HAVING EXPLICIT-IMPLICIT EVALUATION DISCREPANCIES TRIGGERS RACE-BASED MOTIVATED REASONING

Tonya M. Shoda and Allen R. McConnell *Miami University*

Robert J. Rydell Indiana University

> This work examined whether people with divergent explicit and implicit evaluations of African Americans exhibit motivated and biased judgments that could have negative repercussions for members of that group. Specifically, we proposed that participants with relatively more positive explicit evaluations and relatively more negative implicit evaluations of African Americans (i.e., greater explicit-implicit evaluative discrepancies) would engage in motivated reasoning, producing bias against group members. In Study 1, explicit-implicit evaluative discrepancies predicted setting higher standards for competence in domains where Whites are expected to excel and establishing lower standards for competence in domains where African Americans are expected to excel. In Study 2, larger explicit-implicit evaluative discrepancies predicted greater biased assimilation and attitude polarization when an African American (vs. a White) author presented a counterattitudinal message. Thus, having inconsistent explicit and implicit evaluations of a social group can instigate motivated reasoning, providing an avenue to denigrate out-group members and their opinions.

Although many people believe their social perceptions reflect thoughtful, unbiased processes, research suggests otherwise (e.g., Bargh & Chartrand, 1999; Nisbett & Wilson, 1977). In the area of attitudes, our explicit (more controllable and deliberately reported) and implicit (uncontrollably activated and association based) evaluations can diverge. These divergent evaluations stem from heteroge-

Tonya M. Shoda, Allen R. McConnell, Department of Psychology, Miami University. Robert J. Rydell, Department of Psychological and Brain Sciences, Indiana University. This work was supported by the Lewis Professorship.

Address correspondence to Allen R. McConnell, Department of Psychology, Miami University, Oxford, OH, 45056; E-mail: allen.mcconnell@miamioh.edu.

neous mental representations of attitude objects (e.g., Gawronski & Bodenhausen, 2006; Petty, Briñol, & DeMaree, 2007; Rydell & Gawronski, 2009), which in turn affect people's evaluations of and behaviors toward them (e.g., Dovidio, Kawakami, & Gaertner, 2002; McConnell & Leibold, 2001).

Divergent explicit and implicit evaluations can result for many reasons (McConnell & Rydell, 2014; Rydell & McConnell, 2010). For example, McConnell, Rydell, Strain, and Mackie (2008) showed that the valence strongly associated with a target individual's social group membership (e.g., negativity associated with obese individuals) determine one's implicit evaluations of a new target individual whereas descriptive accounts of the same person's actions shape explicit evaluations of the target. Thus, people's explicit and implicit evaluations can be inconsistent, a state known as implicit ambivalence because it is associated with outcomes similar to traditional attitude ambivalence (e.g., increased information processing to resolve inconsistency) even though people do not report having mixed feelings about the attitude object (Petty & Briñol, 2009).

In these situations, important downstream consequences may result. For example, a male African American politician who is explicitly regarded in a relatively positive light could also have negative implicit evaluations reflecting prejudice associated with his race (McConnell et al., 2008). The current research builds on past implicit ambivalence work by examining how this state may bias judgments and decisions. We considered whether such evaluative discrepancies might trigger biased information processing that increases unfair treatment of target group members. We hypothesized that such a target individual might receive surprising amounts of scrutiny even from perceivers who report relatively positive attitudes toward his group.

Motivated reasoning research documents that people find creative ways to distort information in self-serving ways (Kunda, 1990). People can be motivated to set behavioral trait standards that are self-serving (e.g., Dunning & Cohen, 1992) and can work hard to discredit non-congenial arguments to arrive at desired conclusions (e.g., Lord, Ross, & Lepper, 1979). For example, in biased assimilation research, perceivers use additional processing resources to argue against counterattitudinal evidence to maintain preferred beliefs (e.g., Ditto, Scepansky, Munro, Apanovitch & Lockhart, 1998; Munro & Ditto, 1997). Motivated reasoning can be enhanced by additional information processing (e.g., using counter-arguing to discredit counterattitudinal information), increasing information scrutiny to render motivated conclusions (Kunda, 1990).

Here, we examined if people holding explicit and implicit evaluation discrepancies (EIEDs) will reveal greater motivated reasoning. Past research has shown that EIEDs lead to more effortful information processing. For example, Briñol, Petty, and Wheeler (2006) showed that holding discrepant explicit and implicit self-conceptions (e.g., beliefs about one's own shyness) led to more extensive information processing of persuasive arguments relevant to the discrepancy. Similar enhanced information processing was observed for perceivers holding EIEDs about novel target individuals when reading their persuasive arguments (Rydell, McConnell, & Mackie, 2008). However, the current work considered the novel possibility that this extra cognitive effort might be devoted to motivated reasoning. Motivated reasoning results from the application of directional goals to judgment and deci-

sion making (e.g., Kunda & Sinclair, 1999) and often results from effortful but biased scrutiny and skepticism (e.g., Ditto et al., 1998). Because EIEDs trigger greater information processing (e.g., Briñol et al., 2006; Rydell et al., 2008), we anticipated that people holding stronger EIEDs about a target might be more likely to reveal motivated reasoning.

We examined racial attitudes because past work shows that many Whites who report explicit positive evaluations of Blacks have relatively more negative implicit evaluations of them (e.g., Greenwald, McGhee, & Schwarz, 1998). We explored the impact of race-related EIEDs in two different domains: biased standards for competence (Study 1) and biased processing of counterattitudinal arguments (Study 2). We anticipated that as the discrepancy between one's explicit and implicit racial evaluations grows, stronger motivated reasoning would be revealed (i.e., setting competence standards that disadvantage African Americans, scrutinizing counterattitudinal positions more when advocated by a Black author than by a White author). Returning to our initial example, an African American politician might experience greater *effortful scrutiny* from perceivers with mixed racial attitudes than from those whose attitudes are either uniformly positive *or uniformly negative*.

Although we expect that any EIED should instigate greater information processing (see Petty & Briñol, 2009), with respect to racial prejudice, the most likely EIED would be people holding relatively greater implicit prejudice than explicit prejudice against Blacks (Nosek, Banaji, & Greenwald, 2002). Thus, we examined EIEDs by assessing the extent to which one's implicit prejudice was greater than one's explicit prejudice against African Americans.

STUDY 1: MODULATED COMPETENCE STANDARDS

People often modulate standards of competence in self-serving ways when judging themselves (e.g., Dunning, Myerowitz, & Holzberg, 1989) and others (e.g., Dunning, Perie, & Story, 1991). For example, Dunning and Cohen (1992) found people adjusted their standards of performance in self-serving ways by "raising the bar" in areas where they excelled (to ensure fewer people met the stricter criterion) and by "lowering the bar" in areas where they were weaker (so they could still meet a minimum threshold for competence).

In Study 1, we explored this adjustment of standard effect along group membership lines. Specifically, our White participants could show racial bias by adjusting their standards to make it more difficult for people to be competent in domains where, according to cultural stereotypes, Whites are assumed to excel (e.g., academics) and to make it easier for people to be competent in domains where African Americans are (based on stereotypes) assumed to excel (e.g., music). Thus, motivated perceivers should adjust criteria for competence toward a more racially biased position, and we predicted that people with larger racial EIEDs would show this bias more strongly.

METHOD

Participants. Ninety-nine White undergraduates, 65 women and 34 men, participated to fulfill a course research requirement.

Standards Task. Borrowing from Dunning and Cohen (1992), participants reported the behavioral qualifications needed to possess 11 different traits: 4 consistent with Black stereotypes (athletic, lazy, stupid, musical), 4 consistent with White stereotypes (well-read, mathematical, studious, verbal intelligence), and 3 unrelated to race (e.g., being punctual, active in extracurricular activities, tall). For example, participants reported "how many hours per week does a person have to engage in physical activity for you to consider them athletic" and "how many books must a person read per month for you to consider them well read." Pilot testing ensured these traits were viewed as consistent or unrelated to relevant group stereotypes.

To calculate an index of *racial bias in standards*, all responses were first standardized, and the mean of the eight racially related items was computed (reversed scored when appropriate) such that larger values indicated relaxing the standard for African American stereotypic traits (e.g., it was easier to be athletic) and increasing the standard for White stereotypic traits (e.g., it was more difficult to be well-read). Thus, as racial bias in standards scores increased, participants were "raising the bar" for White-stereotypic traits and "lowering the bar" for Black-stereotypic traits.

Racial Evaluation Measures. Next, we measured participants' explicit and implicit racial prejudice (order randomized). Participants rated African Americans and European Americans separately on three 9-point semantic differential scales: badgood, negative-positive, and unfavorable-favorable. We computed the mean of the items for Whites (α = .87) and African Americans (α = .88), subtracting the latter from the former (greater scores reflected relatively more explicit prejudice against African Americans).

Implicit racial prejudice was assessed using an Implicit Association Test (IAT; Greenwald et al., 1998) where participants classified stimuli (positive adjectives, negative adjectives, or race unambiguous faces) presented on a computer as quickly as possible using one of two keyboard responses (combination block orders were counterbalanced across participants). Each participant's D score was calculated (Greenwald, Nosek, & Banaji, 2003), eliminating trials with response latencies faster than 300 ms and slower than 3000 ms and all participants whose overall accuracy was less than 80%. Larger D scores indicated relatively greater implicit prejudice against African Americans.

Explicit-Implicit Evaluation Discrepancies. Following past work (e.g., Briñol et al., 2006), we created an EIED index. We first standardized scores on both attitude measures (i.e., explicit and implicit) and subtracted the explicit prejudice score from the implicit prejudice score. Thus, greater EIED index scores represented participants whose implicit evaluations of African Americans were relatively more negative (in comparison to Whites) than their explicit evaluations of African Americans (in comparison to Whites).

RESULTS

Evidence of Racial Prejudice. Participants' explicit evaluations (semantic differentials) showed more positive attitudes toward Whites (M = 5.98, SD = 1.02) than toward African Americans (M = 5.53, SD = 1.36), t(98) = 4.35, p < .001. Likewise, par-

ticipants' IAT D scores showed greater positivity associated with Whites than with African Americans (M = .49, SD = .30), t(98) = 16.22, p < .001. A modest, though nonsignificant, relation between implicit and explicit prejudice measures existed, r = .18, p < .08.

EIEDs and Competence Standards. To examine our hypothesis that perceivers with larger racial EIEDs would reveal more motivated reasoning, we correlated participants' EIED index with their racial standards bias score. As predicted, participants whose implicit prejudice against African Americans was relatively greater than their explicit prejudice exhibited more racial bias in their competence standards, r = .32, p < .01.

DISCUSSION

We found that participants who exhibited relatively greater racial prejudice in their implicit racial evaluations than in their explicit racial evaluations raised the bar for competence in White stereotypic domains and lowered the bar for competence in African American stereotypic domains. These shifts in standards were not observed in domains unrelated to race, rs < .15, ns. Adapting Dunning and Cohen's (1992) methodology, we found people can adjust their standards for competence in race-serving ways and these biases were stronger for those with greater EIEDs.

In Study 1, we assumed people initially start with an anchor for their standards and then make adjustments in race-serving ways when holding EIEDs. Adjustments from initial starting points are assumed to require cognitive resources (e.g., Gilbert, 1989; Slovic & Lichtenstein, 1971), but admittedly, we do not have direct evidence that additional processing resources were employed in modulating one's standards in race-serving ways. Instead, we relied on past demonstrations (e.g., Briñol et al., 2006; Rydell et al., 2008) that people with greater EIEDs reveal greater cognitive elaboration of information. In Study 2, however, we manipulated whether a persuasive appeal was compatible with one's pre-existing views or was at odds with them, with the latter circumstance providing a situation where one must use elaborative information processing to counter-argue against a persuasive appeal to bolster one's pre-existing beliefs (Ditto et al., 1998).

STUDY 2: ATTITUDE POLARIZATION

When holding strong beliefs, people are more likely to accept belief-confirming arguments at face value but scrutinize disconfirming arguments (i.e., biased assimilation), leading to attitude polarization rather than weakened opinions (e.g., Lord

^{1.} Supplementary analyses simultaneously regressed competence standard ratings on implicit prejudice, explicit prejudice, and their interaction (multiplicative function). Although the 2-way interaction failed to obtain, we observed a significant effect for implicit prejudice (β = .31, p < .01) and a marginal effect for explicit prejudice (β = -.19, p < .06). These effects, in opposite directions, suggest that both implicit and explicit prejudice measures make unique contributions to predicting racially biased competence standards and that the difference score finding is not simply driven by one measure.

et al., 1979). For example, Ditto et al. (1998) found that when refuting evidence inconsistent with one's opinions, people expend cognitive resources to actively argue against counterattitudinal information to maintain motivated beliefs.

Accordingly, Study 2 examined whether racial EIEDs can trigger attitude polarization. We assessed participants' explicit and implicit racial prejudice and then had them read arguments written by an African American professor or by a White professor. When encountering arguments inconsistent with their beliefs, we expected greater attitude polarization for the African American author (relative to the White author) among those with greater racial EIEDs. We also assessed participants' perceptions of argument quality, assuming that those who show greater attitude polarization would do so because they denigrated the quality of the African American author's arguments (versus identical arguments written by a White author).

METHOD

Participants and Design. Following past work (e.g., Cohen, Aronson, & Steele, 2000), participants read fabricated journal articles (related to conceal and carry laws, CCLs; an individual's right to carry concealed firearms in public). We randomly assigned 170 White undergraduates (116 women, 54 men) whose initial attitudes were opposed to CCLs to read an article either supporting or opposing CCLs, ostensibly written by either an African American or a White college professor. We varied author's race by manipulating a black-and-white author headshot (6.2 cm \times 7.5 cm). Thus, participants were randomly assigned within a 2 (Author race: African American, White) \times 2 (Author stance: Pro-CCLs, Anti-CCLs) between-subjects factorial.

Initial CCL Attitude. We measured participants' initial attitudes toward CCLs by embedding a single item measure in a series of eight questions toward political issues on a scale ranging from 1 (*very much in favor*) to 9 (*very much opposed*). The critical item for CCLs asked participants, "What is your attitude toward people's right to carry concealed weapons in pubic?"

Racial Attitudes Measures. Next, participants completed the same measures of explicit and implicit racial prejudice (order randomized) from Study 1.

Article. Participants then read a five-page article entitled, "Guns outside the home: New evidence informs an old debate" that either supported or challenged CCLs. These articles were modeled after Cohen et al. (2000) but were written to summarize purported research involving CCLs. The majority of the passages were identical, but subtle differences in the writing affected whether the article supported or opposed CCLs.³

^{2.} We planned to include participants' CCL beliefs as a between-subjects factor, but only 16 of the original 186 students sampled supported CCLs (these 16 individuals were eliminated from analyses). Importantly, our design manipulates the position advocated by the author (pro- vs. anti-CCLs), allowing us to examine how participants respond to arguments inconsistent with their own beliefs (our primary focus) as well as arguments consistent with their beliefs.

^{3.} These materials are available from the authors.

Attitude Polarization Measure. Next, we assessed participants' CCL attitudes again using the same scale as before. We computed an attitude polarization score (computing the difference between initial and final CCL attitudes) such that larger, positive scores reflected greater attitude polarization (i.e., these anti-CCL participants held even stronger anti-CCL beliefs after reading the article).

Perceptions of Article Effectiveness. Finally, participants reported how effectively the article changed their beliefs on a scale from 1 (*much more opposed*) to 9 (*much more in favor*). Thus, greater article effectiveness scores reflected viewing the article as more compelling and persuasive in support of CCLs and lower scores indicated seeing it as relatively ineffective.

RESULTS

Preliminary Analyses. Compared to the midpoint, participants were strongly against people carrying concealed firearms in public (M=7.73, SD=1.10), t(169)=32.27 p<.001, confirming that articles supporting CCLs were counterattitudinal. Replicating Study 1, participants' explicit evaluations were more positive toward Whites (M=6.05, SD=1.44) than toward African Americans (M=5.80, SD=1.51), t(169)=3.36, p<.001, and they showed relatively greater bias against African Americans on the IAT (M=.50, SD=.39), t(169)=16.80, p<.001. The implicit and explicit prejudice measures were modestly correlated, r=.19, p<.02. As in Study 1, our analyses focused on the EIED index, where larger scores indicated that participants had relatively greater implicit prejudice than explicit prejudice against African Americans.

Attitude Polarization. We examined the hypothesis that when encountering arguments inconsistent with one's own beliefs, greater attitude polarization would result when the author was African American (instead of White) especially for those with larger EIEDs. Thus, we conducted a multiple regression analysis where participants' attitude polarization scores were simultaneously regressed on participants' EIED scores, author race (dummy coded), author position (dummy coded), and all possible interactions (multiplicative terms).

Several effects obtained, but as expected, they were qualified by the three-way interaction, β = -.27, p < .001. To examine this effect, we conducted follow-up two-way interaction regressions (where participants' attitude polarization scores were simultaneously regressed on participants' EIED scores, author race, and their interaction) separately for each author position condition. When the author opposed CCLs (i.e., agreed with participants' beliefs), there were no significant effects, $|\beta|$ s < .11, ns.

However, we found a significant interaction between EIED scores and author race for articles promoting CCLs (i.e., the position inconsistent with participants' beliefs), β = .38, p < .001. As Figure 1 shows, consistent with predictions, participants' anti-CCL attitudes became more polarized after reading a counterattitudinal argument when the author was African American more strongly as their EIED scores increased (i.e., the conditions under which article elaboration should be greatest), β = .78, p < .001. However, this relation between attitude polarization and EIED scores was absent when the author was White, β = -.19, ns.

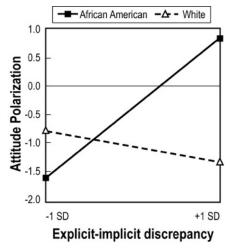


FIGURE 1. Interaction between race of author and explicit-implicit racial prejudice discrepancy (plotted at ± 1 SD) on attitude polarization in Study 2.

Article Effectiveness. If participants are engaged in motivated reasoning, they should view the African American professor's article as especially ineffective (relative to the White author) when it was contrary to their beliefs and when their EIEDs were larger. We conducted parallel analyses by simultaneously regressing participants' reports of article effectiveness on participants' EIED scores, author race, author position, and all interaction terms. A number of effects emerged, but they were qualified by the three-way interaction, β = .34, p < .001. Follow-up two-way interaction regressions (EIED scores × author race) were conducted separately for the two article position conditions. Mirroring the attitude polarization analyses, there were no effects in the anti-CCL article condition, $|\beta|s$ < .16, ns.

However, a different pattern was observed when the author supported CCLs. This analysis revealed the predicted two-way interaction between participants' EIED scores and author race, β = -.52, p < .001. As Figure 2 illustrates, when the author of the counterattitudinal article was African American, participants reported the article was less effective as their EIEDs increased, β = -1.04, p < .001. This relation was not observed for the White author, β = .06, ns.⁴

Mediation. If greater attitude polarization among those with the greatest racial EIEDs results from derogation of the African American author's persuasive appeal, then we would expect that perceptions of article effectiveness should mediate the relation between EIED scores and attitude polarization. The conditions to test for mediation were met in that the above analyses found that the mediator

^{4.} Supplemental multiple regression analyses examined author race, article position, implicit prejudice, explicit prejudice, and all interactions as predictors of attitude polarization and of ratings of article effectiveness. Many effects obtained, but of greatest importance was the significant 4-way interaction for both attitude polarization (β = .22, p < .01) and for perceptions of article effectiveness (β = -.19, p < .02). These findings provide additional support for the interpretation that both implicit and explicit evaluations contribute to the biased assimilation outcomes observed in Study 2. Complete reports of these analyses are available from the authors.

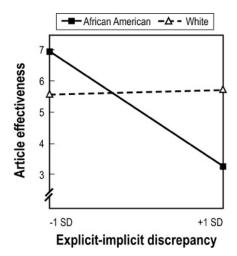


FIGURE 2. Interaction between race of author and explicit-implicit racial prejudice discrepancy (plotted at ± 1 SD) on perceptions of article effectiveness in Study 2.

(i.e., article effectiveness) was significantly related to both the independent (i.e., EIED score × author race interaction) and dependent (i.e., attitude polarization) variables. Thus, attitude polarization was simultaneously regressed on both the independent variable and the mediator. When article effectiveness was included, the relation between the author race by EIED interaction and attitude polarization was no longer significant, β = .06, ns (a significant decrease, Sobel z = 4.23, p < .001), suggesting that greater attitude polarization among those with greater racial EIEDs could be explained by viewing the African American (but not the White) author's scholarship as less convincing.

DISCUSSION

Supporting predictions, we found that people with greater EIEDs judged the quality of counterattitudinal arguments from an African American author more harshly than from a White author, resulting in attitude polarization rather than moderation. Participants reading a counterattitudinal article authored by an African American viewed the author's position with greater skepticism, and these critical perceptions accounted for the magnitude by which their attitudes showed polarization rather than attenuation. These relations were not observed when the author was White or when authors of either race forwarded a pro-attitudinal appeal. It appears that in the face of counterattitudinal arguments, race becomes a dimension along which argument quality can be discounted for those whose implicit-explicit racial prejudice is most discrepant, resulting in holding one's original opinions with even greater conviction.

GENERAL DISCUSSION

Across two studies, EIEDs were shown to predict race-specific biases in two different judgment and decision making contexts. Specifically, as participants had relatively greater implicit prejudice than explicit prejudice against African Americans, race-specific motivated reasoning was observed. In Study 1, those with greater evaluation discrepancies lowered the bar for competence in domains associated with African Americans (e.g., making it easier to be athletic) and raised the bar for competence in domains associated with Whites (e.g., making it more difficult to be well-read). In Study 2, participants with greater EIEDs exhibited more resistance to persuasion from an African American author relative to a White author, and these people showed greater attitude polarization by denigrating the effectiveness of the counterattitudinal arguments. When encountering communications that did not challenge perceivers' pre-existing beliefs, author race was unrelated to persuasion or perceptions of argument effectiveness. In short, it appears that when people have discrepant explicit-implicit racial attitudes, additional cognitive resources (e.g., Rydell et al., 2008) can be directed toward biased processing of social information and persuasive appeals (e.g., Chaiken & Maheswaran, 1994), resulting in race-based motivated reasoning.

The current work showed how greater EIEDs trigger race-related motivated reasoning in two different domains. We adopted the same EIED score approach used in past work and used a standard IAT to assess implicit evaluations (e.g., Briñol et al., 2006) to ensure consistency with the existent literature. We would expect that other implicit measures (e.g., Rydell et al., 2008) would produce similar results. In this study, we did not assess effortful information processing directly (e.g., Briñol et al., 2006) nor did we assess negative affect directly (e.g., Rydell & Durso, 2012; Rydell et al., 2008), but we assume both played a role in the current findings given past demonstrations in the literature. Indeed, assessing the presence of these intervening factors might have provided participants with an attributional explanation for their psychological experiences, undercutting the subsequent effects that we sought to document in the current work.

Although we would expect that any EIED should instigate greater information processing (Briñol et al., 2006; Rydell et al., 2008), the nature of racial prejudice means that the discrepancy studied in the current work involved holding relatively more negative implicit prejudice against African Americans than explicit racial prejudice. Even among African Americans, implicit prejudice is significant and greater than explicit prejudice (Nosek et al., 2002). As such, future research should explore the motivated reasoning implications of EIEDs in situations where explicit evaluations are relatively more negative than implicit evaluations (e.g., motivated reasoning toward taste-tempting but unhealthy snack foods). Here, however, we focused on race given how biased social information processing can perpetuate discrimination.

Another issue to consider is whether the current findings are driven more by "relative bias" or by "absolute bias." Our focus here was on relative bias because no attitudes measure can be viewed in absolute terms (e.g., Bohner & Schwarz, 2001; McConnell & Leibold, 2009; Nosek, Greenwald, & Banaji, 2006). This reality,

coupled with measures such as the IAT being inherently relativistic, leads us to view the current findings in terms of relative bias. However, we could envision situations where the valence of EIEDs might matter. For example, prospect theory (Kahneman & Tversky, 1979) suggests that negativity looms larger than positivity (psychologically), and perhaps, EIEDs involving negative evaluations would elicit greater motivated reasoning. Future research could examine this possibility.

The current work shows people can set standards to enhance an in-group (e.g., Miron, Branscombe, & Biernat, 2010; Rydell & Durso, 2012) but that such processes may be amplified by EIEDs. Also, we show that race (when paired with a counterattitudinal message) may serve as a cue that triggers biased but more effortful information processing (Petty & Wegener, 1998), especially among those with greater EIEDs. Interestingly, the current demonstration of motivated reasoning may be especially insidious because people may be biased yet have no awareness that correction is warranted (Wegener & Petty, 1997) because they would freely report positive attitudes toward the social groups in question. Thus, the current work identifies a new pathway to biased information processing that, ironically, may be unwittingly exhibited by those who believe they are the least likely to exhibit such biases.

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