

The threat of racial progress and the self-protective nature of perceiving anti-White bias

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Abstract

In two studies we tested whether racial progress is threatening to Whites and whether perceiving anti-White bias assuages that threat. Study 1 revealed that Whites primed with racial progress exhibited evidence of threat (lower implicit self-worth relative to baseline). Study 2 replicated the threat effect from Study 1 and examined how perceiving discrimination may buffer Whites' self-worth. After White participants primed with high racial progress attributed a negative event to their race, their implicit self-worth rebounded. Participants primed to perceive low racial progress did not experience fluctuations in implicit self-worth. Furthermore, among those primed with high racial progress, greater racial discounting (attributing rejection to race rather than to the self) was associated with greater self-worth protection. These studies suggest that changes to the racial status quo are threatening to Whites and that perceiving greater racial bias is a way to manage that threat.

Keywords

anti-White bias, discrimination attributions, threat

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Racial progress and perceptions of social change have profound implications for how Whites see themselves and their position in society (Wilkins & Kaiser, 2014). Despite the American ideal of social equality, movement toward that ideal may be threatening to high-status groups. The current investigation explores whether Whites who see their high-status social position as precarious exhibit threat, and whether perceiving personal discrimination is a mechanism to assuage that threat.

minorities (Pew Research Center, 2011; Sidanius & Pratto, 1999), but recently, perceptions of power relations between racial groups have been shifting. For example, Barack Obama's presidential election increased perceptions of racial equality and decreased the perceived need for programs designed to remedy racial inequality (Kaiser, Drury, Spalding, Cheryan, & O'Brien, 2009). Obama's election was taken as evidence of a changing racial status hierarchy and

Racial Progress Is Threatening to Whites

In the US, Whites have traditionally enjoyed greater access to social and material capital than racial

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as a symbol of racial progress (Sears & Tesler, 2011), defined as increasing numbers of racial minorities in high-status or high-power positions traditionally occupied by Whites (Wilkins & Kaiser, 2014).

Several theories predict that high-status groups will be threatened by changes to the social hierarchy (e.g., Jost & Banaji, 1994; Turner & Brown, 1978). Individuals are motivated to rationalize existing social structures and to perceive the status hierarchy as being fair and legitimate (Jost & Banaji, 1994; Jost, Banaji, & Nosek, 2004; Jost & Hunyady, 2002; Sidanius & Pratto, 1999). The status quo is endorsed by virtue of existing (see Eidelman & Crandall, 2012 and Jost & Hunyady, 2002, for reviews), and high-status groups are particularly reluctant to support social change which may undermine their positions (Jost & Hunyady, 2005; Kay & Friesen, 2011; Sidanius & Pratto, 1999).

In fact, when status arrangements change, high-status groups experience threat. For example, high-status individuals in minimal groups experience physiological threat when there is a chance that their power might be usurped (Scheepers & Ellemers, 2005). Similarly, men exhibit physiological threat when they discuss changing gender dynamics in society (Scheepers, Ellemers, & Sintemaartensdijk, 2009), as do Whites in companies with prodiversity messages (Dover, Major, & Kaiser, 2016). Thus, racial progress may be threatening because it causes Whites to see their privileged status in society as being precarious and it alters the status quo.

Attributing Negative Outcomes to Discrimination Is Self-Protective

Individuals may cope with threat by pursuing avenues to boost their self-worth, as self-esteem helps individuals manage threat (see Harmon-Jones et al., 1997). Perceiving greater racial discrimination against Whites may be one way Whites respond to the threat of racial progress. Attributions to discrimination can protect the self because they imply that rejections emanate outside the individual and not from personal shortcomings (Crocker & Major, 1989; Major, Kaiser, & McCoy, 2003).

While the self-protective value of making discrimination attributions was originally proposed

for members of stigmatized groups (Crocker & Major, 1989), the theory has subsequently been applied to high-status groups (see Branscombe, 1998; Schmitt & Branscombe, 2002). For example, men excluded from a professor's class reported less negative affect when they attributed the professor's actions to discrimination against men than when they blamed it on the professor's general hostility (Schmitt & Branscombe, 2002). And men's attributions to discrimination are more self-protective than blaming the self for negative outcomes (Major, Kaiser, & McCoy, 2003). Similarly, perceiving discrimination may actually boost Whites' self-worth (Unzueta, Lowery, & Knowles, 2008). When White men believe that they are discriminated against (through the use of affirmative action quotas that favor minorities), they are more likely to say that they are competent than when they think they are not discriminated against (affirmative action does not involve quotas). This increased sense of competence, in turn, helps White men cope with negative performance feedback (Unzueta et al., 2008). Thus, high-status groups experience self-protective benefits of making attributions to discrimination.

Despite evidence that discrimination attributions *can* be self-protective, we suspect that this is not always the case. When Whites are seen as a high-status group, it is unlikely that their discrimination attributions would be perceived of as legitimate and thus, unlikely that the attributions would be self-protective. In contrast, if Whites are seen as losing status, discrimination may be seen as more probable (Wilkins & Kaiser, 2014). If discrimination is more probable, it can be used as an excuse for negative outcomes. Thus, we expect racial discrimination attributions to be a successful strategy for buffering self-esteem only when racial progress is salient. In those situations, blaming bias may seem more justifiable than when racial progress is not salient.

Based on previous research, it is unclear whether the self-protection afforded by discrimination attributions is sufficient to reestablish self-worth. Past work has only examined the consequences of different attributions without measuring changes in self-worth. Here we test

whether self-esteem *rebounds to baseline levels*. In other words, we examine self-protection more directly by specifically testing whether racial attributions are sufficient to overcome threat.

Overview and Hypotheses

In Study 1, participants read articles that either primed racial progress or did not, and we assessed changes in implicit self-worth for evidence of greater threat when racial progress was primed (relative to a control). We expected that racial progress would be threatening. In Study 2, participants were primed to perceive high or low racial progress and were led to believe they lost an award to a Black competitor. We assessed changes in implicit self-worth over the course of the study as well as the degree to which participants' self-worth was protected by attributing failure to racial discrimination. We expected self-worth to decrease relative to baseline in the high (but not low) racial progress condition. We also expected participants in the high racial progress condition to experience a greater boost in self-worth after attributing their loss to race than those in the low progress condition. Finally, we hypothesized that self-worth protection would be greater to the extent to which participants attributed their failure to bias rather than the self.

Study 1

Study 1 was designed to assess whether racial progress is threatening to Whites, and whether this threat manifests as lower implicit self-worth. Specifically, we tested the hypothesis that Whites would exhibit lower implicit self-worth (relative to baseline) after reading about the social advancement of racial minorities, but that reading a control article would not affect participants' self-worth.

Decrease in Implicit Self-Worth as Threat

Implicit self-worth is defined as evaluations of the self that operate relatively automatically and outside of conscious awareness (Dijksterhuis, 2004; Karpinski & Steinberg, 2006; Zeigler-Hill,

2010). We utilized decreases in implicit self-worth as evidence of threat because self-esteem suffers when individuals' worldviews are threatened (Major, Kaiser, O'Brien, & McCoy, 2007). We reasoned that threats to the system (and the group) inherent in racial progress would threaten self-esteem because worldview maintenance is a key aspect of self-esteem (Greenberg, Solomon, & Pyszczynski, 1997; Solomon, Greenberg, & Pyszczynski, 1991).

Operationalizing threat implicitly is advantageous because participants might not be consciously aware of, or able to report, experiencing threat after perceiving racial progress. Furthermore, although high-status groups experience physiological threat in response to status changes, they do not report it on explicit measures (Scheepers et al., 2009; also see Blascovich & Mendes, 2000; Townsend, Major, Gangi, & Berry Mendes, 2011). This may be particularly true given egalitarian social norms, which might make it difficult for individuals to admit that they feel worse when considering the social advancement of historically oppressed groups (see Greenwald & Banaji, 1995).

We assessed implicit self-esteem by examining changes in signature size. Signature size is considered an *indirect* measure of self-esteem (Karpinski & Steinberg, 2006). Signature size has convergent validity with other measures of self-esteem: Tennessee Self-Concept Scale (Fitts, 1964); Self-Esteem Inventory, Short Form (Coopersmith, 1967; Zweigenhaft, 1977; Zweigenhaft & Marlowe, 1973). Recently, researchers have demonstrated that manipulations that increase signature size also increase values on the self-esteem Implicit Association Test (IAT; Rudman, Dohn, & Fairchild, 2007). Furthermore, signature size varies with manipulations that affect self-esteem. Specifically, when individuals are given negative intelligence feedback, their signature size shrinks, and when they receive positive intelligence feedback, their signature size grows (relative to baseline; see Zweigenhaft, 1977, for review).

Method

Participants. Participants were 87 White University of Washington subject pool participants

(49% female, $M_{\text{age}} = 19.34$, $SD = 1.07$). Due to experimenter error (condition was not recorded), data was only analyzable for 81 participants.

Procedure. The study ostensibly examined reactions to news articles. Participants first signed a consent form agreeing to participate in the study (Time 1 baseline signature size was obtained from this form). All participants read an article about the world's oldest tortoise to minimize suspicion among participants who were later assigned to read a racial progress article. Subsequently, participants were randomly assigned to read one of two different articles manipulating racial progress. These articles either described (in the *racial progress condition*) racial minorities' social advancement in the US, or (in the *control condition*) the success of an underdog swim team (see Wilkins & Kaiser, 2014). Following each article, participants completed questions assessing their memory of the articles. Participants then signed a "study completion form" (providing the Time 2 signature size). All participants received course credit for their participation.

Measures

Implicit self-worth. Signature size at Time 1 (baseline) was taken from the first consent

form. Signature size at Time 2 was taken from the study completion form—after the racial progress manipulation. In order to assess implicit self-worth, a rectangle was drawn around the furthest edges of participants' signature on each form. The height and width of the rectangle were multiplied together to determine the area of the signature (see Zweigenhaft & Marlowe, 1973) and recorded in millimeters squared.¹

Results and Discussion

In order to examine whether racial progress was threatening to Whites, we ran a 2 (condition) \times 2 (time) mixed-model ANOVA on signature size. We found the expected interaction between condition and time in predicting signature size, $F(1, 79) = 8.12$, $p = .006$, $\eta_p^2 = .09$ (see Figure 1). We probed the simple effects and found that for participants in the racial progress condition, signature size decreased between Time 1 ($M = 978.36$, $SE = 94.47$) and Time 2 ($M = 794.51$, $SE = 75.80$), $F(1, 79) = 8.39$, $p = .005$, $\eta_p^2 = .10$. In the control condition, there was no significant difference between participants' signature sizes at Time 1 ($M = 881.77$, $SE = 93.41$)

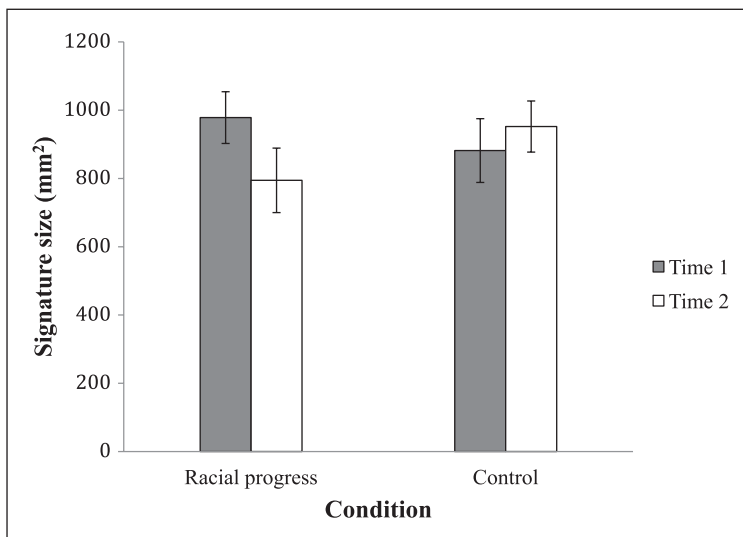


Figure 1. Change in signature size across time for participants in the racial progress and control conditions (Study 1).
Note. Bars represent standard error.

and Time 2 ($M = 952.15$, $SE = 74.87$), $F(1, 79) = 1.26$, $p = .27$, $\eta_p^2 = .02$. Thus, Study 1 provides evidence that racial progress is threatening to Whites and decreases their implicit self-worth.

Study 2

Study 2 was designed to test the prediction that high levels of racial progress would threaten Whites' self-worth, and that Whites would react by perceiving greater amounts of racial discrimination against themselves, which would in turn increase self-worth. In Study 2 we utilized a more conservative manipulation in which all participants were primed with racial progress. We expected participants primed with high (but not low) racial progress to experience decreases in implicit self-worth relative to baseline.

Further, we predicted that racial discounting would buffer individuals' self-worth. We expected that racial discounting and condition would interact to predict changes in self-worth at the end of the study. Specifically, we hypothesized that the more participants in the high racial progress condition (but not the low racial progress condition) attributed their rejection to race rather than to themselves, the greater the increase in their implicit self-worth. In other words, we expected a three-way interaction between discounting, condition, and time in predicting signature size at the end of the study.

Method

Participants. Participants were 77 self-identified White, Wesleyan University students (56% female, $M_{\text{age}} = 19.03$, $SD = 1.20$). Sixty-five participated through the psychology participant pool and received psychology credit. Twelve responded to advertisements placed around campus (and were paid \$10.00). The ads included a URL to a questionnaire that determined eligibility. Three participants were removed from analyses because of experimental error, and one was removed for identifying as mixed-race.

Procedure. Participants arrived at the lab individually to ostensibly participate in a study examining individuals' behavior during a competitive application process. Each participant was told that another participant had arrived early and had begun the study in the next room—a backpack was placed outside a closed door to enhance this cover story.

After signing a consent form (Time 1 baseline implicit self-worth), participants completed an electronic application for a merit-based cash award of \$10.00. The application included questions about previous work experience and skills. Participants were photographed and told that the photographs would be attached to their application. Finally, participants completed two graphing tasks: purportedly to test their data representation skills. The first graphing task, included to diffuse suspicion, involved charting changes in undergraduate majors at their university.

The second graphing task served as the crucial manipulation (see Eibach & Keegan, 2006). Participants graphed changes to student racial demographics at their university. Those in the *high racial progress* condition plotted statistics indicating that the proportion of students of color at their university was *higher* than projected in analyses conducted several decades earlier. Participants in the *low racial progress* condition were given statistics indicating that, while the proportion of students of color had increased over time, the number was actually *lower* than projected in previous decades. This method capitalized on the fact that individuals tend to perceive greater racial progress when they think about how far we have come relative to the past (Eibach & Ehrlinger, 2006). This method also provided a more conservative manipulation of racial progress than the one used in Study 1 because individuals in both conditions perceived greater numbers of students of color at their university over time.²

After 5 minutes, participants were informed that they had not been selected for the award. They then signed a release form (Time 2 implicit self-worth) to allow an application exchange with their competitor. Although all participants were expected to exhibit lower implicit

self-worth after losing the competition, we expected the decrease to be greatest in the racial progress condition—evidence of greater threat following the high (relative to low) racial progress manipulation.

Next, participants were given the fictional participant's packet: including a printed photograph of their Black "competitor." They then completed an attribution questionnaire in which they indicated why they believed the competitor was chosen instead of them. Participants signed a form to verify completion of the study (Time 3 implicit self-worth).

Stimuli

Competitor's photograph and application. The photograph of the fictitious competitor was a headshot of a Black individual that matched participants' gender. Male images were one of three selected from the Eberhardt face database (see Eberhardt, Davies, Purdie-Vaughns, & Johnson, 2006). The female images were one of three selected from the Productive Aging Lab face database (see Minear & Park, 2004). Images were selected to appear college-aged (as rated by 10 research assistants). The fictional application contained responses that were held constant across conditions; it provided the competitor's demographic information as well as a description of previous work experience and skills.

Measures

Attributions questionnaire. Participants were asked to rate on a 1–7 scale (anchored at *strongly disagree* and *strongly agree*) the extent to which they thought discrimination and their *personal deservingness* contributed to the judge's decision. The discrimination item was "my race" ($M = 2.67$, $SD = 1.54$), and the *personal deservingness* attributions were a composite of: "your answer quality" and "previous experience": $\alpha = .63$, $M = 4.59$, $SD = 1.37$). There were three filler items: "my sex," "competitor's answer quality," and "competitor's previous experience."

Implicit self-worth. Implicit self-worth was assessed as described in Study 1. Baseline

signature size was assessed using the first consent form (Time 1), which participants completed shortly after arriving in the lab. Signature size was also assessed from the application release form (Time 2), which participants signed after the racial progress manipulation (and learning of their failure). The final signature was taken at the end of the study after participants learned they had lost to a Black individual and had the opportunity to make attributions for their rejection (Time 3).

Results

Changes in signature size across time. To examine changes in signature size across time for the two conditions, we ran a 2 (progress condition) \times 3 (time) mixed-model ANOVA on signature size. There was a significant main effect of time, $F(2, 134) = 8.29$, $p < .001$, $\eta_p^2 = .11$. This main effect was qualified by a marginal interaction between time and condition, $F(2, 134) = 2.73$, $p = .07$, $\eta_p^2 = .04$ (see Figure 2).

As expected, in the *high racial progress* condition, participants' signature size changed significantly across time, $F(2, 66) = 7.49$, $p = .001$, $\eta_p^2 = .19$. Participants' signature size decreased between Time 1 ($M = 826.79$, $SE = 62.71$) and Time 2 ($M = 642.03$, $SE = 54.75$), $p < .001$: replicating the results of Study 1. Also, consistent with hypotheses, signature size increased between Time 2 and Time 3 ($M = 750.97$, $SE = 53.90$), $p = .009$. Importantly, this increase indicated that participants' self-worth recovered to baseline levels in the *high racial progress* condition: as signature size did not significantly differ between Times 1 and 3, $p = .10$.

In the *low racial progress* condition, there were no significant differences in participants' signature size between the three time points $F(2, 66) = 1.94$, $p = .15$, $\eta_p^2 = .06$. There was an insignificant drop in signature size between Time 1 ($M = 728.53$, $SE = 60.04$) and 2 ($M = 664.25$, $SE = 52.42$), $p = .17$ (perhaps as a result of the rejection), and no change between Time 2 and Time 3 ($M = 643.22$, $SE = 51.61$), $p = .59$.

Did racial discounting affect growth in signature size between Times 2 and 3? We computed a measure of

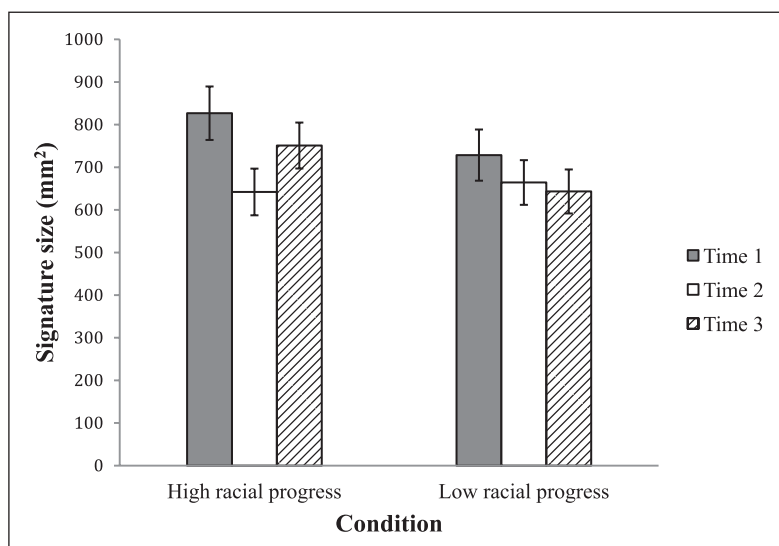


Figure 2. Change in signature size across time for participants in the high and low racial progress conditions (Study 2).

Note. Bars represent standard error.

racial *discounting* by subtracting the extent to which participants made attributions to a lack of personal deservingness from their race attributions (see Major, Kaiser, & McCoy, 2003).³

In order to establish whether racial discounting predicted participants' change in implicit self-worth, we tested the three-way interaction between condition, discounting, and time in predicting signature size. This method allowed us to determine whether racial discounting was self-protective for participants by increasing their implicit self-worth between their rejection (Time 2) and the end of the Study (Time 3). Specifically, we ran a repeated-measures analysis of covariance (ANCOVA) with time as the within-subject variable, racial discounting (continuous, centered) as the covariate, and condition as the between-subjects variable (for use of a similar strategy of dealing with a continuous predictor with repeated measures, see Plaks, Malahy, Sedlins, & Shoda, 2012; Wilkins, Wellman, Babbitt, Toosi, & Schad, 2015). This analysis revealed the predicted significant three-way interaction between time, condition, and discounting, $F(2, 68) = 4.42, p = .02, \eta_p^2 = .12$: suggesting that discounting played a

different role in signature size change for participants in the low and high racial progress conditions.

Given our primary interest in how participants felt at the end of the study (*after* having made attributions for their loss), we probed the three-way interaction by examining the two-way interaction between condition and racial discounting on signature size at Time 3, controlling for signature size at Time 2. Signature size at Time 2 was entered in Step 1 of a hierarchical linear regression. Mean-centered discounting scores and racial progress condition (0 = low progress, 1 = high progress) were entered in Step 2. The interaction between discounting and condition was entered in Step 3. Consistent with hypotheses, there was a significant interaction between condition and discounting in Step 3, $F(4, 66) = 29.23, p < .0001, R^2 = .64, \beta = .20, t(66) = 2.08, p = .04$. In the *low racial progress condition*, discounting was unrelated to signature size at Time 3, $\beta = .13, t(66) = 1.38, p = .17$. Importantly, in the *high racial progress condition*, greater discounting was associated with larger signature size, $\beta = .45, t(66) = 3.81, p < .001$ (see Figure 3).⁴

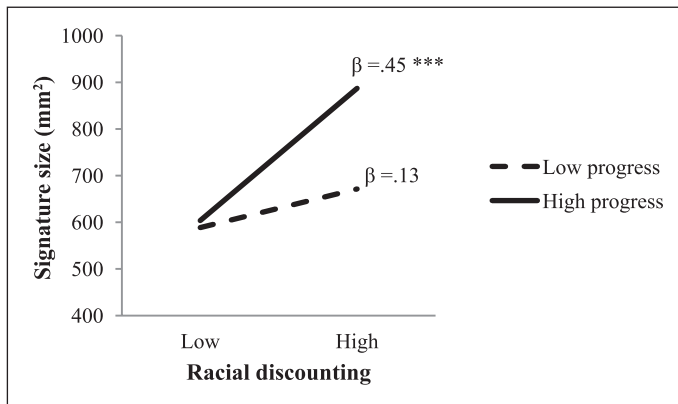


Figure 3. Racial discounting moderates the relationship between racial progress condition and signature size (Study 2).

Note. ***Slope is significant at the 0.001 level (two-tailed). Endpoints are graphed at 1 *SD* above and below the mean of the discounting measure.

Discussion

Study 2 tested whether racial progress is threatening to Whites, and whether attributions to racial discrimination buffer Whites' self-worth from the threat of racial progress. We replicated the Study 1 pattern: Whites exhibited lower implicit self-worth when considering high, but not low, racial progress. Importantly, this effect arose using a more conservative manipulation of racial progress in which all participants were primed to consider increasing numbers of racial minorities at their university.

Priming participants to perceive high racial progress did not make them more likely to perceive discrimination: perhaps because they were compared to a low racial progress condition as opposed to a pure control (as in Wilkins & Kaiser, 2014). Our null finding might have also been a result of a greater tendency for participants to agree that Whites (in general) experience racial bias than to report that they *personally* experienced bias (Taylor, Wright, Moghaddam, & Lalonde, 1990). Furthermore, personally claiming racial bias is associated with negative interpersonal consequences (e.g., Kaiser & Miller, 2001; Wilkins, Wellman, & Kaiser, 2013). Essentially, participants might have been reluctant to claim racial bias.

Importantly, Whites in the high racial progress condition who made greater racial attributions

experienced greater increases in implicit self-worth. The implicit self-worth of participants in the low racial progress condition was unrelated to discrimination attributions. After having the opportunity to make attributions for their loss, the self-worth of Whites in the high racial progress condition returned to baseline levels, but it remained low for those in the low racial progress condition. This suggests that attributing a negative outcome to racial discrimination is self-protective for Whites primed with a significant amount of racial progress.

General Discussion

Two studies examined Whites' reactions to perceiving racial progress: operationalized as increasing numbers of high-status racial minorities in the US and greater numbers of students of color at participants' university. White participants responded to racial progress by exhibiting evidence of threat: lower implicit self-worth relative to baseline. This reaction is consistent with our argument that racial progress threatens the status hierarchy and thus, Whites—who traditionally occupy dominant positions in society. These experiments are the first to demonstrate that Whites' implicit self-esteem suffers when they consider racial minorities' social advancement.

Participants primed with high racial progress experienced greater self-worth protection to the

extent to which they attributed their loss to race relative to the self. This is consistent with theorizing on race attributions and self-esteem (Crocker & Major, 1989), and evidence that Whites experience a boost in perceived competence when they perceive bias against their group (Unzueta et al., 2008). We found that self-worth was restored to baseline levels for White participants in the high racial progress condition. This suggests that when experiencing threat due to racial progress, Whites might be motivated to perceive racial bias because the more they do, the better they feel about themselves.

Limitations and Future Research

While we refer to signature size as implicit self-esteem (to be consistent with terms used by previous researchers; e.g., Rudman et al., 2007), it is an indirect measure, and thus it may assess explicit self-esteem, implicit self-esteem, or a combination of both (Karpinski & Steinberg, 2006). Therefore, we cannot say with certainty *what* aspect of the self we assess. However, given the consistency between fluctuations in signature size and the self-esteem IAT (Rudman et al., 2007), we are confident in referencing implicit self-esteem.

Additionally, based on previous research on *implicit self-esteem compensation* (ISEC) (Rudman et al., 2007), some might expect participants to respond to threat with an *increase*, rather than decrease, in signature size. It remains unclear which circumstances elicit traditional threat responses (like those observed in the present studies) versus ISEC (Rudman et al., 2007). Further research is needed to delineate the limits of ISEC versus other threat effects.

Implications

In the US egalitarian ideals are widely espoused, and yet this research demonstrates that Whites implicitly feel worse about themselves when they consider greater progress toward achieving racial equality. Because Whites feel better about themselves to the extent to which they make discrimination attributions, it suggests that they may be

motivated to perceive greater discrimination against their group. This provides one potential explanation for Whites' increasing perceptions of anti-White bias (Norton & Sommers, 2011).

Our work raises the important question of whether racial progress can be framed in a non-threatening way for high-status groups. While self-affirmation (Steele, 1988) will likely reduce threat, other strategies that are easier to implement on a large scale are needed. Perhaps racial progress framed as evidence of commitment to equality rather than as progress toward equality (Eibach & Purdie-Vaughns, 2011) would be less threatening.

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Notes

1. We also included measures of status legitimizing belief (SLB) endorsement (Levin, Sidanius, Rabinowitz, & Federico, 1998) in Studies 1 and 2. We tested whether threat response would be particularly apparent for strong SLB endorsers given their particular support for existing status arrangements. We did not find a significant interaction between time, condition, and SLB endorsement for either Study 1, $F(2, 55) = 1.62, p = .21, \eta_p^2 = .06$, or Study 2, $F(2, 130) = 0.79, p = .46, \eta_p^2 = .01$.
2. A pilot test confirmed that the graphing task successfully manipulated perceptions of racial progress (assessed by agreement with three items: e.g., "How much progress toward racial equality has occurred since the 1960s?" $\alpha = .88$). Whites in the *high racial progress* condition ($M = 4.61, SD = 1.34$) perceived greater racial progress than those in the *low racial progress* condition ($M = 3.93, SD = 1.18$), $t(62) = 2.16, p = .04, d = .54$.
3. We also tested whether SLBs would moderate the racial progress effect on racial discounting. There were no significant main effects in Step 1 ($ps > .48$), and no significant interaction in Step 2, $t(69) = -.10, p = .92$. This suggests that neither condition nor SLBs affected the extent to which individuals attributed personal outcomes to discrimination.

4. As expected, there were no significant main effects or interactions for analyses examining attributions to sex or competitor deservingness.

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