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Structurally Unjust: How Lay Beliefs about Racism Relate to Perceptions of and Responses to  
Racial Inequality in Criminal Justice

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## Abstract

Racial inequality has been a persistent component of American society since before its inception. This research investigates how lay beliefs about the nature of racism— as primarily due to prejudiced individuals or, rather, to structural factors that disadvantage members of particular racial groups—predict perceptions of (Studies 1A & 1B) and reactions to (Studies 2 & 3) racial inequality in the criminal justice system. Specifically, the current research suggests that holding a more structural (v. interpersonal) racism view predicts a greater tendency to perceive racial inequality in criminal justice. Moreover, White Americans' lay beliefs regarding racism, coupled with their general level of comfort with societal hierarchy, may predict support for policies that would reduce disparities in mass incarceration. Together, this work suggests that beliefs about the nature of racism—as either interpersonal or structural—may play an important role in how people perceive and respond to racial inequality.

Keywords: lay beliefs, racial inequality, criminal justice

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Over the past half-century, social scientists have documented a sizable societal shift towards endorsing “norms of racial equality” (e.g., Bobo, 2001). Yet despite this rapid proliferation in the endorsement of racially-egalitarian principles, many of the stark, obstinate racial disparities that have long been a hallmark of American society still remain. Indeed, substantial racial disparities continue to persist in nearly every important domain of contemporary American life, including education (e.g., U.S. Department of Education, 2016), health (e.g., Washington, 2006), housing (e.g., Massey & Denton, 1993), and wealth (e.g., Pew Research Center, 2011).

One domain that is characterized by its spectacularly immense racial disparities is the criminal justice system (e.g., Alexander, 2010). Indeed, racial disparities in the U.S. criminal justice system are some of the most stark and persistent, especially in the form of mass incarceration. Given that mass incarceration has led to a negligible reduction in crime rates, one might expect that the very fact of their racially disparate impact would reduce support for the “tough on crime” policies that have engendered it. Recent evidence, however, suggests otherwise. Specifically, greater awareness of stark racial disparities in the criminal justice system seem to actually *increase* support for policies that heighten these disparities (Hetey & Eberhardt, 2014, 2018).

The persistence of racial inequality in the United States and, particularly, in criminal justice, seems to stand in contrast with the oft-noted increasing prevalence of racially egalitarian values among American citizens. This discrepancy between the reality of racial inequality in American society and the egalitarian rhetoric of its citizens and elites harkens back to the

fundamental paradox that political scientist Gunnar Myrdal called the “American Dilemma” (Myrdal, 1944). How can we reconcile the persistent racial inequities that pervade contemporary American society when racial egalitarianism is ostensibly at an historic high? The present work considers one potential contributor to this dilemma; namely, the role of lay beliefs about racism in shaping perceptions, construals, and thus, tolerance, of racial disparities in society.

### **Lay Beliefs about Racism**

Social scientists have long considered the multifaceted nature of racism. Allport (1954), for instance, noted the roles of both individual-level factors such as personality and attitudes, as well as more societal-level factors, such as norms and laws, that support racial discrimination. Racial discrimination and racism, more broadly, can be thought of as emerging from individuals and/or systems operating in ways that disadvantage racial minorities relative to Whites. Interpersonal (individual-level) racism is characterized by the negative attitudes that individuals hold regarding members of different racial and/or ethnic groups. When considered at the individual level, racism and racial prejudice are viewed as virtually synonymous and discrimination is thought to emerge from individuals’ prejudices, be they explicitly held and acknowledged or more implicit. Structural racism, on the other hand, is characterized by policies, practices, and/or laws that have a disparate impact on members of particular racial or ethnic groups. For instance, laws creating strict identification requirements in order to vote have a disparate negative impact on voter turnout among racial minority (and lower SES) voters (e.g., Hajnal, Lajevardi & Nielson, 2017). Such laws, policies, and practices can be formed with or without discriminatory intent. Indeed, evidence of racially disparate outcomes is often suggestive of the operation of structural racial bias.

Interpersonal and structural forms of racism are certainly not mutually exclusive, and both are concerning in their own right. Further, despite the removal of overt discriminatory laws and some social conventions, there is considerable evidence suggesting that structural (also sometimes called “institutional”) forms of racism continue to play a significant role in maintaining societal racial inequality (e.g., Bonilla-Silva, 2006; Massey & Denton, 1993; Salter, Adams & Perez, 2018). Yet, research suggests that White Americans rarely think of contemporary racism in structural, compared to interpersonal, terms (e.g., Nelson, Adams & Salter, 2013; Unzueta & Lowery, 2008). Some scholars have argued that White Americans’ tendency to hold an interpersonal rather than structural understanding of racism may help to account for the apparent disconnect between their support for racially-egalitarian principles and relative lack of concern about persistent societal racial disparities (Bobo, 2001). Consistent with this notion, in a longitudinal study conducted shortly after Hurricane Katrina, O’Brien and colleagues found that White undergraduate students in New Orleans who held a relatively interpersonal understanding of racism, compared with those who held a structural understanding, were less likely to perceive racism as a cause of the racially-disparate relief efforts and outcomes (O’Brien, Blodorn, Alsbrooks, Dube, Adams, & Nelson, 2009).

Similarly, Adams and colleagues (2008) found that a multi-day tutorial that increased understanding of structural factors that contribute to the persistence of racial discrimination also increased students’ support for policy initiatives designed to reduce societal racial inequality (e.g., Affirmative Action programs), compared with a similar tutorial that focused exclusively on interpersonal forms of racial bias. Taken together, this work suggests that the tendency to conceptualize racism as interpersonal or structural has implications for how people react to

events with racially disparate outcomes (e.g., O'Brien et al., 2009), as well as for support of policies designed to reduce or redress racial disparities (e.g., Adams et al., 2008; Bobo, 2001).

### **Social Dominance Orientation**

In addition to beliefs about the interpersonal or structural nature of racism, it is likely that many other psychological factors contribute to perceptions of (or willingness to acknowledge) racial inequality in criminal justice, as well as subsequent responses after exposure to racial disparities in the criminal justice system. There is considerable evidence, for instance, that individuals do not necessarily perceive societal inequality as reflective of societal injustice (e.g., Jost, Banaji, & Nosek, 2004; Sidanius & Pratto, 1999; Tyler, Boeckmann, Smith, & Huo, 1997). That is, individuals vary in the extent to which they are comfortable with societal inequality, often indicated by their level of social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994). Indeed, individual differences in SDO predict support for ideologies and specific policy preferences implicated in the maintenance of the intergroup hierarchy (see Pratto, Sidanius, & Levin, 2006). Recent work has also found that SDO influences the extent to which individuals perceive intergroup inequality (Kteily, Sheehy-Skeffington, & Ho, 2017) and support policies designed to reduce it. Consequently, it is reasonable to expect that SDO will shape reactions to racial disparities in general and in criminal justice outcomes; and, further, that it may be a more robust and stable predictor than lay beliefs about racism. Study 3 of the present work examines this possibility. The overarching question fueling the present research, then, is whether lay beliefs about racism, perhaps in conjunction with SDO, inform perceptions of and reactions to current levels of racial inequality in the U.S. criminal justice system.

### **Overview of the Present Research**

The present research examines relationships between individual differences in the tendency to think of racism in terms of biased individuals (interpersonal) or, rather, structures that disadvantage members of particular racial groups (structural), as well as a) the extent to which people perceive racial inequality in criminal justice (Studies 1A & 1B) and b) their reactions to evidence of racial inequality in mass incarceration (Studies 2 & 3). Specifically, in two nationally-representative samples of American adults (Studies 1A & 1B), we examine the role of racism lay beliefs as predictors of perceptions of inequality in criminal justice. Two additional, well-powered<sup>1</sup> studies build on these findings by examining the role of racism lay beliefs among White Americans in shaping reactions to exposure to evidence of racial disparities in the U.S. criminal justice system either alone (Study 2) or in conjunction with individual differences in comfort with societal hierarchy (i.e., SDO, Study 3).

Based on previous research (e.g., Unzueta & Lowery, 2008), we expected Americans, on average, to endorse an individual understanding of racism more than a structural one and, further, for White Americans to do so more than Black Americans (and other racial minorities). Moreover, we expected racism lay beliefs to predict the extent to which individuals tend to perceive (or acknowledge) the existence of racial inequality in the U.S. criminal justice system. In addition to predicting the perception of racial inequality, we also expected lay beliefs to predict how people respond to evidence of racial disparities in mass incarceration, such that White Americans with a relatively more interpersonal (v. structural) lay belief would be more likely to support harsh criminal justice policies after exposure to starker, rather than more modest, evidence of racial disparities in the prison population. Study 3 considers these

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<sup>1</sup> Power analyses (G\*Power; Faul, Erdfelder, Buchner, & Lang, 2009) suggested that the samples sizes for Studies 2 and 3 were sufficiently large to ensure adequate power ( $1-\beta \geq .80$ ) to detect a small effect (Cohen's  $d = .20$ ) for our predicted simple effects.

relationships further, with an examination of potential moderation of the role of lay beliefs by individual differences in preferences for societal hierarchy (i.e., SDO).

### **Studies 1A and 1B**

The primary aims of Studies 1A and 1B were to examine 1) Americans' tendency to endorse an interpersonal rather than structural lay belief about racism and 2) whether the tendency to hold an interpersonal (v. structural) lay belief predicts perceptions of racial inequality in the US criminal justice system. We predicted that, on average, respondents would endorse an interpersonal lay belief more than a structural one, and for White respondents to demonstrate this pattern more than respondents from racial minority backgrounds. We also expected racism lay beliefs to predict perceptions of racial inequality in the criminal justice system, such that holding a structural rather than interpersonal understanding of racism would be associated with a greater tendency to perceive (or acknowledge) societal racial inequality in the criminal justice system.

### **Data and Method**

We examined data from 1801 participants, drawn from the nationally representative Survey of Americans on Race (CNN & Kaiser Family Foundation, 2015). In the interviews, participants were asked about their perceptions of racial discrimination and inequality in the US, as well as their levels of support for various efforts (e.g., policies) to address contemporary racial issues. The present work analyzed responses to the following items: 1) perceptions of interpersonal/structural racism (i.e., racism lay beliefs) and 2) perceptions of racial inequality in criminal justice (See the Online Supplemental Material for additional methodological details).

*Racism lay beliefs.* Participants' endorsement of a relatively interpersonal or structural lay belief about racism was operationalized by their response to the interview question "which is



the bigger problem today?” Participants were then provided with two response options: “Individuals’ own beliefs and prejudices that cause them to treat those of other races poorly” (indicative of a relatively interpersonal racism view), or “Discrimination that is historically built into our society and institutions” (indicative of a relatively structural racism view). For subsequent analyses, endorsement of an interpersonal lay belief was coded as “1” and of structural belief was coded as “2.”

*Perceptions of unfair treatment in criminal justice.* Participants were asked whether they thought the U.S. criminal justice system “treats Whites and Blacks equally” (coded as “1”) or “favors Whites over Blacks” (coded as “2”).

*Demographic variables.* Participants provided information regarding their age, gender, education level, political conservatism and racial background.<sup>3</sup>

## Results & Discussion

**Analytic strategy.** Descriptive statistics and zero-order correlations between measures are displayed in Table 1. All analyses control for participant gender, education level, and political conservatism.

**Racism lay beliefs.** Consistent with past research (e.g., Sommers & Norton, 2006; Unzueta & Lowery, 2008), participants were significantly more likely to report that interpersonal forms of racism (64.3%) are “the bigger problem today” rather than structural forms,  $\chi^2(1) = 143.19, p < .001$ . Analyses further revealed, however, significant differences in participants’ racism lay beliefs as a function of their racial background,  $\chi^2(2) = 47.35, p < .001$ . White participants’ lay beliefs echoed that of the full sample; a significant majority considered interpersonal racism (68.6%) to be “the bigger problem” relative to structural racism,  $\chi^2(1) = 164.63, p < .001$ . Among the subsample of Black respondents, in contrast, there was slightly

greater endorsement of structural (54%) rather than interpersonal racism, although this difference was not statistically significant  $\chi^2(1) = .28, p = .60$ . The rest of the racial minority subsample also expressed significantly greater endorsement of interpersonal (57.7%) over structural racism as a “the bigger problem today,”  $\chi^2(1) = 11.17, p = .001$ , however did so at levels somewhat in between that of the White and Black subsamples.

**Perceived Racial Inequality in Criminal Justice.** We next examined whether lay beliefs predicted the extent to which respondents perceived racial inequality in the criminal justice system. Given that the survey question specifically probed perceptions of Black disadvantage in criminal justice, relative to Whites, we limited the analyses to those from the Black and White respondents. Specifically, we conducted a series of logistic regressions on the perception that Whites are favored (relative to Blacks) in the criminal justice system. The first model tested for racial group (White v. Black) differences. The second added lay beliefs about racism to the model; then, if appropriate, a Sobel test<sup>2</sup> was conducted to examine whether the magnitude of the race effect was significantly reduced by the inclusion of racism lay beliefs.

Consistent with predictions, the first model revealed a significant effect of race,  $b = 2.06, p < .001, OR = 7.88$ . Not surprisingly, White respondents were over seven times less likely as Black respondents to believe that the U.S. criminal justice system favors Whites over Blacks. Also consistent with predictions, however, the second model revealed a significant relationship between racism lay beliefs and perceived racial inequality in criminal justice,  $b = 0.57, p = .002, OR = 1.76$ , even controlling for respondent race; those with a structural view of racism were nearly twice as likely to believe that the U.S. criminal justice system favors Whites over Blacks,

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<sup>2</sup> Because both the IV (White v. Black) and mediator (Interpersonal v. Structural) were measured dichotomously, we were unable to find another method suitable to test a mediation model. Given the large sample size, we concluded that a Sobel test would be an appropriate to test for an indirect effect of interpersonal/structural lay beliefs on the relationship between participant race and perceived racial inequality in CJ.

compared with those holding an interpersonal view of racism. And, although the effect of respondent race remained statistically significant in this second model ( $b = 1.90, p < .001, OR = 6.68$ ), as predicted, a Sobel test revealed that the relationship between respondents' racial background and their perceptions of racial inequality in criminal justice was significantly reduced with the inclusion of lay beliefs,  $z = -2.69, p < .01$ .

Taken together, these results offer initial evidence that lay beliefs about the interpersonal vs. structural nature of racism are related to perceptions of racial inequality in the United States. Consistent with hypotheses, holding a structural rather than interpersonal view of racism was associated with the perception that Blacks are disadvantaged relative to Whites in terms of their treatment in the criminal justice system. Moreover, racism lay beliefs helped to account (statistically) for the Black-White gap in the perception of racial inequality in the U.S. criminal justice system, suggesting perhaps one previously unidentified contributor to these typically quite large perceptual gaps.

### **Study 1B**

Study 1B sought to examine the relationship between racism lay beliefs and the perception of racial inequality in the U.S. criminal justice system in a second, nationally-representative sample of American adults. We, again, predicted that participants with a structural (v. interpersonal) understanding of racism would perceive greater racial inequality.

### **Data and Method**

We examined data from 3346 participants in the nationally representative 2016 Racial Attitudes in America III Survey (Pew Research Center, 2016). Participants were asked a number of questions about their views of race in contemporary America, including several items that were particularly relevant to the present inquiry. From this survey, we analyzed responses to the

following items: 1) racism lay beliefs (i.e., interpersonal vs. structural) and 2) perceptions of racial inequality in criminal justice at community and national levels.

*Racism lay beliefs.* Endorsement of a relatively interpersonal or structural lay belief about racism was measured with the question “when it comes to discrimination against Black people in our country today, which do you think is the bigger problem?” Participants were provided with two response options: “Discrimination that is based on the prejudice of individual people” (indicative of an interpersonal view of racism), or “Discrimination that is built into our laws and institutions” (indicative of a structural view of racism). For all analyses, endorsement of an interpersonal view was coded as “1” and endorsement of a structural view was coded as “2.”

*Perception of racial inequality in criminal justice.* Participants were asked whether Blacks are treated more or less fairly than Whites “in dealing with the police” and “in the courts.” Perceptions of Black-White inequality in each domain was originally recorded on the same 3-point scale (1 = *Blacks treated less fairly*, 2 = *Whites treated less fairly*, 3 = *Treated about equally*). We recoded “treated about equally” response as the midpoint of the scale (2) and reversed-scored the scale, such that higher values indicate greater perception that Blacks are treated less fairly than Whites (i.e., Black disadvantage). In addition, participants were randomly-assigned to respond to the two items either in reference to either *their community* or *the United States*. Responses were averaged into two composites that assessed *perceived Black disadvantage in criminal justice* at either the community level ( $\alpha = .79$ ) or the national level ( $\alpha = .73$ ).

*Demographic variables.* Participants also provided information regarding their age, gender, education level, political conservatism, and racial background.

## Results

Descriptive statistics and zero-order correlations between all measures are displayed in Table 2. All analyses control for participant gender, education level, and political conservatism.

**Racism lay beliefs.** Consistent with the findings of Study 1A, the majority of participants in Study 1B viewed interpersonal racism (74.9%) as “the bigger problem today,” rather than structural racism,  $\chi^2(1) = 738.27, p < .001$ . Also replicating Study 1A, participant race (White v. racial minority) moderated this pattern,  $\chi^2(2) = 96.66, p < .001$ ; White respondents endorsed interpersonal racism as a bigger problem than structural racism [78.4%;  $\chi^2(1) = 656.02, p < .001$ ]. Among Black respondents in Study 1B, similar to those in Study 1A, there was no difference in the endorsement of interpersonal or structural racism [53%;  $\chi^2(1) = .90, p = .34$ ]. Also consistent with Study 1A, the rest of the racial minority subsample also expressed significantly greater endorsement of interpersonal racism as a bigger problem than structural racism. [72.3%;  $\chi^2(1) = 141.44, p < .001$ ].

**Perceived racial inequality in criminal justice.** As in Study 1A, we next examined the role of lay beliefs in predicting perceptions of racial inequality in criminal justice. Once again, given that the outcome measures specifically gauged perceptions of Black disadvantage in criminal justice, relative to Whites, we analyzed the responses of the Black and White participants only. Specifically, perceived racial inequality in criminal justice was subjected to a series of regression analyses, separately for the community-level and national-level question. The first model tested for racial group (White v. Black) differences. The second model added lay beliefs about racism, and a Sobel test was conducted to examine whether the magnitude of the race effect was significantly reduced by the inclusion of lay beliefs in the model.

Perceptions of community-level inequality in criminal justice. Consistent with predictions, as well as with Study 1A, results of the first model revealed a significant relationship

between participants' racial background and their perceptions of racial inequality at the community level [ $N = 1297$ ],  $b = -0.40$ ,  $p < .001$ ,  $r_{\text{partial}} = -.30$ . On average, White participants perceived less racial inequality in criminal justice in their communities than did Black participants. This race effect remained reliable in the second model [ $b = -0.36$ ,  $p < .001$ ,  $r_{\text{partial}} = -.30$ ], but the predicted effect of racism lay beliefs also emerged as statistically significant,  $b = 0.17$ ,  $p < .001$ ,  $r_{\text{partial}} = .16$ . Endorsing a structural, rather than interpersonal, understanding of racism was associated with a greater tendency to perceive that Blacks are disadvantaged relative to Whites in criminal justice at the community level. Further, a Sobel test indicated that the magnitude of the relationship between participants' racial background and perception of community-level racial inequality in criminal justice was significantly reduced after accounting for participants' racism lay beliefs,  $z = -4.34$ ,  $p < .001$ .

Perceptions of national-level inequality in criminal justice. Participants' tendency to perceive racial inequality in criminal justice nationwide was submitted to the same series of regressions. The results of the first model again revealed a significant effect of participants' racial background [ $N = 1218$ ],  $b = -0.30$ ,  $p < .001$ ,  $r_{\text{partial}} = -.25$ . The second model, however, revealed that participants' racism lay beliefs, after accounting for their racial background, did not significantly predict their perceptions of national-level racial inequality in criminal justice,  $b = 0.01$ ,  $p = .67$ ,  $r_{\text{partial}} = .01$ . The effect of participant race, however, remained reliable in this second model,  $b = -0.30$ ,  $p < .001$ ,  $r_{\text{partial}} = -.25$ . Further and contrary to our predictions, a Sobel test indicated that the magnitude of the race effect was not significantly reduced with the inclusion of lay beliefs,  $z = -0.43$ ,  $p = .67$ .

## Discussion

The results of Study 1B bolster the findings of Study 1A, suggesting that lay beliefs about the interpersonal or structural nature of racism may help in shaping perceptions of racial inequality in criminal justice. Not only did lay beliefs about racism predict perceptions of racial inequality in criminal justice, but accounting for these lay beliefs significantly reduced the racial gap in these perceptions, at least in the case of perceived racial inequality at the community level.<sup>3</sup>

There are some noteworthy methodological limitations associated with these surveys, however, that hinder our ability to draw broader conclusions from the data. First, in both surveys, lay beliefs about racism were assessed with the somewhat heavy-handed prompt, “which is *the bigger problem* today?” It is possible that individuals generally think of racism in one way, perhaps as structural, but think that a different form (i.e., interpersonal) is a greater problem in today (i.e., in contemporary society). Second, both surveys presented the lay belief question as a forced choice, which could obfuscate the extent to which individuals generally endorse each racism view. To address both issues, we conducted two additional studies, wherein we vary the “bigger problem” language (across studies) and measure lay beliefs on a continuous scale (in both studies). We then examined whether lay beliefs, irrespective of how they are assessed, moderate responses to racial disparities in the criminal justice system.

## Study 2

The primary purpose of Study 2 was to build upon the survey findings of Studies 1A and 1B suggesting that a more structural understanding of racism is associated with a greater tendency to perceive racial inequality in criminal justice. It is possible, however, that individuals recall different exemplars of discrimination when asked to report on it, depending on their lay

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<sup>3</sup>We also ran the alternate mediation analyses, which revealed that the extent to which participants in these studies perceived racial inequality in the criminal justice system significantly reduced the Black–White racial gap in support for a structural rather than interpersonal lay belief about racism (see Online Supplement for these results).

beliefs about racism, leading to the differential perceptions of the extent of racial inequality in criminal justice observed in Studies 1A and 1B. It is also possible, of course, that it is simply people who perceive more inequality in criminal justice who also tend to have a structural understanding of racism. Hence, in addition to differences in the perception of inequality, it is important to ascertain whether lay beliefs about the nature of racism predict how individuals respond to (and reason about) the racial disparities to which they are exposed.

To examine this possibility, in Study 2 we investigated whether tending to hold a relatively interpersonal or structural racism view moderates responses to information about racial disparities in the U.S. criminal justice system. Given that participant racial background was a strong predictor of both the perception of racial disparities and holding a structural/interpersonal lay belief in Studies 1A and 1B, we decided to examine this question among a sample of White Americans. Specifically, we sought to extend recent research on the effects of exposure to information about racial disparities in mass incarceration (e.g., Hetey & Eberhardt, 2014). This research finds that individuals who are exposed to starker rather than more modest racial disparities in the U.S. prison population express *greater* support for harsh criminal justice policies that are known to contribute to mass incarceration (e.g., habitual offender laws). Further, Hetey and Eberhardt (2014) found that concern about crime getting out of control should these laws be repealed mediated the effect of the racial disparity information on participants' level of policy support, suggesting the stereotypical associations with Black Americans were activated by exposure to the racial disparity information rather than (or, perhaps, more than) skepticism about the system all together (i.e., more structural concerns).

Consistent with these findings, we expected individual differences in racism lay beliefs to moderate the extent to which participants in the present studies differentially support harsh



criminal justice policies and express concern about crime after exposure to the starker, rather than the more modest, racial disparity information. Because they are more likely to recognize the impact of structural forces that give rise to disparities, that is, we expected participants with a more structural racism lay belief to be less likely to increase their support for harsh criminal justice policies and less likely to express greater concern about crime when exposed to starker (rather than more modest) racial disparity information, compared with participants with a more interpersonal racism lay belief.

## Methods

**Participants.** Two-hundred forty-four White U.S. Citizens (40% female;  $M_{age} = 34.73$ ,  $SD = 15.93$ ) were recruited in two separate waves. *Wave 1* included 88 White participants (26% female;  $M_{age} = 19.16$ ,  $SD = 1.86$ ) who were recruited from an introductory psychology class across the 9-month academic year and participated in exchange for partial course credit. *Wave 2* included 156 White participants (52% female;  $M_{age} = 43.51$ ,  $SD = 13.43$ ) who were recruited from the Amazon Mechanical Turk marketplace and participated in the study in exchange for \$1. Since the results from the two samples were comparable, they were combined and analyzed together.

## Materials & measures

*Racism lay beliefs.* Participants completed a single-item measure assessing their lay beliefs about racism. Using an 11-point scale, adapted from a measure developed by O'Brien and colleagues (2009), participants were asked to indicate "When you think of racism, is racism primarily caused by racist individuals who have negative attitudes towards racial and ethnic minorities (1), or is racism caused by institutional practices that happen to disadvantage racial and ethnic minorities (11)?" The scale also anchored the midpoint, labeled "Racism is equally

due to biased individuals & biased institutional practices” (6). Higher scores reflect a more structural (and less interpersonal) lay belief regarding racism.

Lay beliefs were assessed either in a mass testing survey administered several weeks before participants completed the rest of the study (41.5% of participants), or they were embedded in a survey assessing “political attitudes” that was administered immediately after participants consented to participating in the study and just prior to the presentation of the racial disparity manipulation (58.5% of participants).

*Racial disparity manipulation.* Similar to the methods detailed in Hetey and Eberhardt (2014), participants were shown demographic information about the U.S. prison population. Specifically, participants were shown a) the number of inmates in the U.S. prison population, b) the number of prisons in the U.S., and c) graphical representations of the gender and age demographics of the prison population. Last, they were shown a graphical representation of the racial demographics of the prison population, which was manipulated such that the population was either approximately 40% Black or approximately 60% Black. Consistent with Hetey and Eberhardt’s methodology, these percentages were drawn from veridical U.S. prison demographic data, with “40%” approximating the percentage of Black inmates in U.S. prisons, nationwide, and 60% approximating the percentage of Black inmates in states like Illinois or cities like New York City. The percentages of Whites depicted in the prison population were roughly 30% and 11%, respectively, and percentages of other groups (e.g., Latinos) did not vary across conditions.

*Habitual offender law support.* Participants were provided with a definition of and information about habitual offender laws (see Appendix B) and were then asked to report the extent to which they would support a habitual offender law in their state with a single-item

measure (“I would support a proposed habitual offender law in my state”). Participants recorded their responses on a 6-point Likert scale from 1 (*strongly disagree*) to 6 (*strongly agree*).

*Concern about crime.* Participants completed the same 4-item measure used in Hetey and Eberhardt (2014) to assess the extent to which they thought crime would increase if habitual offender laws were banned nationally (e.g., “Given the controversy, how worried are you that crime will get out of control without habitual offender laws?”). Participants recorded their responses on 6-point Likert scales from 1 (*not at all*) to 6 (*extremely*). The items were averaged to form an index of concern about crime. Higher scores reflect greater concern ( $\alpha = .93$ ).

*Racial disparity manipulation check.* Participants were asked to recall whether the percentage of Black Americans in the U.S. prison population was more or less than 50%. Participants in the stark disparity condition (60% Black) who indicated that the prison population was less than 50% Black, and participants in the more modest disparity condition (40% Black) who indicated that the prison population was more than 50% Black, were excluded from subsequent analyses.

*Racial attitudes.* Wave 1 participants also completed a measure of explicit racial attitudes (i.e., Anti-Black Scale; Katz & Hass, 1988). Participants completed a 10-item measure gauging the extent to which they agreed or disagreed with statements expressing negative views of Black Americans (e.g., *On the whole, Black people don’t stress education and training*). Participants recorded their responses on 7-point Likert scales from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores reflect higher levels of explicit anti-Black sentiment ( $\alpha = .86$ ).

*Political ideology.* Participants completed a 2-item measure assessing their endorsement of a liberal or conservative political ideology. Participants rated the extent to which they agreed or disagreed with the following statements: “I endorse many aspects of the conservative political

ideology” and “I endorse many aspects of the liberal political ideology.” Participants recorded their responses on 7-point Likert scales from 1 (*strongly disagree*) to 7 (*strongly agree*). The liberal item was reversed prior to averaging with the conservative item to index participants’ level of political conservatism ( $r = .78$ ). Higher scores reflect greater endorsement of a conservative political ideology.

### **Procedure**

All participants completed the lay beliefs about racism measure before being randomly assigned to the racial disparity information treatment. Lay beliefs were assessed either in a mass testing survey administered several weeks before participants completed the rest of the study (41.5% of participants), or they were embedded in a survey assessing “political attitudes” that was administered immediately after participants consented to participate in the study and just prior to the presentation of the racial disparity manipulation (58.5% of participants).

Participants were next informed that they would be providing their opinions about a policy in one of several potential domains (e.g., health care, education, etc.) and that they would have to advance to the next screen in order for a policy domain to be “randomly selected” for them. Participants were all informed that they would be making judgments about a criminal justice policy. They were then told that, given differing levels of familiarity with the U.S. prison system, they would first be provided with some basic information. Next, participants were exposed to the basic demographic information and either the stark (60% Black) or more modest (40% Black) racial disparity information. Participants were then provided the information about habitual offender laws and subsequently asked to report their support for such policies being adopted in their state. After, participants responded to the crime concern scale, followed by the racial disparity manipulation check item, and a demographic survey on which they reported their

age, gender, and political ideology. Participants were then debriefed, thanked, and credited for their participation.

## **Results**

Thirty-seven participants were excluded from analyses for incorrectly recalling the percentage of Blacks in the national prison population to which they were exposed. All effects remain reliable when participants who failed the manipulation check are included in the analyses, however (see Online Supplement for results with all participants included). Descriptive statistics and correlations between measures are provided in Tables 3 and 4, respectively.

### **Preliminary analyses**

Participants in the present study were quite liberal, on average ( $M = 3.35$ ,  $SD = 1.80$ ), and, as predicted, tended to hold a relatively interpersonal, rather than structural, understanding of racism ( $M = 4.93$ ,  $SD = 2.32$ ), similar to the nationally-representative survey respondents in Studies 1A and 1B.

We also calculated correlations among lay beliefs about racism, conservative political ideology, and racial attitudes (for the subsample who completed that measure). As shown in Table 3, racism lay beliefs (higher numbers reflect a more structural understanding) and conservative political ideology were significantly negatively correlated, similar to the relationship between these variables observed among the Study 1A and 1B survey respondents. Interestingly, lay beliefs were not significantly related to explicit anti-Black attitudes. Given this pattern of correlations, then, the primary analyses control for political conservatism, in addition to participant age and data collection wave.

### **Primary analyses**

**Habitual offender law support.** Support for habitual offender laws were examined as a function of the manipulation of the racial disparity (stark vs. modest), individual differences in lay beliefs about racism (standardized), and the interaction between these two variables. Analyses revealed neither a main effect of the racial disparity manipulation,  $t(233) = 1.33$ ,  $p = .19$ , 95% CI [-.11, .56], nor a significant effect of racism lay beliefs,  $t(233) = -0.10$ ,  $p = .92$ , 95% CI [-.19, .17], but the predicted interaction between lay beliefs about racism and the racial disparity manipulation was statistically reliable,  $t(233) = -2.57$ ,  $p = .01$ , 95% CI [-.79, -.11]. As depicted in Figure 1, and replicating Hetey and Eberhardt (2014), participants with a primarily interpersonal understanding of racism (-1 SD below the mean) expressed greater support for habitual offender laws after exposure to the starker, rather than more modest, racial disparity information,  $t(233) = 2.77$ ,  $p = .006$ , 95% CI [.20, 1.15]. Participants with a more structural understanding of racism (+1 SD above the scale mean), however, revealed no differences in their support for habitual offender laws as a function of the racial disparity information to which they were exposed,  $t(233) = -0.89$ ,  $p = .37$ , 95% CI [-.70, .26].

**Concern about crime.** Participants' responses to the crime concern composite were submitted to the same analysis. Again, neither the main effect of the racial disparity manipulation,  $t(233) = 1.63$ ,  $p = .10$ , 95% CI [-.05, .57] nor of racism lay beliefs,  $t(233) = 0.85$ ,  $p = .40$ , 95% CI [-.13, .32], were reliable, but neither was the interaction between these two variables,  $t(233) = -1.23$ ,  $p = .22$ , 95% CI [-.52, .12]. Given the Hetey and Eberhardt findings, however, we conducted separate exploratory analyses of the effect of the manipulation among participants with a more interpersonal lay belief and those with a more structural lay belief. Results revealed that participants with a relatively interpersonal understanding of racism (-1 SD below the mean) indeed expressed significantly more concern about crime increasing should

habitual offender laws been repealed when exposed to the starker, rather than more modest, percentage of Blacks in the national prison population  $t(233) = 1.95, p = .043, 95\% \text{ CI } [.01, .89]$ . Participants with a relatively structural understanding of racism (+1 SD above the mean), however, did not differ in their level of concern about crime increasing as a function of the racial disparity manipulation,  $t(233) = 0.27, p = .79, 95\% \text{ CI } [-.38, .50]$ .

**Exploratory Moderated Mediation.** To examine whether crime concerns mediated the relationship between racial disparity exposure and habitual offender law support among participants with a more interpersonal understanding of racism, we used a bias-corrected bootstrapped model to test for moderated mediation (e.g., Preacher & Hayes, 2008; Preacher, Rucker, & Hayes, 2007). The model probed the conditional indirect effect of disparity level on habitual offender law support through crime concern at varying levels of racism lay beliefs (e.g., Preacher et al., 2007). Including values of lay beliefs at -1 SD below the mean (a relatively interpersonal racism view) and +1 SD above the mean (a relatively structural racism view) resulted in conditional indirect effects of perceived disparity level on habitual offender law support through crime concern at  $\beta = .40$  (-1 SD), and  $\beta = .05$  (+1 SD), respectively.

A bootstrapped confidence interval for each of these indirect effects only excludes zero among those with a relatively interpersonal understanding of racism (-1 SD below the mean), 95% CI [.02, .79], but not among those with a relatively structural racism view (+1 SD above the mean), 95% CI [-.32, .47]. That is, among participants who held a relatively interpersonal understanding of racism, the effect of exposure to a starker, rather than more modest, racial disparity in the prison system on increased support for habitual offender laws was statistically mediated by increased concern about crime “getting out of control”, replicating Hetey and Eberhardt (2014). Not surprisingly, given the null results for habitual offender support and crime

concern among participants with a relatively structural understanding of racism, this meditational pathway was also not observed.

## **Discussion**

The findings of Study 2 suggest that the tendency to understand racism in terms of interpersonal or structural factors moderates the effect that exposure to starker, rather than to more modest, racial disparities in the prison population has on subsequent support for harsh criminal justice policies. Consistent with predictions, and with the Hetey and Eberhardt (2014) findings, participants with an interpersonal understanding of racism expressed greater support for habitual offender laws after exposure to a larger racial disparity in the national prison population (i.e., the “more Black” prison population). Participants with a relatively structural understanding of racism, on the other hand, did not report different levels of support for habitual offender laws as a function of the racial disparity information manipulation. Similarly, participants with a relatively interpersonal lay belief, but not those with a relatively structural one, expressed greater concern about crime increasing when exposed to the starker, rather than more modest, racial disparity information. Further, moderated mediational analyses revealed that the effect of perceiving starker, relative to more modest, racial disparities in the prison population on subsequent habitual offender law support was mediated through increased crime concern, as found in Hetey and Eberhardt (2014), but only among participants with an interpersonal understanding of racism.

Contrary to predictions, however, participants with a relatively structural understanding of racism did not report lower levels of support for habitual offender laws all together or, even, after exposure to the starker compared with more modest racial disparity information, as might be expected from previous research (e.g., Adams et al., 2008) and the results of Studies 1A and



1B. Instead, participants with a relatively structural understanding of racism generally revealed an unexpectedly high level of support for the harsh criminal justice policies, regardless of the racial disparity information to which they were exposed. Though this was certainly unexpected, it is possible that in changing the language of the lay belief measure so as not to conflate concerns about “the problem of racism today” with individuals’ general view of what racism is, we also reduced the correlation between holding a structural view of racism and being concerned about racial inequality and racism in contemporary society. In other words, the patterns observed in the survey studies may have been due, at least in part, to the combination of holding a relatively structural, rather than interpersonal, understanding of racism *and* thinking that racism is still a problem in society today (i.e., generally being concerned about contemporary societal racial inequality and/or racism). We examined this possibility in Study 3.

### Study 3

The primary aim of Study 3 was to re-examine the relations among lay beliefs and responses to exposure to racial disparities in the prison population. Further, Study 3 sought to provide clarity regarding the surprisingly high level of support for harsh criminal justice policies found among participants with a relatively structural understanding of racism observed in Study 2. Specifically, Study 3 considered two possible reasons for this unexpected outcome. First, rather than asking participants to indicate their lay beliefs about racism in general, the present study returned to the “*bigger problem*” language used in the survey studies. Second, Study 3 considered whether both a structural understanding of racism and general discomfort with societal inequality may be required to yield reduced support for harsh criminal justice policies upon exposure to racial disparity information. Consequently, in addition to assessing participants’ lay beliefs, Study 3 also assessed their level of social dominance orientation (SDO;

Ho et al., 2015). The inclusion of SDO also allowed for an examination of whether this variable may be a more important predictor of responses to racial disparity information than lay beliefs.

Specifically, we again recruited a convenience sample of White participants and assessed both their racism lay beliefs and their level of SDO. Participants were exposed to either the stark or more modest information about the racial demographics of the prison population described in Study 2, then expressed their support for habitual offender laws and their concern that crime would get out of control should such laws be abolished. We expected to replicate the effects of racism lay beliefs on responses to the disparities observed in Study 2; however, we also examined whether support for habitual offender laws after exposure to stark rather than more modest racial disparity information may also be moderated by individual differences in SDO either directly or in combination with participants' lay beliefs.

## Methods

**Participants.** One-hundred ninety-three White, U.S. Citizens (43% female;  $M_{age} = 36.69$ ,  $SD = 11.27$ ) were recruited from Amazon Mechanical Turk in exchange for \$1.

### Materials & measures

*Racism lay beliefs.* Participants completed a single-item racism lay beliefs measure similar to the measure used in Study 2, with the exception of a slight change of wording to the initial prompt. Participants were first prompted: "When it comes to **racism** in the United States, which do you think is **the bigger problem today: racist individuals** who have negative attitudes towards racial and ethnic minorities, or **institutional practices** that disadvantage racial and ethnic minorities? Please indicate where you fall on this spectrum." Then, participants indicated their response using an 11-point scale (e.g., O'Brien et al., 2009) with responses ranging from "Individuals' negative racial attitudes & discriminatory behaviors committed by individuals

toward other individuals” (1) to “Institutional practices and structural factors (e.g., laws, policies, etc.) that disadvantage some racial groups more than others” (11), with a midpoint anchored at “**Both** racially-biased individuals & institutional practices/ structural factors disadvantage some racial groups more than others” (6). Once again, higher scores reflect a more structural (and less interpersonal) lay belief regarding racism.

*Racial disparity manipulation & manipulation check.* The manipulation and manipulation check were identical to those described in Study 2. Again, participants who incorrectly recalled the percentage of Blacks in the prison demographics information they were shown were excluded from analyses.

*Habitual offender law support.* Support for habitual offender laws were assessed with two items measuring their support for a proposed habitual offender law in their state. First, as described in Study 2, participants were asked whether they would support such a law in their state. Participants were also prompted: “*given the questions about their fairness/constitutionality, would you be willing to sign a petition for repealing habitual offender laws?*” Participants then rated their willingness to sign a petition on a 6-point Likert scale from 1 (not at all) to 6 (very much). The responses to the second item were reverse-scored and then averaged with the policy support item to form a policy support composite, with higher numbers indicating greater support for habitual offender laws ( $\alpha = .80$ ).

*Concern about crime.* Crime concern was assessed in a manner identical to in Study 2. Higher scores reflect greater concern that crime will get out of control if habitual offender laws are repealed ( $\alpha = .94$ ).

*Social Dominance Orientation (SDO).* Participants completed the Social Dominance Orientation-7 Scale (Ho et al., 2015)—an 8-item measure of the extent to which people agree or

disagree with statements expressing anti-egalitarian views (e.g., “An ideal society requires some groups to be on top and others to be on the bottom”). Participants recorded their responses on 7-point Likert scales from 1 (*strongly oppose*) to 7 (*strongly favor*). Higher scores reflect higher levels of SDO ( $\alpha = .94$ ).

*Political ideology.* Political ideology was assessed with a 2-item measure identical to the one used in Study 2 ( $r = .94$ ). Again, higher scores reflect greater endorsement of a conservative political ideology.

### **Procedure**

Study 3 followed a procedure nearly identical to that in Study 2. After providing informed consent, participants completed the lay beliefs measure embedded in a “political attitudes” survey that was administered just prior to the presentation of the prison demographics information and racial disparity manipulation. As in Study 2, that is, participants were exposed to the basic prison demographic information (e.g., age, gender) and then randomly assigned to the stark (60% Black) or modest (40% Black) information about the racial demographics of the prison population. Participants then indicated their support for habitual offender laws (including the repeal item), and completed the concern about crime scale, followed by the racial disparity information manipulation check. Last, participants completed the demographic survey on which they reported their age, gender, political conservatism, and the SDO-7, after which they were debriefed, thanked, and compensated for their participation.

### **Results**

Forty-eight participants were excluded from analyses for incorrectly recalling the percentage of Blacks in the national prison population to which they were exposed. Unless otherwise noted, all effects remain reliable when participants who failed the manipulation check

were included in the analyses (see Online Supplement for results with all participants included). All analyses controlled for participants' endorsement of conservative political ideology, age and education level. Descriptive statistics and correlations between measures are provided in Tables 5 and 6, respectively. Notably, SDO and lay beliefs were only modestly (negatively) correlated ( $r = -.26$ ).

**Habitual offender law support.** Support for habitual offender laws were examined as a function of the manipulation of the racial disparity (60% Black vs. 40% Black), individual differences in lay beliefs about racism (centered), participants' SDO scores (centered), and the interactions between the variables. Analyses revealed no effect of the racial disparity manipulation,  $t(181) = 0.01, p = .99, 95\% \text{ CI } [-.42, .42]$ , but a significant effect of racism lay beliefs,  $t(181) = -2.83, p = .005, 95\% \text{ CI } [-.20, -.04]$ , such that the more participants tended to think that structural, rather than interpersonal, racism was the *bigger problem* the less support they expressed for habitual offender laws. Somewhat surprisingly, there was not a significant main effect of SDO,  $t(181) = 1.66, p = .10, 95\% \text{ CI } [-.03, .31]$ , however, the relationship was in the predicted direction; those higher in SDO expressed greater support for habitual offender laws.

The interaction between lay beliefs about racism and the racial disparity manipulation observed in Study 2 did not replicate in this sample,  $t(181) = 1.79, p = .07, 95\% \text{ CI } [-.01, .28]$ . Planned tests of the simple effects that make up this interaction further revealed that the support for habitual offender laws did not differ as a function of the disparity manipulation for either participants with a primarily interpersonal understanding of racism (-1 SD below the mean),  $t(181) = -1.26, p = .21, 95\% \text{ CI } [-.98, .22]$ , or participants with a more structural understanding of racism (+1 SD above the scale mean),  $t(181) = 1.27, p = .20, 95\% \text{ CI } [-.21, .98]$ .

There was, however, a reliable interaction between lay beliefs about racism and SDO,  $t(181) = 2.92, p = .004, 95\% \text{ CI } [.02, .11]$ . As depicted in Figure 2, whereas holding a more structural, rather than interpersonal, racism lay belief was associated with lower support for habitual offender laws among the more egalitarian participants ( $-1$  SD below the mean on SDO),  $t(181) = -3.77, p < .001$ , racism lay belief did not predict support for habitual offender laws among the less egalitarian participants ( $+1$  SD above the mean on SDO),  $t(181) = -0.62, p = .54$ . Neither the interaction of SDO and the disparity manipulation,  $t(181) = -1.27, p = .20, 95\% \text{ CI } [-.47, .10]$ , nor the three-way interaction of racism lay beliefs, SDO and the disparity manipulation were significant,  $t(181) = 0.19, p = .85, 95\% \text{ CI } [-.08, .09]$ .

**Concern about crime.** Responses to the crime concern measure were submitted to the same analysis, which revealed non-significant effects of the racial disparity manipulation,  $t(181) = -0.45, p = .65, 95\% \text{ CI } [-.51, .32]$ , racism lay beliefs,  $t(181) = -1.15, p = .25, 95\% \text{ CI } [-.13, .03]$ , and their interaction,  $t(181) = 1.79, p = .075, 95\% \text{ CI } [-.01, .28]$ . The main effect of SDO was also not statistically significant,  $t(181) = 1.31, p = .19, 95\% \text{ CI } [-.06, .28]$ , but its interaction with racism lay beliefs was reliable,  $t(181) = 2.88, p = .005, 95\% \text{ CI } [.02, .10]$ . Similar to the pattern observed for habitual offender law support, holding a more structural, rather than interpersonal, racism lay belief was associated with lower levels of crime concern among the more egalitarian participants ( $-1$  SD below the mean on SDO),  $t(181) = -2.40, p = .02$ . Among the less egalitarian participants ( $+1$  SD above the mean on SDO), however, racism lay beliefs did not predict crime concern,  $t(181) = 0.75, p = .46$ . Neither the interaction of SDO and the disparity manipulation,  $t(181) = 0.02, p = .99, 95\% \text{ CI } [-.28, .28]$ , nor the three-way interaction of racism lay beliefs, SDO and the disparity manipulation were significant,  $t(181) = 0.64, p = .52, 95\% \text{ CI } [-.06, .11]$ .

## Discussion

The findings of Study 3 suggest that the extent to which beliefs about the nature of racism—as either interpersonal or structural—predict the effect that exposure to racial disparities in the prison population has on subsequent support for harsh criminal justice policies, depends on how much individuals think that inequality is a problem in contemporary society. Specifically, much like in Studies 1A and 1B, the present study found a negative direct relationship between the perception that structural (v. interpersonal) racism is a bigger problem in contemporary society and support for habitual offender laws after exposure to the racial demographics of the prison population. Moreover, this effect was moderated by individual differences in SDO. Specifically, it was only among participants with more egalitarian ideals (i.e., those low in SDO) that holding a relatively structural (v. interpersonal) view of contemporary racism was associated with lower support for habitual offender laws after exposure to the racial disparity information. Among participants higher in SDO, however, support for habitual offender laws after exposure to the racial disparity information did not differ as a function of their racism lay beliefs. In other words, it is the combination of a structural understanding of racism and concern about societal inequality that predicts concern about racial disparities in criminal justice.

Surprisingly, contrary to our predictions and the results of Study 2, support for habitual offender laws did not significantly differ based on the racial disparity manipulation for either participants with a more interpersonal lay belief or those with a more structural lay belief (see, again, Table 6). Given these inconsistent patterns of results, the role of racism lay beliefs in moderating reactions to varying level of racial disparities remains unclear. Nevertheless, coupled with the findings of the previous studies, the present results offer key evidence regarding the relevance of lay beliefs about the nature of racism for both the perception of, and reactions to,

racial disparities. Specifically, the results of Study 3 underscore the importance of examining individual differences in beliefs about the structural and/or interpersonal nature of racism in combination with individual differences in egalitarian values, in shaping how people respond to evidence of racial disparities in criminal justice.

### **General Discussion**

The present research examined the relevance of lay beliefs about the nature of racism—as either primarily interpersonal or structural—for how individuals perceive and subsequently respond to racial disparities in the criminal justice system. Analyses of responses in two nationally-representative samples of adults living in the U.S. revealed that, on average, people hold a more interpersonal rather than structural lay belief, however, consistent with past research (e.g., Adams et al., 2008; Nelson et al., 2013; O’Brien et al., 2009), this tendency differs consistently and considerably as a function of participants’ own racial background. That is, whereas 70% of White Americans tend to endorse an interpersonal, rather than structural, lay belief, Black Americans are more equivocal (about 50% endorsing each belief).

Although these racial differences are themselves interesting, what is even more fascinating is that racism lay beliefs also relate to the perception (& acknowledgment) of racial inequality in the criminal justice system. Specifically, participants who endorsed a structural rather than interpersonal lay belief were also more likely to think that Blacks (relative to Whites) are disadvantaged in the criminal justice system. Indeed, accounting for individual differences in lay beliefs significantly reduced the racial gap in perceptions of inequality in criminal justice, even after accounting for other relevant individual differences, including political conservatism. In other words, the tendency for White and Black Americans to hold differential beliefs about the nature of racism (or the experiential factors that lead to this racial difference) may be one reason



why they also tend to differentially perceive racial inequality. Taken together, these initial studies hint at the potentially important role that lay beliefs regarding the nature of racism may play in shaping perceptions and/or acknowledgement of racial inequality in criminal justice in contemporary American society.

Studies 2 and 3 sought to extend these findings by examining whether lay beliefs about racism predict responses to, in addition to perceptions of, racial inequality in criminal justice. Specifically, similar to the procedures introduced by Hetey and Eberhardt (2014), White American participants were exposed to demographic information about the national prison system that presented the racial disparity as relatively smaller (40% Black) or quite stark (60% Black), prior to offering their opinions regarding habitual offender laws that are known to contribute to mass incarceration in general and racial disparities in this domain. Study 2 revealed that White participants with a fairly interpersonal understanding of racism expressed greater support for habitual offender laws after exposure to the starker compared with more modest disparities in the prison population, replicating Hetey and Eberhardt (2014), whereas White participants with a relatively more structural understanding did not report differential levels of support for habitual offender laws as a function of the magnitude of racial disparity in the prison population to which they were exposed.

Study 3 attempted to replicate and extend these findings and, although the effect of the racial disparity manipulation did not replicate in this sample, the study revealed that individual differences in social dominance orientation, coupled with racism lay beliefs, predict responses to exposure to racial disparities in incarceration, irrespective of its magnitude. Specifically, among participants with more egalitarian attitudes regarding societal inequality (i.e., those lower in SDO), holding a relatively structural, rather than interpersonal, racism lay belief was associated

with lower support for habitual offender laws (and crime concern) after exposure to information about the racial demographics of the prison population. Among participants with relatively high levels of SDO, in contrast, racism lay beliefs were not related to support for habitual offender laws after exposure to the racial disparity information. In other words, the findings of Study 3 suggest that it may be the combination of concern about societal hierarchy in general and a structural lay belief about racism that leads people to respond to evidence of racial disparities in incarceration by reducing their support for policies that contribute to them. Taken together, then, this work suggests a compelling role of lay beliefs about the nature of racism in predicting both the perception of and responses to racial inequality in criminal justice.

### *Implications*

The findings of the present work offer several theoretical and practical implications for research on how people perceive and reason about racial inequality. First, this work suggests an important, albeit largely overlooked, potential role of individual differences in beliefs about the nature of racism in contributing to the typically quite vast differences in the perception of racial inequality among members of racial minority groups and Whites. Many studies report on these racial gaps, but few try to examine psychological factors that may contribute to them (but see, Adams et al., 2006; Nelson et al., 2013; Unzueta and Lowery, 2008 for notable exceptions). But, of course, racial group membership is simply a proxy for individuals' experiences within and beliefs about the world and, it is these beliefs that are likely to shape subsequent perceptions and behavior. The present work makes the case that lay beliefs about the nature of racism as being largely interpersonal or structural are relevant to perceiving, if not acknowledging, the prevalence of racial injustice in contemporary society (see also Salter, Adams & Perez, 2017).

Second, the second two studies suggest that these same lay beliefs may be important to consider in examinations of how people respond to evidence about racial inequality in contemporary society. Study 3, in particular, offers evidence that lay beliefs in combination with concerns about societal inequality is associated with greater skepticism about criminal justice policies upon exposure to racial disparities in the prison population. That said, it is important to note that we did not actually manipulate “racial disparity information” in Studies 2 and 3, but rather, simply provided demographic information about the prison population. Participants would have to know that Black Americans make up roughly 11% of the national population to interpret either the 40% Black or 60% Black demographic information as a “disparity.” Indeed, it is possible that both conditions were interpreted by participants as being so disparate and stark that they did not differentiate between them. Nevertheless, future research is needed to examine how different methods of community disparity information may shape how people respond to it and, of course, whether individual differences in lay beliefs moderate these responses.

Although the results were less consistent than one might hope, together, these studies suggest that variance in how (White) Americans conceptualize racism predicts how they respond to (and, presumably, reason about) the racial disparities to which they are exposed. In addition to egalitarian values and attitudes, in other words, this work suggests that considering how people tend to conceptualize racism—as relatively more interpersonal or structural— can shed new light on how they reason about racial disparities, which in turn, contributes to their support for efforts to reduce discriminatory laws and policies that contribute to the maintenance and/or exacerbation of racial disparities in any number of domains. Given how prevalent the endorsement of interpersonal racism we observed in this work was, accounting for variability in

the extent to which people appreciate structural racism may be especially helpful for refining empirical understanding of how people respond to evidence of racial inequality.

In terms of its practical implications, the present research suggests that promoting a more structural understanding of racism, at least among those most concerned about societal hierarchy, may reduce support for policies that contribute to racially disparate criminal justice outcomes, at least after exposure to such information. As stark as many of these racial disparities are, it is now clear that exposure to this information does not necessarily lead to reduced support for relevant policies and can even result in greater support (Hetey & Eberhardt, 2014, 2018). Although we found only limited support that exposure to a starker, rather than more modest, disparity information increases support for punitive criminal justice policies, we found no evidence for the oft-assumed reduction in support for such punitive policies after exposure to starker, compared with more modest, racial disparity information. For advocates interested in increasing awareness of racial disparities with the hope that garnering interest from the broader public will increase efforts to reduce them, the present research suggests that awareness may need to be directly coupled with an effort to highlight the structural causes of the disparity.

#### *Limitations & Future Directions*

Of course, there are several noteworthy limitations of the present research that should be addressed in future research. For instance, although this work offers considerable evidence linking beliefs about the interpersonal and structural nature of racism to policy preferences after exposure to racial inequality in mass incarceration, future work should examine whether racism lay beliefs *cause* differential reasoning about racial disparities and, thus, result in differential policy preferences. Though some previous research provides evidence that lay beliefs about racism may be relatively stable (e.g., O'Brien et al., 2009), they certainly must be open to

cultivation and, thus, are likely to be somewhat malleable, at least at some point as people are forming their understanding of race and racism (e.g., Adams et al., 2008; Unzueta & Lowery, 2008). Future work should, therefore, also examine how people come to hold either an interpersonal or structural lay belief.

Further, the generalizability of these patterns of results to other domains in which racial disparities are prevalent beyond criminal justice remains unknown, as is its generalizability to other types of societal discrimination. Presumably, for instance, holding a more structural (v. interpersonal) understanding of sexism should also predict differential perceptions of and responses to evidence of gender inequality (e.g., the wage gap). In other words, it may prove fruitful to consider how lay beliefs may influence perceptions of, and motivations to redress, intergroup inequality for any number of types/targets of discrimination (e.g., sexism, classism), in different domains (e.g., education, employment) and among different perceivers (e.g., advantaged v. disadvantaged group members).

Although there is much to be learned about how lay beliefs relate to responses to racial disparities, the evidence amassed in the present research offers encouraging implications for both psychological theory and social change. Given the obstinacy of intergroup inequality in the United States, and throughout the world, a more complete understanding of the factors that shape perception of and reactions to these disparities will be crucial in both advancing academic discourse on intergroup inequality and stratification, as well as creating effective interventions to galvanize broader support for reducing intergroup inequality, in the criminal justice system and beyond.

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Table 1

*Descriptive statistics and zero-order correlations for Study 1A*

Variables	M	SD	RLB	ICJ	PC
Racism lay beliefs (RLB)	1.37	.48	—		
Perceptions of racial inequality in criminal justice (ICJ)	1.63	.48	.24***	—	
Political Conservatism (PC)	2.09	.79	-.18***	-.27***	—

\*\*\* $p < .001$

Table 2

*Descriptive statistics and zero-order correlations for Study 1B*

Variables	M	SD	RLB	CRI	NRI	PC
Racism lay beliefs (RLB)	1.26	.44	_____			
Perceptions of community-level racial inequality in criminal justice (CRI)	2.40	.47	.24***	_____		
Perceptions of national-level racial inequality in criminal justice (NRI)	2.56	.48	.17***	<i>n/a</i>	_____	
Political Conservatism (PC)	3.04	1.07	-.19***	-.34***	-.35***	_____

†  $p < .10$  \*  $p < .05$  \*\*\* $p < .001$ ; Note: as CRI and NRI were measured in separate subsamples, a correlation between the two measures could not be obtained

Table 3

*Study 2 Habitual Offender Law Support and Concern about Crime by Racial Disparity*

*Condition*

	Racial Disparity Condition			
		Less Stark	More Stark	Combined
	N	M (SD)	M (SD)	M (SD)
Habitual Offender Law Support	239	3.82 (1.41) <sup>a</sup>	4.04 (1.43) <sup>a</sup>	3.92 (1.42)
Concern about Crime	239	3.39 (1.35) <sup>a</sup>	3.65 (1.29) <sup>a</sup>	3.52 (1.32)

*Note:* Different superscripts within each row indicate statistically significant ( $p < .05$ ) differences between conditions.

Table 4

*Correlations among Racism Lay Beliefs, Conservatism, Anti-Black Bias, Habitual Offender Law Support and Concern for Crime, Study 2.*

	1	2	3	4	5
1. Racism Lay Beliefs (N= 242)	—				
2. Conservatism (N= 240)	-.30***	—			
3. Anti-Black Bias (N= 82)	-.18	.51***	—		
4. Habitual Offender Law Support (N= 244)	-.10	.34***	.17	—	
5. Crime Concern (N= 244)	-.14*	.41***	.09	.82***	—

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Table 5

*Study 3 Habitual Offender Law Support and Concern about Crime by Racial Disparity**Condition*

	Racial Disparity Condition			
		Less Stark	More Stark	Combined
	N	M (SD)	M (SD)	M (SD)
Habitual Offender Law Support	193	3.87 (1.65) <sup>a</sup>	3.75 (1.63) <sup>a</sup>	3.81 (1.63)
Concern about Crime	193	3.60 (1.62) <sup>a</sup>	3.39 (1.57) <sup>a</sup>	3.48 (1.59)

*Note:* Different superscripts within each row indicate statistically significant ( $p < .05$ ) differences between conditions.

Table 6

*Study 3 Correlations among Racism Lay Beliefs, Conservatism, Social Dominance Orientation (SDO), Habitual Offender Law Support and Concern for Crime*

	1	2	3	4	5
1. Racism Lay Beliefs (N= 193)	—				
2. Conservatism (N= 193)	-.47***	—			
3. SDO (N= 193)	-.26***	.58***	—		
4. Habitual Offender Law Support (N= 193)	-.35***	.46***	.33***	—	
5. Crime Concern (N= 193)	-.26***	.44***	.29***	.85***	—

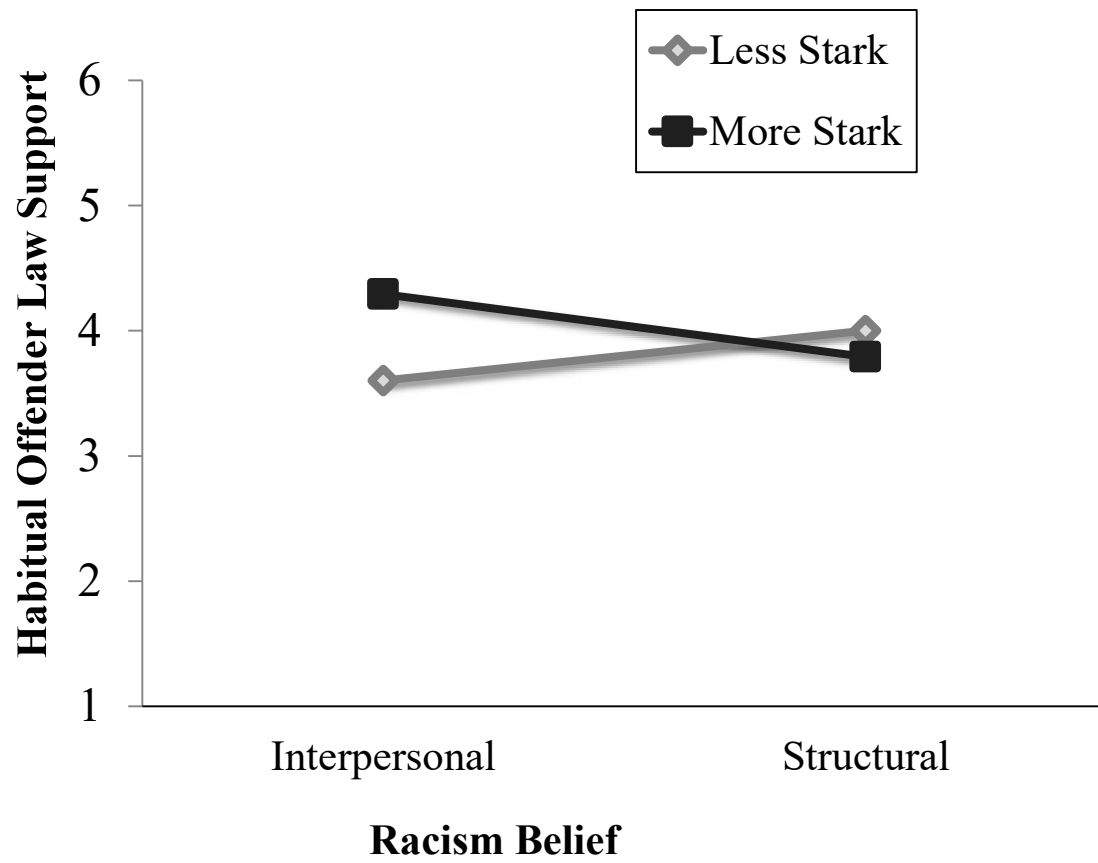
\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

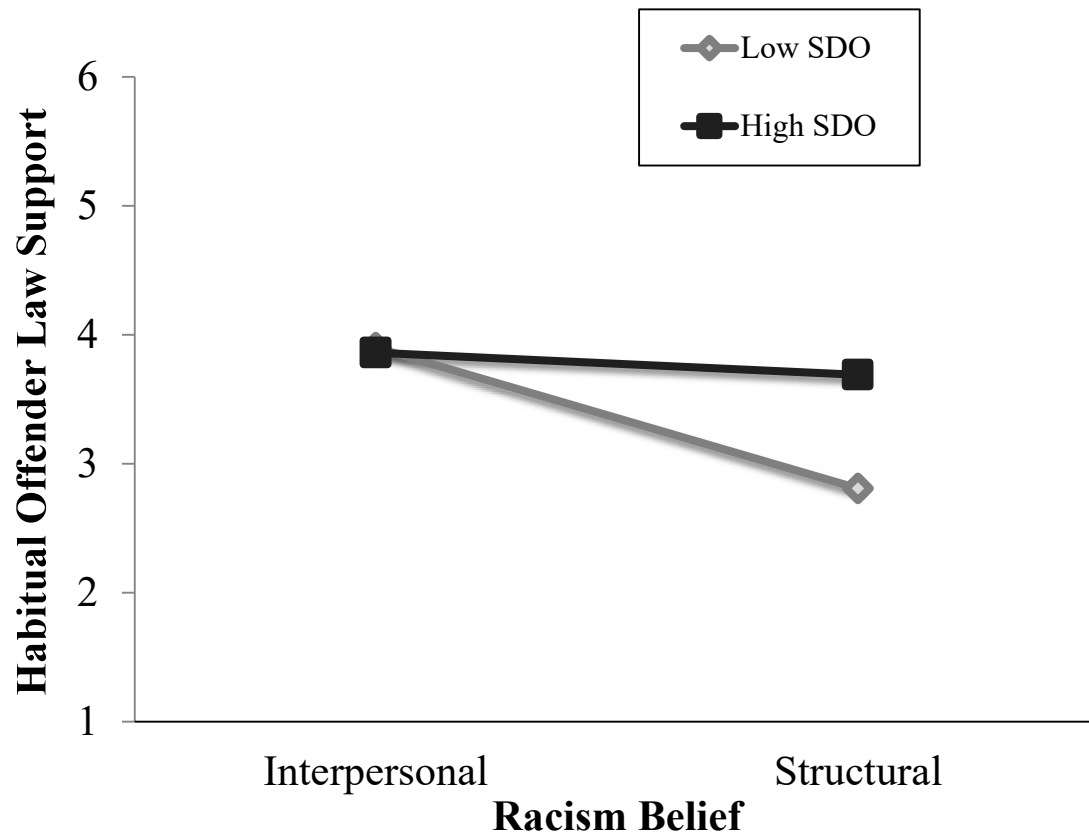
**Figure Captions**

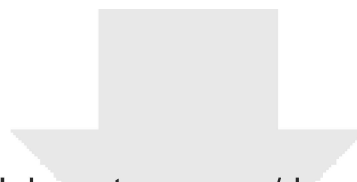
*Figure 1.* Support for habitual offender laws as a function of individual differences in lay belief about racism and the racial disparity condition in Study 2. Interpersonal and structural beliefs about racism reflect scores at  $\pm 1$  SD below and above mean of the lay belief scale, respectively.

*Figure 2.* Interaction of racism belief and Social Dominance Orientation (SDO) on support for a proposed habitual offender law in Study 3. Preference for social hierarchy plotted at  $\pm 1$  SD above or below the mean.









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**Supplemental Material**

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