Missing context from experimental studies amplifies, rather than negates, racial bias in the real world

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Reply to: Cesario (2021): What Can Experimental Studies of Bias Tell Us About Real-World Group Disparities?

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Abstract

We agree with Cesario's (2021) premise but reject his conclusion: although experimental studies of racial stereotyping, weapons perception, and shoot decisions typically exclude real-world contextual factors and thus have limited relevance to race disparities (e.g., in policing), these excluded factors include systemic, institutional, and individual-level biases which are more likely to amplify racial disparities than negate them.

Main text:

Cesario claims that experimental findings of racial bias are so disconnected from real-world situations that they "cannot and do not provide information about the nature of group disparities" (p. 6). Indeed, because such experiments are designed to isolate specific cognitive processes, they exclude myriad real-world factors that may otherwise influence intergroup behavior. However, we disagree with Cesario's conclusion that such factors overwhelm effects of social categories like race. In reality, the opposite is true: real-world situations contain many layers of prejudice and discrimination, typically excluded from lab experiments, and these dramatically compound race effects.

Cesario argues that racial bias is only revealed in experiments when factors such as circumstantial information, group differences, and situational contingencies are omitted. Yet he all but ignores the many powerful layers of systemic, institutional, and individual racism that pervade real-life interracial interactions. In U.S. policing, many of the situational factors omitted from lab studies are themselves shaped by race, such as racially-motivated profiling and surveillance (Browne, 2015), stop-and-frisk policies (e.g., Gelman, Fagan, & Kiss, 2007; Goel, Rao, & Sheriff 2016; Cooper 2018), and the use of discriminatory data-driven precision policing (Southerland, 2020). Although Cesario claims these real-world factors "overwhelm [the] strength of categorical bias" (pp. 10), historical and sociological data suggest they actually *exacerbate* group disparities observed in experimental tasks.

To illustrate the supposedly race-neutralizing effect of real-world information, Cesario highlights a study by Correll et al. (2011) but misrepresents the finding. In this modified shooter task, targets are presented in either neutral or "dangerous, urban backgrounds." Cesario writes that the urban background—an instance of "missing information" reintroduced to a task—"completely eliminated racial bias in the decision to shoot." However, "dangerous, urban" settings are themselves racially coded from decades of segregationist housing policy, racist political rhetoric and media representations, and targeted over-policing (Hurwitz & Peffley, 2005; Rhodes & Brown, 2018; Gordon, 2020). Indeed, the data show that urban backgrounds actually increased the tendency to shoot White targets to the level of Black targets—an unsurprising effect given that these backgrounds themselves contain race-stereotypic cues.

As a real-world illustration, consider the NYPD's killing of Amadou Diallo, a case that galvanized research on implicit bias in shoot decisions: Four white NYPD officers patrolling the Bronx neighborhood of Soundview stopped Diallo, a young Black man "acting suspiciously" who allegedly matched the description of wanted criminal. When Diallo reached into his pocket for his wallet, the lead officer, per his testimony, misidentified it as a gun, triggering the group to shoot and kill Diallo. What other factors were at play that could have overwhelmed the subtle effect of automatic race associations? Notably, the officers were targeting a neighborhood that became majority-Black and over-policed following white flight, economic disinvestment, and redlining (Nonko, 2016; Stoudt, Fine, & Fox, 2011). Moreover, the officers were part of the infamous NYPD Street Crimes Unit, which expressly targeted *dangerous, urban* communities of color to turn up guns and drugs to meet quotas (Harring, 2000). Attributing Diallo's death to a quick decision made in ambiguous circumstances does leave out critical context from this scene, but this context amplifies disparities rather than ameliorates them (Amodio, 2015).

Although studies of implicit bias are often inspired by real-world incidents, they are rarely (if ever) designed to explain them. Instead, they aim to isolate and illuminate basic mechanisms of race processing in the mind; asking, for example, *can race influence automatic thought and quick decisions?* Such experiments are rarely presented as complete accounts of real-world disparities and expressions of prejudice. Curiously, the article Cesario singles out as "a prototypical example" of this practice, by Moss-Racusin et al. (2012), is a field study on gender bias in job applicant evaluations that uses none of the methods he critiques. Moreover, social psychologists have long considered the roles of additional information, forces, and contingencies as moderators of category-based stereotyping (e.g., Amodio & Swencionis, 2018; Darley & Gross, 1983; Dovidio & Gaertner, 2000; Fiske & Neuberg, 1990). The deficiencies Cesario attributes to social psychology appears to concern its translation more than the science itself.

We see a different issue with reductionist experimental studies which, we believe, is much more pressing (Jasperse & Stillerman, 2021): by presenting racial bias as a subtle, unintentional spandrel of the mind, these studies problematically reduce the broad, structural nature of racism to a transient impulse. Consequently, they misdirect efforts towards ineffective training programs (Worden et al., 2020) and give cover to the more pernicious effects of systemic, institutional and

blatant racism. Hence, in addition to underestimating the magnitude of bias, such studies draw attention away from its deeper causes.

Finally, we feel compelled to comment on the selective scholarship and rhetoric in this target article. Cesario elides evidence that racial bias is a pervasive dimension of policing and criminal justice—one that inflects (and exceeds) moment-to-moment individual cognition. He then suggests that observed real-world disparities are due mainly to behavioral differences between groups. For example, he argues that racial disparities in policing may be more a product of different racial groups' criminal tendencies than bias on the part of police officers. Although he hastens to "make no claims about the origin of these group differences" (pp. 7-8), a casual reader could be forgiven for thinking that Cesario believes elevated criminality "might very well be" (pp. 8) a trait feature of racial minorities. This rhetorical pattern—to deny the severity of racial bias and then suggestively attribute disparities to individual merits of group members—follows a familiar refrain known to social psychologists as *modern racism*. Regardless of the authors views and intentions, it is concerning to see this device in mainstream scientific discourse.

In summary, we accept Cesario's premise but reject his conclusion; the many real-world factors often missing from sociocognitive experiments of racial bias are themselves the product of systemic, institutional, and individual racism. To the extent real-world factors overwhelm experimentally-observed patterns of bias, the effect of racism is likely much stronger.

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