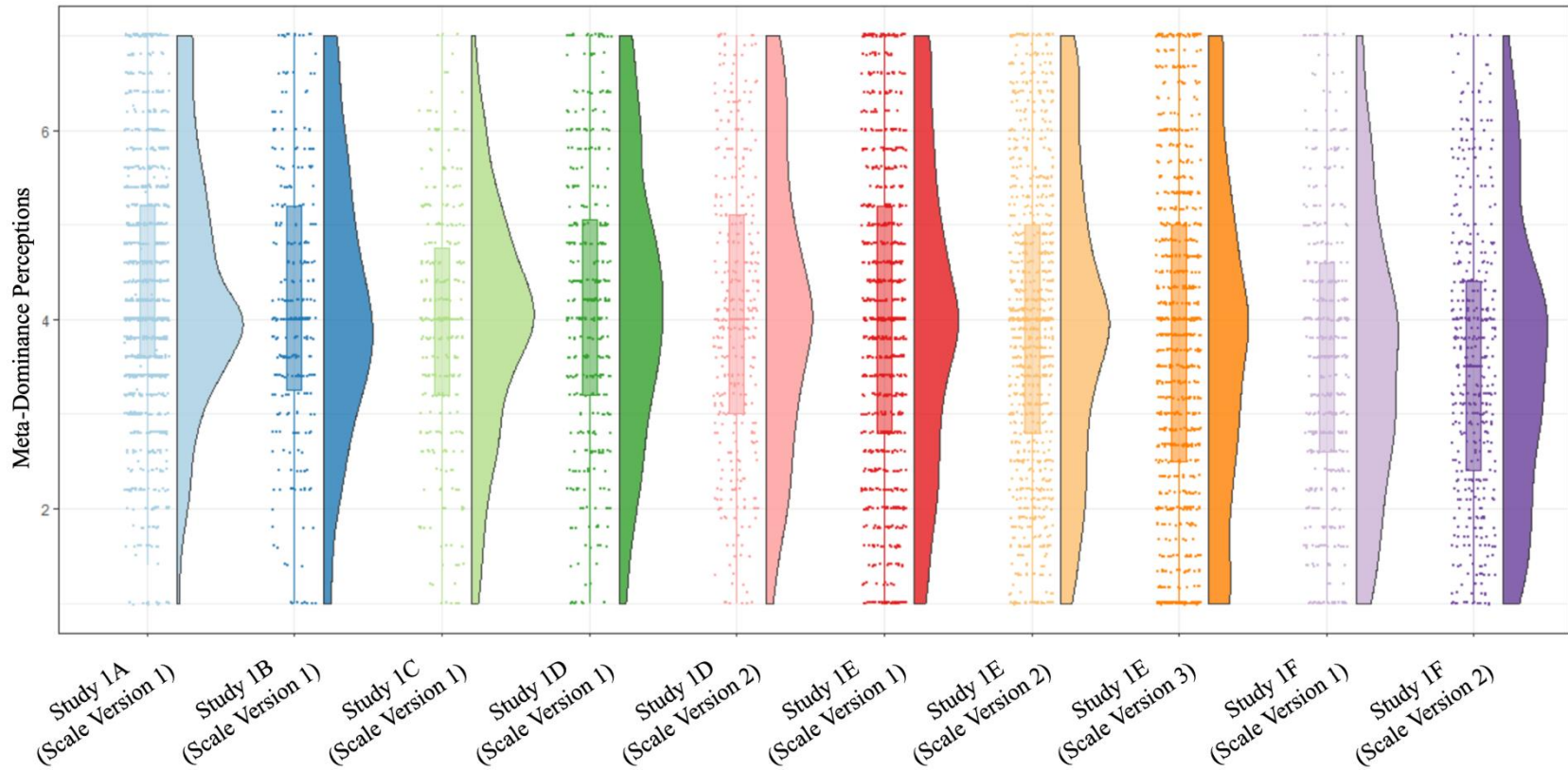
Note. Data distributions plotted using the Raincloud tool in R (Allen et al., 2021). Plots show probability distribution, jittered raw data distribution, and box-plots. Please note that the data for Study 1A are based on the unadjusted sample (i.e., without complex sampling adjustments). The rectangular boxes represent the interquartile range, with the lower end of the rectangle representing the 25th percentile, the middle of the rectangle repressing the median, and the upper end of the rectangle representing the 75th percentile.

Validating the Meta-Dominance Belief Concept

We assessed three types of validity pertaining to our conceptualization and operationalization of meta-dominance: *construct validity*, *discriminant validity* and *criterion validity* (e.g., Crocker & Algina, 1986; Furr & Bacharach, 2008; See Table 8 for detailed results).

Construct validity. Construct validity refers to testing whether the construct of interest relates to other relevant yet distinct concepts in theoretically predictable ways. In this way, tests of construct validity speak to both the validity of the measurement scale itself, but also the underlying theorizing and conceptualization that gave rise to the scale (Nunnally & Bernstein, 1994; Strauss & Smith, 2009).

One way we assessed construct validity was by testing whether meta-dominance positively related to *ethnic identification, social dominance orientation, political conservatism, authoritarianism, zero-sum beliefs, and competitive world views* which as we reviewed, conceptually form part of meta-dominance's nomological network (e.g., by heightening people's sensitivity to threat, or by motivating the dominant group to legitimize reasons to hold onto power). When examining correlations, we expected to consistently see correlations greater than 0.20 – which is typically regarded as a small yet meaningful correlation (Schober et al., 2018). Supporting our predictions, across all studies, and versions of the meta-dominance scale, we found that meta-dominance perceptions were significantly associated with each of these concepts, and surpassed the threshold of 0.20 (*r*s ranging from 0.22 to 0.57; see Table 8).

Another way we probed for construct validity, was to test whether meta-dominance beliefs were positively associated with concepts that have conceptual similarity to meta-dominance beliefs either because they also reflect a negative (meta) perception of the outgroup

(i.e., *meta-favoritism, meta-prejudice, anti-Black prejudice*) or because they also reflect

perceptions that could be threatening White Americans' perceived status and power in America

(i.e., perceived racial progress, perceived demographic shifts, perceived anti-White/Black bias,

and explicit concerns about White Americans losing status due to perceived social change in

America). Supporting our predictions, with the exception of perceived changes in Black/White

population shares, meta-dominance significantly related to each concept in the predicted

direction and above the threshold of $r = 0.20$. Moreover, while many of these associations were

moderate to large, no variables surpassed the 0.75 threshold. Only one variable – meta-

favoritism- came close, ranging in its correlation coefficients from 0.69 to 0.72 (which we found

in our CFA to nevertheless load onto a separate factor; see Table 8). Taken together, these data

support the notion that meta-dominance is not redundant with other conceptually related

concepts.

Table 8. All Zero-Order Correlates of Meta-Dominance (Total Score) by Sub-Study

	S1A-V1	S1B-V1	S1C-V1	S1D-V1	S1D-V2	S1E-V1	S1E-V2	S1E-V3	S1F-V1	S1F-V2
Construct Validity										
Ethnic Identification	-	0.30***	0.20***	0.29***	0.29***	0.28***	0.28***	0.30***	-	-
Social Dominance Orientation	0.46*	0.42***	0.46***	0.52***	0.54***	0.56***	0.58***	0.59***	-	-
Social Dominance Orientation (Race Specific)	-	-	-	-	-	-	-	-	0.54***	0.54***
Zero-Sum Beliefs	-	0.46***	-	-	-	-	-	-	-	-
Competitive World View	-	-	-	-	-	0.43***	0.44***	0.46***	-	-
Right Wing Authoritarianism	0.22*	-	-	-	-	-	-	-	-	-
Political Conservatism	-	0.42***	0.38***	-	-	0.56***	0.57***	0.55***	-	-
Anti-Black Prejudice	-	0.40***	-0.29***	0.42***	0.44***	0.54***	0.55***	0.54***	-	-
Anti-Black Dehumanization	0.31*	0.50***	0.39***	-	-	-	-	-	-	-
Meta-Prejudice	-	-	-	-	-	0.60***	0.61***	0.59***	-	-
Meta-Favoritism	-	-	-	0.71***	0.72***	0.69***	0.70***	0.71***	-	-
Black Racial Progress	-	-	0.28***	-	-	-	-	-	-	-
Perceived Anti-White Discrimination	0.41*	0.37***	-	-	-	-	-	-	-	-
Perceived Anti-Black Discrimination	-0.47*	-0.50***	-	-	-	-	-	-	-	-
Black Population Increase	-	-	0.15**	-	-	-	-	-	-	-
White Population Increase	-	-	-0.04	-	-	-	-	-	-	-
Anxiety About White Status Loss	-	-	-	-	-	-	-	-	0.64***	0.65***
Discriminant Validity										
Extroversion	-	0.01	-0.01	-	-	-0.06 \	-0.05	-0.03	-	-
Agreeableness	-	-0.11 \	-0.07	-	-	-0.20***	-0.21***	-0.22***	-	-
Openness	-	-0.12*	0.04	-	-	-0.20***	-0.21***	-0.20***	-	-
Conscientiousness	-	-0.01	-	-	-	0.08*	0.07*	0.06 \	-	-
Neuroticism	-	-0.07	-	-	-	-0.06 \	-0.05	-0.03	-	-
Criterion Validity										
Opposition (Support for) Black Lives Matter	0.54*	-	0.61***	0.70***	0.71***	0.69***	0.70***	0.67***	0.60***	0.62***
Support for Affirmative Action	-	-0.55***	-0.36***	-0.62***	-0.63***	-	-	-	-	-
Support for Reparations	-	-0.44***	-0.30***	-	-	-	-	-	-	-
Support Policies to give Black Americans Structural Power	-	-	-	-	-	-0.65***	-0.67***	-0.63***	-0.64***	-0.66***
Support Policies to give Black Americans Symbolic Power	-	-	-	-	-	-0.63***	-0.65***	-0.61***	-	-
Complimenting Black Culture	-	-	-	-	-	-0.47***	-0.50***	-0.48***	-	-
Support for Removing Confederate Statues	0.51*	-	-	-	-	-	-	-	-	-
White Americans' Willingness to Give-Up Advantages	-	-	-	-	-	-0.55***	-0.53***	-0.53***	-	-
Support for Collective Action on Behalf of Whites	0.54*	0.60***	0.46***	0.64***	0.64***	0.65***	0.65***	0.67***	0.60***	0.61***

For Study 1A, p values not shown because 95% boot-strapping confidential intervals were used to compute significance. *indicates significance on this basis. For studies 1B through 1F: \ p < .10 , *p<.05, **p<.01, ***p<.001

Discriminant validity. To assess *discriminant validity* we tested whether meta-dominance beliefs were—relative to concepts in our construct validity bucket—more weakly associated with constructs we have less theoretical reason to expect to cohere with meta-dominance. To this end we assessed the association between meta-dominance beliefs and the Big-Five personality traits (Gosling et al., 2003) across Studies 1B, 1C, and 1E. With respect to these concepts, we expected to see correlations *smaller* than a small yet meaningful correlation of $r = 0.20$ (Schober et al., 2018).

Supporting the discriminant validity of our scale, out of 13 possible tests across 3 distinct samples, we observed a correlation above $r = 0.20$ between meta-dominance and one of the personality traits in only two cases (with the highest being of magnitude $r = .22$).[7] These two cases, both in the same sample, were meta-dominance's negative correlation with agreeableness and openness; of note, these are the two personality factors from the Big Five with the most evidence of associations with politically relevant constructs like SDO and RWA (Kteily & Brandt, 2024; Sibley & Duckitt, 2008). All 11 of the other relevant correlations were lower than $r = .20$. To provide some basis for comparison, consider that the lowest correlation between meta-dominance and a construct in the *construct validity* bucket was with ethnic identification; all meta-dominance correlations with ethnic identification were significant and at least equal to $r = 0.20$, with most close to $r = 0.30$. The majority of items in the construct validity bucket correlated with meta-dominance at $r = .40$ or above.

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[7] Note that we test the correlation between meta-dominance and each construct using all three variants of our meta-dominance scale wherever available, and include the relevant information in Table 8. That said, seeing as the scales overlap substantially, we treat any situation in which there are multiple variants of the meta-dominance scale as a single test of the association between the meta-dominance construct and the variable in question.

Criterion validity. *Criterion validity* refers to whether our construct relates to or 'predicts' outcomes we would expect it to. We tested for criterion validity by testing the relation between meta-dominance beliefs and variables tapping into whether Whites opposed policies that support Black empowerment (e.g., opposition to affirmative action, opposition to Black Lives Matter) and rather support policies/actions that maintain White Americans' dominant position within the existing hierarchy that disempowers Black Americans (e.g., support for collective action initiatives on behalf of Whites). Supporting the criterion validity of our scale, across all of our indices of criterion validity, across all studies, and for all versions of the meta-dominance scale, we found significant and substantial zero-order correlations in the expected direction (*r*s ranging from .30 to .71).

Unique Criterion Correlates of Meta-Dominance Beliefs

Our final goal in Study 1 was to test whether White Americans' meta-dominance beliefs regarding Black Americans' intentions for power *uniquely* related to their opposition to the empowerment of Black Americans and support for protecting White Americans' own standing in the U.S. hierarchy. To this end, we moved beyond zero-order correlations and tested the semi-partial correlations between meta-dominance beliefs and our criterion validity variables while controlling for other well-established predictors of Whites' opposition to Black empowerment, and their desire to protect their own dominance. These covariates included: political conservatism; hostile attitudes towards Black Americans (i.e., anti-Black prejudice and anti-Black dehumanization); other negative meta-perceptions of Black Americans (i.e., meta-prejudice and meta-favoritism); the explicit desire for Whites to dominate over Black Americans (race-specific SDO; adapted from Kteily, Ho, & Sidanius, 2012); and various indices that might

be tied to Whites' concerns of status loss, including perceived racial progress of Black

Americans, perceptions of anti-White and pro-Black discrimination, perceived demographic

changes to the White and Black American population share, and explicit fears about losing

power due to perceived social change. Providing robust evidence as to the uniqueness of the

meta-dominance concept, even after accounting for available covariates in each study, meta-

dominance was uniquely associated with all of our criterion variables in all cases tested with one

exception (support for removing confederate status in Study 1A) (See Table 9).

Table 9. Semi-partial correlations between meta-dominance and criterion variables across all studies and all scale variables when controlling for potentially overlapping variables.

	V1 Meta-Dom T	V2Meta-Dom T	V3 Meta-Dom T
Study 1A			
Opposition (Support) for Black Lives Matter	0.19***		
Support for Removing Confederate Statues	-0.10ᐩ		
Support for Collective Action on Behalf of Whites	0.18***		
Study 1B			
Support for Affirmative Action	-0.18**		
Support for Reparations	-0.17**		
Support for Collective Action on Behalf of Whites	0.26***		
Study 1C			
Support for Affirmative Action	-0.17**		
Support for Reparations	-0.13*		
Opposition (Support) for Black Lives Matter	0.32***		
Support for Collective Action on Behalf of Whites	0.19***		
Study 1D			
Support for Affirmative Action	-0.29***	-0.30***	
Opposition (Support) for Black Lives Matter	0.35***	0.36***	
Support for Collective Action on Behalf of Whites	0.26***	0.27***	
Study 1E			
Support Policies to give Black Americans Structural Power	-0.20***	-0.24***	-0.18***
Support Policies to give Black Americans Symbolic Power	-0.18***	-0.21***	-0.15***
Complementing Black Culture	-0.11**	-0.14***	-0.12***
Opposition (Support) for Black Lives Matter	0.19***	0.21***	0.17***
White Americans' Willingness to Give-Up Advantages	-0.17***	-0.19***	-0.14***
Support for Collective Action on Behalf of Whites	0.19***	0.20***	0.22***
Study 1F			
Support Policies to give Black Americans Structural Power	-0.23***	-0.24***	
Opposition (Support) for Black Lives Matter	0.15**	0.17***	
Support for Collective Action on Behalf of Whites	0.17***	0.18***	

Note. In Study 1A, anti-Black dehumanization, perceived anti-Black discrimination, perceived anti-White discrimination were entered as covariates. In Study1B, conservatism, anti-Black prejudice, anti-Black dehumanization, perceived anti-Black discrimination, perceived anti-White discrimination were entered as covariates. In Study 1C, conservatism, anti-Black prejudice, anti-Black dehumanization, perceived racial progress, Black population increase, and White population increase were entered as covariates. In Study 1D, anti-Black prejudice and meta-favoritism were entered as covariates. In Study1E, conservatism, anti-Black prejudice, meta-prejudice, and meta-favoritism were entered as covariates. In Study 1F, social dominance orientation specific to Black/White race relations and anxiety about White status loss were entered as covariates. ᐩ$p < .10$, *$p<.05$, **$p<.01$, ***$p<.001$

Discussion

Across six independent samples of White Americans, surveyed between the period of 2016 and 2024, we explored the validity of three different variations of the meta-dominance scale. All three variations of the scale we tested showed strong reliability, construct validity, discriminant validity, and criterion validity. All three variations also factor-loaded separately from other conceptually similar and potentially overlapping constructs and demonstrated structural validity within our EFA and CFA analyses.

Although all three scales are viable options for researchers to use, we recommend the use of Version 2 of our scale. Study 1 showed criterion and structural (factor analytic) validity evidence suggesting that it is reasonable to measure and think of meta-dominance beliefs as a unidimensional construct, assessing beliefs about a disempowered group's desire to use power for dominance *versus* equality (as two ends of one continuum). But we also found some support for additionally parsing meta-dominance beliefs into two separate factors respectively capturing perceptions of a disempowered group's motivation to use power for equality and their motivation to use power for dominance.

Version 2 of our meta-dominance scale offers the flexibility of measuring meta-dominance beliefs as a unidimensional construct represented by a composite score of meta-beliefs of the marginalized group's equality and dominance motives. But it also allows researchers interested in exploring additional nuance to differentiate between these two sub-dimensions using a balanced set of pro-trait and con-trait items for each. This parallels common usage of the SDO7 scale, which is frequently treated as a single scale but sometimes broken down by interested researchers into its SDO-D and SDO-E subcomponents (Ho et al., 2015).

Looking at the relations between the equality and dominance sub-dimensions and outcomes, we found that Version 2 preformed the best in terms of its criterion validity across the two sub-dimensions, likely because it contained the most balanced set of items to capture the two sub-dimensions. Finally, we note that Version 2 of the scale also has the advantage of including all 5 items which compose Version 1 of the scale (which could therefore be used by researchers dealing with space constraints as a short version of the scale).

Measuring meta-dominance is only worthwhile to the extent to that it uniquely relates to constructs that reflect individuals' attitudes and behaviors within intergroup contexts – including whether they direct their attitudes and behaviors in a way that challenges (versus maintains) existing social hierarchies within those contexts. Across the six sub-studies, Study 1 offered robust and consistent evidence among White Americans that meta-dominance was uniquely associated with the consequential construct of White Americans' opposition to Black empowerment (and their support for maintaining their ingroup's dominant position within the hierarchy). Importantly, this association held not only in zero-order terms but even when we statistically controlled for a host of other previously established predictors of Whites' opposition to Black empowerment. These included political conservatism, other negative attitudes and meta-perceptions towards Black Americans, perceptions about the instability of the existing racial hierarchy, and anxiety about losing power and status (Craig & Richeson, 2014; Dover, 2022; Goodman, 2017; Hodson et al., 2022; Jost et al. 2003; Kteily et al., 2016; Norton & Sommers, 2011; Vorauer et al., 2000). The potential implications of White Americans' meta-dominance beliefs regarding Black Americans' motives for supporting hierarchy-attenuating policies and movements is all the more important to consider given that Study 1 revealed these perceptions to be far from fringe beliefs. Indeed, across all six studies and 3,383 participants,

45.7% (n = 1543) of White Americans) reported levels of meta-dominance beyond the (Version 1) scale midpoint.

Despite its contributions, however, Study 1 cannot speak towards the causal nature of the relationship between meta-dominance and opposition to Black empowerment. In Study 2 and Study 3 we shifted to experimental methods to test whether Whites' meta-dominance beliefs cause them to become less supportive of Black empowerment (and/or whether there is evidence for the reverse causal pathway).

Study 2

In Study 2, we sought to gain initial experimental evidence that systematically reducing perceptions of meta-dominance (relative to empty control) could increase White Americans' support of Black empowerment: i.e., we tested our proposed "*Meta-Dominance Beliefs* → *Opposition to Black Empowerment"* pathway. Specifically, we randomly assigned White Americans to read a brief summary of research findings explaining how Black Americans on average desire equality over dominance (relative to an empty control where no information about Black Americans' motives for power was given). This manipulation (in addition to all main-text analyses) was pre-registered: https://aspredicted.org/blind.php?x=ki8ns7.

Since higher levels of meta-dominance (vs. equality) beliefs were associated with opposition to empowering Black Americans in our cross-sectional studies, we predicted that making salient to White Americans Black Americans' intentions to use power for equality rather than dominance could increase their support for Black empowerment. In line with our correlational studies, we also tested whether the experimental manipulation would reduce White Americans' support for collective action to maintain Whites' advantaged position within the

power hierarchy. However, as pre-registered, we assumed that our manipulation—informing White Americans about what Black people want to do with power—would likely have a larger effect on White support for Black empowerment (vs. on White support for maintaining White dominance). There should be a fairly direct relationship between White Americans' skepticism (optimism) about Black Americans' intentions with power and their opposition to (support for) Black Americans gaining that power. By comparison, conceptually, support for collective action on behalf of Whites is a step further removed, as it focuses on the ways in which White Americans may favor mobilizing their own group to protect or amplify the ingroup's power in response.

In exploratory analyses, we also considered whether the effects of our manipulation would be moderated by three individual difference variables of interest (while these tests were pre-registered, we did not have firm predictions about the direction of these potential interactions). Our first moderator of interest was how strongly White Americans identified with their White ethnicity. Our cross-sectional studies suggested ethnic identification was positively associated with meta-dominance, consistent with the idea that highly identified group members may be more sensitive to group threats (Gunn & Wilson, 2011; Riek et al., 2006; Van Zomeren, et al., 2008). Highly (versus weakly) identified Whites, being attuned toward potential group threats, might benefit more from learning that Black Americans do not wish to dominate their group as such a possibility may be chronically more salient for them. Alternatively, it is possible that the manipulation might not affect highly identified Whites, who may be more prone to doubt or rationalize away information suggesting that Black Americans do not seek domination of other groups.

Our second moderator of interest was whether White Americans had a relatively

conservative (vs. liberal) political ideology. Past research suggests that, relative to liberals, conservatives are more likely to feel uncertain about and uncomfortable with social change (Brown et al., 2022; Hennes, et al., 2012; Nam, et al., 2018), and more likely to hold anti-Black attitudes (Jost et al., 2004; Stern & Axt, 2019). Our correlational studies also suggested that more conservative individuals were more likely to report high levels of meta-dominance. Thus, we reasoned that relative to liberals— already inclined to support policies that help disadvantaged groups such as Black Americans (Ho et al., 2015; Jost et al., 2004, 2003; Kteily, et al., 2019) and less likely to hold pessimistic beliefs about the intentions of Black Americans—conservatives might be more impacted by information suggesting that Black Americans would want to use power for equality. At the same time, we also recognized the possibility that meta-dominance might fail to affect support for empowering Black Americans among conservatives if this group simply discounted information suggesting that Black Americans desire equality over dominance.

For our last moderator of interest, we directly assessed whether White Americans felt anxious about instability in the U.S. racial hierarchy and how that might impact their own power and status (Apfelbaum et al., 2008; Richeson & Trawalter, 2005; Trawalter et al., 2009; Vorauer, 2006). Our correlational findings suggest that White Americans who are more anxious about their group losing power within the racial hierarchy were more likely to the hold the pessimistic view that Black Americans would use power for dominance. Drawing on similar logic as for political conservatism, it is possible that we might see more causal impact of the meta-dominance information on support for Black empowerment among Whites most concerned about losing power and status. Among these White Americans—and assuming they do not merely discount the information—learning about Black Americans' desire to use power for equality over dominance could be more impactful given their heightened baseline concerns and opposition to

Black empowerment.

Participants

In total, 3,205 participants accessed the survey via Amazon's Mechanical Turk between December 2nd 2020 and December 16th 2020, of whom 3,015 actually completed the study. We sought to recruit a large sample given work suggesting that even samples of 1,500 can be limited for detecting attenuated moderation (i.e., where effects are smaller but not reversed across levels of the moderator), especially when the interaction involves a categorical predictor crossed with a continuous moderator (Blake & Gangestad, 2020; Giner-Sorolla, 2018; Simonsohn, 2014). We excluded participants who did not identify as White American (n=628), who were not born in the United States (n=102), who missed at least one of two attention checks embedded in the study (n=322)[8], and/or who did not consent to including their responses after reading the debriefing form (n=40). In total 2,080 White American participants were included in our final sample (M_{age}=39.97, SD=12.02; 858 Male, 1222 Female). On scale of 1 "Strong Democrat" to 7 "Strong Republican" scale, 48% selected 1-3, 18% selected 4 (the scale midpoint) and 34% selected 5-7.

Procedure

Prior to assigning participants to our experimental manipulation, we assessed our three exploratory moderators: ethnic identification, political conservatism, and anxiety about the instability of the racial hierarchy. Participants assigned to the 'Blacks Want Equality (BWE)' experimental condition then read a brief summary of research results from a study we had previously conducted with Black Americans, in which we assessed how much Black Americans explicitly thought their group desired power as a means for creating equality vs. dominating

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[8] One attention check asked participants to select a specific scale value if they were reading the attention check item carefully (e.g., "if you are reading this question carefully, please select 3." We also included a second attention check in which participants read a short vignette about someone who worked at a store and then had to answer a question about their occupation.

others (see Supplemental Analyses for details of this study):

> *"In another survey, we also recruited a representative sample of about 300 Black American participants. In that survey, we asked Black Americans what they would want Black Americans to do if they were to gain more power in society. Specifically, we asked Black Americans whether they would want to use power to create equality for all groups or to take advantage and dominate other groups. For example, one of our survey questions was: "If Black Americans got to the top of the social hierarchy, I would want to implement a social system where all groups get an equal share of power". Another of our survey questions was: "If Black Americans got to the top of the social hierarchy, I would want to stay on top, and keep the other groups down." Below we show some of the results we found from this study. When asked if they would want to use power to create more equality for all groups, the average response of Black Americans was 5.44 out of 7, indicating clear agreement. When asked if they would want to use power to take advantage and dominate other groups, the average response of Black Americans was 2.56 out of 7, indicating clear disagreement. Thus, the data clearly indicated that Black Americans want equality for all groups, not dominance for their own."*

Following this presentation, we assessed the key outcomes. Participants in the empty control condition were not provided with any information about past research on Black Americans' intentions for power and completed the outcome measures right away.[9]

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[9] We conducted a pilot study with an independent sample of White Americans in which we tested the effect of our manipulation on meta-dominance (using Version 3 of our meta-dominance scale). Our initial sample included 356 participants before exclusions, and 257 participants when including only those who identified as White, were born in US, and passed an attention check included in the survey. We found that relative to an empty control (M=3.71; SD=1.54), the intervention significantly lowered meta-dominance (M=3.06; SD=1.63) as expected (F(1,255)=7.28, p=.001). Please see Supplemental Analyses for more details.

Measures

Pre-Intervention Moderator Variables.

Ethnic Identification. We assessed ethnic (White) identification with the same 3-item measure used in Study 1E (α=.88).

Political Conservatism. We assessed political conservatism with the same 3-item measure used in Study 1E (α=.92).

Anxiety about White status loss. We assessed the extent to which White Americans were anxious about White Americans losing status due to instability of the racial hierarchy with five items similar to what we used in Study 1F: "As a White person, I am quite nervous about how volatile race relations in America are right now"; "I fear that people who are pushing strongly for social change in America are moving way too quickly without considering the potential for negative consequences"; "I think that changing the current social system in America and replacing it with something new could cause more harm than good"; "I believe that White people risk losing out with all the social changes taking place in America"; "There is no reason for White people to feel threatened by the calls for social change in America (rev; α=.89)".

Outcomes.

Support for policies to increase Black Americans' structural power. We assessed White Americans' egalitarian policy support with three items adapted from Study 1E and Study 1F: "Society should work actively to vote Black politicians into power"; "I would support increasing the representation of Black judges on courts throughout the country"; "I support Black Americans having more power in society" (α=.92).

Support for collective action on behalf of White Americans. We assessed White Americans' support for collective action on behalf of their ingroup with three items selected

from Study 1: "Whites need to start looking out more for one another"; "Whites should lobby to repeal laws that give minorities an advantage on the basis of their race, at the expense of Whites"; "More needs to be done so that people remember that "White Lives" also matter" (α=.89).

Results

Means and correlations for all variables (collapsing across conditions) are shown in Table 10.

Table 10

Descriptive statistics and correlations collapsed across experimental conditions of Study 2

	M	SD	1	2	3	4	5
1.Ethnic Identification	4.01	1.49	-				
2 Conservatism	3.69	1.78	.49***	-			
3. Anxiety about White Status Loss	3.34	1.63	.51***	.72***	-		
4.Policies to Increase Black Americans' Structural Power	5.22	1.56	-.36***	-.61***	-.68***	-	
5. Collective Action on Behalf of White Americans	3.00	1.82	.59***	.69***	.80***	-.67***	-

Note. *** $p<.001$

Preliminary Analyses

We first sought to confirm that the three pre-treatment variables of interest in Study 2 – White ethnic identification, political conservatism, and anxiety about White status loss – did not differ systematically across conditions. One-way analysis of variance confirmed that there was no significant mean difference in ethnic identification between the BWE condition (*M*=4.06; *SD*=1.52) and the empty control condition (*M*=3.96; *SD*=1.46), *F* (1, 2078) = 2.27, *p* = .132, *d* =.07. There was also no significant mean difference in political conservatism between the BWE condition (*M*=3.74; *SD*=1.80) and the empty control condition (*M*=3.63; *SD*=1.75), *F* (1, 2078) =

1.71, $p = .192$, $d = .06$. Despite our use of random assignment, however, one-way ANOVA suggested that participants in the BWE condition ($M=3.41$; $SD=1.65$) reported significantly higher anxiety about White status loss on average than participants in the empty control condition, prior to random assignment to condition ($M=3.27$; $SD=1.60$), $F(1, 2078) = 3.92$, $p = .048$, $d = .09$.

Because of the high correlations between anxiety about White status loss and both outcome variables ($r=-.68$ with structural Black empowerment, and $r=.80$ with collective action on behalf of Whites), analyses not controlling for racial anxiety might underestimate the effect of the BWE intervention on the outcome measures. Thus, we conducted our pre-registered main effect analyses both with and without controlling for anxiety about White status loss. When probing moderation via conservatism or ethnic identification we also report our results with and without including anxiety about White status loss as a covariate. Finally, despite pre-condition differences in anxiety about White status loss we still explored moderation by anxiety about status loss.[10]

Main Effects of Condition on Outcomes

We show the (estimated) condition means for both outcomes as a function of condition both with and without controlling for anxiety about White status loss in Figure 2.

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[10] We note that although independence between the IV and moderator is an assumption of moderation analyses, we proceeded with this analysis since we had included it in our pre-registration plan, and because we were recommended to do so by our reviewers who noted how researchers often still test for moderation (especially in the case of continuous variables) despite correlation between the two IVs.
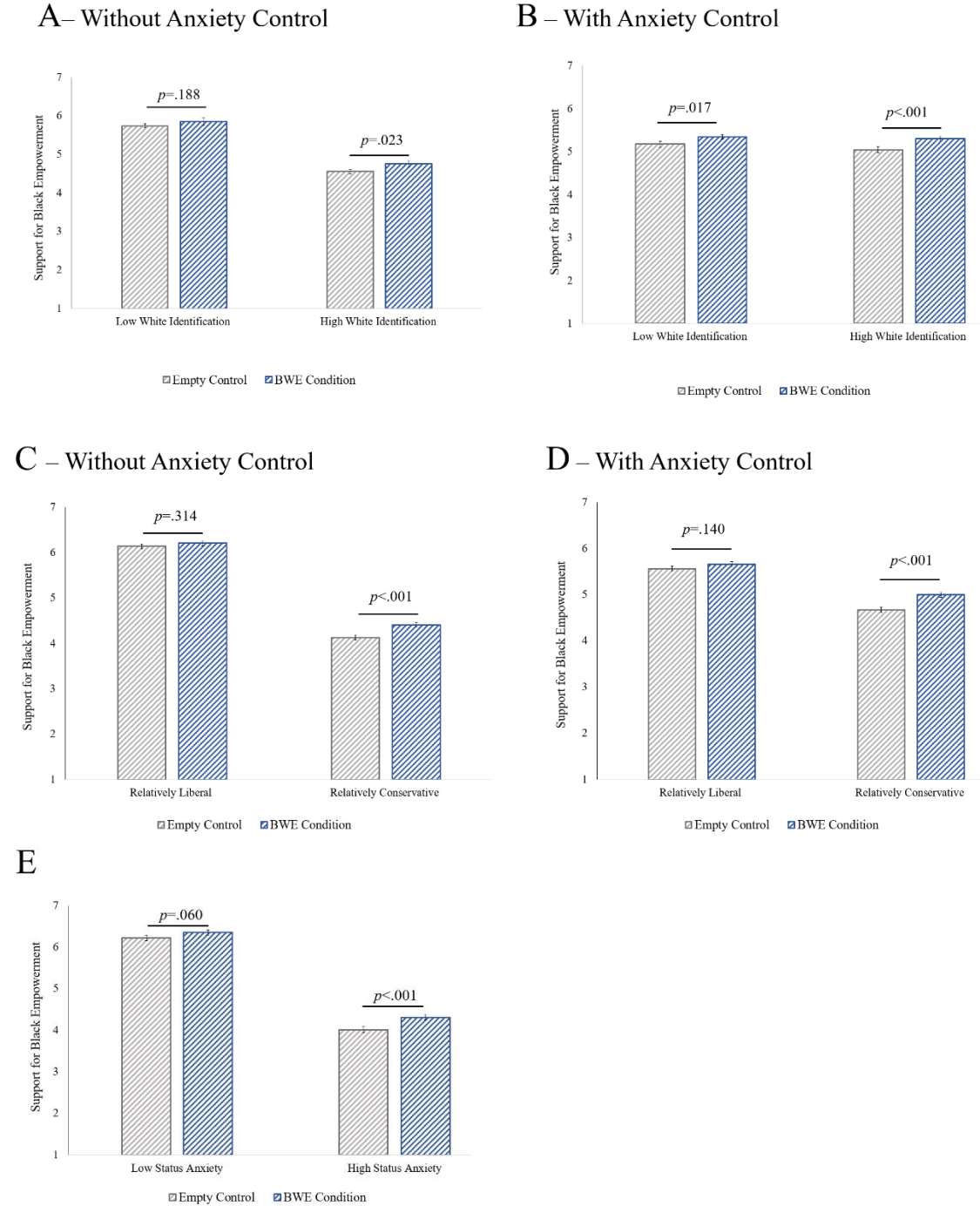
Figure 2

Support for Black Empowerment and Collective Action on Behalf of White Americans as a

Function of the BWE Manipulation (Study 2)
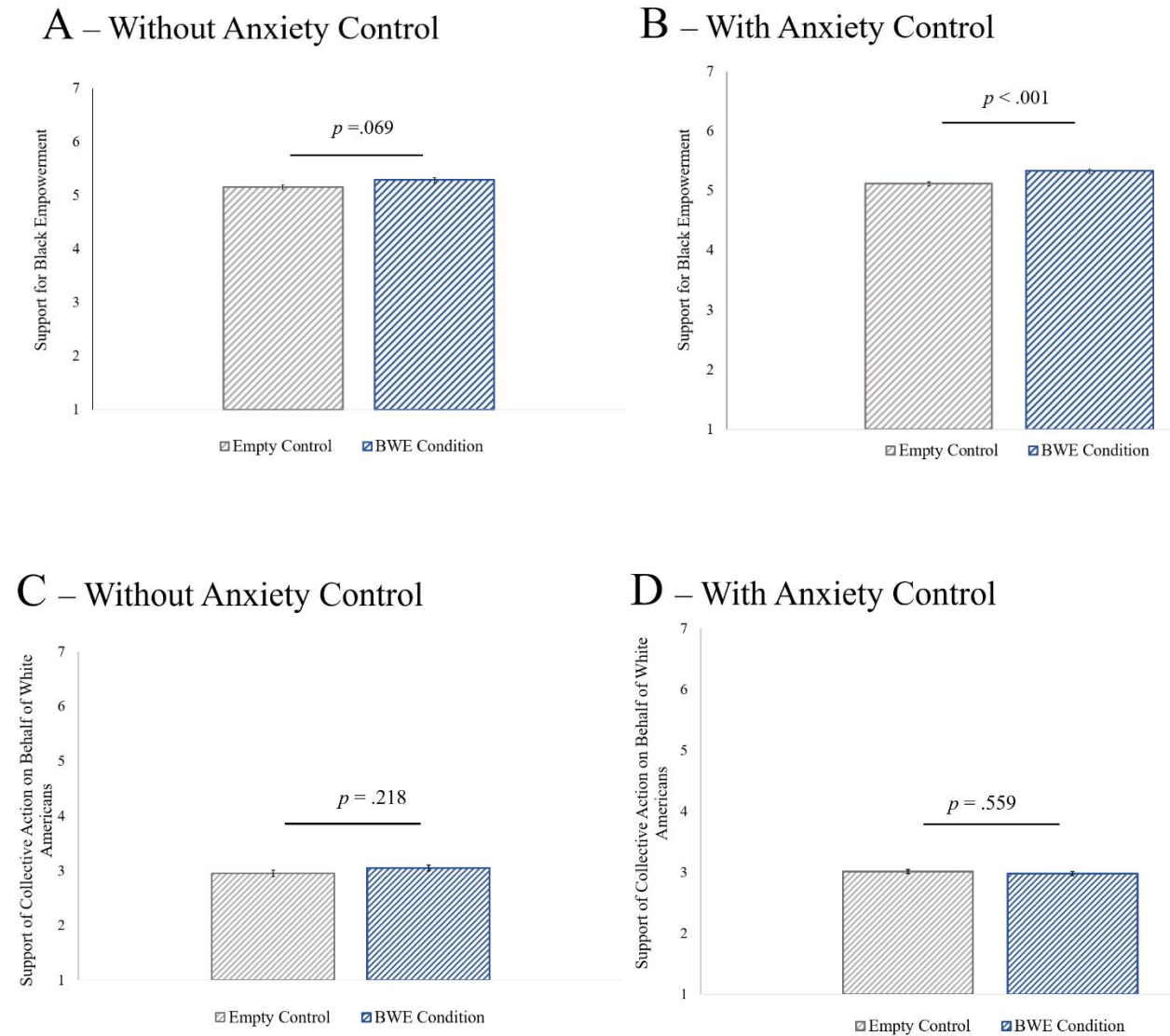
Note – Panels A and B plot White Americans' support for Black empowerment as a function of experimental condition without and with controlling for anxiety about White status loss, respectively. Panels C and D plot White Americans' support for collective action on behalf of White Americans as a function of experimental condition without and with controlling for anxiety about instability of the racial hierarchy, respectively. Error bars indicate standard error.

Figure 3

Study 2 Conditional Effect of BWE Manipulation on White Americans' Support for Black Empowerment Conditional at Levels of Ethnic Identification, Political Conservatism, Anxiety about White Status Loss

A– Without Anxiety Control

B – With Anxiety Control

C – Without Anxiety Control

D – With Anxiety Control

E

Note. Panel A shows estimated marginal condition means conditional on levels of ethnic identification *without* controlling for White's anxiety over their racial status while Panel B shows

means controlling for anxiety over racial status. Panel C shows estimated marginal condition means conditional on levels of conservatism *without* controlling for anxiety over racial status while Panel D shows means controlling for anxiety over racial status. Panel E shows estimated marginal condition means conditional on levels of anxiety over racial status. Error bars indicate standard error.

Support for policies to increase Black Americans' structural power. We first considered the main effect of our manipulation without controlling for the pre-treatment difference in anxiety about White status loss. We did not find a significant effect of the meta-dominance manipulation on support for giving structural power to Black Americans (BWE manipulation: *M*=5.29; *SD*=1.53; empty control condition: *M*=5.16; *SD*=1.59; $F(1, 2078) = 3.30$, $p = .069$, *d* =.08. Of note, however, the non-significant pattern was in the expected direction, and this is *despite* the fact that participants receiving the BWE manipulation happened to be higher at baseline (i.e., pre-treatment) in terms of their anxiety about White status loss. When we controlled for this pre-treatment difference in an ANCOVA, we observed a significant effect such that participants in the BWE condition were substantially more likely to support Black empowerment than White Americans in the empty control, marginal mean difference = .22, 95% CI [.12,.32), $F(1, 2077) = 18.71$, $p < .001$.

Using moderation analyses conducted with the PROCESS macro (Hayes, 2017), we considered how the BWE manipulation functioned at high versus low levels of each of ethnic identification, conservatism, and anxiety over White status loss. We tested the moderating effects of each factor separately in three different sets of regression models. Condition was coded: empty control = 0; BWE = 1. We conducted the moderation analyses for ethnic identification and for conservatism both with and without controlling for the baseline differences between condition in anxiety about White status loss.

Moderation by ethnic identification. When ethnic identification and condition were entered into the first step of the model (i.e., without the interaction), the effect of condition on support for policies to increase Black structural power was significant such that assignment to the BWE condition (vs. empty control) increased White Americans' support for Black empowerment, $b = .12$, $t(2077) = 2.54$, 95% CI [.04, .29], $p = .011$. Ethnic identification was significantly negatively associated with support for Black empowerment, $b = -.38$, $t(2077) = -17.91$, 95% CI [-.43, -.34], $p < .001$. When entered into the model at the second step, the condition by ethnic identification interaction was non-significant, $b = .03$, $t(2076) = .68$, 95% CI [-.05, .11], $p = .496$. The condition by ethnic identification interaction remained non-significant if we controlled for White Americans' anxiety about racial hierarchy instability, $b = .03$, $t(2075) = .97$, 95% CI [-.03, .10], $p = .332$. Notably, relative to control, the BWE manipulation significantly increased support for structurally empowering Black Americans among highly identified White Americans (+1SD), both when we controlled for anxiety (95% CI [.13,.41], $p < .001$) and when we did not (95% CI [.03,.38], $p = .023$). Thus, the manipulation seemed to be effective not only on average, but especially effective for highly identified White Americans who we conceptually predicted (and found evidence in Study 1 suggesting) might be higher in meta-dominance at baseline. We plot the effects of condition on White Americans' support for Black Empowerment conditional on ethnic identification (both with and without controlling for racial anxiety) in Figure 3.

Moderation by political conservatism. When condition and political conservatism were entered into the model at the first step without the interaction, the effect of condition on support for policies to increase Black structural power was significant, such that assignment to the BWE intervention (vs. empty control) increased White Americans' support for Black empowerment, *b*

= .18, $t(2077)$ = 3.30, 95% CI [.07, .29], $p < .001$. Political conservatism was significantly

negatively associated with support for Black empowerment, b = -.54, $t(2077)$ = -35.11, 95% CI

[-.57, -.51], $p <.001$.

We did not find evidence for a significant moderation by political conservatism of the

BWE manipulation on White Americans' support for policies to give structural power to Black

Americans, b = .06, 95% CI [-.003, .12], $p=.061$. That said, when we nevertheless explored

simple effects among liberals and conservatives, we noted that exposure to the BWE

manipulation ($M=.4.41$) vs. empty control (M=4.13) significantly increased White Americans'

support for Black empowerment among those relatively high (+1SD) in political conservatism,

($b=.28$, 95% CI [.13, .43], $p< .001$). By contrast, exposure to the BWE manipulation ($M=6.21$)

vs. empty control ($M=6.14$) did not significantly change White American's support for Black

empowerment among those relatively low (-1SD) in political conservatism, ($b=.08$, 95% CI [-

.07, .23], $p=.314$). Of note, White Americans low in political conservatism were already close to

the scale ceiling in their support for Black empowerment regardless of whether or not they were

told that Black Americans seek equality.

It is also notable that the conservatism by condition interaction on White Americans'

support for Black empowerment became significant when we controlled for the pre-treatment

differences across condition in anxiety about instability in the racial hierarchy, b = -.06, $t(2075)$

= 2.33, 95% CI [.01, .12], $p =.020$. Again, the interaction was such that our BWE intervention

significantly increased support for Black empowerment among White Americans high in

political conservatism, $b=.32$, 95% CI [.19, .46], $p<.001$, but did not have a significant impact on

White Americans low in political conservatism, $b=.10$, 95% CI [-.02, .24], $p=.140$ (see Figure 6

for a plot of the simple effects).

Moderation by Whites' anxiety over their racial status. When condition and Whites'
anxiety over their racial status were entered into the model at the first step without the
interaction, the effect of condition on support for policies to increase Black structural power was
significant, such that assignment to the BWE intervention (vs. empty control) increased White
Americans' support for Black empowerment, $b = .22$, $t(2077) = 4.33$, 95% CI [.12, .32], $p <$
.001. Anxiety about racial status loss was significantly negatively associated with support for
Black empowerment, $b = -.65$, $t(2077) = -42.47$, 95% CI [-.68, -.62], $p < .001$.

Racial anxiety over status loss did not significantly moderate the effect of the BWE
manipulation on White Americans' support for Black empowerment, $b = .05$, 95% CI [-.009,
.11], $p = .095$. We nevertheless explored the simple effects at high versus low levels racial anxiety
over status loss, and observed that exposure to the BWE manipulation ($M = .4.31$) versus empty
control ($M = 4.01$) significantly increased White Americans' support for Black empowerment
among those relatively high (+1SD) in racial anxiety over status loss, ($b = .30$, 95% CI [.16, .44],
$p < .001$). By contrast, exposure to the BWE manipulation ($M = 6.35$) vs. empty control ($M = 6.22$)
did not significantly change White Americans' support for Black empowerment among those
relatively low (-1SD) in racial anxiety over status loss, ($b = .13$, 95% CI [-.006, .27], $p = .060$).
Similar to our findings with political conservatism, White Americans low in racial anxiety about
status loss were already close to the scale ceiling in their support for Black empowerment
regardless of whether or not they were told that Black Americans seek equality.[11]

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[11] We also pre-registered two different sets of exploratory three-way interactions on outcomes: (1) a condition by
political ideology by ethnic identification interaction and (2) a condition by political ideology by racial anxiety
interaction. We did not find a significant three-way interaction between condition, political ideology and ethnic
identification on either outcome (ps > .254). When probing the 3-way interaction between condition, political
ideology and racial anxiety over status loss, we did not find a significant interaction for the Black empowerment
support outcome ($p = 0.193$). However, we did find a significant three-way interaction for support for collective
action on behalf of Whites ($b = -.03$, $t(2072) = -1.99$, 95% CI [-.07, -.001], $p = .047$. That said, all simple effects
were non-significant (e.g., relatively conservative White Americans high in racial anxiety: b = -.09, 95%CI [-
.22,.04], $p = .191$; relatively liberal White Americans high in racial anxiety: $b = -.21$, 95%CI [-.08,.27], $p = .297$).

Support for collective action on behalf of White Americans. We did not find any
evidence suggesting that White Americans' support for collective action on behalf of Whites
differed as a function of whether they were in the BWE condition (*M*=3.04; *SD*=1.84) or the
empty control condition (*M*=2.95; *SD*=1.81), F (1, 2078) = 1.52, p = .218, d =.05. Effects did not
change when controlling for White Americans' anxiety about losing status. There was also no
evidence of moderation by ethnic identification or political conservatism (regardless of whether
we controlled for anxiety over status loss), or racial anxiety over status loss (see Supplemental
Analyses for details).

Discussion

Whereas Study 1 established that meta-dominance was uniquely associated with
important constructs in intergroup relations—like support for the empowerment of disadvantaged
groups—Study 2 was intended serve as a first examination of whether this association might be
causal. In particular, it tested one causal direction, considering whether experimentally exposing
White Americans to real information about Black Americans' (stated) desire to use power to
create equality rather than to dominate (versus an empty control) would increase their support of
Black empowerment.

The evidence was encouraging, but inconclusive, with the answer to this question
muddied by an unanticipated failure of randomization—specifically the fact that participants in
the experimental (vs. control) condition were significantly higher in pre-treatment anxiety about
instability in the racial hierarchy, a variable strongly associated with support for Black
empowerment. Indeed, when we did not control for this unanticipated baseline difference in
racial anxiety, we observed very small differences as a function of meta-dominance condition
that did not cross the threshold of statistical significance. On the other hand, when we *did* control

for this baseline difference across conditions, we observed robust and significant effects such that White Americans exposed to information suggesting that Black Americans would use power for equality rather than dominance were significantly more likely (versus empty control) to support empowering Black Americans (e.g., increasing representation of Black judges on courts and on college campuses and giving preferences to Black candidates).

Furthermore, despite mixed evidence for the significance of the interaction terms, it was notable that we observed significant causal effects of the meta-dominance manipulation on downstream support for Black empowerment among each of highly identified, racially anxious, and relatively conservative White Americans. On the other hand, White Americans who were relatively liberal, or lacking in racial anxiety seemed willing to support Black empowerment regardless of condition. Critically, and suggesting the robustness of this pattern, this was true whether we did or did not control for baseline differences across condition in racial anxiety. Thus, and optimistically, our results suggest that White Americans most prone to holding meta-dominance beliefs—and who could have potentially discounted the information in our experimental condition—appeared (on average) to be assuaged by learning that Black Americans reported wanting equality rather than dominance.

Our experimental manipulation had no significant effects on White Americans' support for collective action initiatives that benefit White Americans. It is possible that learning about the intentions of another group for dominance more directly shapes attitudes relating to that group rather than associated attitudes focused on one's own group. That is, individuals who learn that Black people report they would use power for equality over dominance might be more likely to favor empowering Blacks without necessarily becoming less likely to want to look out for their own group's interest. This idea is consistent with work which suggests that people can feel

differently about the same hierarchy-impacting policy depending on whether these are framed with a focus on the outgroup versus the ingroup (Chow & Gallak; 2012; Dietze & Craig, 2021; Lowery et al., 2012).

Study 3

Study 2 was designed as a first test of one potential causal pathway between meta-dominance and support for Black empowerment – one in which meta-dominance beliefs precede support for Black empowerment. In this pathway, White Americans' reluctance to support Black empowerment is a response stemming from their concerns that Black Americans would dominate White Americans (and other groups) if they had the power to do so. According to this perspective, White Americans might oppose Black empowerment at least in part based on their sincerely-held belief that Black Americans would institute a regime of Black dominance if given the chance. Notwithstanding certain limitations, Study 2 provided initial evidence supporting this pathway, particularly when controlling for the pre-treatment difference between conditions on racial anxiety. We also observed evidence for this pathway among individuals high (and average) in political conservatism—that is, among those who tended to have higher levels of meta-dominance beliefs at baseline—even when we did not control for pre-treatment differences in racial anxiety.

Study 2 did not, however, test the reverse causal pathway. Indeed, it may be that Whites' opposition to Black empowerment can also *precede* meta-dominance beliefs. Specifically, some White Americans might strategically appeal to meta-dominance concerns to legitimize their pre-existing opposition to Black empowerment. This perspective is consistent with social dominance (Sidanius et al., 2016; Sidanius & Pratto, 1999) and system justification (Jost et al., 2003) theories which describe how members of dominant groups instrumentally endorse descriptions of

societal intergroup dynamics that serve the goal of protecting intergroup hierarchy or maintaining the current societal status quo, respectively. Past research stemming from these frameworks argues that individuals sometimes use hierarchy legitimizing myths, such as the Protestant work ethic (Kay & Jost, 2003) or color-blind ideologies (Knowles et al., 2009) to help justify the maintenance of existing racial hierarchies. Similarly, promoting the narrative that disadvantaged groups seek power to dominate (vs. to create equality) may be one effective way by which dominant group members legitimize their opposition to the empowerment of disadvantaged groups.

From this perspective, experimentally increasing White people's support for Black empowerment policies should result in significantly lower reports of meta-dominance. Indeed, if support for Black empowerment policies increases, then the need to legitimize opposition to Black empowerment via narratives of Black people's desire for dominance should in turn decrease. This might be an especially relevant pathway among those most likely to oppose such policies in the first place, such as conservatives or political moderates; by contrast, liberals tend to be more receptive to Black empowerment (both in our initial studies and in the literature), so they may have less "room to move," as well as a weaker motivation to rationalize hierarchy-maintenance.

To address the limitations of Study 2, in Study 3, a registered report experimental study, we aimed to test both the "Meta-Dominance Beliefs → Opposition to Black Empowerment" and the reverse "Opposition to Black Empowerment → Meta-Dominance Beliefs" pathways. To do this, we developed both an experimental condition designed to reduce meta-dominance perceptions (building on our Study 2 manipulation) and a parallel experimental condition designed to increase support for policies, like affirmative action, empowering Black Americans.

Since we found little experimental evidence in Study 2 that changes to meta-dominance beliefs lead to changes in Whites' support of collective action initiatives on behalf of their ingroup, we did not consider this outcome in Study 3.

Study 3 was conducted as a registered report, with its methods, predictions, analysis plan, and pilot studies peer-reviewed and agreed upon prior to us conducting the final pre-registered study (see https://osf.io/dbg8y/?view_only=1af10aad0440487e9fd845849f53d292 for pre-registration; in the supplemental document on OSF we have included our initial registered report write-up and detailed report of our pilot studies).

We conducted Study 3 among participants who identify as having moderate to relatively conservative political ideology. We did this because Study 2 suggested that the meta-dominance manipulation may be primarily effective in increasing support for Black empowerment among individuals at the mean or relatively higher (+1SD) on political conservatism[12]. This is sensible given that political liberals already have relatively low meta-dominance beliefs at baseline, and relatively less room to move as a result of our telling them that Black Americans want to use power to institute equality; it's also notable that their support for Black empowerment is already high.

To parallel our examination of the two experimental pathways as much as possible—and given that liberals are already high in support to Black empowerment—we designed our manipulation for our test of the reverse causal pathway (Opposition to Black Empowerment →

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[12] We note that, based on our results from Study 2, it would have also been reasonable to target individuals high on ethnic identification or high on racial anxiety (each of whom showed similar patterns). We chose political conservatism as the variable to recruit on the basis of both because it captures a broad political orientation of widespread interest and, more pragmatically, because it is relatively easy to target on platforms for recruiting participants.

Meta-Dominance Beliefs) to be effective at increasing support for Black empowerment for those with average or high levels of political conservatism. We did this by designing our manipulation to address concerns about Black empowerment commonly espoused by those tending to the political right. Consistent with this, piloting of our experimental materials revealed that our Black empowerment manipulation was only effective among participants at the mean or relatively high (+1SD) levels of conservatism.

Procedure

We conducted Study 3 across two time points. At Time 1, we assessed basic demographics, baseline perceptions of meta-dominance, and baseline support of policies to structurally empower Black Americans. At Time 2, at least one week following Time 1, participants were randomly assigned to one of two "classes" of experimental conditions (or an empty control condition), each testing one of the two proposed causal pathways linking meta-dominance and opposition to the empowerment of a disadvantaged group (i.e., Black Americans).

Our use of a two-time point pre-post experimental design has several benefits relative to standard one-shot experimental designs (Boer et al., 2015; Kent et al., 2009; Stroke et al., 2009). Despite the benefits of random assignment for helping ensure mean-level similarity on variables between experimental groups prior to exposure to experimental condition (Boer et al., 2015), random assignment does not account for individual-level variability around those means within each group (Stroke et al., 2009). Accounting for that individual-level variability by statistically controlling for baseline levels of the outcome variable can substantially increase the power to detect effects of the manipulation on the outcome post-manipulation (Kent et al., 2009). For

example, Kent and colleagues (2009) suggest that accounting for baseline levels can effectively

reduce sample sizes required to achieve a given level of power by 15 to 30 percent. Beyond

benefits for statistical power, accounting for baseline affords the ability to more precisely

estimate causal effects by accounting for theoretically-relevant constructs, even when random

assignment is successful (Boer et al., 2015). Finally, our two-wave design also has the benefit of

allowing us to explore theoretically interesting interactions, such as determining whether our

manipulations are differentially effective among individuals who began at higher versus lower

levels of the variables of interest[13].

Testing the "Meta-Dominance Beliefs $\rightarrow$ Opposition to Black Empowerment" pathway,

participants read a condensed summary of an ostensibly real Op-Ed article we designed to reduce

meta-dominance perceptions. The Op-Ed presented the same information presented in our Study

2 experimental "BWE" manipulation, but in a format that could parallel the manipulation we

designed for our second Study 3 experimental condition (that tests the reverse causal pathway).

We contrasted participants randomly assigned to the experimental meta-dominance reduction

condition to a control condition where we simply told participants that "The context of race

relations between Black and White Americans has been a subject of much discussion in the

United States of late". We did this to make the issue of race equivalently salient among

individuals assigned to the control condition, while otherwise not aiming to influence any other

perceptions or attitudes related to race. When contrasting the meta-dominance reduction

condition to our control condition, our dependent measure was the same support for structural

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[13] Although we specifically recruited politically moderate and conservative participants, we also assessed political conservatism so that we could (1) confirm the ideology of our participants (excluding liberals who happened to make it into the sample), (2) descriptively report the degree of conservative beliefs held by participants in our sample, and (3) conduct a pre-registered exploratory moderation analyses via conservatism.

Black empowerment outcome used in Study 2. As noted above, we tested this manipulation's effect on Time 2 support for Black empowerment while controlling for Time 1 levels of this same outcome variable.

To test the "Opposition to Black Empowerment → Meta-Dominance Beliefs" pathway, we randomly assigned participants to read a condensed summary of an ostensibly real Op-Ed we designed to increase political moderates' and conservatives' support for affirmative action policies empowering Black Americans. In this article, White Americans read information explaining how there is little evidence that policies designed to empower Black Americans take away from the outcomes of White Americans (and some evidence that policies designed to empower Black Americans can actually also improve outcomes for Whites). We compared the impact of this manipulation (which our pilot testing suggested was effective in significantly increasing Black empowerment among moderate to conservative White Americans) on Time 2 levels of meta-dominance (using the balanced Version 2 scale developed in Study 1D and Study 1E) relative to participants in the control condition (described above). Again, we controlled for Time 1 levels of meta-dominance.

Lastly, we note that participants randomly assigned to our control condition completed both meta-dominance and Black empowerment support measures at both Time 1 and Time 2 (in random order), and served as the comparison category for the tests of each of the two proposed causal pathways (i.e., Meta-dominance → Empowerment and Empowerment → Meta-dominance).

Complete versions of the Time 1 and Time 2 surveys and all experimental manipulations are shown in the full Registered Report document we append in the Supplement.

Registered participant recruitment plan. We recruited 3200 White American

participants using CloudResearch Connect (1600) and Prolific (1600) to complete the Time 1

survey[14]. We employed both platforms to maximize our chances of meeting our ambitious

sample size target. We used CloudResearch's and Prolific's recruitment features that allow us to

recruit participants based on their ideological self-identification. Specifically, when recruiting

participants from CloudResearch we recruited participants who previously identified themselves

to the platform as having "conservative", "somewhat conservative", or "moderate" ideology.

Similarly, when recruiting participants from Prolific we recruited participants previously

identified to the platform as having "conservative", or "moderate" ideology (differences in the

wording of categories reflect platform differences).[15]

Following our pre-registered plan, we followed back up with participants to invite them

to complete the Time 2 survey after they completed the Time 1 survey (and passed the relevant

attention checks; see pre-registration document) on their respective platforms. We waited

approximately 21 days after our completion of T1 data collection for Prolific participants and 22

days after our completion of T1 data collection for Connect participants to invite participants

back. Thus, participants varied in the period of time between their T1 and T2 survey

completions, and all participants waited at least our pre-registered one-week minimum, and did

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[14] We note that in our original registered report and our pre-registration we planned to recruit 3,600 participants (1800 per platform). Only during T2 recruitment did we realize that we had only recruited 3,200 participants, because of human error. However, because we had already reached our pre-registered target minimum of recruiting 1800 participants to invite back for Time 2, we elected not to recruit further participants. This decision was made without analyzing any data and with approval of our manuscript editor.

[15] On each of these two platforms, we asked participants at the end of the Time 1 study whether they had completed a very similar study asking about questions like whether Black people would want to use power for dominance or equality on a different platform. When asking, we made it clear to participants that their compensation would not be affected by their response. We removed the "second" response from participants who responded affirmatively and gave us their platform ID to cross-check in the other platform. Some participants indicated they had already completed the study on the other platform but did not give us their platform ID to cross-check. Because we could not validate whether they had in fact completed the study on the other platform without their ID for the other platform, we opted to exclude these participants. Lastly, we note that some participants said it was possible they completed the T1 survey on the other platform, but, upon checking against their platform ID on that platform, we found that they had not. We therefore kept these participants in the study and invited them back to T2.

not exceed our pre-registered four-week maximum. We gave participants a one-week deadline to complete the Time 2 survey (in a one-hour sitting) after sending out our invitation. We aimed to recruit back as many of the participants from our Time 1 survey to complete the Time 2 survey as possible.

When recruiting participants at Time 1 we had the goal of recruiting a minimum of 1,800 participants, which we surpassed (see details of our final sample below). Our target sample size was based on the sample needed to detect a main effect of condition on outcome equal to Cohen's $d = 0.16$ with 80% power. We derived this effect size based on the observed effect of our meta-dominance manipulation (vs. control) on support for structural empowerment in the Pilot Study (described below) we conducted to test the effectiveness of our manipulations on their respective manipulation checks (in which we also included our outcome measure following the manipulation check measure). These analyses suggested that we would need 484 participants in each of our meta-dominance and control conditions at T2 to detect statistical significance at $p < .05$. Since we planned to recruit between 1,800 and 3,600 participants at T1, we hoped that we would have a good chance of attaining at least 484 participants per condition at T2, even with a projected ~ 20% attrition in the short gap between T1 and T2.

Before inviting participants to the T2 survey, we screened out any participants with a measured political conservatism score of less than 3 on the 3-item political conservatism measure we used in our earlier studies (scored on a 1 to 7 scale, with higher numbers indicating greater conservatism). We used this cut-off for two reasons: first, participants with this level of conservatism might still reasonably be thought of as relatively moderate, even though they lean in the liberal direction. The second reason is grounded in the empirics of the pilot study we conducted to validate our support for Black empowerment manipulation (see below). There,

when comparing participants assigned either to the empty control or the empowerment manipulation, the Johnson-Neyman method indicated that the effect of our manipulation on that manipulation check crossed the threshold of significance for people with conservatism scores of 2.84 and above (in its own pilot, our meta-dominance manipulation was also effective at impacting the manipulation check among participants with conservatism levels of 2.84 and above). By including in our analyses participants with conservatism scores of 3 and above, we were confident that we would be selecting participants into a sample in which we could confidently expect that both of our manipulations would be effective.

Final sample details. Of the 3200 participants we recruited to complete Part 1, 1208 participants from Connect and 1261 participants from Prolific passed our pre-registered inclusion criteria (see pre-registration for details) and were invited to complete Part 2 of the study. Of these, 1119 participants from Prolific and 970 participants from Connect completed Part 2[16]. Ultimately, a total of 1997 participants[17] (900 male; 1092 female; 2 non-binary; 3 other; $M_{age} = 44.25$; $SD_{age} = 13.63$) passed our Part 2 inclusion criteria (1072 from Prolific and 925 from Connect) and were included in our analyses ($N_{meta-dominace\ manipulation} = 692$; $N_{empowerment\ support\ manipulation} = 618$; $N_{control} = 683$).

Materials and Measures

Experimental manipulations. To reduce meta-dominance beliefs amongst White Americans, we used a close variant of the original meta-dominance manipulation used in Study 2 but written in the style of an Op-Ed (see Figure 4 for manipulation wording).

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[16] We note that among these responses at T2, 43 had at least 2 duplicate participant identification numbers (PIDs). In total, 17 distinct PIDs had at least two duplicates. Because it is possible the same participant saw our manipulation multiple times, we excluded all T2 responses with duplicate PIDs.

[17] We note that outside of our pre-registered exclusions, we excluded 3 additional participants because they did not register a click on the page showing the experimental manipulation indicating they may have been a bot. Our results do not change with these participants included in our analyses.

To increase White Americans' support for policies empowering Black Americans, we used a vignette written in the style of an Op-Ed. Given that we focused on moderate and conservative individuals who we found in Study 2 had the most 'room to move', we framed this manipulation in a way that would speak most to values and concerns of conservative Americans (see similar approaches by Feinberg & Willer, 2013; Feinberg & Willer, 2019). Specifically, the article we developed focused on reassuring participants that Black empowerment policies like affirmative action do not hinder White Americans' economic standing or access to important resources like health care, but rather, increase their lot by stimulating economic growth. Thus, this article countered common conservative narratives cautioning that affirmative action policies may disadvantage Whites (Carlson, 2022). The article also affirmed the conservative value of loyalty by emphasizing the importance of all Americans working together to grow a strong America (Graham, et al., 2009; Graham et al., 2013)[18] (see Figure 4 for manipulation wording).

We conducted extensive testing in a pilot study to evaluate and select our manipulation (from a set of possible manipulations). This pilot testing (described in full in the Supplemental Materials) revealed that both our manipulation of empowerment and our manipulation of meta-dominance were effective at influencing their respective manipulation checks among political moderates and conservatives—that is, the population we target in the main study.

One limitation of our experimental materials is that, in our piloting, the effect of the meta-dominance manipulation in reducing meta-dominance perceptions among conservatives (unstandardized b (mean difference) $=-0.98$, $\beta=-0.69$, 95% CI[-0.93, -0.44], $p<.001$) was larger than the effect of the Black empowerment policy support manipulation in increasing support for

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[18] To craft the article, we used generative AI as a "copilot", working iteratively with ChatGPT to re-write and augment the initial article prime we developed, giving it explicit instructions to frame the article in the style of an Op-Ed and in a way that would be digestible to conservatives.

Black empowerment among conservatives (unstandardized b (mean difference) $=0.53$; $\beta=0.31$, 95% CI[0.09, 0.54], $p=.006$). This may be something of an inherent limitation, given that attitudes about Black empowerment policies like affirmative action are very difficult to manipulate in the polarized context of race-relevant policies in the United States (and appear harder to change than to change people's beliefs about what the disadvantaged group would do with power).[19]

A robust mean difference of half a scale point on Black empowerment policy support should be sufficient to detect downstream impacts on meta-dominance if they exist in a relatively high-powered sample of the type we collected, affording a reasonable test of the "Opposition to Black Empowerment → Meta-Dominance Beliefs" pathway. Nevertheless, we acknowledge that given that the manipulation of meta-dominance may be more effective than the manipulation of support for Black empowerment, it is more appropriate in Study 3 to ask whether we are able to rule in support for either or both of our tested causal pathways than it would to directly compare their respective magnitudes.

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[19] We also note that we conducted our piloting after the Supreme Court ruled in favor of Students for Fair Admissions (SFFA) versus Harvard and the University of North Carolina, which challenged affirmative action selection policies used by the schools; this ruling might have further entrenched the attitudes of Americans towards affirmative action policies (Gottlieb, 2023).

Figure 4. Manipulations used in Study 3

A. Meta-Dominance Manipulation

Power and Purpose - A Glimpse into the Aspirations of Black Americans

Op-Ed By: Oliver Winston

The concept of power, its acquisition, and its use, especially in the context of race relations, is a subject of much discussion in the United States. A recent survey posed bold questions to Black Americans, inquiring about their intentions should they ascend to influential positions in society.

The survey's questions were direct, asking if, upon gaining power, Black Americans would use their newfound influence to perpetuate dominance or to foster equality. The options differed starkly: to "stay on top, and keep the other groups down," or to "implement a social system where all groups get an equal share of power."

The clarity of the participants' responses offers a profound insight into the intentions of Black Americans. Scoring an average of 2.56 out of 7, the Black community expressed clear disfavor towards the idea of using power to dominate. Conversely, the notion of using power to create a balanced and fair society garnered a strong average endorsement of 5.44 out of 7.

This pattern of responses sheds light on a deeper truth: the Black American community's pursuit of power is not for the sake of hierarchy but for the opportunity to enact systemic equality. This evidence contradicts some of the more cynical views of human nature and power dynamics.

What does this tell us about the future? If these survey responses from Black Americans are predictive of their real-world behavior—as prior evidence suggests is very likely— then the quest for power amongst Black Americans is intrinsically linked to the pursuit of justice and fairness. It suggests a path forward defined by communal uplift rather than supremacy of any single group.

This study does more than report findings; it invites contemplation on the values that might guide us if given the chance to reshape the hierarchies that govern our lives. For a nation grappling with its identity and the distribution of power within it, these responses are a beacon of hope for a more equitable and inclusive tomorrow.

B. Black Empowerment Manipulation

Challenging the Gap Fairly: Expanding Opportunities for Black Americans While Ensuring White Americans Continue to Thrive

Op-Ed By: Oliver Winston

In our nation's continuing dialogue surrounding racial equality, the disparities faced by Black Americans remain a prominent issue. From household income, where the median Black household earns only 61% of a White household, to underrepresentation in prestigious academic institutions (less than 8% in Ivy League schools), top corporations (only 3.2% of executive roles), and political offices (57 out of 435 members in the House of Representatives), the gaps between Black Americans and White Americans are evident.

Addressing these disparities isn't merely about affirmative action or quotas; it's about expanding opportunities and giving everyone a chance at success. Efforts have focused on enhancing access to quality education, mentorship programs, professional development, and community investments. For example, investments in historically Black colleges and universities (HBCUs) have increased, and initiatives to link corporations with diverse talent have been prioritized. Public-private partnerships are fostering entrepreneurial ecosystems within Black communities, empowering them with resources and networks.

These broad-based opportunities are bearing fruit. Since 2010, there's been an appreciable increase in the number of Black Americans in Fortune 500 managerial roles, from 1.9% to 3.2%. Enrollment in leading colleges has climbed by approximately 10% over the last decade for Black students. And in the political arena, the representation of Black Americans in the U.S. House of Representatives has grown from 9.3% to 13.1%. These gains underscore the positive impact of opportunity-driven policies.

Yet some White Americans have expressed concerns that these gains by Black Americans might translate into losses for their own community. It's an understandable worry rooted in the legitimate fear of limited resources and opportunities. However, the evidence doesn't support this zero-sum thinking. A University of Chicago study illustrates that the expanded opportunities for Black Americans have not diminished those for White Americans. In fact, because of economic growth, there are significantly more White people in managerial positions today than was true in 2010.

In Detroit, urban revitalization projects that began in 2012 aimed at uplifting Black communities have resulted in increased economic activity benefiting all residents, and boosting the overall economy of the city. In North Carolina, a 2020 report by the Kaiser Family Foundation demonstrated that targeted health initiatives designed to decrease disparities in Black communities ended up benefiting all residents by decreasing emergency room visits across the state by 15%, relieving the strain on the overtaxed healthcare system. Finally, investments in Atlanta's minority-owned businesses led to an 8% growth in local GDP, fostering job creation and wealth generation for the entire community, regardless of race.

For all Americans, things remain far from perfect, and many people across the country continue to face meaningful challenges that deserve attention. Yet it's reassuring that, on average, White Americans can still do well while progress is made within the Black community. This stability is indicative of a society that can grow inclusively without diminishing the prospects of anyone else. Strides toward equality need not threaten established successes. It's a balance that fosters a more inclusive prosperity where everyone has a chance to get ahead.

The task ahead is both moral and pragmatic: How do we continue this trajectory, focusing on opportunity rather than competition, embracing the belief that we can all succeed together? It's a delicate challenge but one that is crucial to get right for the continued prosperity of our shared nation.

Measures. We included the same measures at both Time 1 and at Time 2 except for

conservatism which we assessed only at Time 1 with the same 3 items used in Study 2 (α=.84).

We assessed meta-dominance perceptions with the ten-item balanced version of our scale

(Version 2; α_{T1}=.94 ; α_{T2}=.95). We assessed support for Black empowerment with the four items

used in Study 2 (α_{T1}=.87 ; α_{T2}=.87). At Time 1, the order in which these scales were presented to

participants was randomized. At Time 2, participants randomly assigned to the control condition

responded to the meta-dominance and support for Black empowerment measures again

(presented in random order). Participants assigned to the meta-dominance manipulation were

first shown the focal outcome for their condition, support for Black empowerment. We then

subsequently assessed meta-dominance as a manipulation check. Similarly, participants assigned

to the Black empowerment manipulation first responded to the focal outcome for their condition,

meta-dominance perceptions. We then also subsequently measured their support for Black

empowerment as a manipulation check.[20]

Results

Preliminary analyses. We report descriptive means and standard deviations for all

measured variables across both time points across the three different conditions in Table 11.

We used a linear regression to examine the association of condition with T1 measures of

conservatism, support for Black empowerment, and meta-dominance beliefs to ensure the

success of our random assignment (control condition coded 0; experimental condition coded 1).

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[20] Meta-dominance beliefs were significantly lower among White Americans assigned to the meta-dominance reduction condition (M =3.81, SD = 1.37) than those assigned to the control condition (M =4.35, SD = 1.41) , b =-0.53, 95% CI[-0.68, -0.39]; β =0.19 , p<.001, d = 0.39. This effect remained robust controlling for baseline levels of meta-dominance, b =-0.51, 95% CI [-0.60, -0.41]; β =0.18 , p<.001. Also as expected, support for Black empowerment was significantly higher among White Americans assigned to the Black empowerment support condition (M =3.81, SD = 1.43) than those assigned to the control condition (M =3.58, SD = 1.39), b =0.23, 95% CI[0.08, 0.38]; β =0.08 , p<.001, d = 0.16. This effect remained robust controlling for baseline levels of Black empowerment support, b =0.21, 95% CI[0.11, 0.30]; β =0.07, p <.001.

We found no significant between condition differences in T1 conservatism (b =-0.02, 95% CI[-0.14, 0.10]; β =-0.02, p=.727), T1 meta-dominance beliefs (b =-0.03, 95% CI[-0.17, 0.11]; β =-0.01, p=.650), or T1 Black empowerment support (b =0.01, 95% CI[-0.14, 0.15]; β =0.002, p=.932), when comparing participants in the control condition to participants in the meta-dominance reduction condition. Similarly, we found no significant between condition differences in T1 conservatism (b =0.05, 95% CI[-0.07, 0.18]; β =0.02, p=.399), T1 meta-dominance beliefs (b =-0.04, 95% CI[-0.18, 0.11]; β =-0.01, p=.635), or T1 Black empowerment support (b =0.03, 95% CI[-0.13, 0.18]; β =0.01, p=.723), when comparing participants in the control condition to participants in the meta-dominance reduction condition.

Table 11. Means of T1 and T2 measured variables as a function of experimental condition

	Control Condition (n=683)		Meta-Dominance Condition (n=696)		Empowerment Support Condition (n=618)	
	M	SD	M	SD	M	SD
T1 Conservatism	4.82	1.15	4.79	1.13	4.87	1.17
T1 Meta-Dominance	4.32	1.38	4.29	1.27	4.29	1.32
T1 Black Empowerment Support	3.53	1.41	3.53	1.34	3.55	1.41
T2 Meta-Dominance	4.35	1.41	3.81[a]	1.37	4.25	1.37
T2 Black Empowerment Support	3.58	1.39	3.87[a]	1.40	3.81[a]	1.43

Note. An "[a]" near an experimental cell mean indicates a significant difference relative to the control condition. All differences were significant a $p < .001$, both with and without controlling for baseline (T1) levels of that construct.

Primary Analyses

"Meta-dominance Beliefs→ Opposition to Black Empowerment" pathway. Using a regression framework, we regressed our dependent variable of support for Black empowerment assessed at Time 2 onto a dichotomous variable representing the control vs. meta-dominance manipulation contrast and onto baseline levels of support for Black empowerment at Time 1. Our

regression model for this analysis can be represented as:

Time 2 support for Black empowerment $\sim$ $b_{y\text{-intercept}}$ $+ b_{Condition}(X_{condition}) +$

$b_{T1empowerment}(X_{T1empowerment})$

Supporting the "meta-dominance -> opposition to empowerment" pathway, we found that

participants in the meta-dominance reduction condition ($M_{marginal}$=3.87; SE=0.03) reported

significantly greater support for Black empowerment at Time 2 relative to those in the control

condition ($M_{marginal}$=3.58; SE=0.03), b =0.29, 95% CI[0.19, 0.38]; β =0.10, , p<.001, when

controlling for T1 empowerment support (which was also significant in the model b =0.80, 95%

CI[0.76, 0.83]; β =0.78, , p<.001). Of note, even without controlling for baseline empowerment

support, the effect of the meta-dominance condition (M=3.87; SD=1.40) relative to the control

condition (M=3.58; SD=1.19) was robust, b =0.29, 95% CI[0.14, 0.44]; β =0.11 , p<.001,

Cohen's d =0.21. In other words, among our sample of moderate to conservative White

Americans, we significantly increased people's support for policies that empower Black

Americans by experimentally reducing their beliefs that Black Americans seek power as a means

to dominate other groups.

In a secondary, and more exploratory analysis, we tested whether the effect of the meta-

dominance manipulation on Time 2 support for Black empowerment was moderated by Time 1

baseline levels of meta-dominance, while controlling for baseline Black empowerment support.

As we noted in our registered report, it is possible that the experimental effects may be larger for

those political moderates and conservatives relatively high in meta-dominance at Time 1 baseline

as they might require the manipulation the most. Our regression model for this test can be

represented as:

Time 2 support for Black empowerment ~ $b_{\text{y-intercept}}$ + $b_{\text{Condition}}(X_{\text{condition}})$ +

$b_{\text{T1empowerment}}(X_{\text{T1empowerment}})$ + $b_{\text{T1meta-dominance}}(X_{\text{T1meta-dominance}})$ +

$b_{\text{interaction}}(X_{\text{condition}})(X_{\text{T1meta-dominance}})$

In this model we found no evidence of an interaction between condition and baseline meta-dominance beliefs on Time 2 empowerment support, b =-0.02, 95% CI[-.09, 0.05]; p =0.558, and the simple effects at +1 and -1 standard deviations of baseline empowerment support were both significant at $p<.001$.[21]

Opposition to Black Empowerment → Meta-Dominance pathway. Using a regression framework, we regressed our dependent variable of meta-dominance beliefs assessed at Time 2 onto a dichotomous variable representing the control vs. support for Black empowerment manipulation contrast, and on baseline levels of meta-dominance perceptions at Time 1. Our regression model for this analysis can be represented as:

Time 2 meta-dominance ~ $b_{\text{y-intercept}}$ + $b_{\text{Condition}}(X_{\text{condition}})$ + $b_{\text{T1meta-dominance}}(X_{\text{T1meta-dominance}})$

Although the pattern of means was in the expected direction, participants in the Black empowerment support condition (M_{marginal}=4.26; SE=0.03) did not differ significantly in their reported meta-dominance beliefs at Time 2 relative to those in the control condition (M_{marginal}=4.33; SE=0.03), b =-0.07, 95% CI[-0.16, 0.02]; β =-0.03, p=0.112, when controlling for T1 meta-dominance beliefs (which was significant in the model, b =0.84, 95% CI[0.80, 0.87]; β =0.81, p<.001). We also note that without controlling for baseline meta-dominance perceptions, the effect of the empowerment condition (M=4.25; SD=1.37) relative to the control

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[21] In our pre-registration we also planned an exploratory test to see if baseline empowerment support moderated our condition effect. We found no evidence of this interaction (b =0.007, 95% CI[-.06, 0.07]; p =0.839). Finally, we noted in our pre-registration that we would explore whether baseline conservatism moderated the condition effect controlling for baseline empowerment support. This interaction was also non-significant (b =0.04, 95% CI[-.04, 0.11]; p =0.346). Note that unlike in Study 2 (where we also considered moderation), our sample here was comprised only of political moderates and conservatives.

condition (M=4.35; SD=1.41) on T2 meta-dominance beliefs was non-significant, b =-0.10, 95% CI[-0.25, 0.05]; β =0.04 , p=0.189, d=0.07.

In a secondary, and more exploratory analysis, we tested whether the effect of the support for Black empowerment manipulation on Time 2 meta-dominance perceptions was moderated by Time 1 baseline levels of support for Black empowerment (controlling for baseline meta-dominance in the model). It is possible that the experimental effects maybe be larger for those relatively low in support for Black empowerment at Time 1 baseline as they might require the manipulation the most. Our regression model for this test can be represented as:

Time 2 meta-dominance ~ $b_{y\text{-intercept}}$ + $b_{Condition}(X_{condition})$ + $b_{T1\text{meta-dominance}}(X_{T1\text{meta-dominance}})$ +

$b_{T1\text{empowerment}}(X_{T1\text{empowerment}})$ + $b_{interaction}(X_{condition})(X_{T1\text{empowerment}})$

Analysis revealed a non-significant interaction between condition and baseline Black empowerment support predicting T2 meta-dominance =-0.008, 95% CI[-0.07, 0.05], p=0.793.[22]

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[22] In our pre-registration we also planned an exploratory test to see if baseline meta-dominance perceptions moderated our condition effect. While the interaction was non-significant (b =-0.04, 95% CI[-.11, 0.02]; p =0.219) it is perhaps worth noting that we did see a significant (if small) effect of the empowerment manipulation on T2 meta-dominance among those relatively high in baseline meta-dominance beliefs (+1SD = 5.66; b =-0.13, 95% CI[-0.25, -0.002], p=0.046) but not relatively low in baseline meta-dominance beliefs (-1SD = 2.95; b =-0.02, 95% CI[-0.14, 0.109], p=0.799). In other words, relative to those in the control condition (M_{marg}=5.61), reported meta-dominance perceptions among White Americans who at baseline were most prone to reporting that Black Americans desire dominance were lower after exposure to an op-ed (M_{marg}=5.49) designed to reduce their opposition to policies empowering Black Americans. Given the non-significant interaction, this interesting pattern should be interpreted as tentative and replicated in future work. Finally, we noted in our pre-registration that we would explore whether baseline conservatism moderated the condition effect controlling for baseline meta-dominance perceptions – this interaction was statistically non-significant (b =-0.07, 95% CI[-.14, 0.01]; p =0.092). That said, White Americans in our sample relatively highest in conservatism (+1SD = 6.00; b =-0.15, 95% CI[-0.27, -0.03], p=0.016) did show lower meta-dominance after exposure to the empowerment support manipulation (M_{marg}=4.32) relative to those in the control condition (M_{marg}=4.48). This was not true for White Americans in our sample relatively lowest in conservatism ((-1SD = 3.68; b =-0.002, 95% CI[-0.13, 0.12], p=0.979). Again, this pattern needs replication.

Discussion

In Study 3 we replicate and build in several important ways on our first experiment (Study 2). We find that politically moderate to conservative White Americans were significantly more supportive of policies to empower Black Americans when they read an Op-Ed highlighting research findings (based on our own real data) that Black Americans desire power for equality versus dominance. Importantly, this effect was robust when we controlled for participants' baseline support for Black empowerment, which gave us the ability to more precisely estimate causal effects by accounting for theoretically-relevant constructs (Boer et al., 2015). We had no failures of randomization of the type that complicated the interpretation of Study 2. Moreover, we found that the condition effect was robust among politically moderate and conservative White Americans in our sample whether they were—by the standards of this sample—relatively low or high on conservatism at baseline[23], as well as relatively low or high in meta-dominance beliefs, or support for Black empowerment at baseline. Taken together, we think that these findings provide compelling support for our proposed "Meta-Dominance → Opposition to Black Empowerment" pathway, and shed more light on the distinct association between meta-dominance and other consequential intergroup constructs that we identified cross-sectionally in Studies 1A-F.

A strength of Study 3 was that we also experimentally tested the reverse causal pathway, considering whether White Americans who already oppose Black empowerment might come to assert that Black Americans desire power for the purpose of dominating other groups, as a means to justify maintaining their disempowerment. However, while we were able to significantly

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[23] For additional context, those "low" on conservatism in this sample were at 3.68 on a 1-7 scale; those "high" on conservatism in this sample were at 6 on the same scale. Because we sampled only moderates and conservatives in Study 3, these levels are higher than is true when estimating the moderation at low and high levels of conservatism in Study 2.

increase participants' support of Black empowerment in this study relative to participants in a control condition, our Black empowerment support manipulation did not significantly reduce people's meta-dominance beliefs. Thus, we did not obtain clear evidence in Study 3 to rule in the "Opposition to Black Empowerment → Meta-Dominance" pathway.

However, a few important caveats must be noted. Although our study was set up to effectively test each of the "Meta-Dominance → Opposition to Black Empowerment" and the "Opposition to Black Empowerment → Meta-Dominance" pathways, it was *better* set up, relatively speaking, to test the former. Specifically, while the Black empowerment manipulation significantly increased participants' support for Black empowerment relative to control, its effect size was less than half of the meta-dominance reduction manipulation's effect in reducing meta-dominance beliefs (a Cohen's *d* of .16 versus .39 in the main study, and we observed the same pattern in our pilot study). Thus, the Black empowerment manipulation might have had about half the potency to reveal the "Opposition to Black Empowerment → Meta-Dominance" pathway than the meta-dominance manipulation did for the reverse pathway. As a result, we make no attempt here to directly contrast the relative strength of each pathway and instead restrict our inferences to examining whether we can rule *in* the relevance of either pathway.

We *can* confidently state that we tested an intervention that significantly manipulated opposition to Black empowerment. However, despite our relatively large samples and two-wave design, we did not find evidence of a significant knock-on effect on reducing meta-dominance that would have been expected if meta-dominance were invoked as a post-hoc justification to maintain Black disempowerment. Still, we *cannot* confidently rule *out* the possibility that we might have found evidence for this pathway with a stronger manipulation of opposition to Black empowerment and/or in a still-larger sample. Of possible interest for further examination, our

exploratory analyses did reveal some significant simple effects for this pathway. For example, despite the absence of a significant interaction of condition with conservatism, we did observe, among our sample of political moderates and conservatives, that White Americans one standard deviation above the sample mean in baseline conservatism showed a significant (if small) reduction in meta-dominance concerns when exposed to the intervention that increased their support for Black empowerment. Still, given the nonsignificant interaction and this analysis' exploratory nature, this pattern should be treated as highly tentative pending confirmatory replication.

General Discussion

Across eight studies (Studies 1A-F, 2, and 3), using both correlational and experimental methodologies among large samples (Total $N = 7,460$), we introduced and examined the contours of a new construct, meta-dominance: that is, dominant group members' beliefs about a disempowered group's intentions for power.

A plethora of research documents dominant group members' general reticence to give up the advantages associated with their position atop the social hierarchy, notwithstanding moderating factors like perceptions of system (in)stability (Georgesen & Harris, 2006; Saguy & Dovidio, 2013) and (il)legitimacy (Iyer, et al., 2003; Miron, et al., 2006). Our work puts forward dominant group members' beliefs about what disempowered groups would do if they had power as a novel factor uniquely associated with their support for policies empowering groups at the bottom.

In principle, meta-dominance beliefs could be immaterial, with dominant groups squarely focused on holding on to the fruits of power's privileges and unwilling to relinquish any control irrespective of their beliefs about the disempowered groups' intentions. However, across our six

cross-sectional studies in the context of Black-White relations in the U.S., we find evidence of a robust association between White Americans' belief that Black Americans would seek power to dominate other groups (vs. create equality between groups) and their opposition to supporting policies (e.g., affirmative action) or movements (e.g., Black Lives Matter) that empower Black Americans and their support for initiatives to maintain or advance White Americans' dominant position in the racial hierarchy. Critically, these associations between meta-dominance and consequential intergroup attitudes held even when we controlled for a wide range of constructs potentially overlapping with meta-dominance, including other negative meta-perceptions (e.g., meta-prejudice, meta-favoritism), anti-Black attitudes, signals that the current racial hierarchy might be unstable, and Whites' own anxiety about losing power within the racial hierarchy.

Importantly, our work also suggests that there is considerable variation in White Americans' beliefs about Black Americans' intentions for power: across all our correlational studies (including in our nationally representative sample), the average among Whites on the meta-dominance scale was consistently right around the midpoint, with large proportions of Whites falling on either side. Together these results suggest that the belief that Black Americans would seek to use power to dominate other groups is not a fringe view held only by a small percentage of our sampled White Americans. But optimistically, it is also not the case that a majority of Whites believe that Black Americans seek power to dominate other groups (see also Figure 1). We also conducted a mega-analysis (Costafreda, 2009; Curran & Husson, 2009) of the six cross-sectional datasets we collected with White Americans (N=3,383; see Supplemental Analyses), using a standardized composite score of the different measures used to assess opposition to Black empowerment across the different studies. In Supplemental Analyses we report additional analysis reporting the relation between meta-dominance beliefs and

demographic factors such as age, gender, income, education and subjective class ratings. We found some evidence that White Americans who were older, who identified as male, or who were less well educated, were more likely to believe that Black Americans sought power to dominate other groups versus to create equality for all. However, it is notable that despite reaching statistical significance, these correlations were small (absolute value of r ranging between 0.07 to 0.17). Annual household income, and subjective SES were not related to meta-dominance perceptions. Most critically, across the six studies, meta-dominance (Version 1 of Scale) accounted for 33% of the variance in White Americans' opposition to Black empowerment and 26% of the variance in White Americans' desire to protect their own advantaged power position.[24]

Of course, correlational studies do not inform us about causality, and therefore Study 1 could not speak to the nature of the causal relationship—if any—between dominant group members' meta-dominance beliefs concerning a disempowered group and their willingness to empower that group. Across two experimental studies (Study 2 and Study 3), we tested two viable causal pathways linking these constructs. In Studies 2 and 3, we tested the "*Meta-Dominance Beliefs* → *Opposition to Black Empowerment*" pathway, in which White Americans oppose Black empowerment as a consequence of concerns that Black Americans would dominate their group (and other racial groups). In Study 3, we additionally tested the reverse pathway—from "*Opposition to Black Empowerment* → *Meta-Dominance Beliefs*"— in which meta-dominance concerns are invoked by White Americans as a means of legitimizing pre-existing opposition to policies empowering Black Americans.

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[24] When using Version 2 of the scale (n=1705) meta-dominance accounted for 52% of the variance in White Americans' opposition to Black Empowerment and 42% of the variance in White Americans' desire to protect their own advantaged power position.

Both Study 2 and Study 3 provided empirical support for the first causal pathway (i.e., "*Meta-Dominance Beliefs* → *Opposition to Black Empowerment*"), by presenting participants with real data we collected from Black Americans that revealed their intentions to use power for equality rather than dominance. The interpretation of Study 2 was complicated by a failure of randomization; namely, the fact that participants in our meta-dominance information treatment (vs. control) condition were higher at baseline in racial anxiety. Given that racial anxiety is strongly correlated with opposition to Black empowerment, this baseline difference made it less likely that we would find a positive impact of our meta-dominance information manipulation. When we controlled for the baseline difference in racial anxiety, we did find that individuals exposed to the meta-dominance information manipulation were significantly more likely to support policies to increase the structural power of Black Americans. And even without controlling for this baseline difference, we found that the treatment was effective in increasing support for Black empowerment among more conservative White Americans.

Nevertheless, given the inferential complexity introduced by the baseline difference in racial anxiety, we sought to replicate our effects in Study 3, where we specifically sampled White Americans of moderate to conservative political ideology (i.e., those for whom the Study 2 data had suggested the manipulation might be most impactful). And indeed, the results of Study 3 clearly replicated the finding that being exposed to information about Black Americans' stated intentions for power can *cause* increases in White Americans' support for their empowerment (even among White Americans typically most likely to resist it).

Study 3 provided less evidence in favor of the reverse causal pathway (i.e., "*Opposition to Black Empowerment* → *Meta-Dominance Beliefs*" pathway). If meta-dominance beliefs were a post-hoc means of legitimizing opposition to Black empowerment—as the logic underlying this

pathway supposes—then we would expect that experimentally increasing White Americans' support for Black empowerment should result in a significant *decrease* in reported meta-dominance beliefs. Yet, although we developed a manipulation that successfully increased our sample of White Americans' support for policies empowering Black Americans, we did not find corresponding reductions in the subsequent levels of meta-dominance.

As noted above, although we did not obtain evidence to clearly rule *in* the existence of this pathway, we do not feel that our evidence is definitive in ruling it *out*, both because the pattern of means in was in direction expected by the theory underlying this proposed causal pathway, and because our manipulation of support for Black empowerment was relatively weak (Cohen's $d = .16$) compared to the effect on the manipulation check in the meta-dominance treatment condition (Cohen's $d = .39$). Thus, it is possible that future research with still more effective manipulations of support for Black empowerment *would* indeed find an experimental reduction in claims of meta-dominance (as the "Opposition to Black Empowerment → Meta-Dominance" pathway supposes). Future work might also consider following up to replicate significant simple effects (e.g., among those especially high in conservatism) we observed as part of our exploratory moderation analyses (patterns we currently consider highly tentative, especially given the absence of statistically significant interaction coefficients).

Theoretical Contributions

Our work contributes theoretically to intergroup relations in several ways. For one, our findings suggest that theorizing about the contestation of intergroup hierarchies needs to do more to account for people's beliefs about other groups' intentions. Work that has considered when dominant group members might be more willing to accept changes to the social hierarchy has primarily considered how the dominant group views the social hierarchy (e.g., perceptions of

stability and legitimacy; see Saguy & Kteily, 2014 for review), and relatedly, whether dominant groups think about social change in terms of their ingroup losing its privileges versus the disempowered group losing its disadvantages (Chow & Gallak; 2012; Dietze & Craig, 2021). While these factors are clearly important in their own right, they do not consider meta-perceptions; that is, dominant groups' beliefs about the motives of other groups. Although our work is certainly compatible with past perspectives, it suggests that the extent to which dominant group members defensively resist sharing power will additionally depend on what they believe about how disempowered groups would use power: When dominant group members believe that disempowered group members would seek to institute equality, they may show more tolerance for power-sharing than assumed by existing theories focused on the hierarchy-maintaining motives of groups at the top (e.g., Blumer, 1958; Knowles et al., 2014; Kteily & McClanahan, 2019; Sidanius et al., 2016; Saguy & Kteily, 2011).

Our work is also rare among intergroup relations research by considering not only how groups conceive of a reduction in social hierarchy but also of *alternative* hierarchical arrangements, including potential *reversals* in which a dominant ingroup is replaced at the top by a formerly disempowered outgroup (see also research on demographic changes in the U.S. that considers the psychological consequences of thinking about a "majority-minority" future; e.g., Craig & Richeson, 2014; Craig et al., 2018; Danbold & Huo, 2014; Hodson et al., 2022). Although social hierarchies often exhibit an impressive degree of stability (Sidanius & Pratto, 1999), they are sometimes turned on their head, as highlighted in recent times by the rise to power of Shiite Muslims in Iraq after decades of Sunni Muslim control, or the ascension to power of so-called 'Islamists' in Turkey with the election of the AKP, after 80 years of being dominated by secularists (see Soylu & Sheehy-Skeffington, 2015). Our research highlights the

need to attend not only to how individuals think about the current social hierarchy, but also what they think future hierarchical arrangements might hold.

Beyond these contributions, our work adds to a body of recent research emphasizing the importance of meta-perceptions in intergroup relations. How we believe an outgroup perceives our own group impacts the quality of our cross-group interpersonal interactions, with those expecting to be perceived negatively by the outgroup anticipating or actually experiencing fewer positive interactions with the other side (Vorauer et al., 1998; Richeson & Shelton, 2007) and expressing greater bias and more hostility towards them (Kamans et al., 2009; Paolini et al., 2006; Kteily, et al., 2016). Similarly, our tendency to believe that outgroups are motivated by their hate or desire to hurt us predicts attitudes associated with the escalation of intergroup conflict (Waytz et al., 2014; Mernyk et al., 2022). Our work highlights the additional importance of considering meta-perceptions specifically pertaining to how outgroups would use power, suggesting that meta-dominance beliefs predict power-relevant outcomes even when controlling for negative meta-perceptions about the outgroup such as meta-prejudice and meta-favoritism.

Finally, our work is in line with promising intervention-based research that highlights how informing ingroup members about how the actual reported attitudes of the outgroup may not be as bad as they first thought can effectively attenuate the consequences of their negative meta-perceptions (Landry et al., 2022; Lee & Cikara, 2019; Moore-Berg et al., 2020; Voelkel et al., 2024). In our work, showing White Americans data suggesting that Black Americans on average desire equality over dominance increased White Americans' support for structurally empowering Black Americans. While our focus with this manipulation was to test the causal relation between meta-dominance beliefs and opposition to Black empowerment, future research focused on intervention could explore whether simple informative messages, similar to our manipulation,

could be an effective means to increasing White Americans' support of policies empowering

Black Americans.

Limitations and Future Directions

Despite its contributions, our work has several limitations and raises several questions

worth considering in future research. For one, our work focused on the context of Black-White

relations in the U.S., and it therefore remains unclear to what extent our findings would

generalize to other contexts (or other targets, like Latino Americans, within the same context).

For example, it is worth considering how beliefs about a disempowered group's intentions for

power shape attitudes in the context of gender relations: Do men vary in their willingness to

relinquish control and encourage the empowerment of women as a function of their meta-

perceptions about women's intention to use power to dominate men versus maintaining equality?

On the one hand, rhetoric espoused in certain quarters (e.g., among men's rights advocates)

about feminists being "man-eaters" supports the possibility that meta-dominance beliefs

influence these men's willingness to share power. Speaking to this idea, the hostile sexism sub-

scale of the Ambivalent Sexism Inventory (ASI; Glick & Fiske, 1997) contains items which

might tap into meta-dominance concerns that men have about women's intentions for power

such as "Women seek to gain power by getting control over men" and "Feminists are not seeking

for women to have more power than men (reverse-scored)". It may be that some of the negative

consequences of hostile sexism (Bareket & Fiske, 2023) including violence toward women and

opposition to women's advancement in the workplace may in part be driven by fears that men

have regarding what women would with more power. On the other hand, the complexity of the

relationship between men and women— and, in particular, its potential to involve both

competition and mutual interdependence (Glick & Fiske, 2001; Sidanius & Pratto, 1999)— may

make meta-dominance perceptions somewhat less relevant than in contexts marked more

consistently by overt hostility.

Future work could also extend our examination of meta-dominance beliefs to other

contexts marked by violent conflict (e.g., Israel/Palestine), and to further consider how our

effects might depend on other factors, including cultural, historical, and demographic factors. For

example, it is likely to matter whether a dominant group considering a disempowered outgroup's

intentions for power represents the demographic majority or minority in that society. On the one

hand, a currently dominant group that represents a demographic majority might feel that it has a

more legitimate claim on maintaining power. On the other hand, a currently dominant group that

represents a demographic *minority* might be especially concerned about the risks involved in

relinquishing any power given that they have less 'strength in numbers' should an ascendant

group seek to subordinate them.

It is also possible that meta-dominance beliefs might be more prevalent when dominant

group members stereotype the outgroup as being high in agency/competence and low in warmth.

From the perspective of the stereotype-content model (see Fiske et al., 2007, 2009 for reviews),

being high in warmth signals one's intentions to help or hurt others, while being high in

agency/competence signals the capacity for one to act out their good or bad intentions. Thus,

disempowered groups who are viewed as low in warmth might be seen as those most likely to

desire dominance, while disempowered groups seen as high in agency/competence might be

viewed as those most likely to successfully execute their plan to dominate. Importantly, people's

stereotypes of Black Americans have been changing over time (Fiske et al., 2009; Charlesworth

& Banaji, 2019) and vary by the subtypes of Black people in the United States that people are

asked to think about (Williams, 2006). For example, while rich or educated Black people are

stereotyped as relatively competent but cold, poor or disabled Black people are stereotyped as relatively incompetent but warm. Thus, White people's meta-dominance beliefs might vary as a function of what subtypes of Black people they envision when thinking of Black people who are fighting for Black empowerment. Relatedly, dominant group members might hold different warmth/competence stereotypes of different ethnic minorities (Cuddy et al., 2007; Fiske et al. 2002), which might lead them to have different expectations for how much different ethnic groups might desire dominance. Future work is needed to explore these possibilities.

Further research is also still needed to disentangle the extent to which individuals' meta-perceptions about the outgroup's intentions are specifically influenced by perceptions about how the outgroup would treat their ingroup in particular (compared to how they would structure society as a whole). We were careful in our scale development to eliminate items that might reflect White Americans' fear of Black Americans seeking revenge on their group specifically, instead focusing on items about how Black Americans would structure the broader social hierarchy, impacting all groups. Still, it is difficult to know how much White Americans were primarily thinking about the consequences for their own ingroup when completing our meta-dominance scale, and how much of their associated resistance to empowering Black Americans is driven specifically by concerns about the implications for their own ingroup specifically, versus concerns about all groups being treated unequally. Such research could build on our factor analyses to identify the presence (or absence) of important differences in those aspects of the meta-dominance concept that are focused more on perceptions of the outgroup's desire to use power for dominance versus those focused more on perceptions of the outgroup's desire to use power to create equality.

Conclusion

A large body of research finds that dominant group members are threatened by and resist giving up the privileges associated with their position in society. Here, we show that this can meaningfully depend on their beliefs about what outgroups would *do* if they had power. We find that when White Americans believe (or are led to believe) that Black Americans would use power to institute equality for all, they are more willing to share power and relinquish control. Because groups are often overly negative about outgroups' intentions, providing information about disempowered group members' actual intentions for power may be a productive avenue for increasing intergroup equality in society. We think this research provides the first empirical evidence for the importance of sentiments already circulating in debates on American race relations. As one White X user who viewed a relevant video (by Black activist Kimberly Jones) online put it, "The part at the end with the woman telling us that we're lucky black people want equality, not revenge = whole lot of uncomfortable the first time I saw it (a few days back), but damn if it's not necessary to hear. That's why we "must" listen, and then do something about it." (T_L_Seigler, Jun 8th, 2020).

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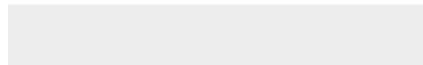
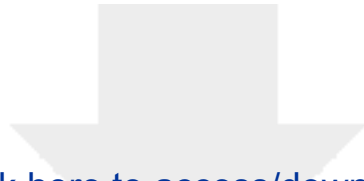Click here to access/download

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