EXAMINING THE INTERSECTION BETWEEN PERSONAL AND SYSTEMIC BIAS FOR BIAS REDUCTION

by

Elisabeth S. Noland

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STATEMENT OF COMMITTEE APPROVAL

Dr. Margo J. Monteith, Chair

Department of Psychological Sciences

Dr. Erin P. Hennes

Department of Psychological Sciences

Dr. Kipling D. Williams

Department of Psychological Sciences

Approved by:

Dr. Kimberly Kinzig

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ABSTRACT

In a preregistered study, we investigated whether two different procedures increased people's recognition and motivation to self-regulate personal bias and also recognition and motivation to combat systemic bias. Non-Black undergraduates (N = 467) were randomly assigned to either a IAT procedure (i.e., took a racial IAT, received fixed feedback indicating racial bias, and received an explanation for why people may hold implicit biases), a discrimination experiences procedure (i.e., read about Black people's discrimination experiences across various institutional contexts), or a control procedure (i.e., rated their preferences for common consumer products). Then, participants completed measures assessing recognition of and motivation to combat personal and systemic bias. Among average IMS participants, results indicated that the IAT procedure significantly increased recognition of personal racial bias, compared to the control procedure. The discrimination experiences procedure significantly increased motivation to combat systemic bias, support for policies aimed at addressing inequality, and motivation to self-regulate personal bias, compared to both the control and IAT procedures. We also found that the IAT heightened negative self-directed affect especially among higher IMS participants, which in turn was associated with increased acknowledgement of and motivation to combat not only personal but also systemic bias. Finally, among all participants, the discrimination experiences procedure heightened negative other-directed affect, which in turn was associated with increased recognition of and motivation to combat systemic bias. Although additional research is needed, these initial results may suggest that personal bias interventions influence personal bias outcomes but do not similarly influence systemic bias outcomes. In contrast, systemic bias interventions may be more likely to influence awareness of and motivation to combat both personal and systemic bias. These results pave the way for future investigation into the nature of crossover effects between personal and systemic bias procedures.

INTRODUCTION

> "…When I reached this policeman in the street, he hit me over the head withhis club...I wanted to get protection, but instead the cops hit me...I was afraid to run, because I knew if I did, they would hit me again."

> "Harry Reed's affidavit is dated August 22, 1900. And little has changed in a century."
>
> — Jill Nelson, (2000) Police Brutality: An Anthology

Police brutality against Black individuals in the United States and subsequent protests are not new (e.g., protests after the Rodney King ruling in 1992; protests in Ferguson following the shooting death of Michael Brown in 2014; protests following the death of Freddie Gray in 2015). A recent, stark example is 26-year-old Breonna Taylor, a Black emergency medical technician who was fatally shot in March of 2020 by Louisville police officers who performed a "no-knock" search warrant at her apartment. Her death, in addition to numerous others, sparked protests against police brutality and racism across the United States. In May of 2020, the world watched in horror as Minneapolis police officers arrested and subsequently killed a 46-year-old Black man, George Floyd, after a convenience store employee called 911 on him for using a counterfeit bill. This fatal encounter was arguably a completely unambiguous form of injustice. He was clearly unarmed, and for many people this was the last straw considering that Floyd's death came on the heels of several other fatal encounters of Black individuals with law enforcement. Further civil unrest ensued in September 2020, when a grand jury did not indict the officers involved in Taylor's death. These events and the persistent police brutality against Black individuals have spurred increased recognition of the larger systemic issue of racism, rather than the idea that "it's just a few bad cops out there (Awad, 2020; Cunningham, 2020)."

The murders of Taylor, Floyd and others have been characterized by the Black Lives Matter (BLM) movement (https://blacklivesmatter.com/) and the media as reflecting systemic racism (Worland, 2020), stimulating calls for increased recognition and motivation to combat it. Indeed, recent poll data (https://www.cbsnews.com/news/racial-discrimination-americans-views-shift-

cbs-news-poll/) and increased searches for the term "systemic racism" on Google Trends suggests that people may be increasingly open to recognizing it.

While some research related to people's recognition and motivation to combat systemic bias can be found in the social psychological literature (e.g., Ellemers & Barreto, 2009), considerably more research has focused on awareness and motivation to self-regulate personal bias (e.g., Plant & Devine, 1998). Researchers have called for better integration between systemic bias and personal bias, (e.g., Berard, 2008; Richeson & Sommers, 2016), yet this intersection has received little empirical attention. More specifically, we know little about whether strategies to increase recognition and motivation to self-regulate personal bias may also result in increased recognition and motivation to combat systemic bias, and vice versa. The present research seeks to understand and advance theory concerning this intersection, given that combatting bias requires that it is acknowledged and addressed at both personal and systemic levels.

The Nature of Systemic and Personal Bias

To begin, it's necessary to define systemic racism and personal prejudice. Sociologist Joe Feagin (2014) provides an excellent framework for understanding the complexities of systemic racism. Feagin defines systemic racism as follows:

> "Systemic racism involves both the deep structures and the surface structures of racial oppression. It includes the complex array of antiblack practices,the unjustly gained political-economic power of whites, the continuing economic and other resource inequalities along racial lines, and the emotion-laden racist framing created by whites to maintain and rationalize their privilege and power. Systemic racism thus encompasses the white-racist attitudes, ideologies, emotions,images, actions, and institutions of this society…each major part of U.S. society—the economy, politics, education, religion, the family—reflects the fundamental reality of systemic racism (Feagin, 2014 p. xiv)."

In other words, this definition encompasses written and unwritten laws, practices, and procedures that lead to major group-based disparities. For example, prior to the 1968 Fair Housing Act, many federal and local housing policies involved inequitable land use that laid the foundation for the racial and economic segregation in American cities today (Goggin, 2019). Further clarifying the role of individuals in contributing to systemic bias, Henry (2010) notes that a critical

mass of individuals who hold positions of power within institutions can cause major group-based inequalities through their discriminating actions. For example, Okonfua and Eberhardt (2015) found that racial disparities in school discipline was driven by teachers' stereotypes. These negative racial stereotypes led teachers to perceive infractions from Black students as more severe, troubling, and indicative of future infractions than infractions from White students. This research suggests that teachers' differences in responses may even help to drive racial differences in students' behavior, leading to repeated delinquent behavior—laying the path toward incarceration for Black youth. This study illustrates the role that individual behavior plays in creating and reinforcing systemic disadvantage for Black people at an institutional level (i.e., education).

The ability to recognize and challenge systemic bias is often referred to as critical consciousness (Freire, 1973; Diemer et al., 2016). Contemporary scholars suggests that critical consciousness is made up of three distinct, but related subcomponents: critical reflection, critical motivation, and critical action (see Watts et al., 2011). However, various theories and related research underscore that people are often reluctant to recognize systemic racism. First, symbolic and modern racism theory concern the nature of post-Civil Rights Movement racial attitudes, which are rooted in negative affect toward Black people and traditional American values. Modern and symbolic racism involve beliefs that racism is a thing of the past (i.e., denial of racism) and that Black people demand too much (i.e., racial resentment; McConahay & Hough, 1976; Kinder & Sears, 1981; Henry & Sears, 2002). These attitudes protect the current inequitable system by maintaining that discrimination no longer exists and produce opposition to policies that would address inequity (e.g., affirmative action).

Second, system justification theory points to the strong motivation to see current systems as fair and legitimate. System justification addresses fundamental human needs to reduce uncertainty and threat (Jost, 2017). System justifying beliefs cause people to see inequitable arrangements and experiences as fair and legitimate, resulting in the development of "legitimizing myths" in the form of stereotypes (e.g., Black people are unintelligent) and opposition to social change (Jost & Hunyady, 2005). Thus, the tendency to justify status quo inequality discourages recognition and motivation to combat systemic bias.

In contrast to systemic bias, personal bias to refer to one's *own* biases, and recognition of it involves being aware of bias within the self. Biases may involve stereotypes about various social groups. For example, a White person may hold a negative stereotype that Black people are

aggressive, resulting in greater threat perceptions of young Black men compared to young White men (Wilson et al., 2017). Personal biases may be explicit (i.e., involving conscious and controlled activation and application) or implicit (i.e., involving nonconscious activation and application; Gawronski & Bodenhausen, 2006; Greenwald & Banaji, 1995). The present research primarily addresses awareness and motivation to reduce personal implicit bias and its consequences given the insidious and pervasive nature of this form of contemporary bias (e.g., Banaji & Greenwald, 2013).

Considerable research demonstrates people's proneness to implicit biases and the discriminatory consequences for minoritized group members (for reviews, see Bodenhausen & Richeson, 2010; Monteith et al., 2013). Yet this begs the question: did participants in these studies recognize their own bias and its influence on their behavior? While recognition of one's own bias is important, people might deny any indicators suggesting that they are biased. Research suggests that people expect to have less implicit bias than what the Implicit Association Test (IAT; Greenwald et al., 1998) might show and generally believe that they are less biased than others (Howell et al., 2013; Howell & Ratliff, 2016). Indeed, research shows that when participants receive feedback indicating they have more implicit pro-White bias than what they indicated explicitly, they experienced defensiveness in the form of derogating the IAT and the feedback (Howell et al., 2015). However, recent research suggests that defensiveness can be mitigated when IAT feedback 1) explains the bias in terms that do not suggest "moral blameworthiness" and 2) inspires efficacy to combat implicit bias (Vitriol & Moskowitz, 2021).

Increasing Recognition of and Motivation to Combat Systemic Bias

Although rather scarce, some research has examined methods to raise people's awareness of systemic bias and their motivation to challenge it. For example, research shows that the framing of racism affects recognition of systemic bias. More specifically, Adams and colleagues administered a lecture-based tutorial focused on stereotyping and prejudice to White undergraduate students, with some students randomly assigned to learn about racism as a systemic phenomenon (i.e., "threats in the air," systemic privilege, and systemic manifestations of racism; Steele, 1997; Adams et al., 2008). Other participants learned about factors that can contribute to bias within people, such as personality. Finally, control condition participants did not have a tutorial. Those who learned about racism as a systemic phenomenon were subsequently more

likely to recognize systemic bias and to support policies aimed at combatting racial inequality on a structural level, compared to participants in the other two conditions. Although this work has relevance to the current research, note that the measured outcomes related to systemic bias only..Furthermore, the condition in which participants learned about bias within people did not explicitlyhighlight the bias that they personally have. In other words, this tutorial did not focus on recognition of bias within the self. Nevertheless, acquiring knowledge about systemic bias appearsto be important for recognizing and combatting it.

One way to acquire knowledge about bias is through exposure to people's experiences with discrimination. Capitalizing on this idea, Carter and Murphy (2017) used exposure to multiple instances of Black individuals experiencing discrimination across contexts to increase recognition of systemic bias. These researchers demonstrated that when discrimination claims came from multiple Black discrimination claimants, rather than when a single Black claimant made one discrimination claim, White individuals were more likely to recognize the embedded, pervasive nature of bias toward Black people (i.e., "Blacks in America have the same rights, privileges, and opportunities as Whites" (reverse-scored); "Discrimination against Blacks is no longer a problem in the United States" (reverse-scored); "Blacks are no longer the targets of racism in the United States today," (reverse-scored); and "American society still has a long way to go before Blacks will achieve equal status compared to Whites").

Uluğ and Tropp (2020) also exposed people to Black people's experiences with bias across contexts. Half of the White participants were randomly assigned to watch two videos of actual incidents of racial discrimination, such as when a White employee of a Starbucks coffee store in Philadelphia called the police on two Black men sitting in the store, resulting in the police escorting the men out in handcuffs. The remaining participants in the control condition simply watched still photographs of the locations of both incidents. Participants exposed to the instances of discrimination later reported greater awareness of their racial privilege, compared to the control condition, which in turn promoted greater reported willingness to participate in collective action behaviors related to the BLM movement. Exposure to discrimination and subsequent intentions to protest and engage in collective action have been demonstrated with other disadvantaged groups as well. Ellemers and Barreto (2009) found that exposing women to overt and "old-fashioned" forms of sexism spurred other-directed affective responses (i.e., anger) and concern about gender

discrimination—as demonstrated by participants' increased support for collective action, intentions to protest, and collective protest behavior.

The current research builds on the idea that learning about people's experiences with discrimination may prompt recognition and motivation to combat bias. Furthermore, by presenting multiple instances of discrimination that occurred across various institutional contexts (e.g., healthcare, education, policing), we sought to raise awareness of and motivation to combat systemic bias in particular. However, the research reviewed in this section did not examine whether the procedures also raised awareness and motivation to self-regulate personal bias, which is a major goal of the current research.

Increasing Awareness of and Motivation to Self-Regulate Personal Bias

The effect of a variety of strategies for increasing people's awareness of and motivation to combat their own biases have been investigated. One strategy involves priming people's prejudice-related discrepancies, or their propensity for having actual responses that are more biased than their personal standards suggest is appropriate (Devine et al., 1991). For instance, in Burns and colleagues (2017), non-Black participants considered and reported how they *should* respond in various situations involving Black people, and then how they *would* respond in these situations by completing the Should Would Discrepancy Questionnaire (Monteith & Voils, 1998). Replicating past research (e.g., Monteith, Devine, et al., 1993; Monteith & Voils, 1998), the experience of completing this scale triggered greater self-directed negative affect as participants' discrepancies increased (i.e., more prejudiced scores on *woulds* than *shoulds*), particularly among participants who were more internally motivated to respond without prejudice (IMS). In turn, this affect was associated with greater ability to self-regulate subsequent bias (i.e., reduced stereotype application and greater rejection of racist jokes).

The IAT provides another useful strategy to prime individuals with their proneness for bias. Using an IAT intervention (Vitriol & Moskowitz, 2021, Study 2), White participants took a racial IAT, received feedback that they had a strong preference in favor of White people compared to Black people, and received an explanation describing the pervasiveness of implicit bias but a person's ability to control its influence on their behavior. Results indicated that this intervention was effective at directly reducing defensive responding to IAT feedback (compared to when participants only received feedback) and indirectly increasing bias awareness/acknowledgement.

In Devine and colleagues "Prejudice Habit-Breaking Intervention," participants learn about implicit bias and various effective, evidence-based bias reduction strategies (e.g., the IAT) as part of a "toolkit," to aid in the process of raising awareness and motivation to self-regulate personal bias (Devine et al., 2012). Indeed, intervention participants increased in their reported awareness of their potential to express bias and concern over racial discrimination compared to control participants, enduring for up to 2 years post-intervention (Forscher et al., 2017).

Other research has utilized confrontation to raise awareness and prompt self-regulation processes. Various studies found that when participants' racially biased responses were pointed out to them, they experienced increased negative self-directed affect, which in turn lead to reduced biased responding (see Monteith et al., 2019, for a review). Indeed, the increased motivation and success at self-regulating one's personal biases following confrontation appears to be enduring (lasting a week following confrontation in Chaney & Sanchez, 2018), to occur regardless of confrontation framing (Czopp et al., 2006; Burns & Monteith, 2019), and to generalize to regulating bias toward groups that were not involved in the initial confrontation (Chaney et al., 2021).

In sum, research designed to raise awareness and the motivation and ability to combat personal bias uses procedures that capitalize on people's prejudice-related discrepancies. These discrepancies lead to a cascading effect of negative-self-directed affect, such as guilt and disappointment with one's self. This affect triggers motivational and learning processes that increase people's subsequent ability to detect and reduce their biased responses (Self-Regulation of Prejudice Model; Monteith, 1993). While this strategy is successful at the personal level, it has not been extended to determine whether it likewise increases recognition of and motivation to combat systemic bias.

Potential Crossover Effects

The previous sections underscore that the general focus in the social psychological literature is on recognition and motivation to self-regulate personal bias, or recognition and motivation to combat systemic bias, but in separate pursuits with little to no crosstalk. The current research focuses on the extent to which crossover effects may occur by testing whether strategies to increase recognition and motivation to combat systemic bias also influence personal bias awareness and motivation to self-regulate, and vice versa.

Procedures to increase people's recognition and motivation to combat systemic bias might also lead to acknowledgment and motivation to self-regulate personal bias. Exposure to multiple discrimination claims by Black claimants might induce self-reflection of people's own personal biases and subsequently the need to self-regulate. This reflection process may especially apply for individuals who are not low in their internal motivation to respond without prejudice (IMS); that is, for people who place at least some value on responding in unbiased ways (Plant & Devine, 1998).

Conversely, procedures to increase people's awareness that their personal bias is problematic and to heighten motivation to self-regulate might also lead to recognition of bias at a systemic level, eliciting responses aimed at combatting it. This crossover effect might occur due to self-serving consistency processes. More specifically, with increased awareness of personal biases and motivation to self-regulate, I expect that people who are not low in IMS will conclude that bias is problematic beyond themselves and rooted in culture, policies, institutions, and others' individual biases. Indeed, research has shown that people are prone to believing that others are more biased and prejudiced than they are (i.e., the "bias blind spot," Pronin et al., 2002; O'Brien et al., 2010), which suggests that people are likely to generalize from the recognition of personal bias to the recognition of systemic bias.

However, there is also reason to question whether crossover effects will occur. Adams et al. (2008) suggested that a potential cost of a systemic portrayal of racism is that it may "absolve people of the responsibility (or otherwise undermine their motivation) to regulate personal expression of automatic bias" (p. 359). To be clear, their studies did not include measures of personal bias awareness or motivation to self-regulate. Nevertheless, their observation suggests that procedures aimed at increasing people's recognition of and motivation to combat systemic bias simply might not cause people (even those who are not low in IMS) to internally reflect and self-regulate their own personal bias due to a perceived lack of personal responsibility.

Conversely, procedures aimed at increasing awareness and motivation to self-regulate personal bias might not cause increased recognition and motivation to combat systemic bias. Scholars have argued that personal level procedures simply are not sufficient to address the deeply embedded systemic level issues affecting society (Onyeador et al., 2021). They propose that systemic inequities can be best addressed through structural interventions that examine and change institutional policies and procedures. On the other hand, the Marley hypothesis argues that White

Americans lack knowledge about historical racism, which dulls their perception of racism in the present. Research indicates that compared to Black students, White students have less knowledge of historical racism and therefore are less likely to perceive isolated and systemic forms of racism (Nelson et al., 2013). However, in a brief intervention, White people learned about the history of systemic bias, which increased recognition relative to a control condition (Bonam et al., 2019, Study 2). Given White individuals impoverished systemic bias knowledge and an intervention specifically focused on personal and not systemic bias, increased recognition and motivation to combat it might not occur.

Overview of the Proposed Research

The current research investigates whether certain strategies are effective ways to a) increase increasing recognition of and motivation to combat personal bias, and b) increase acknowledgment of and motivation to combat systemic bias. Importantly, we investigated potential crossover effects, as explained above. Non-Black participants were randomly assigned to one of three bias conditions:an IAT condition, a discrimination experiences condition, or a no intervention control. After the experimental manipulation, participants completed measures for assessing awareness and motivationto combat both personal and systemic bias.

The procedure intended to heighten awareness and motivation to self-regulate personal bias relied on a method that we recently used in another study, where participants completed the racial IAT and received feedback about the personal biases it revealed. They also learned about the commongenesis of personal implicit biases and how such biases may lead them to behave in discriminatory ways (Noland et al., 2021).

In this preliminary research, participants were either randomly assigned to this IAT conditionor to a control condition where they simply rated their preference for common consumer products. Following this manipulation, participants self-reported the extent to which they were experiencing negative self-directed affect, their acknowledgement of personal bias, and their motivation to self- regulate their personal bias. Additionally, IMS was assessed in a prescreen questionnaire.

We found a significant main effect of condition, with stronger negative self-directed affect inthe IAT than in the control condition, and a significant interaction between condition and IMS. Among lower IMS participants, negative self-directed affect was comparable for the IAT and

controlconditions. However, among higher IMS participants, greater negative self-directed affect was reported in the IAT than in the control condition. When predicting motivation to self-regulate personalbias, we found similar results. There was a significant main effect of condition, with participants reporting greater motivation to self-regulate bias in the IAT than in the control condition, and a significant main effect of IMS indicating that motivation to self-regulate increased as IMS increased.

Although the omnibus interaction was not significant, simple slopes analyses indicated that lower IMS participants reported comparable levels of motivation in the IAT and control conditions. However, higher IMS participants reported greater motivation to self-regulate in the IAT than in thecontrol condition.

As far as acknowledgement of bias, the results were in the expected direction but did not reach significance (i.e., there was no main effect of condition or an interaction). This was unexpected, especially since condition influenced negative self-directed affect and motivation to self-regulate bias.The items used in this preliminary research have been modified for the present purposes with the intention of increasing their sensitivity (e.g., "Stereotypes about Black people can often pop into mymind unintentionally" was changed to "I recognize that stereotypes about Black people could pop into my mind unintentionally").

The procedure intended to increase awareness of and motivation to combat systemic bias usedin the current work is based on relevant past research (Carter & Murphy, 2017; Uluğ & Tropp, 2020). Non-Black participants read five essays ostensibly written by Black individuals who experienced biasin various institutional contexts (e.g., policing, healthcare). Exposure to multiple experiences of discrimination in different institutional contexts was expected to prompt increased recognition of systemic bias and motivation to combat it. Indeed, a meta-analysis performed across five studies in research by Carter and Murphy (2017) indicated that White participants perceived that bias against Black people was more prevalent when exposure to discrimination was high than when it was low (d = 0.44; 95% CI [0.28, 0.60]).

After the experimental manipulation, participants completed measures of their recognition oftheir personal bias and motivation self-regulate, and recognition of systemic bias and motivation to combat it. We hypothesized that there would be crossover effects—that is, procedures to increase people's recognition that their personal bias is problematic and to heighten motivation to self-regulatewould also lead to recognition of bias at a systemic level and elicit responses aimed

at combatting it.Conversely, procedures to increase people's awareness of systemic bias and motivation to combat itwould also lead to acknowledgment and motivation to reduce personal bias. Importantly, we expectedthese findings would be most likely occur among individuals who are not low in their internal motivation to respond without prejudice.

Preregistration of this study can be found at https://osf.io/425gu/?view_only=dccd75b2e83941eea255e494bb9ec79b.

METHOD

Sample Size Determination

An *a priori* GPower power analysis (Faul et al., 2009) indicated that we would need 395 participants for 80% power to detect the anticipated effect size (f^2 = .02) in a linear multiple regression analysis. We used a small effect size because we were testing interactions, and interaction effects are often small. We anticipated having to exclude some participants (e.g., suspicious participants; participants who did not pass attention checks), so we increased our target sample size to a minimum of 450 participants (i.e., 75 participants per condition).

Participants

Between March 11th and May 1st of 2021, we recruited 528 non-Black undergraduates. Data were removed from 26 participants who denied use of their data on the post session consent form. Based on preregistered criteria, 48 participants were excluded for failing 2 out of 3 attention checks (n = 35), failing 3 or more comprehension check questions following each discrimination experience (n = 9), being multivariate outliers in the data (defined as 3 standard deviations from the mean of the relevant measure; n = 4), and who clearly did not find the procedures to be plausible in the experimental conditions (n = 8). Thus, a total of 467[1] participants remained for analyses (53.7% responded male, 44.3% responded female; $MM_{aaaaaa} = 19.28$, $SSSS_{aaaaaa} = 1.18$; 69% White, 21.2% Asian or Asian American, 5.4% Hispanic or Latino; 3.2% biracial or multiracial, 1.1% Middle Eastern Arab or non-Arab, .2% Native American).

Design

This study used a 3 (Bias Condition: IAT, Discrimination Experiences, Control) X continuous measure (IMS) between-participants design.

[1] Given the small pool of participants available in SONA, non-U.S. citizens were allowed to participate to achieve the target (N = 450). Analyses were performed with and without these participants to ensure results did not change. Sixty-nine participants indicated that they were not U.S. citizens. However, given that the results did not change in any significant way, these participants were retained in analyses.

Procedure

After providing informed consent, non-Black undergraduates were randomly assigned to one of three experimental conditions:

IAT Condition

Following previous research in our lab, participants completed the Black-White racial IAT and received feedback indicating that they showed a preference for White people over Black people. They also read an explanation of the common genesis of implicit biases and how they can influence judgements and behaviors. See Appendix A.

Discrimination Experiences Condition

Following past research on discrimination claims by Black individuals (Carter & Murphy, 2017), participants read five descriptions of five different Black people's experiences with discrimination across various institutional contexts (e.g., policing, healthcare). Participants were required to spend a minimum of twenty seconds on each discrimination claim before they could proceed. Also, to increase attention, participants answered two comprehension questions following each claim. If participants missed an item, a big red "X" was displayed along with the message "This study requires that you read each experience carefully. Please read more carefully from now on." See Appendix A.

Control Condition

Participants in the control condition completed a task regarding their preferences for variousconsumer goods. Participants were presented with descriptions of different brands of the same productand selected their preference based on the information provided. This task was similar to the personalbias condition in that there was a focus on preferences. It was also similar to the systemic bias condition given that participants read lengthy descriptions of each product. See Appendix A.

Participants then completed all dependent measures. Internal Motivation to Respond without Prejudice (IMS) was assessed at the very start of the study or after all other measures.

Then, participants completed a funnel debriefing to probe participants for suspicion. The debriefing form was presented next, which outlined the aims and goals of the study. Following the debriefing form, participants read a post session consent form and indicated if they approved of their responses being used or not for data analyses. Finally, participants were thanked for their participation and immediately received credit.

Measures

All measures were completed on 1 (*strongly disagree*) to 9 (*strongly agree*) scales, except where noted.

Internal motivation to respond without prejudice. Participants completed five items (α = .87) indicating the extent to which they are internally motivated to respond in a non-prejudiced manner (Plant & Devine, 1998; see Appendix B).

Personal Bias Measures

Acknowledgement of personal bias. Participants completed seven items (α = .87), indicating the extent to which they are aware and can acknowledge biases they hold against Black people (adapted from Perry et al., 2015 and Hahn & Gawronski, 2019; see Appendix C).

Motivation to self-regulate personal bias. Participants completed six items (α = .87), indicating the extent to which they are motivated to respond in unbiased ways (see Appendix D).

Systemic Bias Measures

Recognition of systemic bias. Participants completed nine items (α = .89), indicating the extent to which they feel they are aware and can acknowledge any biases operating at a structural level to negatively affect Black Americans (Henry & Sears, 2002; Adams et al., 2008; Shin et al., 2016; see Appendix E).

Motivation to combat systemic bias. Participants completed seven items (α = .88), indicating the extent to which they are motivated to combat systemic bias (adapted from Rapa et al., 2020; Appendix F).

Support for Black Lives Matter. Participants completed six items (α = .95), indicating the extent to which they support the Black Lives Matter movement (adapted from Holt & Sweitzer, 2020; see Appendix G).

Support for policies that address racial inequality. Participants completed four items (α = .84), indicating the extent to which they support policies that address racial inequality (Kaiser et al., 2009; see Appendix H).

Affect. Participants completed 32 affect items rated on 1 (does not apply) to 7 (applies very much) scales (Monteith, 1993; Appendix I). Several affect indexes were formed (see results section).

Thought listing task. Participants listed the thoughts they had after completion of the control, IAT, or discrimination experiences condition (adapted from Cacioppo et al., 1979; see Appendix J).

Demographics. Participants completed questions on gender, age, sexual orientation, citizenship and race (to conform our participation restriction), political orientation, and political party. They also indicated whether they were alone while they completed the survey or and/or distracted (Appendix K).

PILOT STUDY

A pilot study was conducted to ensure that scores on the measures used in the current research were not too high (i.e., there is room for people to increase their scores), that individual items loaded onto their respective scales as anticipated, and that correlations were not so high between the personal and systemic measures so as to suggest that they are measuring the same constructs.

In February 2021, we recruited 152 participants to complete an online survey through Amazon's Mechanical Turk (paid $0.50). Data were removed from one person who failed a server check and seven participants who identified as Black/African-American. The final sample included 144 participants (46.2% male, 51.7% female; MM_{aaaaaa} = 44.9, $SSSS_{aaaaaa}$ = 13.35; 86.2% White, 8.3% Asian or Asian American, 2.1% Hispanic or Latino; 3.4% biracial or multiracial). As shownin Table 1, the means and standard deviations suggested no problems with ceiling effects. The correlation between acknowledgment of personal bias and the systemic measures (i.e., recognition of systemic bias, motivation to combat systemic bias, along with support for Black Lives Matter and policies that address racial inequality) did not suggest redundancy. Correlations between motivation to self-regulate personal bias and the systemic bias measures were much higher. Furthermore, the correlations between the measures assessing recognition and motivation to combat systemic bias were very high, exceeding .80. Despite these high correlations, a confirmatory factor analysis suggested that the individual items represented their respective scale sufficiently. Using R packages "lavaan" (Rosseel, 2012), "ltm" (Rizopoulos, 2006), and "foreign" via R 4.0.2 (R Core Team, 2020), this specified model employed a six-factor structure with all items loaded onto their respective scale. The six-factor model fit the data adequately based on common model fit indices (CFI = 0.89, TLI = .88, RMSEA = .08, SRMR = .07).

Table 1. Means, Standard Deviations, and Correlations Among Measures, Pilot Study

	M	*SD*	1	2	3	4	5	6
1. Acknow	4.20	2.20	—					
2. MSR	5.69	2.31	.20*	—				
3. RSB	5.82	2.38	.15	.75**	—			
4. MSB	5.29	2.42	.08	.77**	.88**	—		
5. BLM	4.96	2.77	.13	.67**	.88**	.83**	—	
6. PolSupport	5.95	2.42	.09	.73**	.89**	.86**	.80**	—

Note. Personal Bias Measures: Acknow = Acknowledgement of Personal Bias, and MSR = Motivation to Self-Regulate Personal Bias; Systemic Bias Measures: RSB = Recognition of Systemic Bias, and MSB = Motivation to Combat Systemic Bias; BLM = Support for Black Lives Matter; PolSupport = Support for policies aimed at addressing inequality.

* $p < .05$. ** $p < .01$ (two-tailed).

RESULTS

Perceived Veracity of Experimental Procedures: Thought Listing Task Analysis

We examined participants' responses from the thought listing task to ascertain if we had issues with our experimental procedures. Specifically, we wanted to know whether participants believed what they were told in both conditions. Did participants exposed to the discrimination experiences procedure believe that the discrimination experiences they read were real, and happened to actual Black Americans? Conversely, did participants exposed to the IAT procedure believe the fixed feedback indicating they preferred White people over Black people, or did they feel like this feedback was rigged? Results indicated that 27 participants (18.9%) in the IAT condition questioned the validity of their feedback (e.g.., "I believe that if the task went good/black and bad/white first and then good/white and bad/black then my results might have been different…," "I only missed 3 options on the test. I don't get how I had an implicit bias"). Conversely, results indicated that only 3 participants (1.9%) in the discrimination experiences condition questioned the veracity of this procedure (e.g., "When I was reading through these, I was just thinking, 'These are probably going to be about stereotype/prejudice incidents with black people'"). Analyses were performed excluding participants who questioned the veracity of the procedures, and given that results did not change, these participants were retained for analyses.

Primary Analyses

A 2 (IMS assessment: beginning or end of the study) X 3 (Bias Condition: IAT, Discrimination Experiences, Control) 2-way ANOVA was first performed to determine if participants' IMS scores varied depending on whether IMS was completed at the beginning or end of the study and as a function of condition. This analysis revealed no significant effects, Fs < 3.08, ps ≥ .08. Thus, the inclusion of IMS a predictor in subsequent analyses was justified.

Separate hierarchical regression analyses were performed predicting each dependent variable with condition (dummy coded), IMS (centered), and their interaction. (DC1 compared the IAT condition to control condition: control = 0, IAT = 1, discrimination experiences = 0. DC2 compared the discrimination experiences condition to the control condition: control = 0, IAT = 0, discrimination experiences = 1). Recoding of these dummy variables allowed for comparison

between the IAT and discrimination experiences conditions. DC1 and DC2 were entered at Step 1 (and the increment in R^2 associated with this step was assessed to determine whether the effect for condition was significant), IMS at Step 2, and DC1xIMS and DC2xIMS at Step 2 (and the increment in R^2 associated with this step were assessed to determine whether the effect for the interaction was significant). Correlations among the variables and their means and standard deviations are presented in Table 2. Predicted values as a function of condition are presented in Table 3.

Table 2. Means, Standard Deviations, and Correlations Among Measures, Study 1

	M	*SD*	1	2	3	4	5
1. Acknow	4.39	1.73	—				
2. MSR	7.19	1.48	.19**	—			
3. RSB	6.91	1.53	.18**	.65**	—		
4. MSB	6.61	1.54	.00	.71**	.71**	—	
5. BLM	6.34	2.09	.07	.59**	.78**	.66**	—
6. PolSupport	6.96	1.57	.12**	.66**	.74**	.70**	.67**

Note. Personal Bias Measures: Acknow = Acknowledgement of Personal Bias, and MSR = Motivation to Self-Regulate Personal Bias; Systemic Bias Measures: RSB = Recognition of Systemic Bias, and MSB = Motivation to Combat Systemic Bias; BLM = Support for Black Lives Matter; PolSupport = Support for policies aimed at addressing inequality.

*$p < .05$. **$p < .01$ (two-tailed).

Table 3. Summary of Condition Main Effects for Dependent Variables, Study 1

	Control	IAT	Discrimination Experiences
1. Acknow	4.09_a	4.68_b	4.45_{ab}
2. MSR	7.12_a	7.12_a	7.32_b
3. RSB	6.88_a	6.83_a	7.02_a
4. MSB	6.54_a	6.46_a	6.81_b
5. BLM	6.43_a	6.19_a	6.40_a
6. PolSupport	6.90_a	6.96_a	7.14_b

Note. For each dependent variable, means not sharing a subscript differ significantly, $p < .05$. Personal Bias Measures: Acknow = Acknowledgement of Personal Bias, and MSR = Motivation to Self-Regulate Personal Bias; Systemic Bias Measures: RSB = Recognition of Systemic Bias, and MSB = Motivation to Combat Systemic Bias; BLM = Support for Black Lives Matter; PolSupport = Support for policies aimed at addressing inequality.

Personal Bias Measures

Acknowledgement of personal bias. In line with predictions, the main effect for condition was significant, $F(2, 464) = 4.40$, $\Delta R^2 = .019$, $p = .013$. Participants in the IAT condition ($\hat{Y} = 4.68$) acknowledged personal bias more than participants in the control condition ($\hat{Y} = 4.09$), $b = .58$, $se = .20$, $t(463) = 2.95$, $p = .003$. Acknowledgement of personal bias in the systemic bias condition ($\hat{Y} = 4.45$) did not differ from acknowledgment in the IAT or control conditions, ps > .10. The main effect for IMS was also significant, B = -.20, $se = .06$, $t(463) = 3.26$, $p = .001$, suchthat as IMS increased acknowledgement of personal bias decreased. The interaction was not significant, $F(2, 461) = 2.08$, $\Delta R^2 = .009$, $p = .127$.

Motivation to self-regulate bias. The main effect for condition was significant, $F(2, 464) = 3.15$, $\Delta R^2 = .013$, $p = .044$. Contrary to predictions, motivation to self-regulate bias was comparable in the control ($\hat{Y} = 7.12$) and IAT ($\hat{Y} = 7.12$) conditions, ps > .85. However, in line with predictions for a crossover effect, motivation to self-regulate was significantly greater in the systemic bias condition ($\hat{Y} = 7.32$) compared to the IAT condition, $b = .34$, $se = .17$, $t(464) = 2.02$,

with predictions for a crossover effect, motivation to self-regulate was significantly greater in the systemic bias condition ($\hat{Y}$ = 7.32) compared to the IAT condition, b = .34, se = .17, t(464) = 2.02, p = .044, and also compared to the control condition, b = .37, se = .16, t(464) = 2.30, p = .022. The main effect for IMS was significant, B = .70, se = .04, t(463) = 16.61, p < .001, such that as IMS increased motivation to self-regulate bias increased. These main effects were not qualified by an interaction, F(2, 461) = 1.83, ΔR^2 = .005, p = .161.

In sum, the expectation that the IAT condition (i.e., taking the IAT, receiving feedback that you have a preference for White people over Black people, and reading an explanation that describes the origins of implicit biases, their role in producing biased judgement and outcomes, and a person's ability to inhibit them upon awareness) would lead to increased acknowledgement of personal bias and motivation to self-regulate was partially supported. Participants in the IAT condition did acknowledge bias more than participants in the control condition, whereas the other comparisons (i.e., discrimination experiences condition compared to both the control and IAT conditions) did not differ significantly. However, the IAT experience seemed to be in no way more motivating than reading about discrimination experiences and the control condition activity. Finally, there was partial evidence of "crossover effects," such that participants in the discrimination experiences condition did not show increased acknowledgement of personal bias; however, this manipulation did result in increased motivation to self-regulate personal bias, relative to both the control and IAT conditions.

Systemic Bias Measures

Recognition of systemic bias. The main effect for IMS was significant, B = .53, se = .05, t(463) = 10.92, p < .001. Contrary to predictions, all other ps > .14. Recognition of systemic bias was comparable across the discrimination experiences ($\hat{Y}$ = 7.02), IAT ($\hat{Y}$ = 6.82), and control ($\hat{Y}$ = 6.88) conditions.

Motivation to combat systemic bias. In line with predictions, the main effect for condition was significant, F(2, 464) = 5.03, ΔR^2 = .021, p = .007. Participants in the discrimination experiences condition ($\hat{Y}$ = 6.81) demonstrated significantly greater motivation to combat systemic bias than participants in the control condition ($\hat{Y}$ = 6.54), b = .46, se = .17, t(464) = 2.68, p = .008.

Furthermore, participants in the discrimination experiences condition demonstrated greater motivation to combat systemic bias than participants in the IAT condition ($\hat{Y}$ = 6.46), b = .50, se = .18, $t(464) = 2.80$, p = .005. Finally, the IAT and control conditions were comparable, p = .809. The main effect for IMS was significant, B = .70, se = .04, $t(463) = 15.86$, $p < .001$, such that as IMS increased motivation to combat systemic bias increased. These main effects were not qualified by an interaction, $F(2, 461) = .69$, $\Delta R^2 = .002$, p = .504.

Support for Black Lives Matter. The main effect for IMS was significant, B = .71, se = .07, $t(463) = 10.54$, $p < .001$, such that as IMS increased support for the BLM movement increased. Contrary to predictions, all other ps > .32. Thus, support for the Black Lives Matter movement was not increased in the discrimination experiences condition ($\hat{Y}$ = 6.40), nor in the IAT condition ($\hat{Y}$ = 6.19), relative to the control condition ($\hat{Y}$ = 6.43).

Support for policies that address racial inequality. The main effect for condition was significant, $F(2, 464) = 3.40$, $\Delta R^2 = .014$, p = .034. In line with predictions, participants in the discrimination experiences condition ($\hat{Y}$ = 7.14), demonstrated significantly greater support for policies aimed at addressing inequality than participants in the control condition ($\hat{Y}$ = 6.40), b = .38, se = .17, $t(464) = 2.20$, p = .029. Furthermore, participants in the discrimination experiences condition demonstrated greater support for policies aimed at addressing inequality than participants in the IAT condition ($\hat{Y}$ = 6.96), b = .42, se = .18, $t(464) = 2.31$, p = .021. The comparison between the IAT and control conditions was not significant, p = .84. The main effect for IMS was also significant, B = .57, se = .05, $t(463) = 11.43$, $p < .001$, such that as IMS increased, support for policies aimed at addressing inequality increased. These main effects were not qualified by a significant interaction, $F(2, 461) = 1.07$, $\Delta R^2 = .004$, p = .344.

In sum, the expectation that reading about Black American's experiences of systemic bias in various domains of life (e.g., housing, healthcare, policing) would lead to increased recognition of and motivation to combat systemic bias was partially supported. The discrimination experiences condition did not lead to greater recognition of systemic bias, but did have motivational properties for combatting it. Specifically, participants in the discrimination experiences condition demonstrated significantly greater motivation to combat systemic bias than both participants in the control and IAT conditions. This same pattern of results emerged for policies aimed at addressing inequality—participants in the discrimination experiences condition were significantly more likely

to support such policies than participants in both the control and IAT conditions. However, support for Black Lives Matter was comparable among all conditions. Finally, we found no evidence of crossover effects: the IAT condition was not associated with increased recognition of systemic bias nor with increased motivation to combat systemic bias, relative to the control condition.

Secondary Analyses

Affect

Past research using principal components analysis on the affect items typically reveals five factors (e.g., Monteith & Voils, 1998): negative self-directed affect (negself; e.g., guilty, disappointed with myself), down (e.g., depressed, low), discomfort (e.g., uncomfortable, uneasy), negative other-directed affect (negother; irritated at others, annoyed with others), and a positive affect factor (e.g., content, friendly). A principal components analysis with varimax rotation performed on the 32 affect items from this data set yielded three factors reflecting negself (30.24% of the variance), other negative affect items (21.51% of the variance), and positive (15.41% of the variance). We decided to form indexes in line with past research to make finer distinctions among the negative affect items that had loaded on our second factor. Therefore, we formed the following affect indexes by averaging all relevant items: negself (ten items; M = 2.48; SD = 1.49; α = .95), negother (four items; M = 2.90; SD = 1.86; α = .92), down (three items; M = 2.56; SD = 1.51; α = .84), and discomfort (eight items; M = 2.50; SD = 1.29; α = .90). We also formed a positive affect index (seven items; M = 2.95; SD = 1.35; α = .90).

The same hierarchical regression analysis procedure as for analyses reported above was used when analyzing each affect index. Significant interactions were probed using Hayes' (2018) PROCESS (Model 1). When interactions with IMS were significant, values were probed at 1 SD below and 1 SD above the mean.

Negative self-directed affect. The main effect for condition was significant, $F(2, 463) = 49.39$, $\Delta R^2 = .18$, $p < .001$. Participants in the IAT condition reported the highest level of negself, differing from both the control, $b = 1.51$, $se = .16$, $t(463) = 9.79$, $p < .001$, and discrimination experiences condition, $b = 1.05$, $se = .16$, $t(463) = 6.67$, $p < .001$. In addition, participants in the

discrimination experiences condition demonstrated significantly greater negself than participants in the control condition, b = .46, se = .15, t(463) = 3.08, p = .002.

The main effect for IMS was not significant, B = .09, se = .05, t(462) = 1.92, p = .055. However, the interaction between condition and IMS was significant, F(2, 460) = 20.83, ΔR^2 =.07, p < .001. As shown in Figure 1, among lower IMS participants, negself was significantly higher in the IAT condition than in the control condition, b = .49, se = .22, t(460) = 2.24, p = .03. Other comparisons were not significant, ps > .22. Among higher IMS participants, negself was especially high in the IAT condition, and differed significantly from both the control condition, b= 2.37, se = .20, t(460) = 11.65, p < .001, and the discrimination experiences condition, b = 1.73,se = .20, t(460) = 8.49, p < .001. Finally, higher IMS participants in the discrimination experiences condition showed elevated negself relative to the control condition, b = .63, se = .20, t(460) = 3.19, p = .002. In sum, this interaction suggests that completion of the IAT heightened negself among all participants, but especially among higher IMS participants. Furthermore, reading about discrimination experiences also increased negself, but only among higher IMS participants and not nearly as much as completion of the IAT.

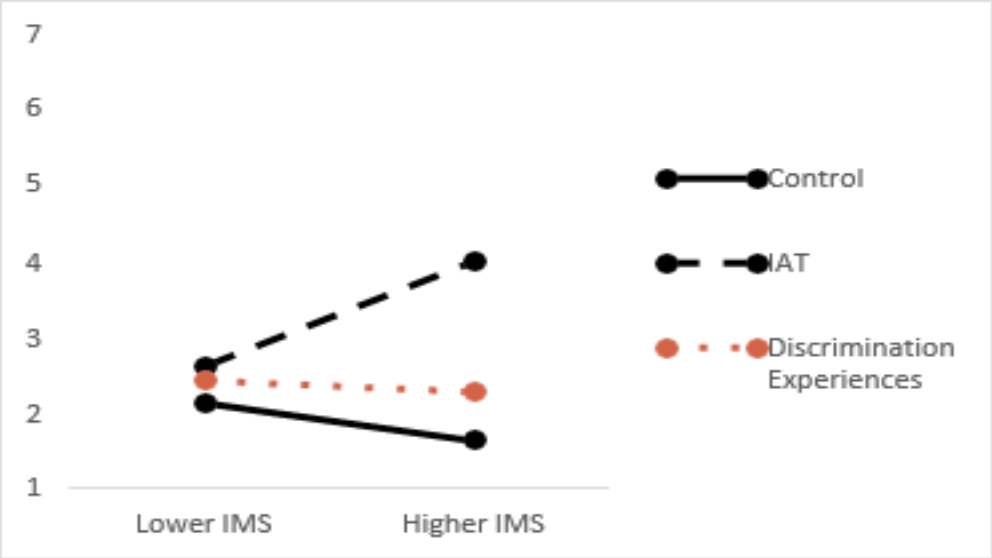

Figure 1. Condition x IMS interaction predicting negative self-directed affect, Study 1.

Negative other-directed affect. The main effect for condition was significant, $F(2, 463) = 224.21$, $\Delta R^2 = .49$, $p < .001$. Participants in the discrimination experiences condition reported the highest level of negother, differing from both the IAT, $b = 2.32$, $se = .15$, $t(463) = 15.07$, $p < .001$, and control conditions, $b = 3.01$, $se = .15$, $t(463) = 20.40$, $p < .001$. In addition, participants in the IAT condition reported significantly higher negother than participants in the controlcondition, $b = .69$, $se = .15$, $t(463) = 4.57$, $p < .001$.

The main effect of IMS was not significant, B = .08, $se = .05$, $t(462) = 1.73$, $p = .084$. However, the interaction was significant, $F(2, 460) = 7.59$, $\Delta R^2 = .016$, $p = .001$. As shown in Figure 2, among lower IMS participants, negother was significantly higher in the discrimination experiences condition, compared to both the control condition, $b = 2.25$, $se = .24$, $t(460) = 9.23$, $p < .001$ and the IAT condition, $b = 1.94$, $se = .25$, $t(460) = 7.72$, $p < .001$. Negother was comparable among the IAT and control conditions, $p = .17$. Among higher IMS participants, negother was especially high in the discrimination experiences condition, and differed significantly from both the control condition, $b = 3.52$, $se = .20$, $t(460) = 17.59$, $p < .001$, and the IAT condition, $b = 2.50$, $se = .21$, $t(460) = 12.19$, $p < .001$. Finally, higher IMS participants in the IAT condition showed elevated negother relative to the control condition, $b = 1.02$, $se = .20$, $t(460) = 4.97$, $p < .001$. This interaction suggests that reading about discrimination experiencesheightened negother among all participants, but especially among higher IMS participants. Furthermore, completing the IAT also increased negother, but only among higher IMS participantsand not nearly as much as reading about discrimination experiences.

Down. The main effect for condition was significant, $F(2, 463) = 31.71$, $\Delta R^2 = .12$, $p < .001$. Participants in the discrimination experiences condition reported the highest level of down affect, differing from both the IAT, $b = .47$, $se = .17$, $t(463) = 2.83$, $p < .001$, and control conditions, $b = 1.24$, $se = .16$, $t(463) = 7.87$, $p < .001$. In addition, participants in the IAT condition reported significantly greater down affect than participants in the control condition, $b = .78$, $se = .16$, $t(463) = 4.79$, $p < .001$. The main effect of IMS was not significant, B = .08, $se = .05$, $t(462) = 1.52$, $p = .130$. The interaction was significant, $F(2, 460) = 9.37$, $\Delta R^2 = .034$, $p < .001$. As shown in Figure 3, among lower IMS participants, down affect was significantly higher in the discrimination experiences condition, compared to both the control condition, $b = .73$, se = .26, $t(460) = 2.82$, $p = .005$, and the IAT condition, $b = .71$, $se = .27$, $t(460) = 2.64$, $p = .008$. Down affect was comparable among the IAT and control conditions, $p = .93$. Among higher IMS participants, both

the IAT condition, $b = 1.41$, $se = .22$, $t(460) = 6.47$, $p < .001$, and the discrimination experiences condition, $b = 1.62$, $se = .21$, $t(460) = 7.60$, $p < .001$, were significantly higher in down affect when compared to the control condition. Down affect was comparable among the discrimination experiences and IAT conditions, $p = .33$. In sum, this interaction suggests that reading about discrimination experiences significantly increased down affect among all participants. Furthermore, among higher IMS participants, completing the IAT increased down affect to the same extent as reading about discrimination experiences.

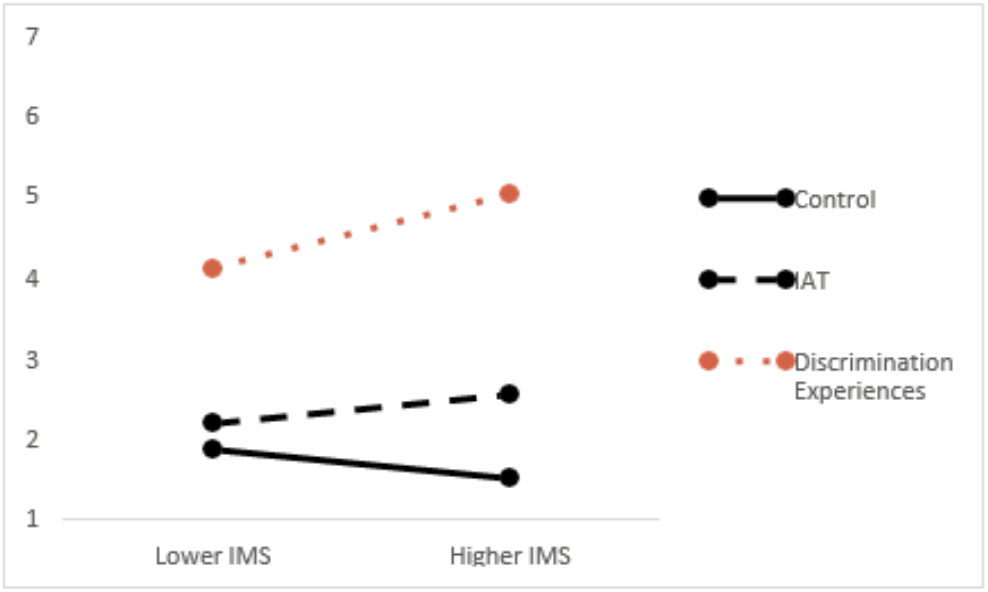

Figure 2. Condition x IMS interaction predicting negative other-directed affect, Study 1

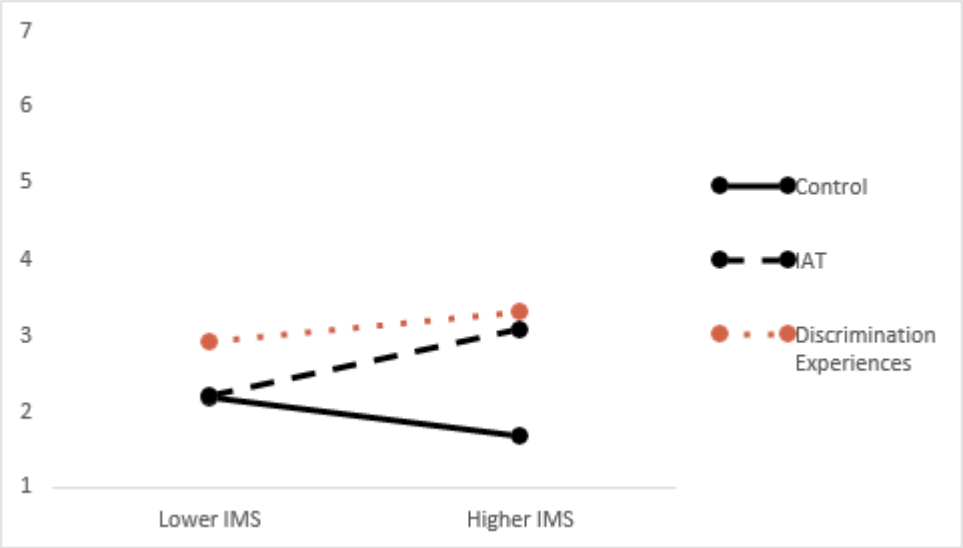

Figure 3. Condition x IMS interaction predicting down affect, Study 1.

Discomfort. The main effect for condition, $F(2, 463) = 43.93$, $\Delta R^2 = .16$, $p < .001$, was significant. Participants in the discrimination experiences condition reported the highest level of discomfort, differing from both the IAT, $b = .31$, $se = .14$, $t(463) = 2.23$, $p = .03$ and control conditions, $b = 1.19$, $se = .13$, $t(463) = 9.01$, $p < .001$. In addition, participants in the IAT condition reported significantly greater discomfort than participants in the control condition, $b = .89$, $se = .14$, $t(463) = 6.15$, $p < .001$. The main effect of IMS was not significant, B = .08, $se = .04$, $t(462) = 1.48$, $p = .140$. The interaction was significant, $F(2, 460) = 7.11$, $\Delta R^2 = .025$, $p = .001$. As shown in Figure 4, among lower IMS participants, discomfort was significantly higher in the discrimination experiences condition, compared to both the control condition, $b = .79$, $se = .22$, $t(460) = 3.61$, $p < .001$, and the IAT condition, $b = .45$, $se = .23$, $t(460) = 2.01$, $p = .04$. Discomfort was comparable among the IAT and control conditions, $p = .09$. Among higher IMS participants, both the IAT condition, $b = 1.34$, $se = .18$, $t(461) = 7.33$, $p < .001$, and the discrimination experiences condition, $b = 1.48$, $se = .18$, $t(461) = 8.27$, $p < .001$, were significantly higher than the control condition. Discomfort was comparable among the discrimination experiences and IAT conditions, $p = .44$. In sum, this interaction suggest that reading about discrimination experiences significantly increased discomfort among all participants. Furthermore, among higher IMS

participants, completing the IAT increased discomfort to the same extent as reading about discrimination experiences.

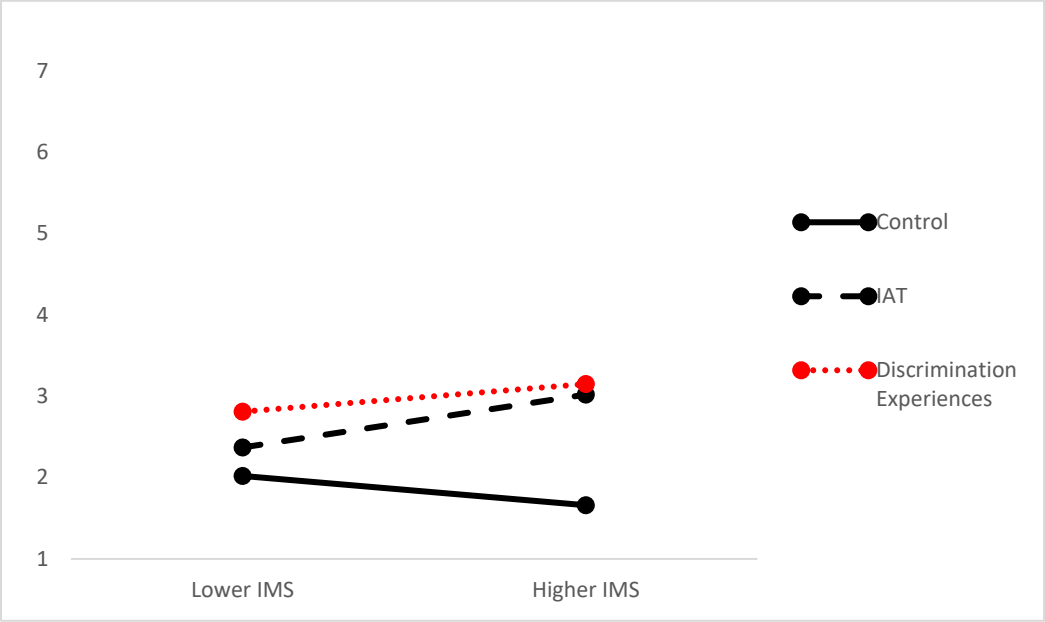

Figure 4. Condition x IMS interaction predicting discomfort, Study 1.

Positive. The main effect for condition, $F(2, 463) = 42.75$, $\Delta R^2 = .16$, $p < .001$, was significant. Participants in the discrimination experiences condition reported the lowest level of positive affect, differing from both the IAT $b = -.60$, $se = .14$, $t(463) = 4.14$, $p < .001$, and control conditions, $b = -1.28$, $se = .14$, $t(463) = 9.24$, $p < .001$. In addition, participants in the IAT condition reported significantly lower positive affect than participants in the control condition, $b = -.66$, $se = .14$, $t(463) = 4.67$, $p < .001$. The main effect for IMS was significant, B = -.09, $se = .04$, $t(462) = 2.02$, $p = .044$, such that as IMS increased positive affect decreased. This interaction was significant, $F(2, 460) = 5.89$, $\Delta R^2 = .021$, $p = .003$. As shown in Figure 5, among lower IMS participants positive affect was significantly lower in the discrimination experiences condition, compared to both the control condition, $b = -.97$, $se = .244$, $t(460) = 4.23$, $p < .001$, $p <$ and the IAT condition, $b = -.84$, $se = .24$, $t(460) = 3.55$, $p < .001$. Positive affect as comparable among the IAT and control conditions, $p = .54$. Among higher IMS participants, positive affect was especially low in the discrimination experiences condition, and differed significantly from both the current condition, $b = -1.50$, $se = .19$, $t(460) = 7.97$, $p < .001$, and the IAT condition, $b = -.3$,

se = .19, *t*(460) = 2.02, *p* = .04. Finally, higher IMP participants in the IAT condition showed reduced positive affects relative to the control condition, *b* = -1.11, *se* = .19, *t*(460) = 5.78, *p* < .001. This interaction suggests that reading about discrimination experiences decreased positive affect among all participants. Furthermore, completing the IAT also decreased positive affect, but only among higher IMS participants and not to the same extent as reading about discrimination experiences.

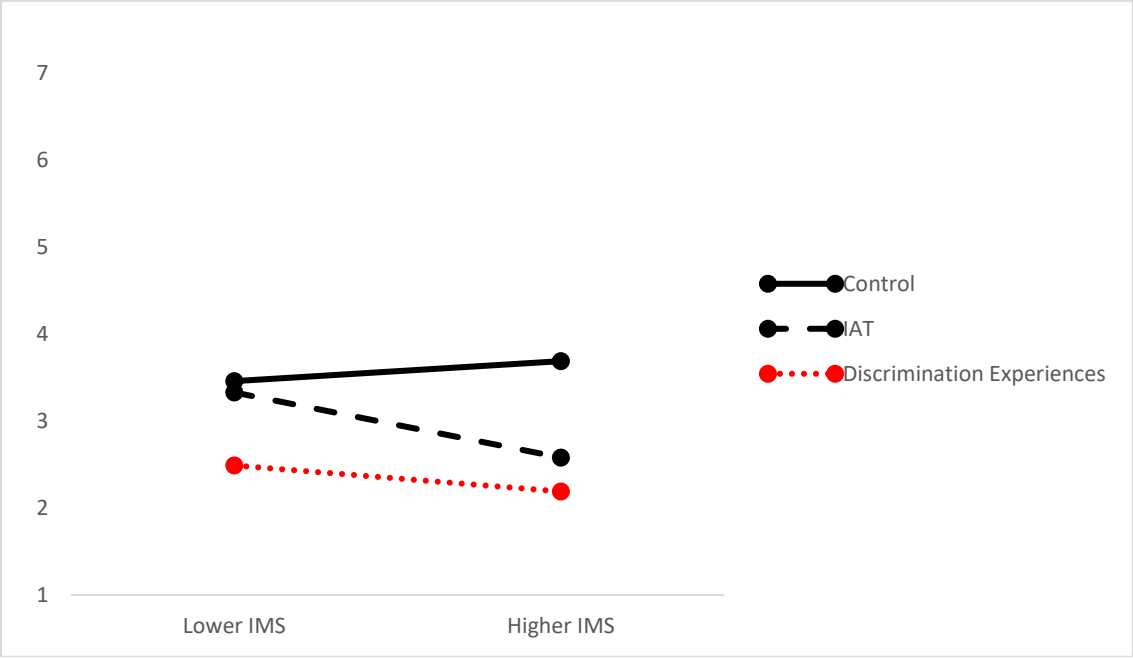

Figure 5. Condition x IMS interaction predicting positive affect, Study 1.

Moderated Serial Mediation Analyses

We performed various moderated serial mediation analyses. The significance of these tests are reported below. Appendix L provides figures (including pathway regression coefficients) when moderated serial mediation effects were significant. Table 4 provides summary information related to the serial mediation tests in instances of significant effects.

Table 4. Serial Mediation Effects Among Lower and Higher IMS Participants, Study 1

Serial Moderated Mediation Model		*b*	*se*	95% [CI]
1. Condition → Negself→ Acknow→ MSR				
IAT vs. Control	Lower IMS	.01	.009	[-.001, .0335]
	Higher IMS	.03	.01	[.0143, .1236]
IAT vs. Discrimination Experiences	Lower IMS	.03	.04	[-.0393, .1250]
	Higher IMS	.29	.11	[.0936, .5056]
2. Condition → Negself→ RSB→ MSB				
IAT vs. Control	Lower IMS	.09	.05	[.0025, .1983]
	Higher IMS	.42	.10	[.2434, .6205]
IAT vs. Discrimination Experiences	Lower IMS	.03	.04	[-.0449, .1228]
	Higher IMS	.31	.08	[.1690, .4746]
3. Condition → Negother→ RSB→ MSB				
IAT vs. Control	Lower IMS	.05	.03	[-.0088, .1243]
	Higher IMS	.16	.05	[.0779, .2644]
Discrimination Experiences vs. Control	Lower IMS	.36	.01	[.1754, .5696]
	Higher IMS	.56	.14	[.2851, .8608]

Note. Relevant results are provided only when the overall serial moderated mediation effect was significant.

As preregistered, we conducted exploratory analyses to test whether negself was associated with personal and systemic level outcomes. We were particularly interested in this given negself has been consistently associated with self-regulation of biases in past research (e.g., Monteith, 1993). We reasoned that condition may interact with IMS to predict negself, which may be associated with increased acknowledgement of personal bias and, in turn, increased motivation to self-regulate personal bias. To test this process, Hayes (2018) PROCESS macro (Model 83, with 5000 bootstrapped samples) was used to assess a moderated serial mediation model, with condition (dummy coded with the control group as the comparison for both the IAT and discrimination experiences conditions) and IMS entered as predictors, negative self-directed affect and acknowledgement of personal bias entered as serial mediators, and motivation to self-regulate bias

entered as the outcome variable. For the comparison between the IAT and control conditions, the moderated serial mediation model was significant, *B* = .02, *SE* = .009, 95%CI [.0038, .0368]. For the comparison between the discrimination experiences and control conditions, the moderated serial mediation model was not significant, *B* = .003, *SE* = .003, 95%CI [-.0025, .0120]. Finally, for the comparison between the IAT and discrimination experiences conditions, the moderated serial mediation was significant, *B* = .01, *SE* = .04, 95%CI [.0273, .1661].

As can be seen in Table 4, among higher but not lower IMS participants, completion of the IAT (compared to both the control and the discrimination experiences conditions) triggered greater negative self-directed affect, which in turn was associated with increased acknowledgement of personal bias and, in turn, increased motivation to self-regulate personal bias. These results support a self-regulation process among higher IMS participants and suggest that this process is unique to the IAT procedure specifically.

As mentioned, were also interested in examining whether negative self-directed affect plays a parallel role for systemic bias measures, and we reasoned that condition may interact with IMS to predict negself, which in turn may be associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias. To test this process, Hayes (2018) PROCESS macro (Model 83, with 5000 bootstrapped samples) was used to assess a moderated serial mediation model, with condition (dummy coded with the control group as the comparison for both the IAT and discrimination experiences conditions) and IMS entered as predictors, negative self-directed affect and recognition of systemic bias entered as serial mediators, and motivation to combat systemic bias entered as the outcome variable. For the comparison between the IAT and control conditions, the moderated serial mediation model was significant, *B* = .12, *SE* = .03, 95%CI [.0637, .1845]. For the comparison between the discrimination experiences and control conditions, the moderated serial mediation model was not significant, *B* = .02, *SE* = .02, 95%CI [-.0185, .0609]. Finally, for the comparison between the IAT and discrimination experiences conditions, the moderated serial mediation was significant, *B* = .10, *SE* = .03, 95%CI [.0465, .1599].

Among higher IMS participants completion of the IAT (compared to both the control and the discrimination experiences conditions) triggered greater negative self-directed affect, which in turn was associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias. While this effect occurred for lower IMS participant when comparing the

IAT vs. control procedures, the effect was much stronger for higher IMS participants. These results suggest that, among participants who are more internally motivated to respond without bias, IAT-induced negself was associated with both personal *and* systemic level outcomes.

Although we did not predict that other affect indexes would play mediating roles, given condition interacted significantly with IMS to predict negother (i.e., large effects were observed, similarly to negself), we also explored whether negother possibly plays a mediating role in predicting personal and systemic level outcomes. We tested whether condition may interact with IMS to predict negother, which in turn may be associated with increased acknowledgement of personal bias and, in turn, increased motivation to self-regulate personal bias. To test this process, Hayes (2018) PROCESS macro (Model 83, with 5000 bootstrapped samples) was used to assess a moderated serial mediation model, with condition (dummy coded with the control group as the comparison for both the IAT and discrimination experiences conditions) and IMS entered as predictors, negative other-directed affect and acknowledgement of personal bias entered as serial mediators, and motivation to self-regulate bias entered as the outcome variable. None of these comparisons yielded significant results. This suggests that negother was not associated with any personal level outcomes.

However, we also tested whether condition may interact with IMS to predict negother, which in turn may be associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias. To test this process, Hayes (2018) PROCESS macro (Model 83, with 5000 bootstrapped samples) was used to assess a moderated serial mediation model, with condition (dummy coded with the control group as the comparison for both the IAT and discrimination experiences conditions) and IMS entered as predictors, negative other-directed affect and recognition of systemic bias entered as serial mediators, and motivation to combat systemic bias entered as the outcome variable. For the comparison between the IAT and control conditions, the moderated serial mediation model was significant, B = .04, SE = .02, 95%CI [.0094, .0777]. For the comparison between the discrimination experiences and control conditions, the moderated serially mediation model was significant, B = .07, SE = .03, 95%CI [.0249, .1359]. Finally, for the comparison between the IAT and discrimination experiences conditions, the moderated serial mediation model was not significant, B = -.01, SE = .01, 95%CI [-.0486, .0070]. Among higher IMS participants, completion of the IAT triggered increased negative other-directed affect, which in turn was associated with increased recognition of systemic bias and, in

turn, increased motivation to combat systemic bias compared to the control condition. However, among both lower and higher IMS participants, reading about discrimination experiences triggered increased negative other-directed affect, which in turn was associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias compared to the control condition. These results suggest that, regardless of internal motivation to respond without bias, negother is induced from reading about other people's experiences with discrimination. However, it is only when someone is especially motivated to be nonprejudiced that negother is triggered from an IAT procedure. Additionally, unlike negself which was associated with personal and systemic level outcomes, negother was associated specifically with systemic outcomes. Although these results are suggestive—demonstrating the self-regulation process at work and the utility of negative self- and other-directed affect for increasing recognition of systemic bias and, in turn, motivation to combat systemic bias, we can have greater confidence in these findings only after they are replicated. Furthermore, we also urge caution given we did not find evidence of a direct effect of condition and its interaction with IMS when predicting motivation to self-regulate personal bias or motivation to combat systemic bias.

GENERAL DISCUSSION

The present research investigated the effectiveness of two different strategies for increasing people's recognition of and motivation to self-regulate personal bias and their recognition of and motivation to combat systemic bias. Moreover, we sought to investigate potential crossover effects. That is, is a procedure aimed at increasing recognition of and motivation to combat systemic bias effective at increasing awareness of and motivation to self-regulate personal bias? Conversely, is a procedure aimed at raising awareness and motivation to self-regulate personal bias effective at increasing recognition of and motivation to combat systemic bias?

The results of this research provide partial evidence in support of our hypotheses. Compared to the control procedure, the IAT procedure (i.e., taking a racial IAT, receiving fixed feedback indicating racial bias, and receiving an explanation for why people may hold implicit biases) increased acknowledgement of personal bias, but unexpectedly, not motivation to self-regulate personal bias. Compared to the control condition, reading about discrimination experiences unexpectedly did not increase recognition of systemic bias or support for the Black Lives Matter movement, but did increase motivation to combat systemic bias and support for policies aimed at addressing inequality. Additionally, there was partial evidence in support of crossover effects: Reading about discrimination experiences did not increase acknowledgement of personal bias but did increase motivation to self-regulate bias when compared to the control and IAT procedures. However, the IAT procedure did not increase participants recognition of systemic bias nor their motivation to combat it relative to the other procedures.

The findings related to the IAT procedure are somewhat consistent with previous research. Similar to recent work by Vitriol and Moskowitz (2021), we found that the IAT procedure increased acknowledgement of personal bias. However, while past work in our lab (see Introduction) has found that this procedure increased motivation to self-regulate bias, we did not find this effect in the present research. It is difficult to explain why motivation to self-regulate bias was not increased, especially among higher IMS participants. This finding might be indicative of a Type II error and is worthy of additional testing in future research.

Contrary to predictions, we did not find that the discrimination experiences procedure was effective at increasing recognition of systemic bias or support for the Black Lives Mattermovement, although it increased motivation to combat systemic bias relative to the other two procedures.

These null findings will be further examined later in the discussion. However, the current research adds to existing literature and extends it by demonstrating that a discrimination experiences procedure produced a crossover effect such that participants were not only more motivated to combat systemic bias and support policies aimed at addressing inequality, but were also more motivated to self-regulate their own bias. Indeed, other researchers have shown that a discrimination experiences procedure (e.g., Carter & Murphy, 2017, Uluğ & Tropp, 2020) has some effects on systemic bias measures. Apparently, considering multiple individuals experiences with discrimination across situations does not just highlight individual experiences (Bonam et al., 2019; Unzueta & Lowery, 2008), but in reading about these "sum of individuals" (Henry, 2010), people grasp the pervasive and systematic nature of bias. This initial finding is particularly interesting in light of the numerous of strategies that have been extensively investigated for increasing awareness of and motivation to self-regulate personal bias (e.g., Monteith & Voils, 1998). While the method of these strategies varies, they all point out a person's *own* propensity for bias. In contrast, reading about discrimination experiences focuses on how Black people experience bias perpetuated by *other* people in various domains of life. We suspect that this strategy induced self-reflection on one's own biases, thus increasing their motivation to self-regulate their personal expression of bias.

Interestingly, while IMS did not interact with condition to predict any of the personal or systemic outcomes, IMS and condition did interact to predict all affect indexes (i.e., negself, negother, down, discomfort, and positive). Notably, replicating past research (i.e., Fehr & Sassenberg, 2010) all participants exposed to the IAT procedure experienced heightened negself, and this effect was stronger among higher IMS participants and differed significantly from participants exposed to the discrimination experiences and control procedures. Similarly, all participants exposed to the discrimination experiences procedure experienced heightened negother, and this effect was stronger among higher IMS participants and differed significantly from participants exposed to the IAT and control procedures.

Given such strong condition and IMS interactions predicting negative self- and negative-other directed affect, we investigated how these measures might then be associated with personal and systemic outcomes. A series of planned and exploratory moderated serial mediation analyses revealed results theoretically consistent with the extant research regarding self-regulation of prejudice (e.g., Monteith, 1993). More specifically, experiences that highlight people's biased

responses leads to feelings of self-disappointment and guilt. This affect subsequently triggers motivational and learning processes that increase people's subsequent ability to detect and reduce their biased responses (Burns et al., 2017; Monteith et al., 2002). In line with this research, among higher IMS participants, the IAT procedure triggered increased negative self-directed affect, which in turn was associated with increased acknowledgement of personal bias and, in turn, increased motivation to self-regulate personal bias.

There was also evidence of a crossover effect: among higher IMS participants, IAT-induced negative self-directed affect was associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias. Prior research has established the utility of negative self-directed affect in the self-regulation process (e.g., Chaney & Sanchez, 2018), yet these results suggests that it might also be associated with processes outside of self-regulation, such as systemic level outcomes. Finally, among higher IMS participants, completion of the IAT triggered increased negative other-directed affect, which in turn was associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias. Among higher IMS participants', behaving in unbiased ways is personally important (e.g., Plant & Devine, 1998). An indication of personal bias (i.e., from the IAT procedure) may cause participants to attribute their biases to others and society and as a result, they might exhibit increased negative other-directed affect, which is then associated with systemic outcomes.

On the other hand, for all participants (i.e., participants lower and higher on IMS) reading about discrimination experiences triggered increased negative other-directed affect, which in turn was associated with increased recognition of systemic bias and, in turn, increased motivation to combat systemic bias. This result is theoretically consistent with the collective action literature which shows that exposure to instances of discrimination spurs other-directed affect (e.g., anger), which leads to collective action intent on behalf of the marginalized group (e.g., Ellemers & Barreto, 2009). Finally, as expected, negative-other directed affect was not associated with increased acknowledgement of personal bias and motivation to self-regulate personal bias. This null result is theoretically consistent with the self-regulation process given that awareness of one's discrepant responses triggers negative self- but not negative other-directed affect, which leads to self-regulation.

In sum, moderated serial mediation analyses revealed a number of findings both consistent with past theory and research and extending prior work. However, additional tests of these

processes and outcomes are needed to determine whether they replicate. We also urge caution with interpretation given we did not find evidence of a direct effect of condition and its interaction with IMS when predicting the personal and systemic outcome measures.

Future Directions

Results suggested that the discrimination experiences procedure was ineffective at increasing recognition of systemic bias or support for the Black Lives Matter movement, although it increased motivation to combat systemic bias relative to the other two procedures. Does something else have to happen to increase recognition of systemic bias, like exposing participants to historical knowledge and learning about the origins, development and operation of systemic bias (consistent with the Marley hypothesis; e.g., Bonam et al., 2019)? Indeed, while research suggests that one way to acquire knowledge about bias is through exposure to people's experiences with discrimination, future research should investigate how historical education regarding systemic bias affects recognition of it. It might be the case that this procedure taps into other constructs (e.g., empathy) in such a way that motivates personal self-regulation and desire to combat systemic injustice while not providing learning opportunities about the nature of systemic bias. Other constructs should be investigated in future research to help clarify why this procedure is motivating personally and systemically.

In terms of the BLM movement, previous research has established that a discrimination experiences procedure (i.e., Uluğ & Tropp, 2020) has some effects on willingness to participate in collective action behaviors related to the BLM movement. However, our results indicated null findings in regards to this measure. One might be tempted to conclude that this null finding is due to a demand characteristic given the "summer of racial reckoning" and a new norm associated with BLM support. However, there was no ceiling effect associated with this measure and the standard deviation was relatively large which suggests variability associated with participants responses. Future research should be conducted to understand the nature of this null effect.

Additionally, investigating the effectiveness of two different strategies for increasing people's recognition of and motivation to self-regulate personal bias and their recognition of and motivation to combat systemic bias does not ensure corresponding behavioral changes. Future research should focus on demonstrating crossover effects in terms of judgmental and behavioral outcomes. For example, research might examine the generation of stereotypic inferences and

judgments to assess personal biases as well as willingness to engage in and time spent on activities geared towards social justice/advocacy to assess systemic bias.

Limitations

Despite the contributions of this work, there are limitations worthy of discussion. Research suggests that IAT feedback indicating bias can be experienced as threatening and trigger defensive reactions (e.g., Howell et al., 2015). As a result, recent research has developed a strategy to mitigate IAT feedback defensiveness (see Vitriol & Moskowitz, 2021) that is similar to the procedures used in the current research. However, defensiveness towards IAT feedback was not assessed in the present research, so we do not know whether participants, especially those lower on IMS, reacted defensively. Perhaps these defensive reactions may explain why the IAT procedure, relative to the control procedure, did not increase motivation to self-regulate bias. Future research should measure defensiveness to explore whether such reactions occur and if so with what implications.

Additionally, about twenty percent of participants did not seem to believe the IAT feedback that they received. Although results did not change when these participants were excluded, this begs the question about whether this procedure is the best for heightening personal bias awareness and motivation as well as examining crossover effects. Perhaps another procedure is better suited in terms of producing these effects. Future research can also improve understanding of precisely who is the target people people's negative other-directed affect. In the current research, participants reported the extent to which they were angry, irritated and disgusted with others, but we did not ask to whom their negative affect was directed. Understanding who the anger is directed towards will allow a better interpretation of any observed effects. In addition, assessing whether interventions prompt behavioral change will also be important, rather than focusing exclusively on self-reported awareness and motivations. Finally, while reading about ostensible Black Americans experiences with discrimination motivated participants to combat both their personal bias and systemic bias, such a procedure might be particularly costly for those who share their experiences and to other members of minority groups that experience discrimination. Indeed, research shows that underrepresented group members experience stereotype threat and reduced feelings of belonging when they are exposed to procedures highlighting bias against their group (Pietri et al., 2018). Therefore, in applied contexts, the way that these experiences are shared and

how they are shared is extremely important to consider and steps must be taken to mitigate any harmful outcomes for marginalized people.

CONCLUSION

This research investigated whether different experiences are required to increase awareness and motivation to combat personal and systemic bias. Whereas an IAT procedure raised awareness of personal bias, reading about Black people's discrimination experiences motivated people to combat systemic bias and support policies addressing inequality, and also motivated the self-regulation of personal biases. These procedures interacted with internal motivation to respond without prejudice to predict negative self- and negative other-directed affect which was then associated with various personal and systemic bias outcomes. Taken together, the present work highlights the effectiveness of certain strategies for raising awareness and motivation for combatting personal and systemic bias individually as well as how these strategies actually lead to motivation to combat bias at both levels.

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APPENDIX A

Personal Bias Condition

We are researchers who examine bias in relation to various groups. This study concerns bias in relation to Black Americans. We realize that this is a particularly sensitive issue especially now inour society. However, we want to assure you that all of your responses will remain completely anonymous. We cannot learn anything from this study unless you ae truly honest and candid.

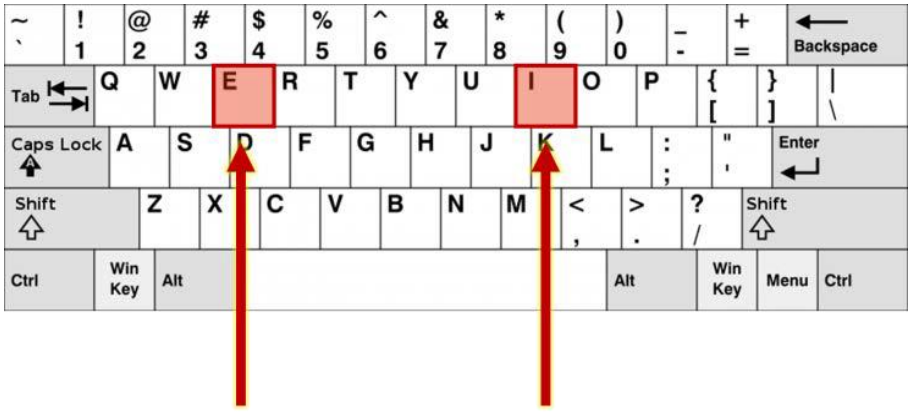
KNOWING YOUR IMPLICIT ATTITUDES

Please read the following instructions carefully. We want to make sure you understand the following task.

Over the centuries, philosophers, anthropologists, and psychologists have suspected that there are different kinds of attitudes. Specifically, scholars have argued that there are attitudes people express when they are asked about them and have time to think about their response - these are called "explicit attitudes." Some scholars have suggested that people might also have another set of attitudes, called "implicit attitudes," that may show up in spontaneous reactions. For instance, someone might say that they have a positive attitude toward spiders - that they are interesting andserve an important function in the ecosystem. However, when this person sees a big spider, they might have a very negative spontaneous reaction, at least initially.

Psychologists have developed a method called the "IMPLICIT ASSOCIATIONS TEST," or IATfor short. An IAT is supposed to measure your implicit attitudes. Think of them as yourspontaneous reactions towards different groups, people, and other targets. Those may be differentfrom the explicit attitudes you would report when you have had time to think about them.

You will be asked to categorize words and pictures that appear in the center of the screen to eitheryour left or your right **by pressing either the "E" (left) or the "I" (right) key on your keyboard(see below)** as fast as you can, while simultaneously making as few mistakes as possible. The taskis easiest if you keep your fingers on the "E" and "I" for the duration of the different tasks.



Implicit Association Test

In this task you will press the 'E' key (left response key) or the 'I' key (right response key) to categorize words and pictures into groups as fast as you can. Here are the four groups and the words and pictures that belong to them:

Category	Item
Good	Cheerful, Beautiful, Success, Smile, Delight, Positive, Enjoy, Joy, Wonderful, Helpful
Bad	Horrible, Terrible, Brutal, Hate, Ugly, Destroy, Angry, Tragic, Evil, Disaster
Black	
White	

IAT Feedback

Our records indicate that you have a preference for WHITE people over BLACK people.(All participants in this condition receive this feedback).

IAT Explanation Page 1

You just received results about how you performed on the IAT. What do those results mean? Pleaseread carefully. You will not be able to advance until a certain amount of time for reading has elapsed.

The result you just received may have been described as an automatic preference for White over Black people if you were faster responding when White and positive words were assigned to the same response key than when Black and positive words were assigned with the same key. Your result may have been described as an automatic preference for Black people over White people ifthe opposite occurred.

As we described earlier, people can hold both explicit and implicit attitudes. Explicit attitudes reflect consciously held attitudes and beliefs while implicit attitudes operate in largely unconscious, spontaneous, and automatic ways. This task is designed to measure implicit attitudespeople may hold about Black and White people. The ease with which a person associates one group (i.e., Black vs. White) with negative or positive words represents an implicit bias. Rememberthat implicit biases often operate in unconscious and automatic ways, so people may not be awarethat they have them.

IAT Explanation Page 2

Sometimes when people receive their IAT results and become aware of their implicit biases, theydeny that they hold implicit biases. For example, sometimes people think their test results are dueto the order in which they completed the test or whether they are left or right-handed. However, research indicates that such factors do not play a significant role in people's IAT results.

People can have an implicit bias towards a group, even if they do not actively endorse explicit biastowards that group and even if they consider themselves to be unbiased. These implicit biases arecaused by racial associations we are exposed to starting with when we are young, such as in the media. These implicit biases can influence our behavior and judgments without our awareness. Thus, awareness of these biases is critical.

Discrimination Experiences Condition

[FIRST PAGE]

Thank you for participating in this survey! We are researchers who examine bias in relation to various groups. This study concerns bias in relation to Black Americans. We realize that this is a particularly sensitive issue especially now in our society. However, we want to assure you that allof your responses will remain completely anonymous. We cannot learn anything from this study unless you are truly honest and candid.

Please continue to begin the survey.[SECOND PAGE]

The first thing we are going to have you do is read through and tell us your reactions in relation tofive experiences written by Black people. Specifically, we collected data from Black Americans aged 18-40 who completed an online survey in another study that we conducted. Each person doingthe current study receives a random sample of five essays written by Black people who completedthe previous study.

[THIRD PAGE]

Please read each experience **carefully,** as questions will immediately follow to test your knowledge.

[FOURTH PAGE]

I remember being pregnant with my first child. My previous doctor moved and so this was my first appointment with my new doctor. She told me that I was officially 35 week and the baby seemedto be doing oK. But when I think about it the appointment was strange and it always comes back to my mind. This White doctor (I'm Black) didn't look me in the eye during the whole appointmentand examination and I felt like she didn't listen to any of my concerns. Like I was trying to tell herabout some slight cramping and pain I'd had but she kept cutting me off. It was very upsetting honestly.

My roommate and I were looking for a new apartment off campus & so were two of our good friends. They recommended this one rental company because they said they had some real good options. After talking to the leasing agent at over the phone, we were really looking forward to ourfirst meeting. But when we met the agent, we were disappointed and irritated that he didn't recommend all of the apartments in various neighborhoods to us as he did with our friends. Insteadthe options that he found for us was only a few. Also when we expressed to the agent what neighborhoods we would be interested in living like closer to campus, this wasn't taken into account and the apartments came from neighborhoods all the way across town. We were really confused and irritated with this experience considering that our friends said this leasing agent wasso great. The only difference between our friends and us is we're Black and they're White but I didn't think this could be the reason. Or maybe it was. I feel so tired when I have experiences likethis and they seem to be because of my race.

At the end of my second year of high school, I remember that me and my friend, Rachel got our appointments with the guidance counselor. We both decided to talk to him about registering for afew AP courses. We figured this would be a good chance for us to start these classes to work on getting college credit and we both had did so good in all of our courses so far. The guidance counselor basically said it he didn't think that I could handle the AP courses. He told me that afteranother year or two maybe I would be ready but seemed concerned that AP classes would be too difficult for me. When I met up with Rachel later that day to ask how her meeting went, she said it went fine. He recommended she take 3 AP courses!! I felt so confused and bad about myself. Rachel and I had both done well in our classes. I has heard that Black students are often tracked into lower level classes & I still wonder if this is what happened to me.

I was rushin to work one day and all of a sudden a heard the police. I pulled over quick. The officerwalked slowly up to my window which I already rolled down. He asked me for my license and registration so I reached over to my glove compartment to pull it out but he stopped talking fast and pulled out his gun and pointed it right at my face. He was yelling at me to stop and put my hands in the air. I was real scared. But then I guess he saw the registration lying on the floor in mycar and slowly started to put his gun down. He told me it was just a precautionary measure. Yeahright. Then he put the gun back in the holster and asked for my license and registration again. Afterthat, luckily I was back on my way to the office but I couldn't help but wonder if everyone got this"precautionary measure" or it's because I'm a Black man. I was really shook by the whole thing.

I remember I went shopping at one of my favorite stores. I go in their a lot so the employees knowme by name. the store had a shift in management so they had hired som new people. When I was shopping I noticed some of the new employees kept eyeing me pretty much everywhere I walkedin the store. I thought "here we go again , following the Black dude everywhere he go". I even bumped into one of them on accident because she was hovering around me so much. I asked her if she needed something but she said she was just putting some things away. The whole experiencewas so irritating. Even though it is one of my favorite stores I'm not sure if I even wanna shop their anymore.

Following each discrimination experience, participants answered three comprehension questions

Discrimination Experience #1- Comprehension Questions

1. How many weeks pregnant was this person?
    - 15 weeks
    - 20 weeks
    - 35 weeks
2. Why was the person being seen by a new doctor?
    - They moved to a new town
    - The doctor moved away
    - Their doctor was on vacation at that time

Discrimination Experience #2- Comprehension Questions

1. The neighborhoods that the agent recommended to the students were
    - on campus
    - all the way across town
    - a short walk to campus
2. Who recommended the leasing agent to the narrator?
    - A professor
    - Their RA
    - Their friends

Discrimination Experience #3- Comprehension Questions

1. What were their friend's name?
    - Monica
    - Rachel
    - Sarah
2. How many AP courses were recommended for the narrator's friend?
    - 1
    - 2
    - 3

Discrimination Experience #4- Comprehension Questions

1. Where was this person headed when they were pulled over?
    - To their job
    - To their house
    - To the store
2. What item was lying on the floor of the car?
    - Wallet
    - Registration
    - Car keys

Discrimination Experience #5- Comprehension Questions

1. Please select the correct response for the next statement based on the experience you just read about. One of the employees_____this person?
   - smiled at
   - helped
   - followed
2. Please select the correct response for the next statement based on the experience you just read about. Prior to this incident, the employees at the store always__?
   - knew him by name
   - gave him a discount
   - asked him to apply to work there

If participants missed an item, they were shown this message:

You have answered the question "The neighborhoods that the agent recommended to the students were _____." incorrectly. This study requires that you read each experience **carefully.** Please read more carefully from now on.

They then re-answered the question that they missed.

Control Condition

[FIRST PAGE]

Thank you for participating in this survey! We are researchers who examine bias in relation to various groups. This study concerns bias in relation to Black Americans. We realize that this is a particularly sensitive issue especially now in our society. However, we want to assure you that allof your responses will remain completely anonymous. We cannot learn anything from this study unless you are truly honest and candid. However, the first thing we are going to have you do is unrelated to bias. This involves your preferences to various consumer products.

[SECOND PAGE]

On the following pages you will be presented with various consumer products. You will read abouttwo different types of the same product and then select which type you prefer. For example, you might be presented with two different types of water (e.g., Dasani and Aquafina). You will read adescription of both and then rate which type of water that you prefer **based on what you have read.** Please read the description of each product in its entirety before selecting a preference.

Please continue to begin the survey.

Amazon - Fire HD 8 10th Generation - 8" - Tablet - 32GB - White

Enjoy the latest videos and games with this 10th Gen Amazon Fire HD tablet. The 32GB of storage accommodates plenty of media files and apps, while the lithium-ion polymer battery lasts for up to 12 hours for reliable availability. This Amazon Fire HD tablet features 2GB of RAM and a quad-core processor for seamless multitasking.

Great tablet

Posted 2 weeks ago.
Owned for 1 month when reviewed.
Its a great tablet overall I like the older versions better as they were a bit more durable. These are my go to because I love the insurance plan. I accidentally dropped this one while out if its case cleaning it not long ago and the whole screen shattered and it landed on the back. With the older version they never broke the first drop. Other than that great tablet!!
first tablet
|
Posted 3 weeks ago.
Owned for 3 weeks when reviewed.
Purchased this tablet for my wife for Christmas, we are both senior citizens, and not computer wizards. My wife has found this tablet to
serve her needs. She now can read books, play her games,
and do her e-mail on a larger, brighter screen. The battery lasts a long time and no problems or issues with this tablet.
This review is from Amazon - Fire HD 8 10th Generation - 8" - Tablet - 32GB - Black

Samsung Galaxy Tab A (2019) - Wi-Fi - 32 GB - Silver - 8"

- Enjoy your favorite movies and videos with its large 8" display
- Its expandable storage capacity of up to 512 GB lets you store your data conveniently
- Comes with dual speakers to offer an immersive audio listening experience

Sleek Thin Lightweight Tablet Great Battery Life

★★★★ October 20, 2020

PROS:
This new Galaxy Tab A 8.0" allows me to create notes, surf the web, watch you tube videos, play different styles of games, watch my favorite tv shows and movies with good enough data upload and download speeds. It's lightweight and thin design is extremely comfortable to hold in my hands with it's ever so sleek, lightweight and thin design. I am really impressed with it overall.
It has a long-lasting battery, which is a positive feature that's important to me because I tend to stay on my devices for hours. The screen is larger than some tablets I've owned with very clear graphics and words with brilliantly bright colors that attracted my eyes! This feature is one of my favorites because larger screens are easier for me to manage and clearly see. This tablet has amazing visual graphics that are extra crisp and clear!
CONS:
At times the processor does run a little slow, at times. It could be a much better tablet if the processor had been created to run faster.
Another con, I've noticed that since there is no screen protector included in the original product box, the screen does easily get scratches that's visible to my eye when screen is solid black.

SAMSUNG vs. AMAZON

When deciding on a tablet, do you prefer the Samsung or Amazon Fire Tablet?

...a lot more positive toward **SAMSUNG** -3	...moderately more positive toward **SAMSUNG** -2	...slightly more positive toward **SAMSUNG** -1	...the same 0	...slightly more positive toward **AMAZON** 1	...moderately more positive toward **AMAZON** 2	...a lot more positive toward **AMAZON** 3
○	○	○	○	○	○	○

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Gain

Gain Flings Original Scent, 96 ct Laundry Detergent Pacs

$21.44

HIGHLIGHTS

- 3-in-1: Gain detergent, Oxi Boost, and Febreze Freshness
- 6 weeks of freshness from wash until wear
- 50% more scent than Gain liquid laundry detergent
- Works in all washing machines even in cold water
- Keep out of reach of children

ABOUT THIS ITEM

Gain flings! laundry detergent pacs are packed with 50% more scent than Gain liquid laundry detergent. Armed with the stain-fighting power of Oxi and Febreze, they give you nothing but great, clean, amazing-smelling laundry. Use with any laundry set-up, because Gain flings! Pacs dissolve in both hot and cold water and are HE compatible. Gain's refreshing Original Scent infuses your clothes with the fragrance of the green, clean, airy outdoors, so you're always just one quick sniff away from the most invigorating scent experience known to humankind.

Tide Pods Free & Gentle, 96 Ct Laundry Detergent Pacs

$21.44

HIGHLIGHTS

- Hypoallergenic. Dermatologist Tested. Free of dyes and perfumes
- 3-in-1: detergent, stain remover, color protector
- Each pac of Tide Pods Free & Gentle provides a deeper clean (versus the leading Free detergent) that's gentle on skin
- 1 laundry pac for regular loads, 2 pacs for large loads and 3 pacs for extra large loads
- Tide PODS laundry pacs dissolve quickly in hot & cold
- Keep out of reach of children

ABOUT THIS ITEM

Taking care of sensitive skin doesn't have to be hard. Each Tide PODS contains breakthrough 3-in-1 laundry solution with super-concentrated detergent, stain remover and color protector that is specially designed free of dyes and perfumes. Simply put in one pac for most loads, but use two pacs for large loads and three pacs for extra large loads. For a simple, worry-free laundry experience that's gentle on skin, Tide PODS Free & Gentle laundry detergent will keep your family looking and feeling great. It outperformed the leading free detergent on 10 different stains (1). Unlike many other HE detergents that can slow washers down because of too many suds, Tide HE Turbo contains quick collapsing suds and targets tough stains. So you can get amazing results without the extra rinse cycles to remove the suds. (1) under standard single-wash conditions on Polycotton fabric in a standard top-loading washer

GAIN vs. TIDE

When deciding on laundry detergent, do you prefer Tide or Gain?

...a lot more positive toward **GAIN** -3	...moderately more positive toward **GAIN** -2	...slightly more positive toward **GAIN** -1	...the same 0	...slightly more positive toward **TIDE** 1	...moderately more positive toward **TIDE** 2	...a lot more positive toward **TIDE** 3
○	○	○	○	○	○	○

>>

Safety 1st Grow and Go 3-in-1 Convertible Car Seat

The Scoop

- All-in-one-seat at a great price
- Lighter weight than many similar all-in-ones
- Fits a wide range of babies and kids

What Our Experts Say

It's definitely possible to get a safe, all-in-one convertible car seat at a great price. The Grow and Go works as a rear-facing, forward-facing and eventually a belt-positioning booster seat. It has three recline positions, two cup holders and a seat pad that snaps on and off for when you need to throw it in the wash. You can easily adjust the harness and headrest in one step, and built-in harness holders keep annoying straps from getting in the way when you're trying to pull your little one out of the car seat.

What's Worth Considering

Some parents don't like that the headrest on this car seat doesn't go as high up as other brands. There are also less recline positions than lots of other seats. And the Grow and Go can be difficult to install, so watching a few videos on how to do it might help.

What Babylist Parents Say

"I like the low price for a high-quality car seat. The seat is durable and easy to use and clean." -C.W.

Additional Specs

Child Guidelines	Rear facing: 5-40 lbs and 19-40"; forward facing: 22-65 lbs and 29-52"; belt-positioning booster: 40-100 lbs and up to 52"

Graco Extend2Fit Convertible Car Seat

The Scoop

- Safe, affordable choice
- Easy install
- Wide seat, not ideal for three-across

What Our Experts Say

The Extend2Fit is an affordable convertible car seat that's a consistent favorite for three main reasons: a high rear-facing weight limit, easy installation and
a great fit in almost any type of car.
The 50-pound weight limit means that kids can stay rear-facing for longer than many other convertible seats.
Since the seat can sit almost upright when rear-facing, it allows for taller parents or those with smaller cars to still get a good fit.

What's Worth Considering

The seat's cup holders are required to be attached, making the seat on the wider side and not a great choice if you're looking for more room in your back seat or need to install three seats across.

What Babylist Parents Say

"Love how you can use it as they grow! Plus, it is super comfy." -Victoria

Additional Specs

Child Guidelines	Rear facing: 4-50 lbs; forward facing: 22-65 lbs and up to 49"

GRACO vs. SAFETY 1ST GROW

If deciding on the best infant car set, do you prefer the Graco or Safety 1st grow?

...a lot more positive toward **GRACO** -3	...moderately more positive toward **GRACO** -2	...slightly more positive toward **GRACO** -1	...the same 0	...slightly more positive toward **SAFETY 1ST GROW** 1	...moderately more positive toward **SAFETY 1ST GROW** 2	...a lot more positive toward **SAFETY 1ST GROW** 3
○	○	○	○	○	○	○

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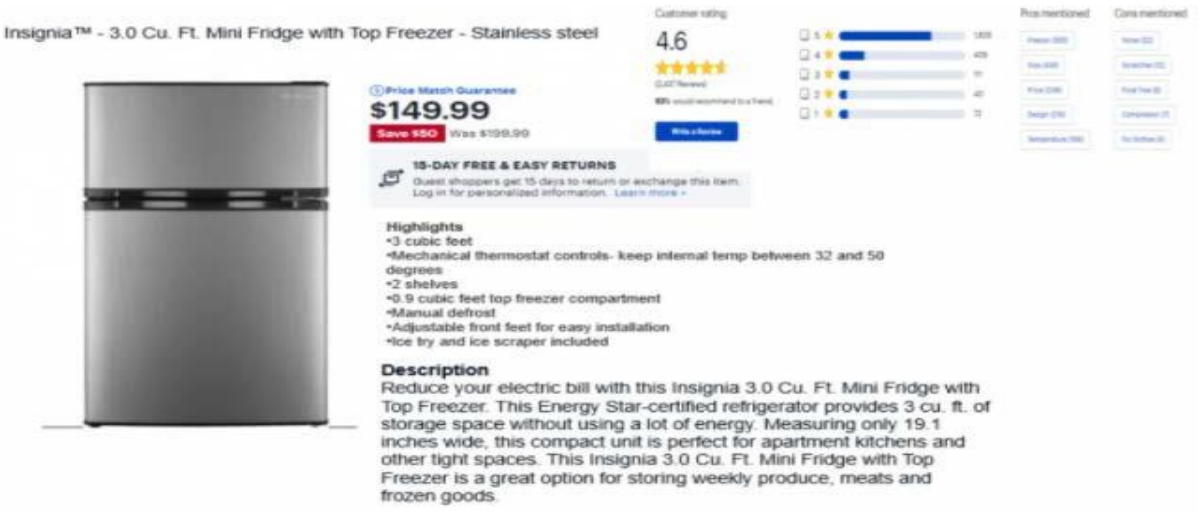

WHIRLPOOL vs. INSIGNIA

When deciding on a mini fridge, do you prefer a Whirlpool or Insignia minifridge?

...a lot more positive toward **WHIRLPOOL** -3	...moderately more positive toward **WHIRLPOOL** -2	...slightly more positive toward **WHIRLPOOL** -1	...the same 0	...slightly more positive toward **INSIGNIA** 1	...moderately more positive toward **INSIGNIA** 2	...a lot more positive toward **INSIGNIA** 3
○	○	○	○	○	○	○

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Campingsurvivals Mountain Bike, Adult Folding 21 Speed Steel Bicycle with Riding Bag,24in/26in Wheel

HIGHLIGHTS

- •Disc brakes guarantee excellent braking.
- •Portable, durable, light and easy to carry and ride.
- •Comfortable grip and special design to increase friction pedal, comfortable seat.
- •21 super smooth speeds, suitable for different terrain.

ABOUT THIS ITEM

High-quality steel frame

The overall structure of the mountain bike is made of high-quality high-carbon steel, and the welding technology is tightly connected. It is resistant to falling, waterproof and rust, and can be used for a long time.

24"/26" extra thick rubber tire

The extra-thick rubber is puncture-resistant, reducing the risk of tire blowouts during use. The rolling resistance provided by the all-terrain tread is less than that of typical mountain bike tires. The sturdy and impact-resistant rim prevents tire deformation.

Handle shift lever, easy to change gears

The handle is designed with a handle shift lever, the front wheel can adjust three gears, and the rear wheel can adjust seven gears, which can realize 21 super smooth speed changes. Cope with different terrain use.

Folding design, easy to transfer

The body can be folded out and equipped with a quick release clip, you can quickly fold the bicycle, and can put it in the trunk of the car, or store it in the corner of the family.

Hyper 26" Shocker Men's Dual Suspension Mountain Bike, Black

HIGHLIGHTS

- •Shimano equipped
- •Hyper mountain bike has 18-speed twist grip shifting
- •Suspension steel frame with suspension fork
- •Black mountain bike has front and rear linear pull brakes
- •Hyper men's bike features an alloy quick release seat clamp
- •Assembled dimensions: 67" L x 42" H x 24" W
- •Brakes: linear pull front and rear brakes
- •Seat: deluxe padded
- •Frame: steel
- •Wheel type: 26" spoked wheel
- Tires: 26" x 2.25" knobby tires
- Pedals: resin platform pedals
- 3-piece high-performance crank
- Rear derailleur
- Comes in black with authentic Hyper graphics
- Ensures a comfortable ride every time
- This Shimano bike is suitable for on- and off-road surfaces
- Supports maximum weight of 250 lbs
- •Rider Height: 5'2" - 5'10"

ABOUT THIS ITEM

Enjoy a comfortable ride with the Hyper 26" Shocker Men's Dual Suspension Mountain Bike. It features a strong steel frame, front fork and powerful linear pull front and rear brakes, so it's ready to take on any adventure. The knobby tires and the easy-to-use, 18-speed twist-grip shifting on this black mountain bike make it fun for cruising in the park or hitting the back trails. Plus, it has a deluxe padded MTB seat with an alloy quick-release clamp that allows for easy adjustment of the seat height. Other features on this Hyper mountain bike include spoked wheels, resin platform pedals and a rear derailleur. There is also a three-piece high-performance crank. The authentic graphics complete the look and give this black mountain bike a stylish appearance.

CAMPINGSURVIVALS vs. HYPER 26"

When deciding on a mountain bike, do you prefer a camping survivals or Hyper 26" dual suspension bike?

...a lot more positive toward CAMPINGSURVIVALS	...moderately more positive toward CAMPINGSURVIVALS	...slightly more positive toward CAMPINGSURVIVALS	...the same	...slightly more positive toward HYPER 26"	...moderately more positive toward HYPER 26"	...a lot more positive toward HYPER 26"
-3	-2	-1	0	1	2	3
○	○	○	○	○	○	○

>>

APPENDIX B

Internal Motivation to Respond without Prejudice Scale(Plant & Devine, 1998)

Instructions: Use the scale below to indicate your level of agreement with each of the following items. Use "1" to indicate strong disagreement, "9" to indicate strong agreement, and intermediate numbers to indicate intermediate levels of agreement.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. I attempt to act in nonprejudiced ways toward Black people because it is personally important to me.

2. According to my personal values, using stereotypes about Black people is OK. (R)

3. I am personally motivated by my beliefs to be nonprejudiced toward Black people.

4. Because of my personal values, I believe that using stereotypes about Black people is wrong.

5. Being nonprejudiced toward Black people is important to my self-concept.

APPENDIX C

Acknowledgement of Personal Bias Scale (adapted from Perry et al., 2015; Hahn & Gawronski, 2019)

Instructions: The following items concern your personal attitudes and beliefs. Please indicate howmuch you agree or disagree with each of them. There are no right or wrong answers, we are interested in your hones self-assessment.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. Whether I want it or not, my spontaneous reactions towards Black people may be racially biased.
2. I have no racial bias towards Black people. (R)
3. I am aware that my immediate reactions toward Black have the potential to be racially biased.
4. My first reactions to a person who is Black would *never* be influenced by their racialbackground. (R)
5. I recognize that stereotypes about Black people could pop into my mind unintentionally.
6. I recognize that stereotypes and unintentional biases could influence my behavior towards Black people.
7. I believe that I hold some unconscious negative attitudes toward Black people.
8. When talking to Black people, I may be unintentionally acting in a prejudiced way.
9. I recognize that I have unconscious biases toward Black people.

APPENDIX D

Motivation to Self-Regulate Personal Bias Scale

Instructions: The following items concern your personal motivations. Please indicate how much you agree or disagree with each of them. There are no right or wrong answers, we are interestedin your honest self-assessment.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. I am motivated to be on guard so that stereotypes do not affect my judgments about Black people.
2. Frankly, I am not worried about monitoring my words and actions so that they are non-prejudiced. (R)
3. I am willing to experience some guilt if it will help me to learn not to behave in biased ways toward Black people.
4. I want to put effort into preventing my automatic attitudes from influencing the way I treat Black people.
5. I'm willing to learn more about my biases so that I can behave in non-prejudiced ways toward Black people.
6. After doing this study, I am more motivated to reduce any racial bias that may affect my judgement and behavior towards Black people.

APPENDIX E

Recognition of Systemic Bias Scale
(adapted from Henry & Sears, 2002; Adams et al., 2008; Shin et al., 2016)

Instructions: Please indicate how much you agree or disagree with each of the followingstatements.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. I recognize that because of racism, Black people and White people have fundamentally different life experiences and outcomes.

2. To reduce racial bias, sweeping changes are needed across society (for example, education, health, housing, criminal justice).

3. Policies and procedures in various institutions in society lead Black people to have worse life outcomes than White people.

4. I recognize that racism is embedded in the legal, educational, and economic systems withinour society.

5. Generations of slavery and discrimination have created conditions that make it difficult for Black people to work their way out of the lower class.

6. Due to policies and procedures in the U.S., Black people have gotten more economically thatwhat they deserve (R).

7. Structural and institutional racism in society (e.g., racist laws, policies, customs) is responsiblefor racial inequality.

8. Overall, White people are the most successful group because they work the hardest (R).

APPENDIX F

Motivation to Combat Systemic Bias Scale (adapted from Rapa et al., 2020)

Instructions: Please indicate how much you agree or disagree with each of the followingstatements.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. I am motivated to do what I can to correct social and economic inequality that disadvantages Black people.
2. Frankly, I would not bother to confront someone who says something that is racist or prejudiced. (R)
3. It is my responsibility to get involved and to work towards achieving equality for Black Americans.
4. I should participate in the political activity surrounding civil rights laws and equitabletreatment of Black people.
5. I want to put effort into preventing racial bias from affecting Black people.
6. I'm willing to learn more about how systemic bias operates in society (e.g., in housing education, healthcare) so that I can get involved with combatting it.
7. After doing this study, I am more motivated to take action like signing petitions and attending peaceful protests to support the reduction of racial bias embedded in society's institutions.

APPENDIX G

Black Lives Matter Attitudes Scale (adapted from Holt & Sweitzer, 2020)

Black Lives Matter (BLM) is an international activist movement, originating in the African-American community, that campaigns against violence and systemic racism towards black people. BLM regularly holds protests speaking out against police killings of black people, and broader issues such as racial profiling, police brutality, and racial inequality in the United Statescriminal justice system.

Instructions: Please indicate how much you agree or disagree with each of the followingstatements about BLM.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. I support the BLM movement.
2. The BLM movement wants to make the world a better place for all people.
3. The BLM movement behaves in ways that are justifiable to obtain their goals.
4. The BLM movement has a positive set of goals.
5. The BLM movement is a threat to American society. (R)
6. The BLM movement wants to cause conflict between groups (e.g., between Black people and White people). (R)
7. This movement ignores the struggles of other racial groups. (R)

APPENDIX H

Support for Policies that Address Racial Inequality (Kaiser et al., 2009)

Instructions: Please indicate how much you agree or disagree with each of the followingstatements.

Strongly Disagree				Neutral				Strongly Agree
1	2	3	4	5	6	7	8	9

1. Affirmative action programs are still needed today.
2. Desegregation programs that ensure diversity in public schools are still necessary today.
3. Businesses should increase their efforts to promote diversity in the workplace.
4. Efforts should be made to promote equal access to healthcare for minorities.

APPENDIX I

Affect Scale (Monteith, 1993)

Instructions: Oftentimes, researchers are interested in how people feel after completing study tasksand procedures. Below are a list of items describing certain feelings. Please indicate the extent towhich each item applies to you at this moment using provided scale. When answering each item, please consider how you feel ***at this moment.***

Does not Apply at all						ɔlies verymuch
1	2	3	4	5	6	7

1. disappointed with myself
2. regretful
3. anxious
4. helpless
5. energetic
6. guilty
7. bothered
8. uneasy
9. friendly
10. frustrated
11. happy
12. irritated at others
13. angry at others
14. angry with myself
15. depressed
16. sad
17. good
18. optimistic
19. disgusted with others
20. annoyed with myself
21. self-critical
22. low
23. uncomfortable
24. shameful
25. embarrassed
26. dissatisfied
27. fearful
28. tense
29. threatened
30. amused
31. content
32. disgusted with myself

APPENDIX J

Thought Listing Task (adapted from Cacioppo et al., 1979)

We are interested in what went through your mind while you completed the task before you ratedyour feelings. In the space provided below, please list all of the thoughts that occurred to you whilecompleting this task, whether they were about yourself, the task, and/or others, and whether they were positive, neutral, and/or negative.

APPENDIX K

Demographics

Geographic: What part of the United States are you from?

Response Options: New England, Mid-Atlantic States, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, Pacific, I am not from the listed areas in the United States (please specify)

Age: What is your age?

Free Response

Race: With which racial/ethnic group(s) do you identify?

Response Options: African American/Black; Asian, Asian American; Caucasian/White; Middle Eastern (Non-Arab); Middle Eastern (Arab); Hispanic or Latino/a; Native American; Biracial Multiracial; A different identity

Gender: With which gender do you identify?

Response Options: Man; Woman; Nonbinary; Agender; Genderfluid; Gender non- conforming; Transgender man; Transgender woman; I prefer a different term

Citizenship: Are you a citizen of the United States? *Yes/No*

Sexual Orientation: How would you describe your sexual orientation?

Response Options: Heterosexual or straight, Gay/lesbian, Bisexual, I don't know, I'd rather not say, Pansexual, Asexual, I prefer a different term (if you wish please specify)

Political Orientation: Please indicate your political orientation (from very liberal to very conservative) on the provided scale.

Very Liberal — Very conservative

1 2 3 4 5 6 7

Alone: Did you complete this survey and answer all questions alone? Please be honest; yourresponse to this question will not influence whether or not you receive credit.

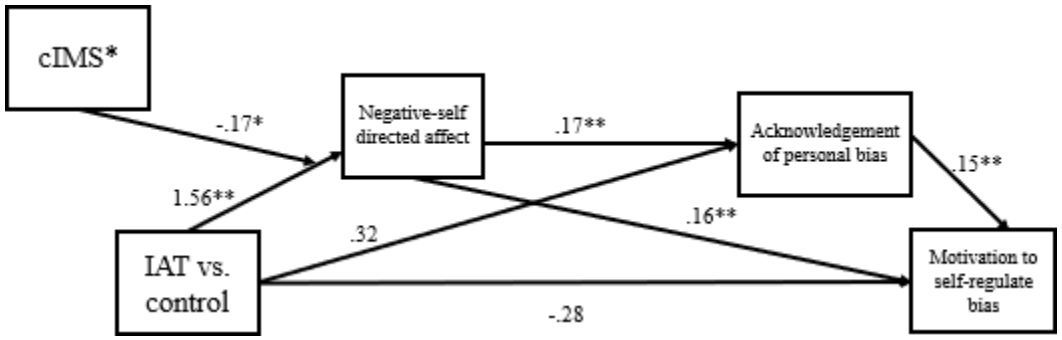
Response Options: I completed this survey alone; I completed this survey alone, but someone was looking at the screen and saw most or all of my answers; I completed this survey together with another person.

Distraction: Were you doing anything while taking this survey? (e.g., Facebook, watching TV, hanging out with friends). Please be honest; your response to this question will not influence whether or not you receive credit.

Response Options: No/Yes (please specify what you were doing in the space provided).

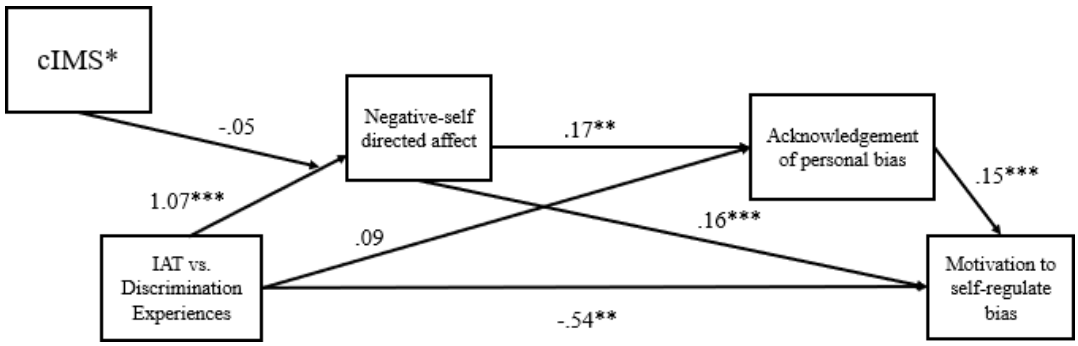
APPENDIX L

Panel A



*Only held for higher IMS (+1 SD) participants.

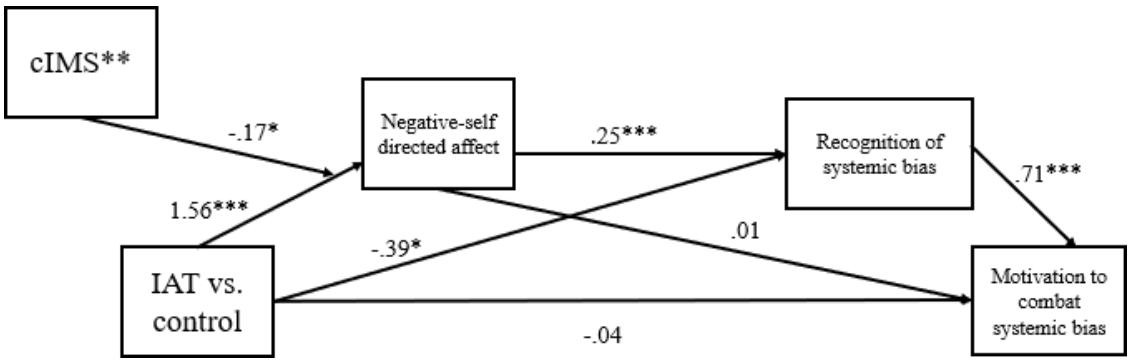
Panel B



*Only held for higher IMS (+1 SD) participants.

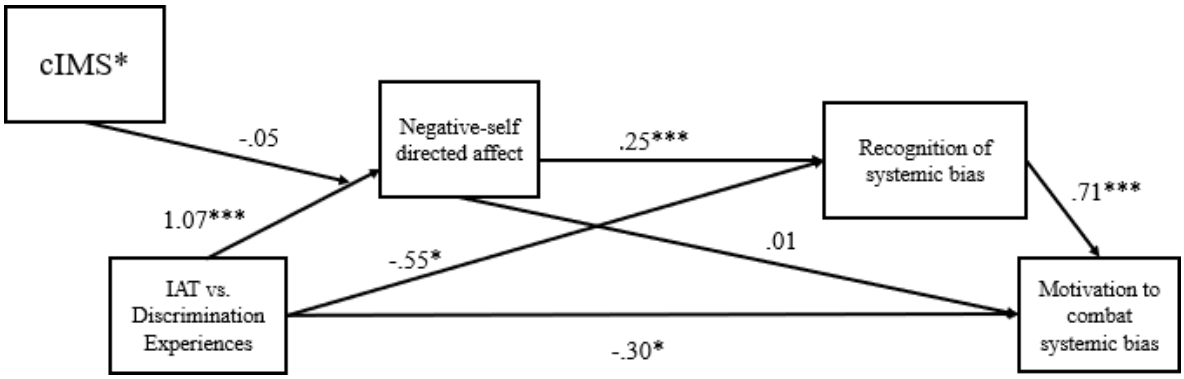
Figure 6. The Effect of Condition (IAT vs. Control - Panel A) (IAT vs. Discrimination Experiences - Panel B) and IMS on Motivation to Self-Regulation, Mediated by Negself andAcknowledgement of Personal Bias.

Panel A



**Held for both higher IMS (+1 SD) and lower IMS (-1 SD) participants.

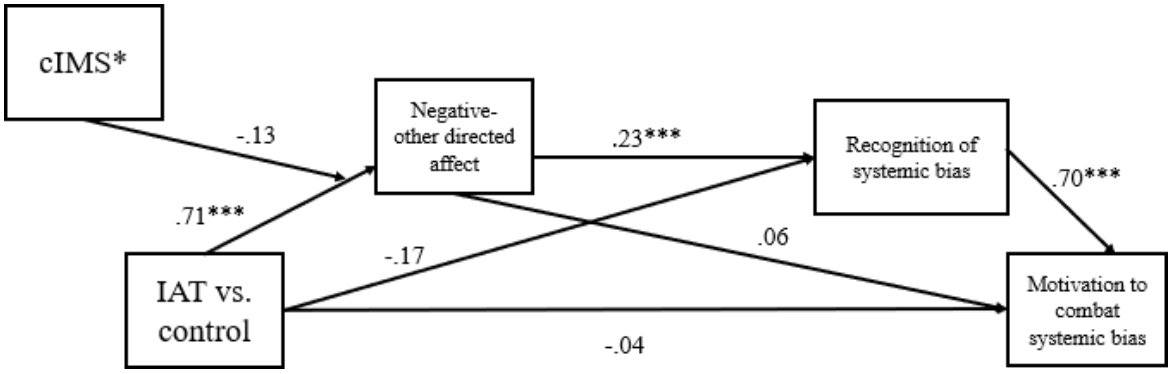
Panel B



*Only held for higher IMS (+1 SD) participants.

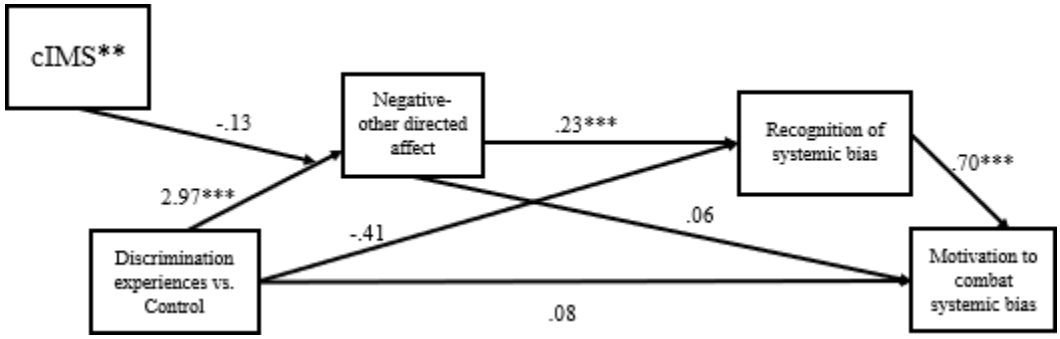
Figure 7. The Effect of Condition (IAT vs. Control - Panel A) (IAT vs. Discrimination Experiences - Panel B) and IMS on Motivation to Combat Systemic Bias, Mediated by Negselfand Recognition of Systemic Bias.

Panel A



*Only held for higher IMS (+1 SD) participants.

Panel B



**Held for both higher IMS (+1 SD) and lower IMS (-1 SD) participants.

Figure 8. The Effect of Condition (IAT vs. Control - Panel A) (Discrimination Experiences vs. Control - Panel B) and IMS on Motivation to Combat Systemic Bias, Mediated by Negother and Recognition of Systemic Bias