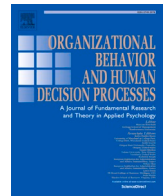




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## Organizational Behavior and Human Decision Processes

journal homepage: [www.elsevier.com/locate/obhdp](http://www.elsevier.com/locate/obhdp)Self-views of disadvantage and success impact perceptions of privilege among White men<sup>☆</sup>Sean Fath<sup>a,\*</sup>, Anyi Ma<sup>b</sup>, Ashleigh Shelby Rosette<sup>c</sup><sup>a</sup> ILR School, Cornell University, 133 Statler Drive, Ithaca, NY 14853, United States<sup>b</sup> Freeman School of Business, Tulane University, 7 McAlister Drive, New Orleans, LA 70118, United States<sup>c</sup> The Fuqua School of Business, Duke University, 100 Fuqua Drive, Durham, NC 27708, United States

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## ABSTRACT

When presented with evidence of their advantages, the privileged often either deny that their social system has accorded them any gains or that social inequity exists altogether. In this research, we draw on two literatures related to self-perception—multiple social categorization and self-image threat—to propose factors that may increase the racial privilege perceptions of White men, a group often in positions of power in the workplace. Across ten studies ( $N = 5,124$ ) in a workplace context, we find that White men who self-report (Studies 1c, 2a-d, 3) or recall (Studies 1a-b, 4) experience(s) of disadvantage based on a social category (e.g., physical disability) perceive greater White privilege than those without exposure to such disadvantage. Additionally, we find mixed evidence that greater self-reported success at work corresponds to increased perceptions of privilege for White men who have experienced social category-based disadvantage. We discuss these findings, their implications, and future directions.

“White people’s lack of consciousness about their racial identities has grave consequences in that it not only denies White people the existence of seeing themselves as benefiting from racism, but in doing so, frees them from taking responsibility for eradicating it.” – Alice McIntyre (1997)

“While I do not have the experience of ever having been discriminated against because of the color of my skin, I do have the experience of sometimes feeling like a stranger in my own country... Standing here wearing this wedding ring in a way that couldn’t have happened two elections ago lets me know just how deep my obligation is to help those whose rights are on the line every day.” – Pete Buttigieg, U.S. Secretary of Transportation, speaking about his experience as a White, gay man in America (Alter & Villa, 2019)

Along economic and social lines, racial inequity has persisted for centuries in the United States (Margo, 2016). For White Americans, this legacy translates into unearned economic and social advantages not shared by racial minorities (i.e., White privilege). For instance, predominantly White school districts across the United States receive \$23 billion more in funding than predominantly non-White school districts (EdBuild, 2019), even though they serve the same number of students.

White people seeking housing are shown more options than equally qualified racial minorities, Whites in the market for a new car are quoted significantly lower prices at car dealerships (Pager & Shepherd, 2008), and average earnings are 26.7% higher for White people than for Black people in the U.S. workplace (Vega, 2016). White men, specifically, receive around twice as many call-backs when seeking employment as equally qualified Black and Hispanic men (Pager, Bonikowski, & Western, 2009; Bertrand & Mullainathan, 2004). Further, when occupying executive roles, White men have more behavioral freedom than racial minorities (Westphal & Stern, 2007), are less likely to be blamed for poor performance (Park & Westphal, 2013), and less likely to incur decreased perceptions of competence by superiors for championing important social causes and issues (Hekman, Johnson, Foo, & Yang, 2017). Evidence of the privilege of Whiteness is widely available—for Whites generally and White men especially.

However, Whites often reject notions of privilege or advantage. When confronted with facts about racial inequity, White people tend to seek to distance themselves from their racial category, justify existing racial inequities, or deny that White privilege exists altogether (Baker & Fausset, 2015; Knowles, Lowery, Chow, & Unzueta, 2014; Lowery,

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Knowles, & Unzueta, 2007; Hetey & Eberhardt, 2018; DiAngelo, 2018). Indeed, the motivation to enhance and maintain positive self-regard (Rogers, 1951; 1959) can come into conflict with perceptions that one's personal outcomes in life derive in part from systemic privilege (Knowles, Lowery, Chow, & Unzueta, 2014). Perceiving that Whites as a group benefit from racial privilege or advantage carries negative, self-relevant consequences for White individuals, threatening the positivity of their self-image (Branscombe, 1998), fostering racial guilt (Leach, Snider, & Iyer, 2002), and lowering esteem for their racial ingroup (Lowery, Chow, Knowles, & Unzueta, 2012).

Whites' denial of group-level privilege is problematic because it decreases their favorability toward racial minority groups (Stewart, Latu, Branscombe, Phillips, & Denney, 2012) and, as the above quote by Alice McIntyre suggests, diminishes their sense of responsibility toward advancing parity (Phillips & Lowery, 2015). Conversely, increases in perceived privilege correspond to increases in Whites' support for policies aimed at reducing social disparities (e.g., affirmative action) and their positive opinions toward racial minorities (Phillips & Lowery, 2015; Lowery et al., 2012; Stewart et al., 2012). Notably, White men occupy most positions of power and influence in American society (e.g., Jones, 2017); hence, the degree to which White men perceive White privilege likely has especially far-reaching consequences (e.g., Phillips & Lowery, 2018). In the present research, we ask: What factors might impact the extent to which White men perceive White privilege, and why?

We specifically explore White men's perceptions of workplace White privilege, since racial inequity is especially pronounced in organizational settings (Jones, 2017), and draw from two different literatures exploring topics related to the self and self-views: research on multiple categorization and self-image threat. First, drawing on core tenets in theories of multiple social categorization (Ramarajan, 2014; Nicolas, de la Fuente, & Fiske, 2017), we propose that seeing oneself as being a member of a disadvantaged social group—such as along the lines of one's sexual orientation, as the above quote by U.S. Secretary of Transportation Pete Buttigieg suggests—can increase the extent to which White men perceive workplace racial privilege. Second, drawing on research related to self-image threat (Steele, 1988; Tesser, 2000), we propose a boundary on this effect; namely, that beliefs concerning how successful one has been at work may help define the relationship between White men's experiences of disadvantage and their perceptions of privilege. Specifically, we expect perceived success at work to enhance the effect of experienced disadvantage on perceived privilege when perceived success is high and diminish that relationship when perceived success is low. We test these predictions across ten studies ( $N = 5,124$ ). We find consistent evidence that experience of disadvantage based on a social category, whether measured (Studies 1c, 2a-d, and 3) or experimentally manipulated (Studies 1a, 1b, and 4), increases the degree to which White men perceive White privilege in the workplace. However, we find only mixed and non-experimental evidence that perceptions of success moderate the relationship between experienced disadvantage and perceived White privilege (Studies 2a, 2c-e, and 3).

This research contributes to the broader literature on self and identity by applying a multiple social categorization framework to White men in a novel way. Classically, research that explores the effects of holding membership in multiple social categories of variable status (e.g., intersectionality; Collins & Bilge, 2016) has often focused on people who hold simultaneous membership in distinct, subordinated groups (e.g., Black women; Crenshaw, 1989). When White men are discussed in this research, they are often focused on as a point of comparison—i.e., as individuals who occupy dominant positions across visible social dimensions. We apply an intersectional framework<sup>1</sup> to White men directly, exploring the notion that White men can hold membership in

overlapping, dominant and subordinate social groups. In this exploration, we expand the span of social categories most often discussed in research on intersectionality (especially with respect to White men), moving beyond race and gender to other, often non-visible social categories such as religion or disability status. We note that some White men's lived experience may include simultaneous membership in dominant and subordinate social groups and explore the effects of that unique, intersectional experience on their racial privilege perceptions. In so doing, we contribute to research connecting multiple social category memberships to social cognition, such as work showing how shared identities can reduce bias between seemingly disparate social groups (Gaertner et al., 1994; Craig & Richeson, 2012). We contribute to this work by demonstrating the social cognitive effects of holding disparate social identities *intra-personally* (i.e., within one person): namely, a broader understanding of the social hierarchy and one's group's place in it (i.e., increased perceptions of White privilege). To our knowledge, this research is the first to demonstrate that the experience of social category-based disadvantage can foster privilege perceptions among White men.

## 1. Multiple Social Categorization and the Self-Concept

A person's self-concept—a global sense of self that is developed continuously through one's experiences in life (Baumeister, 1999)—is a critical driver of perceptions and behavior (Markus, 1983). Central to one's self-concept is the concept of identity—the collection of qualities (e.g., attributes, traits, values) that one uses to identify oneself (Rogers, 1959). People can see themselves in many ways; that is, they can hold multiple identities. The constellations or networks of different identities that people hold—the various “knowledges, meanings, and experiences that are self-defining” (Ramarajan, 2014; pg. 593)—collectively inform their broader self-concept.

In the present research, we focus specifically on multiple social identities, as derived from self-perceived membership in multiple social categories (i.e., multiple social categorization; Nicolas et al., 2017; Ramarajan, 2014; Turner & Tajfel, 1986; Ashforth & Mael, 1989). People can hold simultaneous membership in multiple, distinct social categories, such as nationality, religion, race, ethnicity, and gender, and these multiple social category memberships serve to contextualize the self-concept (Chen, English, & Peng, 2006). Theories of multiple social categorization abound in social science and have played a prominent role in research on social identity, intergroup relations, and bias reduction (Abrams & Hogg, 1990; Brewer & Hewstone, 2004; Crisp & Hewstone, 2000; Gaertner et al., 1994). From intersectionality frameworks (Collins & Bilge, 2016; Parent, DeBlare, & Moradi, 2013; Purdie-Vaughns & Eibach, 2008; Crenshaw, 1989), to status inconsistency theory (Bacharach, Bamberger, & Mundell, 1993; Stryker & Macke, 1978), to social identity complexity theory (Miller, Brewer, & Ar buckle, 2009; Brewer, Gonsalkorale, & van Dommelen, 2013; Roccas & Brewer, 2002), most multiple social categorization theories tend to converge on at least three principal tenets.

First, people tend not to see and experience themselves as members of just one specific social category (e.g., men), but often instead see and experience themselves as members of multiple different social categories at the same time (e.g., White people, men, Americans; Nicolas et al., 2017). These categories can be both those granted by birth (e.g., race, sex) and those granted through experiences in life (e.g., physical disability, socioeconomic status). Second, social categories are housed within social hierarchies (Bacharach, Bamberger, & Mundell, 1993; Anthias, 2013; Acker 2006, 2012); consequentially, the multiple category memberships people may hold can vary in the status afforded to them on a societal level (Moss-Racusin & Johnson, 2016; Rudman et al., 2012; Hornsey, 2008). Specifically, some social categories are more dominant (e.g., Whites, rich people) and others subordinate (e.g., racial minorities, poor people). Third, the experience of membership in overlapping social categories tends to inform the myriad of ways in which

<sup>1</sup> Specifically, we note that we use an intracategorical complexity approach to our study of White men in the present research (McCall, 2005).

individuals view themselves and understand their positioning in these various interlocking hierarchies of privilege and disadvantage (Settles & Buchanan, 2014; Nicolas et al., 2017; Roccas & Brewer, 2002). That is, while the multiple social category memberships people may hold can vary hierarchically in terms of status afforded to them by society, they can also vary intra-personally in terms of the status they are afforded, such that people can simultaneously *see themselves* as holding membership in traditionally dominant and/or subordinated social categories (Ramarajan, 2014).

## 2. White Men, Multiple Social Categorization, and Privilege Perceptions

Here, we apply these tenets of multiple social categorization to White men. While White men as a group are generally not subordinated on gender hierarchies (e.g., Blau & Kahn, 2007) or racial hierarchies (e.g., Vega, 2016; Bertrand & Mullainathan, 2004), they may vary from one another in important ways along other dimensions. For instance, White men who have a physical disability or grew up with few resources (i.e., low socioeconomic status) might self-categorize as members of subordinate social groups (e.g., people with disabilities, poor people) as a consequence of that experience of disadvantage. Consider a White man who is gay. While he might seem, to a stranger, to only hold membership in social categories that are traditionally dominant in the greater social hierarchy (i.e., the visible dimensions of race and sex), he might self-categorize, at least to an extent, as a member of a subordinated social group as well (Ramarajan, 2014). Indeed, people often view themselves more in terms of their subordinate (vs. dominant) social categories (Pratto & Stewart, 2012).

This point is important to make, because theories of multiple social categorization suggest that White men whose experiences in life place them at such an intersection of social categories—not just as members of dominant social groups but also as members of one or many subordinate social groups—may be particularly well-positioned to understand the privilege associated with membership in a dominant social group (e.g., Whites, men). That is, having a self-concept that comprises overlapping membership in conflicting social categories may afford White men a unique perspective, such that their experience(s) of disadvantage as a member of a subordinate social category (or categories) may make their privilege in a dominant social category more evident than it otherwise may have been. Specifically, White men who have experienced disadvantage in life due to membership in a social category (or categories) may gain a clearer perspective than White men without such experience on the interlocking social hierarchies in society more broadly (Settles & Buchanan, 2014), such that they are better able to understand the disadvantages experienced by members of subordinate social groups, such as racial minorities (Craig & Richeson, 2012; Cortland et al., 2017; Kaplan, Spenkuch, & Tuttle, 2020). In brief, White men with experience of disadvantage (vs. without experience of disadvantage) may be better able to empathize with others' disadvantages. This ability to empathize—a clearer understanding of others' experiences of disadvantage due to their own social category memberships (Alter & Villa, 2019)—may, in turn, provide White men with more information about their relative privileges. With regard to racial privilege, it follows that the better able White men are to empathize with the disadvantages faced by racial minorities—an ability fostered by White men's own experiences of social category-based disadvantage—the greater the degree to which they should perceive White privilege.

While no existing research—to our knowledge—demonstrates that the experience of social category-based disadvantage can foster racial privilege perceptions among White men, some research supports the broader notion that experienced disadvantage can help make privilege more visible, inducing multifaceted—rather than myopic—views of social hierarchies (Jones, 2009). For example, in a qualitative study, Jones (2009) detailed how White Americans felt like an “odddity” or an “outsider” (Jones, 2009, pp. 296) while traveling in Kenya and China,

and how these experiences made them more aware of their racial identity, and consequent privilege, at home in America. That is, White people who had negative experiences due to membership in a social category—i.e., as Americans—became more able, as a consequence of that experience, to understand the privileges they enjoy as Whites. Other qualitative evidence suggests that White women who have experienced sexism or classism are more sensitive to discrimination towards others (Ancis & Szymanski, 2001; Case, 2012). In a similar vein, research demonstrates that individuals of lower subjective social class are relatively more likely to favor contextual explanations of social inequity (e.g., the economic system privileges the rich) over person-centered explanations (e.g., the rich work harder than the poor; Kraus, Piff, & Keltner, 2009).

It follows that White men who have (vs. have not) experienced disadvantage(s) in their life along lines of membership in a subordinate social category or categories (e.g., disabled people) may be better equipped to understand the relative advantages they experience via membership in traditionally advantaged social categories (e.g., Whites), as a result of an enhanced ability to empathize with the experiences of disadvantage that others face (e.g., racial minorities). Consequentially, White men who have experienced disadvantage, relative to those who have not had such experiences, may be more likely to perceive White privilege. Consistent with this reasoning, we make the following prediction:

*Hypothesis 1: White men with experience(s) of disadvantage due to a social category will perceive greater White privilege than those without such experience.*

It is important to note, however, that we do not expect *all* (perceived or actual) experiences of disadvantage along social category lines to foster privilege perceptions for White men. Rather, we expect experience of disadvantage to provide greater perspective on experience of privilege only insofar as the experience of disadvantage is not rooted in the social category associated with privilege. For instance, recent polling suggests that a majority of Whites in the United States believe White Americans are discriminated against, as a group. Moreover, a smaller subset (fewer than 20%) indicated, when polled, that they had personally experienced discrimination (i.e., disadvantage) as a function of being White (Gonyea, 2017). This polling suggests that a non-negligible proportion of White Americans, and presumably White men specifically, would perceive their membership in the social group, White people, as a source of disadvantage—would understand being White as being a member of a subordinated social group. While we would expect from the foregoing reasoning that the experience of disadvantage along lines of a social category would foster increased privilege perceptions for *most* White men, we would not expect this prediction to hold for those White men who perceive their *Whiteness* as a source of disadvantage. Hence, one likely boundary to the positive impact of experienced disadvantage on perceived White privilege would be White men who perceive themselves to have experienced disadvantage due to membership in the White social category. We do not systematically explore this boundary condition in the studies that follow—we generally focus on experience of disadvantage due to non-racial (and non-gender) social categories such as religion or disability status—but we return to this notion in exploratory analyses in Study 4 and in greater depth in the General Discussion.

## 3. Self-Image Maintenance and Privilege Perceptions

People are motivated to maintain an image of themselves as competent and good (Greenwald, 1980; Steele, 1988; Banaji & Prentice, 1994). This is important to note because research consistently shows that perceiving, or being confronted with information communicating, one's privilege(s) can be psychologically aversive (Branscombe, 1998; Leach, et al., 2006; Lowery et al., 2007). That is, being aware that one may be privileged by one's racial group membership is likely to threaten one's ability to maintain a positive self-image (Lowery et al., 2007; Unzueta & Lowery, 2008). People often respond to self-image threats by

rationalizing and/or denying the threatening stimulus (i.e., self-protective patterns of thinking and responding; Steele, 1988; Banaji & Prentice, 1994). For instance, Whites may avoid threats inherent in perceptions of racial privilege by distancing themselves from the White racial group or simply denying the existence of White privilege altogether (Knowles et al., 2014). It follows that White men who have experienced disadvantage(s) due to social category membership(s)—and thus have a better understanding of Whites' position of relative privilege on the racial hierarchy than those without such experience—should perceive White privilege to a greater degree to the extent they can *withstand self-image threat* inherent in the perception of privilege. We propose that White men who experience social category-based disadvantage and perceive themselves to have been relatively successful at work (vs. relatively unsuccessful) should be better able to withstand that self-image threat.

People's perceptions of their job performance or workplace success are a reliable and central indicator of the positivity of their self-evaluation (Judge, Erez, & Bono, 1998; Judge & Bono, 2001; Judge, Van Vianen, & De Pater, 2004; Kammeyer-Mueller, Judge, & Scott, 2009; Coopersmith, 1967). Indeed, the ties between perceived job performance and the positivity of self-evaluation may be especially strong insofar as people's jobs are an increasingly central component of their identity in modern society (Dutton, Dukerich, & Harquail, 1994; Pratt, Rockmann, & Kaufmann, 2006; Elsbach, 1999). Moreover, in a workplace-focused context—like the context of our topic of study—perceived success at work represents a particularly apt meter of positive self-evaluation.<sup>2</sup> As such, we expect that White men who perceive themselves to have been relatively successful at work—i.e., those with a relatively positive self-evaluation—should have greater standing resiliency to specific self-image threats, when those threats are encountered, than White men with lower self-perceived success at work. In other words, we expect perceptions of success at work to operate as an indicator of White men's ability to accommodate information that is threatening to their self-image (e.g., that their racial group is privileged) without engaging in self-protective patterns of thinking and responding (e.g., denying or avoiding the threat; Banaji & Prentice, 1994). This line of reasoning is consistent with a resource-based view of positive self-concept (Steele, Spencer, & Lynch, 1993), which argues that some people are "more resilient to self-image threat than others" because they have generally "favorable self-concepts"—i.e., self-evaluations that are positive as a whole (Steele et al., 1993; pgs. 885–886). This line of reasoning is also consistent with research on the role of core self-evaluations in response to psychological threat (e.g., self-image threat), which demonstrates that those with more positive core self-evaluations are better able to cope and contend with psychological threats than those with less positive core self-evaluations (Kammeyer-Mueller et al., 2009).

It follows that White men who experience social category-based disadvantage should be more likely to ultimately perceive workplace White privilege than those without such experience when they perceive themselves to have a relatively high (vs. low) degree of success at work. That is, White men with experience of disadvantage along a social category dimension should have a heightened awareness, relative to those without such experience, of their position of relative privilege along the racial hierarchy. This heightened awareness of their advantaged position on the racial hierarchy should lead White men with

<sup>2</sup> It is important here to distinguish between two constructs: perceived success and experience of disadvantage. Specifically, as defined in the present research, experience of disadvantage does not necessitate "low" perceived success, and a lack of experience of disadvantage does not necessitate "high" perceived success. That is, people can belong to a disadvantaged social group (e.g., due to a physical disability), but still believe that they have been successful in life. Similarly, people can belong to an advantaged social group (e.g., Whites) but still believe they have been unsuccessful in life.

experience of disadvantage to be more likely to perceive workplace White privilege in general (Hypothesis 1), but it may also increase the relevance of their ability to contend with self-threat. At higher levels of perceived success, White men with experience of disadvantage (vs. without such experience) should be both more aware of their relatively advantaged position on the racial hierarchy as well as more capable of shouldering the self-threat inherent in perceptions of racial advantage. Conversely, at lower levels of perceived success, the effect of experience of disadvantage on privilege perceptions may be attenuated—White men with experience of disadvantage may be relatively less capable of withstanding the self-threat inherent in perceptions of privilege. In this way, perceived success at work may define the boundaries of the effect of experience of disadvantage on perceptions of privilege—facilitating that effect when success is high and reducing it when success is low.

It is important to note that we are not predicting a main effect of perceived success at work on perceptions of workplace White privilege and are agnostic about whether such an effect may emerge. Indeed, in the broader literature on privilege perceptions, mechanisms that help people contend with self-image threat (e.g., self-affirmation) do not always generate main effects on perceived privilege—sometimes these main effects emerge (Lowery et al., 2007, Experiment 3) and sometimes they do not (Phillips & Lowery, 2015, Experiment 2). In fact, some research suggests that threat-buffering mechanisms may only facilitate perception of racial privilege for Whites who have first been provided with a primer on racial inequity in society (Phillips & Lowery, 2015, Experiment 2; also see Phillips & Lowery, 2020). Rather than supporting a main effect of perceived success, this research presents a picture consistent with the above reasoning—that perceived success (i.e., resiliency to self-image threat) should be especially relevant to privilege perceptions for participants with experience of disadvantage, who should have a broader understanding of interlocking social hierarchies (i.e., inequities between different social groups) than those without such experience. In other words, we expect perceptions of success at work to influence perceived privilege only when paired with a heightened awareness of inequity in society (i.e., as could be provided by personal experience of disadvantage). Accordingly, we predict the following interaction:

*Hypothesis 2: When perceived success is high (vs. low), White men with experience(s) of disadvantage due to a social category will perceive greater White privilege than White men without experience(s) of disadvantage.*

#### 4. Overview of Studies

To test these hypotheses, we conducted ten studies. In Studies 1a-c, we explored the relationship between experience of disadvantage and perceptions of workplace White privilege among White men (Hypothesis 1), as well as the mechanism we theorize undergirds that relationship—ability to empathize with the disadvantages faced by racial minorities. In Studies 2a-4, we sought to provide a broad test of Hypotheses 1 and 2—the positive effect of experienced disadvantage on perceptions of privilege (Hypothesis 1) and the nature of perceived success at work as a moderator of that effect (Hypothesis 2).

All data and materials for each study, and the pre-registration documentation for Study 3, are available at <https://osf.io/v2mgq/>. We report all independent variables and dependent variables measured. Data were collected in one wave in each study. No participants were excluded across studies unless noted otherwise (see Studies 2e and 3). Sensitivity power analyses for each study are available in the Supplementary Materials.

#### 5. Study 1a

In Study 1a, we conducted an initial, experimental test of Hypothesis

1. Because we were not aware of an established manipulation of experience of disadvantage along a social category dimension, we developed a face-valid manipulation of experience of disadvantage.<sup>3</sup> Participants read a brief description of experience of disadvantage stemming from membership in a social category (vs. a description of a neutral topic) and then were asked to bring to mind and reflect on a time when they felt disadvantaged (vs. a neutral topic). Following the manipulation of experience of disadvantage, participants indicated their agreement or disagreement, on a binary basis, with the notion that White people are inherently privileged in work settings. Consistent with Hypothesis 1, we expected a larger proportion of participants to agree that White people are inherently privileged in work settings following a reflection on personal experience of disadvantage vs. a neutral topic.

### 5.1. Method

**Participants and procedure.** In order to perform a highly powered, initial test of Hypothesis 1, we sought approximately 200 participants per experimental condition in Study 1a. As such, we recruited 400 White, American men from Lucid, an online platform providing high-quality data (Pennycook et al., 2021; Carlson & Hill, 2021; Coppock & McClellan, 2019). We obtained a final sample of 398 participants ( $M_{age} = 45.35$ ,  $SD_{age} = 16.11$ ).

**Disadvantage manipulation.** Participants were randomly assigned to one of two conditions: disadvantage vs. control. In the *disadvantage* condition, participants read:

*“In today’s society, people can be disadvantaged for different reasons – some types of personal disadvantage may stem from factors that are obvious or observable, like when a person has a physical disability. Other types of personal disadvantage may arise from factors that are not immediately obvious, such as having grown up in a poor household or having grown up in an impoverished area with few resources. Indeed, many people have felt disadvantaged at some point in their lives. Being disadvantaged can lead people to feel: Different from others around them; Confused; Isolated; Worse off than others.”*

Next, participants in the *disadvantage* condition were asked to think of a time in their lives when they felt disadvantaged in the manner described above. Participants were prompted to recreate the experience vividly in their mind and think about how the event made them feel and what it made them think about as they experienced it. We asked participants to reflect on and bring to mind an experience of disadvantage in any domain of their lives in order to reduce the possible number of our (White, male) participants who might fail to recall an experience of disadvantage.

Conversely, participants in the *control* condition read,

*“A living room is described as a room in a residential house that is designated for relaxing and socializing. This type of room is sometimes called a front room when it is located near the front door of the house. A standard living room may contain furniture, like a couch, a table, or a chair, and may also include furnishings such as a rug, a vase, or a lamp. The living room is designed to be a place where family members and their guests assemble for family activities like watching TV, talking, or playing games. It is frequently located next to the kitchen.”*

Participants in the *control* condition were then asked to reflect on a living room they had been in the past. They were asked to recreate the room as fully as possible in their mind and to think about the feelings and thoughts that came to mind when they were in this living room.

**Perceived White privilege at work.** After completing the experimental manipulation to which they were assigned, participants completed a one-item, binary privilege perceptions measure.

Participants indicated whether they agreed or disagreed with the statement, “White people are inherently privileged in work settings due to their race,” using options “disagree” (coded as 0) and “agree” (coded as 1).

### 5.2. Results and Discussion

We expected that a greater proportion of participants would agree with the notion that White people are inherently privileged in work settings due to their race when asked to bring to mind and reflect on an experience of social category-based disadvantage (vs. a neutral topic). Consistent with this prediction and supporting Hypothesis 1, 52.3% of participants in the *disadvantage* condition indicated agreement, while only 37.3% indicated agreement in the *control* condition,  $\chi^2(1) = 9.02$ ,  $p = .003$ ,  $\phi = 0.15$ . That this relatively simple manipulation—merely bringing to mind and reflecting on an experience in one’s life—appears to boost perceptions of White privilege among White men has positive implications for the promotion of White privilege awareness in the workplace, which we return to in the General Discussion.

## 6. Study 1b

In Study 1b, we employed an experimental manipulation of disadvantage similar to that which was used in Study 1a and again assessed participants’ inclination to agree or disagree with the notion that Whites are inherently privileged in work settings due to their race (Hypothesis 1). However, building on the design of Study 1a, we also sought to test the psychological mechanism we expect underlies Hypothesis 1. As outlined in the Introduction, we reasoned that experience of social category-based disadvantage should increase the extent to which White men perceive White privilege through an increased ability to empathize with the disadvantages experienced by racial minorities. To test this proposed mediator, we employed a validated scale measuring ethnocultural empathetic perspective taking (EEPT; Wang et al., 2003). According to Wang and colleagues (2003, pg. 22), people who are high on ethnocultural empathetic perspective taking (EEPT) are able to not only “understand a racially or ethnically different person’s thinking and/or feeling” but also “feel the other’s emotional condition from the point of view of that person’s racial or ethnic culture.” We selected items from the EEPT scale that are focused on understanding the *disadvantages* experienced by racial or ethnic minorities (e.g., discrimination), as we describe in more detail below.

Consistent with Hypothesis 1 and the results of Study 1a, we expected that participants prompted to reflect on an experience of social category-based disadvantage (vs. a neutral topic) would be more likely to agree with the concept of workplace White privilege. Moreover, we expected that participants prompted to reflect on an experience of social category-based disadvantage (vs. a neutral topic) would report higher EEPT, and that participants’ EEPT would mediate the relationship between the experimental manipulation of disadvantage and agreement with the concept of workplace White privilege.

We also built on Study 1a in this study by testing our predictions using a sample drawn from a different pool of participants: White men in the United Kingdom. We made this change in order to assess the generalizability of our effects to a non-U.S. base. Notably, like in the United States, racial inequity persists in the United Kingdom (Aitken & Butcher, 2020), and the recognition of White privilege (by Whites in the U.K.) is a topic highlighted both in the U.K. media (Bakar, 2020) and also within academia (Gorski, 2003; Murdoch, & McAloney-Kocaman, 2019). Thus, we sought to broaden the contribution of the present research by extending it to a participant pool comprised of White men from the U.K.

### 6.1. Method

**Participants and procedure.** Following the same 200/cell rule used

<sup>3</sup> We thank an anonymous reviewer for this suggestion.

in Study 1a, we used Lucid to recruit 400 White men from the U.K. in Study 1b. We obtained a final sample of 398 participants ( $M_{age} = 44.91$ ,  $SD_{age} = 15.46$ ).

**Disadvantage manipulation.** Participants were randomly assigned to one of two experimental conditions: disadvantage vs. control. In the *disadvantage* condition, participants read:

*“For this part of the study, please reflect on an experience of disadvantage you have had in your life. For instance, this could be disadvantage you experienced due to things like your age, your religion, your sexual orientation, growing up in a poor household/area, a mental or physical disability, or other things like this. What was a time in your life in which you experienced disadvantage? What happened? How did the experience of disadvantage make you feel? What thoughts came to mind when you experienced disadvantage?”*

Conversely, participants in the *control* condition read,

*“For this part of the study, please reflect on your most recent trip to the grocery store. What was your most recent trip to the grocery store like? What happened? How did the trip to the grocery store make you feel? What thoughts came to mind while you were in the grocery store?”*

Following these prompts, in both conditions, participants were prompted to take a moment and attempt to recreate the experience as fully as possible in their minds.

**Ethnocultural empathetic perspective taking (EEPT).** Next, we measured ethnocultural empathetic perspective taking (EEPT). To do so, we employed select items from the empathetic perspective taking subscale of the ethnocultural empathy scale, which was developed and validated by Wang and colleagues (2003). We reviewed the items in the EEPT sub-scale and made an *a priori* choice to employ three items that we judged were most relevant to our construct of interest—ability to empathize with the disadvantages faced by racial minorities. The remaining items in the EEPT sub-scale that we chose not to use generally involved ability to empathize with other (i.e., not necessarily minority) racial groups and/or did not reference experiences of disadvantage (e.g., “I don’t know a lot of information about important social and political events of racial and ethnic groups other than my own.”)

Of the three EEPT items we selected for this study, we re-worded two items to read as pro-trait rather than con-trait in order to present a cohesive set of pro-trait items, and we re-worded one to read as specific to minority racial/ethnic groups. The three items we employed were, “I can relate to the frustration that some people feel about having fewer opportunities due to their racial or ethnic backgrounds,” “It is easy for me to relate to stories in which people talk about racial or ethnic discrimination they experience in their day to day lives,” and “It is easy for me to put myself in the shoes of someone who is a member of a minority racial or ethnic group” ( $\alpha = 0.83$ ). These items were measured with 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*) and were averaged to generate a composite.

**Perceived White privilege at work.** After completing the EEPT measure, participants indicated their perceived White privilege at work in the same manner as in Study 1a.

## 6.2. Results and Discussion

We expected participants in the *disadvantage* condition to report a greater degree of EEPT and to be more likely to agree with the notion that White people are inherently privileged in work settings due to their race than participants in the *control* condition. Consistent with our expectations, participants in the *disadvantage* condition reported greater ability to empathize with the experiences of disadvantage faced by racial minorities ( $M = 4.23$ ,  $SD = 1.55$ ) compared to those in the *control* condition ( $M = 3.78$ ,  $SD = 1.60$ ),  $t(396) = 2.87$ ,  $p = .004$ ,  $d = 0.29$ . Moreover, consistent with the results of Study 1a, a marginally greater proportion of participants in the *disadvantage* condition agreed that

White people are inherently privileged in work settings due to their race (55.3%) than in the *control* condition (46.2%),  $\chi^2(1) = 3.26$ ,  $p = .071$ .

We also predicted that the effect of the disadvantage manipulation on privilege perceptions would be mediated by participants’ self-reported EEPT. To test this, we employed Hayes’s (2013) PROCESS macro (Model 4; 5000 bootstraps), with disadvantage condition (*disadvantage* = 1; *control* = 0) specified as the independent variable, EEPT as the mediator, and perceived White privilege as the dependent variable. Consistent with our theoretical account of the mechanism undergirding Hypothesis 1, a significant indirect effect emerged,  $ab = 0.23$ , bias-corrected  $SE = 0.09$ , 95% C.I. [0.070 to 0.428]. That is, participants in the *disadvantage* condition were more inclined to agree with the concept of workplace White privilege to the extent that recalling an experience of social category-based disadvantage increased their ability to empathize with the disadvantages faced by racial minorities.

## 7. Study 1c

The chief strength of Studies 1a-b was their experimental design. In Study 1a, participants randomly assigned to reflect on an experience of disadvantage vs. a neutral topic were more likely to agree that White people are inherently privileged in the workplace, and in Study 1b, this effect was mediated by participants’ self-reported ability to empathize with the disadvantages racial minorities face. This pattern of results was consistent with the theoretical account supporting Hypothesis 1: Reflecting on a personal experience of social category-based disadvantage (vs. a neutral topic) caused White men to perceive greater White privilege as a function of an increased ability to understand the disadvantages experienced by members of subordinated groups in society.

With that said, one limitation to the experimental manipulations we employed in Studies 1a-b was their open-ended nature: Though participants in the *disadvantage* conditions were prompted with examples of social category-based disadvantage, it was not possible for us to ensure that all participants would reflect on an experience of disadvantage based on a social category (e.g., vs. a different type of experience of disadvantage). Moreover, though the perceived White privilege measure used in Studies 1a-b pertained specifically to White privilege in the workplace, we asked participants to reflect on an experience of disadvantage in any domain of their lives, rather than just the workplace, in order to reduce the chance that some participants would fail to recall such an experience.

In Study 1c, we sought to both resolve these issues and conceptually replicate Studies 1a-b. To do so, we employed a measurement-based design. That is, rather than experimentally manipulate the salience of personal experience of disadvantage in life (vs. a neutral topic), in this study, we measured the extent to which participants had experienced disadvantage at work along lines of multiple different social categories. Following our measurement of experience of social category-based disadvantage at work, we measured participants’ EEPT, as in Study 1b, and their perceptions of White privilege. In order to confirm that the effects found in Studies 1a-b were robust to surface-level changes in elicitation of privilege perceptions, in this study, participants completed a multi-item scale of perceived workplace White privilege.

Consistent with Hypothesis 1, we expected that participants reporting some (vs. no) experience of disadvantage based on a social category would perceive greater White privilege. Consistent with the results of Study 1b, we also expected experience of disadvantage (some vs. none) to positively predict EEPT, and finally that there would be an indirect effect from experience of disadvantage to perceived privilege through EEPT.

### 7.1. Method

**Participants and procedure.** We sought to recruit 200 White American men from Pollfish, an online survey platform providing high-

quality data (Meyer et al., 2019; Goel, Obeng, & Rothschild, 2015), targeting roughly 100 participants per “cell” in this measurement-based study (i.e., levels of experience of disadvantage, as described below; Gervais, Jewell, Najle, & Ng, 2015). We obtained a final sample of 199 participants. Due to platform restrictions, participant age was measured using 5 categorical options (18–24, 25–34, 35–44, 45–54, and >54), and the average age range was 35 to 44.<sup>4</sup>

**Perceived experience of disadvantage at work.** First, we measured the extent to which participants had experienced disadvantage at work based on a social category. We asked participants to indicate whether they had experienced disadvantage at work along lines of any of five different social categories. Participants indicated whether they had experienced disadvantage along each social category dimension by answering “yes” or “no.” The five social categories provided were sexual orientation, religion, age, socioeconomic status, and disability. Participants who reported experience of disadvantage along at least one dimension were coded as 1, and those who reported no experience of disadvantage along any dimension were coded as 0. In our sample, 64% of participants reported having experienced disadvantage along at least one social category dimension.

**Filler task.** After participants completed the perceived disadvantage measure, they next completed a filler task. In the filler task, participants read a snippet of an article about plans to colonize Mars and provided their opinions, via open response, of the likelihood that humanity would eventually come to colonize Mars. We inserted this filler task to break up the three different measures used in this study and to reduce potential demand concerns related to capturing ability to empathize with discrimination faced by racial minorities after a measure capturing one’s own experiences of disadvantage at work.

**Ethnocultural empathetic perspective taking (EEPT).** Next, we measured ethnocultural empathetic perspective taking (EEPT) using the same items as in Study 1b ( $\alpha = 0.85$ ). As in Study 1b, these items were measured with 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*) and were averaged to generate a composite.

**Perceived White privilege at work.** Finally, we measured participants’ perceptions of White privilege at work. To do so, we adapted the scale used by Swim and Miller (1999). Given that we were interested in perceptions of racial privilege in the workplace, we added the referent “in work settings,” appropriately placed, to each of the respective items. An example item was “In work settings, White people have certain advantages that racial minorities do not have.” In Swim and Miller (1999)’s original scale, there was a reverse-coded item (“I do not feel that White people have any benefits or privileges due to their race”). To ensure high scale reliability in this initial test, we rephrased this reverse-coded question to “I feel that White people have a great deal of benefits or privileges due to their race in work settings.” We added a sixth item to the original scale used by Swim and Miller (1999), which read, “In work settings, White people are viewed more positively than are racial minorities.” We averaged across items to form a composite score; higher scores indicated greater perceived White privilege at work ( $\alpha = 0.96$ ). Items were measured with 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*).

## 7.2. Results and Discussion

We first established discriminant validity between the measures of perceived privilege and EEPT.<sup>5</sup> Next, we examined if White men with

<sup>4</sup> Of the total sample, 73.4% indicated they were presently employed in some capacity, and employment status did not moderate results. Results remain the same in terms of direction and significance if participants who did not indicate present employment are excluded from analyses.

<sup>5</sup> Following procedures described by Bagozzi and Phillips (1982), we established the discriminant validity of EEPT and White privilege perceptions using confirmatory factor analysis (see Supplementary Materials).

experience of disadvantage at work based on a social category perceived greater White privilege at work than those with no experience of disadvantage (Hypothesis 1). Consistent with our predictions, we found that White men who reported having experienced disadvantage perceived greater workplace White privilege ( $M = 4.31$ ,  $SD = 1.89$ ,  $n = 127$ ) than those who reported having experienced no disadvantage ( $M = 3.35$ ,  $SD = 1.75$ ,  $n = 72$ ),  $t(197) = 3.53$ ,  $p = .001$ , Cohen’s  $d = 0.53$ . Next, we examined whether experienced disadvantage positively predicted EEPT. As predicted, we found that White men with experience of disadvantage reported greater ability to empathize with the experiences of disadvantage faced by racial minorities ( $M = 4.57$ ,  $SD = 1.64$ ) compared to those who reported having experienced no disadvantage ( $M = 3.99$ ,  $SD = 1.38$ ),  $t(197) = 2.53$ ,  $p = .012$ ,  $d = 0.38$ .

Finally, we tested if EEPT mediated the effect of perceived disadvantage on perceived White privilege. To test for mediation, we employed Hayes’s (2013) PROCESS macro (Model 4; 5000 bootstraps), with perceived disadvantage specified as the independent variable, EEPT as the mediator, and perceived White privilege as the dependent variable. Consistent with our expectations, a significant indirect effect emerged,  $ab = 0.30$ , bias-corrected  $SE = 0.12$ , 95% C.I. [0.073 to 0.576]. As in Study 1b, these results suggest that White men with experience of disadvantage (vs. no experience) are more likely to perceive White privilege to the extent that experience increases their ability to empathize with the disadvantages faced by racial minorities. With that said, it is important to note that, in contrast to Studies 1a and 1b, these results are correlational in nature, given the measurement-based design employed in this study. As such, we cannot definitively claim that these results reflect the natural, causal ordering of the variables we tested, and it is also possible that other, untested variables could account for the pattern of results we observed (Fiedler, Harris, & Schott, 2018; Fiedler, Schott, & Meiser, 2011). However, when the results of this study are considered in tandem with the results of Studies 1a-b, there is reasonable support for the causal ordering of variables predicted in Hypothesis 1. We note that we replicated all findings in this study with an independent sample of participants and a different scale of perceived White privilege (see Supplementary Materials).

**Summary.** In sum, across Studies 1a-c, we found converging evidence for Hypothesis 1 and its mechanism using both experimental and measurement-based designs. In Study 1a, White male participants who were randomly assigned to reflect on an experience of social category-based disadvantage (vs. a neutral topic) were more likely to agree that White people are privileged at work, and in Study 1b, this effect was mediated by participants’ self-assessed ability to empathize with the disadvantages faced by racial minorities (EEPT). In Study 1c, White men who reported having experienced disadvantage at work along lines of a social category (or categories) perceived workplace White privilege to a greater degree than those who reported not having experienced such disadvantage, and self-assessed EEPT again explained this relationship. Additionally, Studies 1a-c demonstrated that this pattern of results is robust to surface-level changes in elicitation of privilege perceptions and occurs among White men from both the United States and the United Kingdom. As noted in the Introduction, these studies are the first to demonstrate, to our knowledge, both the positive impact of social category-based disadvantage on racial privilege perceptions for White men and the psychological mechanism explaining that effect. We turn to concurrent tests of Hypotheses 1 and 2 across Studies 2a-4.

## 8. Studies 2a-e

In these studies, we used a measurement-based design to test Hypotheses 1 and 2. Given that replicability of findings is important for the integrity of psychological science in general (Brandt et al., 2014) and especially when predictions involve interactions (e.g., Hypothesis 2), we tested our predictions using the same design across five unique studies (Studies 2a-e). Below, we report all results from these studies collectively. Studies 2a-e are hereafter referred to collectively as Samples 2a-e.

In four of five samples, we elected to draw participants from online platforms (Samples 2a-d). We made this sample choice because it afforded us the ability to perform high-powered tests of our predictions while sampling participants along specific demographic criteria (e.g., White men). As in Studies 1a-c, the online sources we used to draw these convenience samples provide data comparable in quality to data derived from more traditional sources (e.g., laboratory/in-person surveys; Buhrmester, Kwang, & Gosling, 2011; Peer, Brandimarte, Samat, & Acquisti, 2017) and have been used extensively in previous research on social and political perceptions (Clifford, Jewell, & Waggoner, 2015). We recruited participants to comprise our fifth sample (Sample 2e) from public areas in a university located in the Southeastern United States. We made this choice to test generalizability to a non-online population.

To accommodate tests of a three-way interaction (see footnote 6) at roughly 100 participants/cell (Gervais et al., 2015), we aimed to recruit at least 800 participants per sample in Samples 2a-d. We were not able to recruit 800 participants who met our demographic criteria of interest—White, American men—for Samples 2a and 2c. In these cases, we stopped data collection after we judged the response rate had significantly slowed. In each case, this amounted to 5 days after the study was posted on the platform. Finally, for Sample 2e, which only tested a two-way interaction (see footnote 6), we sought to recruit at least 400 participants, following the same 100/cell rule. We obtained 414 complete responses. Of these 414 participants, we excluded 28 participants because they had no work experience, and our questionnaire items pertained specifically to experiences and perceptions in the workplace. We further excluded 54 participants who self-identified as mixed-race and/or non-White, leaving a final sample of 332 participants.

### 8.1. Method

**Participants and procedure.** Samples 2a-d were recruited using different online platforms: Prolific Academic (Sample 2a:  $N = 612$ ,  $M_{age} = 33.51$ ,  $SD_{age} = 9.96$ ), Amazon's Mechanical Turk (Sample 2b:  $N = 800$ ,  $M_{age} = 37.27$ ,  $SD_{age} = 9.82$ ), Clearvoice (Sample 2c:  $N = 779$ ,  $M_{age} = 48.60$ ,  $SD_{age} = 10.92$ ), and Pollfish (Sample 2d:  $N = 800$ ,  $M_{age} = 24-35$ ). Sample 2e was recruited in-person in public areas at a U.S. university (Sample 2e:  $N = 332$ ,  $M_{age} = 23.89$ ,  $SD_{age} = 8.56$ ). Due to platform restrictions, age was measured using 5 categorical options (18–24, 25–34, 35–44, 45–54, and >54) for Sample 2d. All participants reported that they were currently employed full or part-time (Samples 2a-d) or had work experience in the past (Sample 2e). All measures completed by participants are listed below. All means and standard deviations of measures, scale reliabilities, and intercorrelations are

<sup>6</sup> We also measured internal attributions for success in Samples 2a-d, as one important factor related to self-views of success is the extent to which the perceiver attributes his/her success to him/herself (Zuckerman, 1979). A significant disadvantage x success x attributions interaction did not reliably emerge, indicating that attributions of success did not reliably moderate the disadvantage x success interaction observed across Samples 2a-d. See Supplementary Materials for more details. Given the lack of moderation by attributions across Samples 2a-d, we ceased measurement of internal attributions of success in the following studies. Additionally, we note that the measure of experienced disadvantage used in Samples 2a-e included two additional social categories not included in Study 1c: disadvantage along lines of race and gender. The analyses reported here do not include these items, and results are not substantially altered if these items are included in analyses (see Supplementary Materials). Finally, as an exploratory step, we asked participants to indicate the percentage of White employees at their workplace as well as the percentage of White leaders at the highest level of management. We reasoned that the percentage of Whites in participants' organizations could influence their perceptions of workplace White privilege. The analyses reported here do not include these covariates; results are not substantially altered when these covariates are included (see Supplementary Materials for analyses including these covariates, which were captured in Samples 2a, 2b, and 2d).

presented in Table S1 in the Supplementary Materials.

**Perceived success at work.** First, we measured participants' self-perceived success at work. We used a measure from previous work examining similar topics (e.g., Rosette & Tost, 2013). An example item was "In my current job, I am successful." Items were averaged to generate a composite score ( $\alpha = 0.90$  to  $0.95$ ) and were measured with 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*).

**Perceived experience of disadvantage at work.** Next, we measured participants' perceived experience of disadvantage at work in the same manner as in Study 1c. Responses ranged from 24% to 40% of participants reporting perceived disadvantage along at least one social category dimension.

**Perceived White privilege at work.** Finally, we measured perceived White privilege at work using a measure similar to that which was used in Study 1c. Unlike Study 1c, the measure of perceived White privilege we employed in this study contained the original, reverse-scored item from the Swim & Miller (1999) scale (i.e., "I do not feel that White people have a great deal of benefits or privileges due to their race in work settings"). After relevant reverse coding, items were averaged to form a composite score; higher scores indicated greater perception of White privilege at work ( $\alpha = 0.87$  to  $0.96$ ). These items were measured with 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*).

### 8.2. Results and Discussion<sup>6</sup>

**Categorical measure of disadvantage.** To examine if White men with experience of disadvantage perceived greater White privilege than White men without experience of disadvantage (Hypothesis 1), we regressed perceptions of White privilege on perceived disadvantage (0 = no reported disadvantage on any dimension; 1 = reported disadvantage on at least one dimension). Results generally supported Hypothesis 1: We found that White men who reported having experienced disadvantage perceived greater workplace White privilege than those who reported having experienced no disadvantage in three out of five samples,  $b_{Sample\ 2a} = 0.75$ ,  $SE = 0.14$ ,  $t(610) = 5.58$ ,  $p < .001$  ( $n_{disad} = 242$ ,  $n_{no\ disad} = 370$ );  $b_{Sample\ 2c} = 0.62$ ,  $SE = 0.12$ ,  $t(777) = 5.39$ ,  $p < .001$  ( $n_{disad} = 188$ ,  $n_{no\ disad} = 591$ );  $b_{Sample\ 2d} = 0.40$ ,  $SE = 0.11$ ,  $t(798) = 3.51$ ,  $p < .001$  ( $n_{disad} = 205$ ,  $n_{no\ disad} = 595$ ; see Table 1, Model 1, Samples 2a, 2c, & 2d). Although the effect of perceived disadvantage was not significant in Sample 2b, it was directionally similar to that which was observed in samples 2a, 2c, and 2d,  $b_{Sample\ 2b} = 0.20$ ,  $SE = 0.13$ ,  $t(798) = 1.54$ ,  $p = .123$  ( $n_{disad} = 220$ ,  $n_{no\ disad} = 580$ ). The main effect of disadvantage was not significant in Sample 2e,  $b_{Sample\ 2e} = -0.02$ ,  $SE = 0.17$ ,  $t(330) = -0.09$ ,  $p = .933$  ( $n_{disad} = 103$ ,  $n_{no\ disad} = 229$ ).

To examine if success interacted with experience of disadvantage, such that differences in privilege perceptions due to experience of disadvantage were moderated by perceptions of success (Hypothesis 2), we regressed perceived privilege on experience of disadvantage, mean-centered perceived success, and the interaction term (Aiken & West, 1991). Supporting Hypothesis 2, a significant interaction emerged in four of the five samples,  $b_{Sample\ 2a} = 0.30$ ,  $SE = 0.12$ ,  $t(608) = 2.60$ ,  $p = .010$ ;  $b_{Sample\ 2c} = 0.23$ ,  $SE = 0.09$ ,  $t(775) = 2.76$ ,  $p = .006$ ;  $b_{Sample\ 2d} = 0.16$ ,  $SE = 0.08$ ,  $t(796) = 2.00$ ,  $p = .046$ ;  $b_{Sample\ 2e} = 0.38$ ,  $SE = 0.18$ ,  $t(328) = 2.15$ ,  $p = .032$  (see Table 1, Model 2, Samples 2a, 2c-e). These results are illustrated in Fig. 1. Notably, though the interaction was not significant in Sample 2b, it was directionally similar to those of the other samples,  $b_{Sample\ 2b} = 0.17$ ,  $SE = 0.12$ ,  $t(796) = 1.46$ ,  $p = .146$ .

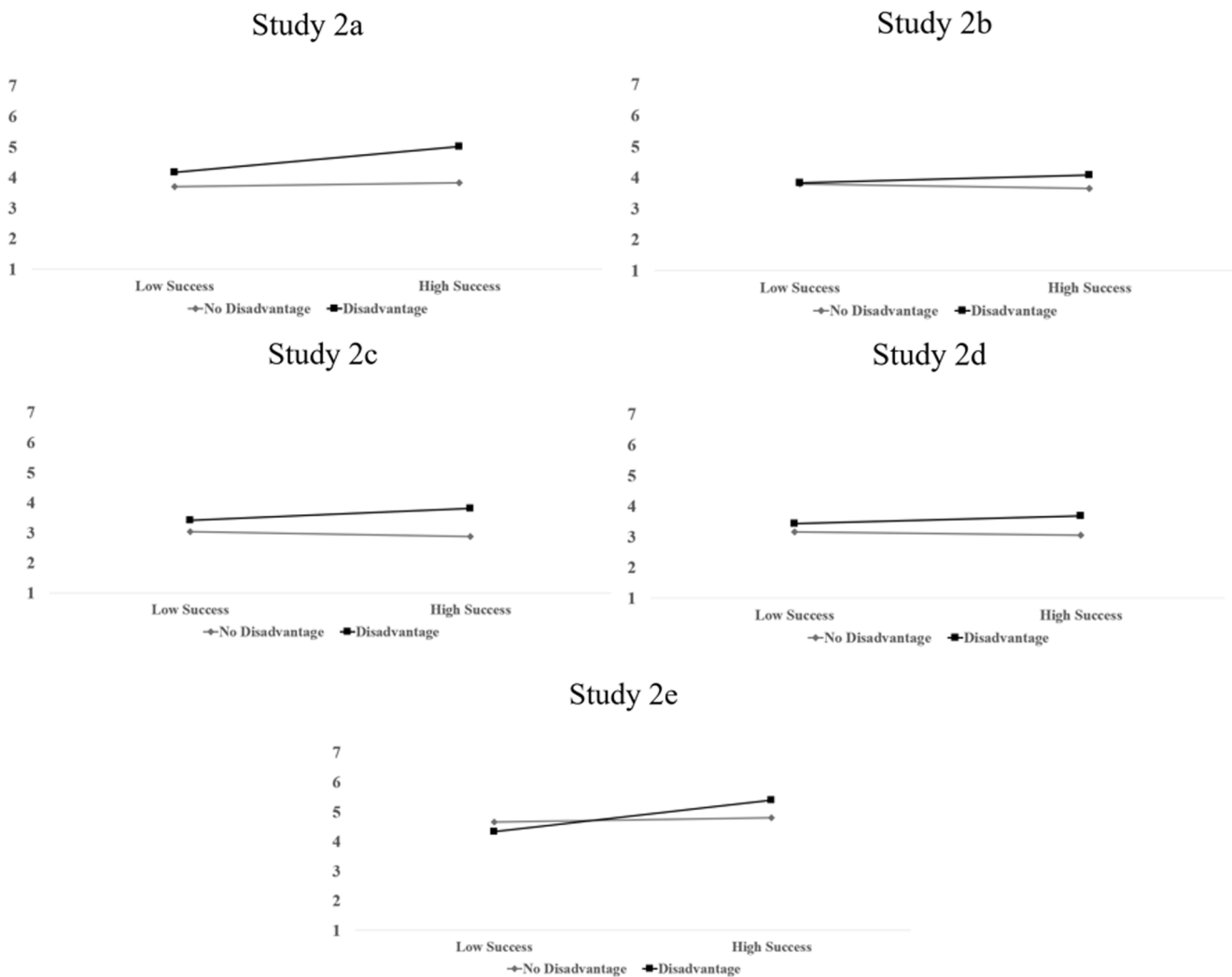
Providing further support for Hypothesis 2, the beta coefficient for the effect of disadvantage on perceived privilege was greater (i.e., more positive) at high vs. low levels of perceived success across all five samples. Spotlight analyses at one standard deviation above and below the mean of perceived success indicated that, at low levels of perceived success, there was a significant or marginally significant effect of experience of disadvantage on perceived privilege—such that participants who reported experience of disadvantage (vs. none) perceived greater privilege—in three samples,  $b_{Sample\ 2a} = 0.48$ ,  $SE = 0.18$ ,  $t(608)$



**Table 1**  
Effects of experienced disadvantage and perceived success on perceived White privilege.

Sample	Model 1					Model 2				
	2a	2b	2c	2d	2e	2a	2b	2c	2d	2e
Disadvantage	<i>b</i> ( <i>SE</i> ) 0.75(0.14) ***	<i>b</i> ( <i>SE</i> ) 0.20 (0.13)	<i>b</i> ( <i>SE</i> ) 0.62(0.12) ***	<i>b</i> ( <i>SE</i> ) 0.40(0.11) ***	<i>b</i> ( <i>SE</i> ) −0.02 (0.17)	<i>b</i> ( <i>SE</i> ) 0.82(0.13) ***	<i>b</i> ( <i>SE</i> ) 0.24(0.14)	<i>b</i> ( <i>SE</i> ) 0.65(0.12) ***	<i>b</i> ( <i>SE</i> ) 0.45(0.12) ***	<i>b</i> ( <i>SE</i> ) 0.13(0.18)
Success						0.05(0.08)	−0.06 (0.07)	−0.07(0.04)	−0.05(0.05)	0.06(0.11)
Disad * Success						0.30(0.12)*	0.17(0.12)	0.23(0.09)**	0.16(0.08)*	0.38(0.18) *
<i>N</i>	612	800	779	800	332	612	800	779	800	332
<i>F</i>	31.15	2.38	29.03	12.31	0.007	16.23	1.51	12.29	5.45	3.55
<i>df</i>	610	798	777	798	330	608	796	775	796	328
<i>R</i> <sup>2</sup>	0.05	0.01	0.04	0.02	0.01	0.07	0.01	0.05	0.02	0.03
Change in <i>R</i> <sup>2</sup>						0.03	0.01	0.01	0.01	0.01

Unstandardized coefficients, \**p* < .05, \*\**p* < .01, \*\*\**p* < .001



**Fig. 1.** The interactive effects of perceived disadvantage and perceived success on perceived White privilege at work (Studies 2a-e). Y-axis in all figures corresponds to level of perceived White privilege.

= 2.62, *p* = .009; *b*<sub>Sample 2b</sub> = 0.05, *SE* = 0.17, *t*(796) = 0.31, *p* = .756; *b*<sub>Sample 2c</sub> = 0.35, *SE* = 0.15, *t*(775) = 2.29, *p* = .022; *b*<sub>Sample 2d</sub> = 0.24, *SE* = 0.14, *t*(796) = 1.66, *p* = .098; *b*<sub>Sample 2e</sub> = −0.22, *SE* = 0.22, *t*(328) = −1.00, *p* = .319. In comparison, at *high* levels of perceived success, the positive effect of experienced disadvantage on perceived privilege was significant or marginally significant in all five samples, *b*<sub>Sample 2a</sub> = 1.17, *SE* = 0.19, *t*(608) = 6.07, *p* < .001; *b*<sub>Sample 2b</sub> = 0.43, *SE* = 0.21, *t*(796) =

2.07, *p* = .039; *b*<sub>Sample 2c</sub> = 0.96, *SE* = 0.17, *t*(775) = 5.68, *p* < .001; *b*<sub>Sample 2d</sub> = 0.67, *SE* = 0.18, *t*(796) = 3.77, *p* < .001; *b*<sub>Sample 2e</sub> = 0.48, *SE* = 0.26, *t*(328) = 1.89, *p* = .06.

**Cumulative measure of disadvantage.** To explore whether variance in *amount* of disadvantage experienced, rather than variance in experience of disadvantage itself, impacted perceived privilege, we conducted the analyses described above using a cumulative, rather than

categorical, measure of experienced disadvantage. To generate this measure, we summed the number of social categories along which participants reported experience of disadvantage, resulting in a continuous variable with possible values ranging from zero (no experience of disadvantage reported) to five (experience of disadvantage reported along each social category dimension listed). Results were substantively similar using this cumulative measure of disadvantage.

Supporting Hypothesis 1, we found that increases in amount of experienced disadvantage corresponded to increased perceptions of privilege in four out of five samples,  $b_{\text{Sample } 2a} = 0.37$ ,  $SE = 0.06$ ,  $t(610) = 6.53$ ,  $p < .001$ ;  $b_{\text{Sample } 2b} = 0.15$ ,  $SE = 0.07$ ,  $t(798) = 2.16$ ,  $p = .031$ ;  $b_{\text{Sample } 2c} = 0.34$ ,  $SE = 0.04$ ,  $t(777) = 8.34$ ,  $p < .001$ ;  $b_{\text{Sample } 2d} = 0.24$ ,  $SE = 0.05$ ,  $t(798) = 5.25$ ,  $p < .001$ . The main effect of disadvantage was not significant in Sample 2e,  $b_{\text{Sample } 2e} = 0.14$ ,  $SE = 0.11$ ,  $t(330) = 1.29$ ,  $p = .198$ . Supporting Hypothesis 2, a significant or marginally significant interaction emerged in four of the five samples,  $b_{\text{Sample } 2a} = 0.10$ ,  $SE = 0.05$ ,  $t(608) = 1.92$ ,  $p = .055$ ;  $b_{\text{Sample } 2c} = 0.11$ ,  $SE = 0.03$ ,  $t(775) = 3.36$ ,  $p = .001$ ;  $b_{\text{Sample } 2d} = 0.08$ ,  $SE = 0.03$ ,  $t(796) = 2.97$ ,  $p = .003$ ;  $b_{\text{Sample } 2e} = 0.19$ ,  $SE = 0.10$ ,  $t(328) = 1.93$ ,  $p = .055$ . The interaction was not significant in Sample 2b using this cumulative measure of disadvantage,  $b_{\text{Sample } 2b} = 0.06$ ,  $SE = 0.06$ ,  $t(796) = 1.11$ ,  $p = .266$ .

As above, and supporting Hypothesis 2, the beta coefficient for the effect of the continuous disadvantage measure on perceived privilege was greater at high vs. low levels of perceived success across all five samples. Performing the same spotlight analyses described above, we found that, at low levels of perceived success, there was a significant positive effect of cumulative experience of disadvantage on perceived privilege in three of five samples,  $b_{\text{Sample } 2a} = 0.23$ ,  $SE = 0.09$ ,  $t(608) = 2.43$ ,  $p = .015$ ;  $b_{\text{Sample } 2b} = 0.10$ ,  $SE = 0.08$ ,  $t(796) = 1.20$ ,  $p = .23$ ;  $b_{\text{Sample } 2c} = 0.17$ ,  $SE = 0.07$ ,  $t(775) = 2.70$ ,  $p = .007$ ;  $b_{\text{Sample } 2d} = 0.18$ ,  $SE = 0.05$ ,  $t(796) = 3.46$ ,  $p = .001$ ;  $b_{\text{Sample } 2e} = 0.06$ ,  $SE = 0.13$ ,  $t(328) = 0.46$ ,  $p = .648$ . In comparison, at high levels of perceived success, there was a significant positive effect of cumulative experience of disadvantage on perceived privilege across all five samples,  $b_{\text{Sample } 2a} = 0.45$ ,  $SE = 0.07$ ,  $t(608) = 6.44$ ,  $p < .001$ ;  $b_{\text{Sample } 2b} = 0.24$ ,  $SE = 0.11$ ,  $t(796) = 2.20$ ,  $p = .028$ ;  $b_{\text{Sample } 2c} = 0.46$ ,  $SE = 0.05$ ,  $t(775) = 8.59$ ,  $p < .001$ ;  $b_{\text{Sample } 2d} = 0.40$ ,  $SE = 0.07$ ,  $t(796) = 5.71$ ,  $p < .001$ ;  $b_{\text{Sample } 2e} = 0.41$ ,  $SE = 0.15$ ,  $t(328) = 2.67$ ,  $p = .008$ .

**Summary.** In sum, using the same measurement-based design across five samples, we found a pattern of results generally supportive of Hypothesis 1, such that White men who indicated they had experienced disadvantage due to a social category perceived greater White privilege than those who did not report experience of disadvantage. These results are consistent with those of Studies 1a-c, which provided support for Hypothesis 1 via both correlational and experimental designs. Moreover, Samples 2a-e also provided consistent support for Hypothesis 2: Experience of disadvantage translated to increases in perceived privilege when perceived success was relatively high, but this effect was attenuated when perceived success was low.<sup>7</sup>

However, because we used a measurement-based design across Samples 2a-e, these studies provide only correlational evidence supportive of Hypothesis 2. As such, we cannot definitively state that participants' level of perceived workplace success facilitated the effect of disadvantage on privilege perceptions at high levels of success or caused that effect to attenuate at low levels. For instance, while we did not generally observe significant correlations between perceived workplace success and White privilege across all participants in Samples 2a-e (see

Supplementary Materials), it is possible that, specifically for participants with experience of disadvantage, increases in a tendency to recognize privilege caused increases in perceptions of success in their jobs. Moreover, because we did not manipulate perceived workplace success across Samples 2a-e, we cannot rule out the possibility that a third variable, other than perceived success at work, is the actual driver of the interactions we observed. We seek to address these issues in Study 3 via an experimental manipulation of perceived success at work.

Finally, we note that, though there were small changes in results across Samples 2a-e when experience of disadvantage was employed as a categorical variable (i.e., some experience vs. none) vs. continuous measure (i.e., cumulative experience of disadvantage across categories), the trend of support in these studies for Hypotheses 1 and 2 was strong in either case. Since a categorical indicator of disadvantage is the more direct operationalization of our theoretical account regarding experience of disadvantage (i.e., understanding the perspectives of White men with vs. without such experience), we employ a categorical version of the experienced disadvantage variable in analyses in Study 3.

## 9. Study 3

In Study 3, we built on Studies 2a-e by testing Hypothesis 2 using an experimental manipulation of success at work. As in Studies 1a-b, we developed a face-valid, recall-based manipulation, which is described in greater detail below. Participants first reported their degree of experience of disadvantage based on a social category and were then assigned to an experimental condition priming either perceptions of a high or low degree of success in their jobs. Given the interaction pattern predicted in Hypothesis 2 and generally found across Studies 2a-e, we expected that experience of disadvantage (vs. no experience) would translate to greater privilege perceptions in the "high" success condition, but that this effect would be attenuated in the "low" success condition.

However, on the basis of the large body of research related to self-enhancement and self-protection (for a review, see: [Alicke & Sedikides, 2009](#))—whereby people are motivated to "exaggerate their virtues and minimize their shortcomings" ([Alicke & Sedikides, 2009](#), pg. 2)—we anticipated some difficulty in experimentally manipulating perceptions of success at work among participants in Study 3. Reactions to, and perceptions of the legitimacy of, success and failure manipulations vary widely across people, and manipulations of failure can, in particular, elicit reactance, resistance, or self-protective re-framing ([Brown & Dutton, 1995](#); [Zell et al., 2015](#); [Kling et al., 1997](#); [Beauregard & Dunning, 1998](#); [Buckingham et al., 2019](#)). Among other things, people may avoid negative reactions to perceived failures by downplaying the importance of those failures ([Kling et al., 1997](#)), boosting the favorability of their self-image in a compensatory manner ([Greenberg & Pyszczynski, 1985](#)), attributing failure to external causes ([Zuckerman, 1979](#)), and beyond. We may especially expect self-protective effects like these to emerge with regard to perceptions (or prompts) of success vs. failure in one's job, which is a core self-evaluative domain ([Judge et al., 1998](#); [Dutton et al., 1994](#)). Indeed, in a field study of ego-defensive responses to performance feedback across two different organizations, managers who received feedback communicating low (vs. high) success at work were more likely to resist the feedback and question the legitimacy of the appraisal system itself ([Pearce & Porter, 1986](#)).

Given these concerns, in Study 3, we pre-registered the exclusion of participants who evidenced reactance or defensiveness in response to the manipulation prompt (e.g., indicating "I love my job" when asked to think about drawbacks of their work). The preregistration document for this study is archived at <https://osf.io/v2mgq/>.

### 9.1. Method

**Participants and procedure.** We sought to recruit 400 White, American men from Pollfish (i.e., 100/cell; [Gervais et al., 2015](#)), and obtained a sample of 395 participants. Per our pre-registration, we

<sup>7</sup> We provide additional, complementary analyses for Samples 2a-e in the Supplementary Materials, including analyses using a Likert-based measurement of experienced disadvantage (i.e., a 1–7 scale), analyses employing individual items (e.g., experienced disadvantage due to age) from the experienced disadvantage measure reported here as predictors of privilege perceptions, and analyses decomposing the disadvantage x success interaction within categories of disadvantage (some vs. none) rather than categories of success (high vs. low).

excluded 54 participants who were resistant to the experimental manipulation (i.e., when asked to reflect on a failure at work, those who reported successes at work or were unwilling to reflect on failures; when asked to reflect on success at work, those who reported failures or were unwilling to reflect on successes). This amounted to 40 participants in the *low success* condition and 14 participants in the *high success* condition. Accounting for these pre-registered exclusions, the final sample consisted of 341 participants ( $M_{age} = 39.57$ ,  $SD_{age} = 11.00$ ). Below, we first report results for the full sample without any exclusions and then report results with resistant participants excluded.

**Perceived experience of disadvantage at work.** First, we measured participants' experience of disadvantage using the same measure used in Study 1c. In this study, 69% of participants reported experience of disadvantage along at least one social category dimension and were thus coded as 1; those who reported no experience of disadvantage were coded as 0.

**Perceived success manipulation.** After responding to the perceived disadvantage measure, participants were randomly assigned to one of two experimental conditions, *high success* vs. *low success*. The manipulation involved a series of open-ended response questions, priming participants to view themselves as successful or unsuccessful in their jobs. To develop these prompts, we drew on research by Judge and colleagues (Judge, Erez, & Bono, 1998), who conceptualize workplace success in terms of both subjective enjoyment and happiness (e.g., job satisfaction) as well as objective rewards (e.g., income, promotions). Hence, participants were prompted to consider ways in which they were subjectively successful vs. unsuccessful in their jobs as well as ways in which their jobs were objectively rewarding vs. unrewarding.

In the *high success* condition, participants responded to the following prompts in open-response format. Participants were instructed to consider their most recent job if they were not presently employed.

[Prompt 1] *What elements of your job make you feel happy, successful, etc?*

[Prompt 2] *When does your job make you feel like you're getting ahead, or being the person you want to be, or being rewarded sufficiently for your work?*

[Prompt 3] *What elements of your job make you feel positively about your career prospects in general? Common examples of this are gaining a new position or responsibility, feeling like you are broadening your skillset, or reaching a goal you set for yourself at work, etc.*

[Prompt 4] *Thank you for sharing your perceptions of the upside of your current job. Is there anything else you would like to add regarding the upside of your job?*

Conversely, in the *low success* condition, participants responded to the following:

[Prompt 1] *What elements of your job make you feel unhappy, unsuccessful, etc?*

[Prompt 2] *When does your job make you feel like you're not getting ahead, or not being the person you want to be, or not being rewarded sufficiently for your work?*

[Prompt 3] *Have there been times when your job has made you feel negatively about your career prospects in general? Common examples of this are being passed over for a promotion, failing to secure a raise, feeling like you're not being paid enough, not being able to reach goals at work, etc.*

[Prompt 4] *Thank you for sharing your perceptions of the downside of your current job. Is there anything else you would like to add regarding the downside of your job?*

**Perceived White privilege at work.** Finally, participants indicated their perceived degree of White privilege at work using the same items as in Study 1c ( $\alpha = 0.95$ ).

## 9.2. Results and Discussion

**Analyses without exclusions.** To test the interactive effects of experienced disadvantage and perceived success on perceived White privilege, we ran a 2 (Experience of disadvantage: Some vs. None)  $\times$  2 (Success condition: High vs. Low) ANOVA. We found a main effect of experience of disadvantage, such that participants who reported experience of disadvantage based on a social category perceived greater privilege ( $M = 4.96$ ,  $SD = 1.84$ ,  $n = 274$ ) than those who did not ( $M = 3.69$ ,  $SD = 1.98$ ,  $n = 121$ ),  $F(1, 391) = 37.29$ ,  $p < .001$ ,  $\eta_p^2 = 0.09$ , but not a main effect of success,  $F(1, 391) = 0.08$ ,  $p = .780$ ,  $\eta_p^2 = 0.00$ , or a disadvantage  $\times$  success interaction,  $F(1, 391) = 0.84$ ,  $p = .361$ ,  $\eta_p^2 = 0.002$  (Fig. 2). That is, with the full sample of participants, we found a pattern of results supportive of Hypothesis 1 but not Hypothesis 2.

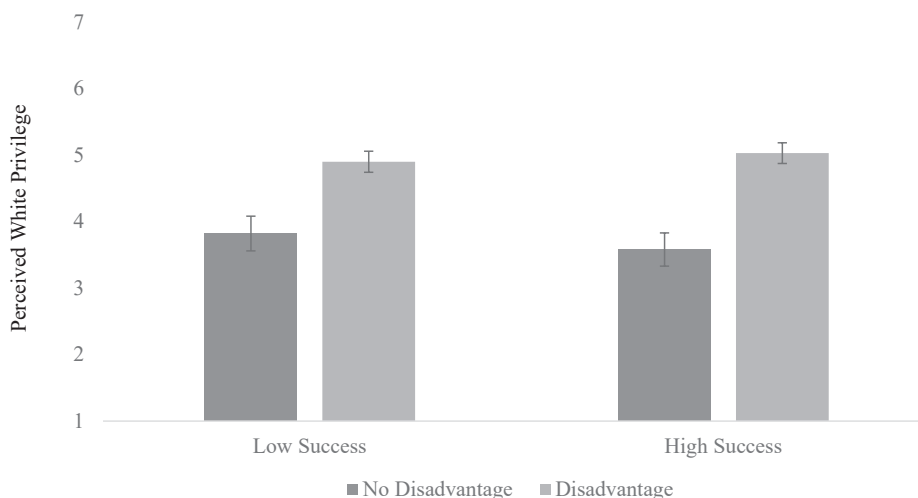
**Analyses excluding participants resistant to success manipulation.** Next, we performed the same analysis described above, but with the 54 participants who were resistant to the experimental manipulation of success excluded. This analysis revealed a main effect of experience of disadvantage, such that participants who reported experience of disadvantage based on a social category perceived greater privilege ( $M = 4.80$ ,  $SD = 1.85$ ,  $n = 241$ ) than those who did not ( $M = 3.76$ ,  $SD = 2.04$ ,  $n = 100$ ),  $F(1, 337) = 19.95$ ,  $p < .001$ ,  $\eta_p^2 = 0.06$ , and no main effect of success,  $F(1, 337) = 0.01$ ,  $p = .913$ ,  $\eta_p^2 = 0.00$ . The main effect of disadvantage was qualified by a significant disadvantage  $\times$  success interaction,  $F(1, 337) = 4.33$ ,  $p = .038$ ,  $\eta_p^2 = 0.01$  (Fig. 3).

Probing simple effects, we found that the effect of experienced disadvantage on perceived privilege was significant in the *high success* condition,  $F(1, 337) = 23.83$ ,  $p < .001$ , such that participants who reported experience of disadvantage perceived greater privilege ( $M = 5.05$ ,  $SD = 1.76$ ,  $n = 121$ ) than those who did not ( $M = 3.56$ ,  $SD = 2.07$ ,  $n = 57$ ). In comparison, there was no effect of experienced disadvantage in the *low success* condition ( $M_{disadvantage} = 4.55$ ,  $SD_{disadvantage} = 1.91$ ,  $n_{disadvantage} = 120$  vs.  $M_{no disadvantage} = 4.01$ ,  $SD_{no disadvantage} = 1.99$ ,  $n_{no disadvantage} = 43$ ),  $F(1, 337) = 2.59$ ,  $p = .109$ . This pattern of results is consistent with the interaction pattern we predicted in Hypothesis 2 and generally found across Studies 2a-e. That is, we found that perceived success operated as a boundary on the effect of experienced disadvantage on perceived privilege, attenuating that effect when perceived success was low.

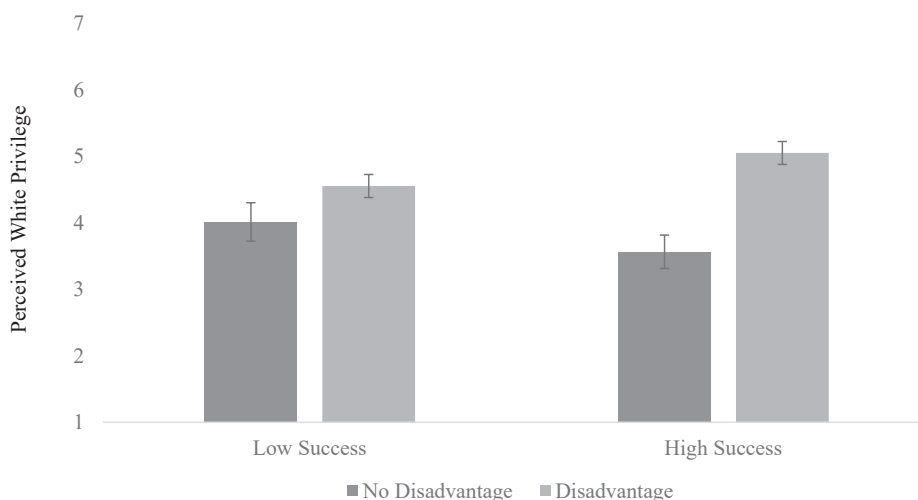
For completeness, we also explored simple effects of success condition within levels of disadvantage. Among participants who reported experience of disadvantage based on a social category, there was a significant effect of success, such that participants in the *high success* condition perceived greater White privilege ( $M = 5.05$ ,  $SD = 1.76$ ) than those in the *low success* condition ( $M = 4.55$ ,  $SD = 1.91$ ),  $F(1, 337) = 4.15$ ,  $p = .043$ . In comparison, among participants who reported no experience of disadvantage, the effect of the success manipulation was non-significant ( $M_{high} = 3.56$ ,  $SD_{high} = 2.07$  vs.  $M_{low} = 4.01$ ,  $SD_{low} = 1.99$ ),  $F(1, 337) = 1.37$ ,  $p = .243$ .<sup>8</sup>

**Summary.** In sum, for this study, we developed a manipulation of perceived success at work in which participants were prompted to reflect on elements of their job that made them feel successful vs. unsuccessful. Given research on self-protective responses to manipulations related to the positivity of self-image (Alicke & Sedikides, 2009), we pre-registered the exclusion of participants who were resistant to this experimental manipulation. Following this exclusion, we found that, among participants assigned to the *high success* condition, those with experience of disadvantage based on a social category perceived greater White privilege than those without such experience. Conversely, among

<sup>8</sup> Results remain the same in terms of direction and significance if we further exclude participants who provided nonsensical/gibberish responses to the writing prompts (e.g., a response of "Fgghrgbhj"). Additionally, results remain the same in terms of direction and significance when participants without work experience are excluded from analyses.



**Fig. 2.** The interactive effects of perceived disadvantage and success condition on perceived White privilege at work (Study 3) when the full sample is employed in analyses. Error bars indicate standard error of the mean.



**Fig. 3.** The interactive effects of perceived disadvantage and success condition on perceived White privilege at work (Study 3) when participants who were resistant to the experimental manipulation of success are excluded from analyses. Error bars indicate standard error of the mean.

participants assigned to the *low success* condition, the effect of disadvantage on perceived privilege was attenuated. This pattern of results is consistent with Hypothesis 2 and the results observed across Studies 2a-e, and this study improves on the design of those studies by seeking to manipulate perceived work success. Across these studies as a whole, results suggest that, when White men have sufficient standing resiliency to self-threat—when they are relatively high in perceived success at work—experience of disadvantage based on a social category translates to increases in perceived White privilege at work. However, when White men do not have sufficient standing resiliency to self-threat—when they are relatively low in perceived success at work—experience of disadvantage based on a social category is less likely to impact privilege perceptions.

With that said, the results of this study cannot be taken as causal evidence for Hypothesis 2 because of the nature of our participant exclusions. That is, we cannot state that an experimentally induced state of low workplace success *caused* the effect of experienced disadvantage on perceived privilege to attenuate (Hypothesis 2) because our exclusion of participants in this study (concentrated in the *low success* condition) compromised random assignment. As such, while the results of this study are consistent with Hypothesis 2, they fail to demonstrate Hypothesis 2 experimentally. Moreover, it should also be noted that our

manipulation in this study may have confounded a reflection on workplace success with a reflection on happiness or positive self-regard more generally, further constraining the conclusions that may be drawn from this study. We deliberately designed our manipulation to reflect conceptualizations of workplace success by Judge and colleagues (Judge, Erez, & Bono, 1998), which involve both objective rewards as well as subjective enjoyment and happiness with one's job, but this design choice increased the possibility that subjective happiness (primed by our manipulation) drove the results we reported. We return to a discussion of the limits of our ability to make causal claims in the present research in the General Discussion.

## 10. Study 4

Study 4 built on the preceding studies in multiple ways. Complementing Study 3, we again tested Hypothesis 2 via experimental methods, but in this study, we employed an experimental manipulation, rather than a measurement, of experience(s) of disadvantage along a social category dimension (or dimensions). After completing the measure of perceived workplace success used in Studies 2a-e, participants were randomly assigned to reflect on an experience of social category-based disadvantage (vs. a neutral topic), as in Studies 1a-b. Moreover,

building on Studies 1a-b, in this study, we also asked participants to write about their experience with disadvantage (vs. a neutral topic) in an open-ended manner. As such, in this study (vs. Studies 1a-b), we were able to examine whether differences in the types of experiences participants reflected upon when randomly assigned to the *disadvantage* condition impacted their perceptions of White privilege. Specifically, we explored the frequency with which participants in the *disadvantage* condition reflected on experiences of social category-based disadvantage (vs. other types of experience of disadvantage) and differences in privilege perceptions as a function of different types of experience of disadvantage recalled.

### 10.1. Method

**Participants and procedure.** We recruited 400 White, American men from Prolific Academic for Study 4 (i.e., 100/cell; Gervais et al., 2015). We obtained a final sample of 411 participants ( $M_{age} = 32.88$ ,  $SD_{age} = 10.52$ ).

**Perceived success at work.** First, participants indicated the extent to which they perceived themselves to be successful at work, using the same measure as in Studies 2a-e. Items were measured with 7-point Likert scales (1 = *strongly disagree*, 7 = *strongly agree*) and averaged to generate a composite score ( $\alpha = 0.93$ ).

**Disadvantage manipulation.** After responding to the perceived success measure, participants were randomly assigned to either the *disadvantage* or *control* condition from Study 1a.

Participants in the *disadvantage* condition were asked to think of a time in their lives when they felt disadvantaged in the manner described (see Study 1a). In a change from Study 1a, participants in the *disadvantage* condition were also asked to provide a brief, written description of the event. Participants were prompted to consider how the event made them feel and what it made them think about as they experienced it. As in Studies 1a-b, we asked participants to focus on an experience of disadvantage in any domain of their lives in order to reduce the possible number of participants who might fail to recall an experience of disadvantage.

Conversely, participants in the *control* condition read a description of a living room and were asked to provide a brief written description of a living room they had been in. Participants were prompted to describe the living room, consider the thoughts that come to mind in the living room, and the way the living room makes them feel.

**Perceived White privilege at work.** Finally, participants indicated their perceived degree of White privilege at work using the same items as in Studies 2a-e ( $\alpha = 0.95$ ).<sup>9</sup>

### 10.2. Results and Discussion

**Main analyses.** First, we regressed perceptions of White privilege on the disadvantage manipulation (0 = *control*, 1 = *disadvantage*). Supporting Hypothesis 1, we found that White men who wrote about an experience of disadvantage perceived greater White privilege at work than those who wrote about a neutral topic,  $b = 0.43$ ,  $SE = 0.16$ ,  $t(408) = 2.76$ ,  $p = .006$ . To examine if perceived success interacted with the disadvantage manipulation, such that differences in how much participants perceived White privilege due to experimental condition were moderated by perceptions of success (Hypothesis 2), we regressed perceived privilege on experimental condition, mean-centered perceived success, and the interaction term. The predicted interaction did not emerge,  $b = -0.14$ ,  $SE = 0.13$ ,  $t(406) = -1.02$ ,  $p = .310$ . Thus, in

contrast to the results of Studies 2a and 2c-3, the results of this study were not supportive of Hypothesis 2.

**Exploratory coding.** We next explored whether variance in *type* of disadvantage recalled by participants in the *disadvantage* condition impacted their reports of perceived privilege.<sup>10</sup> Responses provided in the *disadvantage* condition were reviewed and coded by two independent coders; any disagreements between coders were resolved after discussion. Coders read participants' responses and grouped them by whether they were related to a social category or not. At the outset, responses were grouped into three categories: those related to a "given" social category (e.g., sexual orientation), those related to a "chosen" social category (e.g., veteran status), and those not related to a social category (e.g., being disadvantaged by a large workload at work).

Exploring the frequency of these different types of experiences, we first noted that 13 responses indicated that the participant did not believe they had experienced disadvantage, did not explain the nature of the disadvantage experienced (e.g., discussing only emotions felt in response), or were not comprehensible (i.e., gibberish). We excluded these responses from our exploratory analyses.<sup>11</sup> Of the remaining responses, 55.1% were related to a "given" social category, 2.7% were related to a "chosen" social category, and 42.2% were not related to a social category. For ease of analysis, we then collapsed responses related to a "given" social category and responses related to a "chosen" social category, resulting in two categories of responses overall: Experience of disadvantage based on a social category (coded as 1), which accounted for 57.8% of responses, and experience of disadvantage not based on a social category (coded as 0), which accounted for 42.2% of responses. The fact that some participants did not report experience of disadvantage, and that those who reported experience of disadvantage did not all report experiences based on a social category, is not surprising—we did not expect, *a priori*, that all of our White male participants would be able to recall an experience of disadvantage based on a social category (or otherwise) in their lives.

Having developed these two categories of responses through exploratory coding, we tested whether the type of disadvantage participants discussed in the *disadvantage* condition impacted their privilege perceptions. Regressing privilege perceptions on the type of experience of disadvantage mentioned (0 = not based on a social category, 1 = based on a social category), there was a significant effect of type of experience,  $b = 0.54$ ,  $SE = 0.22$ ,  $t(185) = 2.45$ ,  $p = .015$ , such that participants who reported experience of disadvantage based on a social category perceived greater White privilege than those who reported experience of disadvantage not based on a social category. Next, we explored whether certain categories of response were more prevalent among participants in the *disadvantage* condition who were relatively high (i.e., +1SD or higher) vs. low (-1SD or lower) on perceived privilege. The percentage of participants referencing experience based on a social category varied significantly between participants low vs. high in perceived privilege,  $\chi(1)^2 = 8.35$ ,  $p = .004$ . Among participants whose perceptions of privilege were low (-1SD or lower), 39.4% referenced experience of disadvantage based on a social category while 60.6% referenced experience of disadvantage *not* based on a social category. In comparison, among participants whose perceptions of privilege were high (+1SD or higher), 75.9% referenced experience of disadvantage based on a social category while 24.1% did not, referencing experience not based on a social category.

In brief, in this study, the majority of participants assigned to the *disadvantage* condition—which was very similar to the manipulations of social category-based disadvantage used in Studies 1a-b—recalled an experience of disadvantage based on a social category, supporting the construct validity of the disadvantage manipulation employed across

<sup>9</sup> In this study, we also measured the same covariates as in Studies 2a, 2b, and 2d: percentage of Whites employed in participants' organizations in general and in top management specifically. As in Studies 2a, 2b, and 2d, the analyses below do not include these covariates. The direction and significance of the results are unchanged when covariates are included.

<sup>10</sup> We thank an anonymous reviewer for this suggestion.

<sup>11</sup> We note that the main analyses described above hold, in terms of direction and significance, if these responses are removed.

these studies. Moreover, while participants in the *disadvantage* condition perceived greater privilege overall, participants who reported experience of disadvantage based on a social category perceived greater White privilege than those who reported experience of disadvantage not based on a social category. In other words, it appears that experience of disadvantage based on a social category is particularly likely to contribute to privilege perceptions, out of the many possible types of experience of disadvantage one may face in life. This finding is consistent with the theoretical account laid out in the Introduction—that White men who have experienced disadvantage based on a social category should perceive greater racial privilege than those without such experience because they are better able to empathize with the disadvantages racial minorities face due to their own social category memberships. It is reasonable to conclude that experience of disadvantage based on a social category should be a more potent driver of privilege perceptions than experience of disadvantage not based on a social category, because experience based on a social category (vs. *any* experience) should be especially beneficial to one's ability to empathize with others' experiences based on their own social categories.

With that said, as we discussed in the Introduction, it does not necessarily flow from our theorizing that *any* experience of social category-based disadvantage should foster privilege perceptions among White men. In particular, perceived experience of personal disadvantage along lines of a social category providing group-level privilege should not translate to increased perceptions of group-level privilege along that category dimension. Thus, we would not expect White men who believe they have personally experienced disadvantage due to being a White person to be more likely to perceive group-level White privilege. To that point, in this study, three of the participants who reported experience of disadvantage based on a social category (i.e., 2.7% of those participants) described their White race as a source of disadvantage. Mean perceived privilege across those participants was 2.67 ( $SD = 1.53$ ), which was more than one standard deviation lower than the mean level of privilege perceptions among participants in the *disadvantage* condition overall. While a sample of three is far too small to draw firm conclusions from, this result is suggestive of the notion that, while the experience of social category-based disadvantage should positively impact racial privilege perceptions for most White men, the experience of disadvantage due to Whiteness should act as a countervailing force, negatively impacting privilege perceptions. Hence, as the proportion of White men in a given sample who perceive themselves to have personally experienced disadvantage due to their race increases, we would expect the overall positive impact of experience of social category-based disadvantage on racial privilege perceptions in that sample to reduce.

We also note that the proportion of participants reflecting on personal experience of disadvantage due to race in this study may seem low at first blush, given recent polling suggesting that large proportions of U.S. Whites believe White people experience group-level discrimination (vs. privilege) due to their race (Gonyea, 2017). However, it is very important to note that, though large proportions of U.S. Whites indicate, when polled, that Whites are discriminated against (rather than privileged) at a *group level*, much smaller proportions report *personal experience* with discrimination due to their race (Gonyea, 2017). This discrepancy is consistent with research demonstrating that people may often perceive that a social group in which they are members faces discrimination while believing that they themselves do not (Crosby, 1984; Crosby et al., 1993; Taylor et al., 1990). Gaps in perceptions of group vs. personal discrimination can emerge for various reasons, which we elaborate on—specifically as they relate to White men's perceptions of group-level and personal discrimination due to their Whiteness—in the General Discussion.

**Summary.** Our chief goal in Study 4 was to test Hypotheses 1 and 2 following an experimental manipulation of experience of disadvantage. Consistent with Hypothesis 1 and the results of Studies 1a-b, participants who were prompted to reflect upon and write about an experience of disadvantage in their life perceived greater White privilege at work than

those who reflected upon a neutral topic. Moreover, consistent with our theoretical account of the psychological process underlying Hypothesis 1, we found that White men who reported an experience of disadvantage based on a social category perceived greater White privilege than those reporting experience of disadvantage not based on a social category. However, while the results of this study provided further causal evidence in support of Hypothesis 1, we did not find support for the disadvantage  $\times$  success interaction predicted in Hypothesis 2 (and generally found across Studies 2a-3). It is possible that this was due to the manipulation of experience of disadvantage we employed in this study, which differed from the measurement employed in Studies 2a-3.

## 11. General Discussion

As a whole, these studies provide consistent, correlational (Studies 1c, 2a-d, 3) and causal (Studies 1a-b, 4) evidence that the experience of social category-based disadvantage increases White men's perceptions of workplace White privilege (Hypothesis 1) and that ability to empathize with the disadvantages faced by racial minorities explains this effect (Studies 1b-c). However, the trend of support in these studies for Hypothesis 2 is mixed: Studies 2a and 2c-3 demonstrate that perceptions of success at work help to increase perceived privilege for White men with experience of disadvantage when success is high and attenuate that effect when success is low (Hypothesis 2), but these studies do not provide causal evidence, and the disadvantage  $\times$  success interaction did not emerge in Studies 2b or 4.

### 11.1. Contributions

This research offers multiple theoretical contributions. First, we contribute to theories of multiple social categorization, which assert that holding membership in overlapping social categories informs social perceptions of the self (e.g., seeing oneself as a member of multiple, rather than a singular, social categories) and of others (e.g., understanding oneself as related to others via co-membership in different social groups). However, the conditions that facilitate increased understanding of how the self and others are situated in complex social hierarchies are not often made explicit or tested empirically. We add specificity to the tenets espoused in these theories by exploring these conditions. We find that, by holding membership in social categories that are traditionally advantaged *and* traditionally disadvantaged in the social hierarchy, one may gain better perspective on the advantages associated with membership in the former via comparison with experience in the latter. Moreover, we find that experience of social category-based disadvantage increases perceptions of racial privilege via an increased ability to understand the disadvantages faced by racial minorities. In short, our studies suggest that White men with experience of disadvantage along a social category dimension (vs. without such experience) gain a broader perspective on society and their advantaged position within it.

The present research also contributes to the field of research on self-narratives, or personal histories we construct to make sense of the world and the meaning of our place and role within it (Hermans, 1999). As noted above, we demonstrate that White men whose personal narratives or life stories involve experience of disadvantage due to a social category become better able to see and admit the privileges they have in life due to their race than those whose personal narratives do not include experience of social category-based disadvantage. This finding is noteworthy, as people's self-narratives are shaped by self-enhancement motives (Hermans, 1999), such that a person's personal history is actively constructed and continuously revised in such a way as to cast the self in a positive light (Greenwald, 1980). We outline elements of self-perception (e.g., self-perceived experience of disadvantage, ability to understand others' disadvantages, and workplace success) that can lead White men to perceive their privileges—specifically their racial privilege in the workplace—even though that perception runs counter to

self-enhancement tendencies (Branscombe, 1998). In so doing, we also contribute to research demonstrating the important role that self-narratives can play in helping people understand their positioning in the turbulent and changing modern workplace (Petriglieri, Petriglieri, & Wood, 2018; Petriglieri, Ashford, & Wrzesniewski, 2019), which often requires the navigation of multiple social identity (Ibarra & Obodaru, 2016) and power (Anicich & Hirsh, 2017) hierarchies.

We contribute to research on intersectionality and multiple social categorization by providing a consideration of the *subjective* dimension of identity as it relates to White men and racial privilege perceptions. Though White men may be perceived by others as solely holding membership in dominant social categories (e.g., along the dimensions of race and gender), it is important to note that people can define themselves in ways different from how they appear to others. For example, White men might define themselves more in terms of membership in a subordinate social category (e.g., as a first-generation student) than membership in dominant social categories (e.g., Whites, men, Pratto & Stewart, 2012). Indeed, by asking people about their subjective experiences rather than drawing inferences from how they appear to others (Lorber, 2011), one can gain a deeper and more complex understanding of the advantages and disadvantages that people believe they have experienced as a function of these experiences. Heeding Lorber (2011)'s recommendation, we asked our White, male participants to indicate their subjective perceptions of experienced disadvantage as a function of multiple different social categories. We found not only that a sizable proportion of White men in our samples felt that they had experienced disadvantage due to a social category, but also that their views of whether their racial group has benefited from privilege were profoundly shaped by these experiences.

The present research also contributes to the intergroup relations literature by elaborating on the relationship between the broad constructs of experienced disadvantage and privilege perceptions among members of advantaged groups. Some existing work has demonstrated that, when faced with evidence of their racial privilege, Whites may claim or cite personal experiences of disadvantage to avoid the threat inherent in the consideration that privilege may have benefitted them (Phillips & Lowery, 2015; Brown & Craig, 2020). Other research, exploring almost entirely White women, suggests that an experience of disadvantage, like a physical handicap and/or simultaneous membership in a subordinate group (such as a minority religious affiliation), can sensitize dominant group members to the privilege afforded to them as a function of dominant group membership (Ancis & Szymanski, 2001; Case, 2012; Rosette & Tost, 2013). In other words, the former stream of research demonstrates that the construct of experienced disadvantage can help to reduce self-image threat when threatening information about privilege is made especially salient, such as via an experimental manipulation of privilege salience/awareness (i.e., a threat-reduction account). The latter stream demonstrates that, in contexts where threat is relatively less salient, experience of disadvantage can provide dominant group members with important information about inequity between groups in society and their own relative privileges (i.e., an informational account).

Our findings generally conform with an informational account but are also informed by the threat-reduction account. Indeed, we contribute to existing research supporting the informational account of disadvantage and privilege perceptions by providing evidence for the mechanism by which experience of disadvantage relates to privilege perceptions—ability to empathize with disadvantages faced by other members of disadvantaged groups (in the present research, racial minorities). Notably, however, our studies also integrate perspectives on the self-image threat inherent in privilege awareness. That is, we hypothesize an important boundary to the informational account of disadvantage and privilege perceptions: that the effect of experienced disadvantage on perceived privilege is attenuated when White men's resiliency to self-threat is low (Steele et al., 1993; Kammeyer-Mueller et al., 2009)—when they perceive themselves to have had little

success at work, or when failures at work are made salient experimentally. In our studies that employed measurement-based (but not experimental) designs, we generally found support for this proposed boundary condition.

Finally, by examining how elements of White men's self-narratives influence their group-level beliefs about racial privilege, we present a multi-level examination of the interplay between self- and group-level views of disadvantage, success, and privilege. Our work thus responds to recent calls (e.g., Phillips & Lowery, 2015) for more research aimed at understanding the multi-level interrelationships between self-views or personal experiences of disadvantage and group-level racial privilege perceptions. It would be fruitful for future research to examine if the positive effect of self-views of disadvantage also generalizes to perceptions of personal privilege. Although past research has found that people are able to distinguish between individual- and group-level perceptions of discrimination, disadvantage, and privilege (Crosby, 1984; Taylor, Wright, Moghaddam, & Lalonde, 1990), these individual- and group-level beliefs tend to be positively correlated (Phillips & Lowery, 2015; 2020). Therefore, the present research may suggest a positive relationship between the self-related antecedents explored here and the perception of personal privilege.

### 11.2. Practical Implications

These findings have noteworthy practical implications. Considered in tandem with existing research on socio-political attitudes, our studies imply that experienced disadvantage may not merely foster perceived privilege but may represent a self-concept component that spurs the enactment of changes in social policies. Indeed, White men whose experiences in life provide them with information on the nature of interlocking social hierarchies and the disadvantages of other social groups (e.g., racial minorities) generally support more progressive political systems and goals (Kaplan, Spenkuch, & Tuttle, 2020), and privilege perceptions among the advantaged predict support for progressive social policies, egalitarianism, and social change (e.g., affirmative action, Goodman, 2000; Tuch & Hughes, 1996). Therefore, our findings imply that White men (or other members of advantaged groups) who occupy and recognize the unique intersection between their dominant group membership and simultaneous membership in a subordinate group (via experience of disadvantage in life along a social category or categories) may be particularly likely to not only understand their relative privileges, but also support a lessening of the inequity that generates those privileges in the first place. Broadly, our findings may suggest that, at least among White men, an enhanced perspective of the social hierarchy coupled with positive self-evaluation may spur a desire to generate social change.

This is noteworthy because, as aforementioned, White men disproportionately occupy positions of influence, and wield consequent power, in society (Jones, 2017; White, 2017). Therefore, to the extent that perceiving privilege leads White men and other members of dominant groups to support progressive social policies and the reduction of existing inequities, that support may generate tangible, positive outcomes for racial minorities and others that suffer from social inequity in America (and abroad). Notably, the perception of White privilege may also afford benefits to Whites themselves. In one qualitative study, to the extent that White respondents perceived racial privilege, some also reported both a deeper understanding of their social category and a new resolve in life to personally reduce racial inequity (Ancis & Szymanski, 2001).

Given the connection between privilege perceptions and support for progressive social policies such as affirmative action or wealth redistribution, our research would suggest that organizations interested in fostering such support, especially among their more advantaged (e.g., White male) employees, should endeavor to catalyze privilege perceptions among those employees, but should do so in a very specific manner, as negative and defensive reactions on the part of Whites can

sometimes accompany the introduction of White privilege as a topic (Branscombe, 1998; Leach et al., 2006; Lowery et al., 2007). For instance, interested organizations could pair seminars educating their employees on topics such as racial privilege, implicit bias, and social inequity—which many organizations already implement (Emerson, 2017; Feloni, 2016; Morse, 2016; Zarya, 2015)—with programs that encourage racially privileged employees to reflect upon experiences of disadvantage in their lives (as participants did in Studies 1a, 1b, and 4) and, in particular, the ways these experiences might help them to understand the disadvantages faced by racial minorities (as participants did in Studies 1b and 1c). In these ways, organizations could leverage these findings toward practice aimed at boosting privilege perceptions—and unlocking positive downstream consequences—among employees.

### 11.3. Limitations and Future Directions

The foremost limitation of these studies is the inconsistent picture they present with regard to workplace success as a moderator of the relationship between experienced disadvantage and perceived privilege. Though we generally observed across Studies 2a-3 that the effect of perceived disadvantage on perceived privilege was attenuated for participants low (vs. high) in perceived success at work, we were unable to provide causal evidence consistent with this moderation. Studies 2a-e employed a measurement-based design, and the disadvantage  $\times$  success interaction in Study 3 was only significant following participant exclusions concentrated in the *low success* condition, which compromised random assignment.

This missing causal evidence is an important limitation to recognize for two main reasons. First, without experimental evidence consistent with Hypothesis 2, we are unable to rule out issues of reverse causality explaining the disadvantage  $\times$  success interaction. Specifically, we cannot rule out the possibility that, for participants with experience of social category-based disadvantage, it was actually increases in *perceived racial privilege* that led to (real or perceived) increases in workplace success. Indeed, it may be the case that White men with experience of social category-based disadvantage self-select into occupations or organizations—for instance, workplaces with a more liberal leaning—where stronger socio-political attitudes like recognition of White privilege foster workplace success. Second, we also cannot rule out the possibility that some third variable, which we did not measure or manipulate in our studies, accounts for the role of success in the observed disadvantage  $\times$  success interactions. For instance, it is possible that workplace success correlated with level of formal education among participants in our studies, such that more (vs. less) educated participants with experience of disadvantage perceived greater privilege. Similar arguments might be made with regard to political orientation. Had our studies demonstrated the disadvantage  $\times$  success interaction predicted in Hypothesis 2 experimentally, rather than via measurement, these concerns would be less important to raise. However, without such evidence, we cannot rule them out; we can only conclude that, when measured, perceptions of success *appear* to attenuate (vs. facilitate) perceptions of privilege among White men with experience of disadvantage. It would be very useful for future research to further explore the possible moderating role of perceived workplace success via experimental methods.

The present research is also limited to the extent it does not systematically address another possible boundary condition: White men who believe they have experienced disadvantage due to being White. As we discussed in the Introduction, we would not expect Hypothesis 1—that experience of social category-based disadvantage should foster (racial) privilege perceptions for White men—to hold when the personal experience of disadvantage stems from the category providing group-level privilege. In some of the present research, it was not possible to address this boundary condition: In Studies 1c and 3, our measurement of experience of disadvantage did not include White men's dominant

social identities, race and gender, and thus any White men who believed themselves to have experienced disadvantage solely due to being White (or male) were not coded in our analyses as having experienced disadvantage. Notably, however, across Studies 1a-b, 2a-e, and 4, our manipulations and measurements of experience of disadvantage collapsed across multiple types of experience of disadvantage *including* race and gender. In Studies 1a, 1b, and 4, our White, male participants were able to reflect on any experience of disadvantage in their lives, rather than specifically age, socioeconomic status, religion, sexual orientation, and disability status (i.e., as in Studies 1c and 3). In supplementary analyses for Studies 2a-e (see Supplementary Materials), we discuss results using a disadvantage measure that included race and gender as possible axes of disadvantage.

This is noteworthy because, across Studies 1a, 1b, and 4, we observed consistent, positive effects of manipulations of disadvantage salience on perceptions of privilege. Moreover, across Studies 2a-e, participants with experience of disadvantage generally reported greater perceived privilege than those without such experience even when the race and gender social categories were included in the measure as possible axes of disadvantage (though the inclusion of participants claiming race and gender-based disadvantage somewhat diminished the strength of the effect, see Supplementary Materials). In other words, even though some participants in some of these studies referenced experience of disadvantage based on race, the overall impact of personal experience of disadvantage on group-level privilege perceptions remained positive.

With that said, it is possible that the (>5,000) White male participants in our studies were not representative of the U.S. population of White men, with specific regard to inclination to claim personal experience of disadvantage based on race. Across Studies 2a-e, between 7 and 14% of participants indicated perceived experience of disadvantage based on race. In Study 4, 2.7% of participants referencing experience of disadvantage based on a social category mentioned race in their response. At first glance, these percentages may seem low, given recent and widespread pushback against Critical Race Theory and the notion of White privilege among conservative, American Whites (Blake, 2021). Indeed, U.S. participants using online platforms like those used in our studies tend to lean somewhat more democratic than the nation as a whole (but this relationship is nuanced, see: Huff & Tingley, 2015), suggesting that White male participants who would cite personal experience of disadvantage along lines of race may have selected out of our studies to a certain degree. On the other hand, it is important to note that recent increases in resistance to the notion of group-level White privilege among American Whites (e.g., Blake, 2021; Gonyea, 2017) may not necessarily correspond to increases in perceptions of *personal* experience with disadvantage related to Whiteness. Indeed, in one recent survey (Gonyea, 2017), while 55% of White Americans disagreed with the notion that Whites are privileged as a group, far fewer were able to cite personal experiences of disadvantage due to Whiteness (ranging from 11 to 19%).

This polling data is consistent with a body of research demonstrating that people may often recognize that their social group is disadvantaged or discriminated against while failing to perceive that they have personally experienced disadvantage or discrimination as a function of membership in that social group (Crosby, 1984; for a review, see: Taylor et al., 1994). This body of work suggests various reasons why White Americans should be more likely to believe Whites are discriminated against as a group than to believe they have personally experienced discrimination due to their Whiteness. Recognizing that one has faced personal discrimination may be more difficult than recognizing group-level discrimination for cognitive reasons, in that discrimination may be harder to ascertain in individual cases but easier to perceive in the aggregate (Crosby et al., 1986; Taylor et al., 1990). Recognizing personal discrimination may also be more aversive for interpersonal reasons, to the extent that perceiving oneself to have experienced discrimination can encourage a search for an individual perpetrator and also requires admitting to personal suffering, both of which are



emotionally uncomfortable (Crosby, 1984; Crosby et al., 1986; Stevens & Jones, 1976). Finally, some scholars have suggested that the discrepancy in perceptions of personal vs. group-level discrimination could arise in part due to exaggerated beliefs about the level of discrimination faced by the focal group (Taylor et al., 1990). This explanation is a poor match for the perceptions of members of subordinated groups in society—given existing and robust inequities between dominant (e.g., Whites) and subordinate (e.g., racial minorities) groups (e.g., Margo, 2016; Pager & Shepherd, 2008)—but it may well explain discrepancies in perceptions of personal vs. group-level discrimination by Whites in the U.S., given their objectively privileged (vs. disadvantaged) position in U.S. society.

In sum, both recent polling data (Gonyea, 2017) and research on gaps in perceptions of personal and group-level discrimination (Crosby, 1984) suggest that our findings extrapolate rather well to the broader population of White men in the U.S. With that said, one caveat should be raised: In samples of White men where perceptions of personal discrimination due to Whiteness are more common (e.g., conservative samples; Kranish, 2021; Tesler, 2021), the overall positive impact of social category-based disadvantage on perceived racial privilege may be reduced. Future researchers would do well to seek replication of our effects among more conservative samples of U.S. White men or other members of dominant groups.

A final limitation of the present research is that it focuses on one specific dominant group—White men—and on the factors involved in catalyzing the perception of one specific type of privilege—racial privilege. As such, it cannot be said for certain that the findings presented here generalize to members of other types of dominant groups (e.g., Americans, Christians, heterosexuals) or perceptions of other types of privilege. Furthermore, it is important to note that our exclusive use of White male participants in these studies—though consistent in approach to other research examining similar topics (e.g., Unzueta, Lowery, & Knowles, 2008)—obfuscates whether our findings are driven by participants being Whites, men, or specifically White men. We cannot conclude from our data, for instance, that different patterns of effects would obtain with White women or non-White men, as we did not include these groups as comparisons in our studies. In other words, because we did not include comparison groups such as White women in our studies, we cannot conclude that the effects we demonstrate are specific to White men. In fact, there is reason to believe that the relationship we demonstrate between experienced disadvantage and perceived privilege would replicate with White women, as similar effects with White women (e.g., reflecting on disadvantage experienced as a woman) have been documented in other research (Rosette & Tost, 2013; Ancis & Szymanski, 2001). However, there may also be reason to believe that the nature of success as a moderator of the effect of experienced disadvantage on perceived privilege may shift for White women vs. men.

Indeed, the effects we demonstrate regarding perceived success—that, at least when measured, increases in success facilitate increases in perceived privilege for White men with experience of disadvantage—seem to run counter to research examining racial privilege perceptions among White women, which has found that a self-view of success can temper perceptions of racial privilege among White women experiencing disadvantage (Rosette & Tost, 2013). On one hand, it is possible that differences in the societal conversation on race and privilege between 2013 and 2021 may account for differences between the findings of Rosette and Tost (2013) and the findings presented in this research. On the other hand, it is also possible that perceived success at work may operate differently for (White) men than for (White) women. For instance, the extent to which positive self-evaluations decrease or increase defensive reactions towards threats depends on whether those positive self-evaluations are secure/stable as opposed to insecure/fragile (Jordan et al., 2003; Baumeister, Heatherton, & Tice, 1993), and it is possible that workplace success might be more insecure and tenuous for women than for men due to existing and pervasive pro-male workplace

dynamics in America and abroad. In other words, perceived success may boost White men's ability to perceive White privilege by increasing the positivity of self-evaluation, as we hypothesize, whereas White women who perceive themselves to have been successful may be less likely to perceive privilege due to concerns that doing so may lessen their role in their achievements and successes. This line of thinking is consistent with research showing that White women often have to contend with negative stereotypes concerning competence (Heilman, 2001) and gender backlash (Rudman, 1998) in order to achieve workplace success. Future research could test these assertions by seeking to replicate the studies offered here with White men and White women.

## 12. Conclusion

In the United States, White privilege denial is common. Recent polling suggests that a majority of White Americans believe Whites are discriminated against, rather than privileged (Gonyea, 2017), and similar trends can be observed in Europe (Golinkin, 2017). Clearly, there remains an urgent need to study the conditions that facilitate the perception of White privilege among advantaged groups like White men. Addressing this need, the core and novel finding of the present research is that White men who understand what it is like to be disadvantaged in life gain a broader perspective on the disadvantages faced by others and are consequentially better able to recognize the privileges they enjoy as Whites.

## CRedit authorship contribution statement

**Sean Fath:** Conceptualization, Methodology, Formal analysis, Visualization, Writing – review & editing. **Anyi Ma:** Conceptualization, Methodology, Formal analysis, Visualization, Writing – review & editing. **Ashleigh Shelby Rosette:** Conceptualization, Methodology, Writing – review & editing.

## Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

## Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.obhdp.2021.104114>.

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