Preserving positive identities: Public and private regard for one’s ingroup and susceptibility to stereotype threat

Arnold K. Ho and Jim Sidanius

Abstract
The current study examines the effect of racial regard—feelings of positivity or negativity toward African Americans—on stereotype threat. Forty participants at Harvard University responded to questions concerning their social attitudes and returned later to take a difficult verbal test. This study replicated the well-established stereotype threat effect, and found evidence that both public regard (judgments concerning how others view Blacks) and private regard (how one views Blacks and feels about being Black) moderate the effect. Specifically, Blacks high in public regard and high in private regard appear more susceptible to stereotype threat effects. The article discusses the possibility that African Americans in our study face an additional cognitive burden when confronted with the need to preserve a positive identity.

Keywords
Black identity, racial regard, stereotype threat

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In an effort to understand the problem of academic underachievement among African-American students, Steele and Aronson (1995) explored whether the risk of confirming or being judged in terms of a negative stereotype could lead to poorer academic performance. Steele and Aronson argued that this risk, which they labeled stereotype threat, could induce anxiety since individuals subjected to the risk would be motivated to disprove the stereotype concerning their group. While Steele and Aronson provided compelling data documenting this phenomenon, many questions remained following their seminal publication concerning the mechanisms that mediated and moderated stereotype threat.

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Racial identity and stereotype threat

One moderator that has received considerable attention in the stereotype threat literature is group identity. However, the conceptualization of group identity and the conditions under which it is expected to moderate stereotype threat have varied. For instance, Schmader (2002) examined the effect of gender identity on performance on a math test among women under stereotype threat. Specifically, Schmader looked at the importance of gender identity to one’s self-identity (e.g., “Being a woman/man is an important part of my self-image”), and found that for women, a stronger gender identity led to greater vulnerability (poorer performance) under threat. McFarland, Lev-Arey, and Ziegert (2003) similarly looked at the importance of group identity to one’s self-definition, but in a racial context. McFarland et al. adapted Helm’s Black Racial Identity scale (e.g., “I feel an overwhelming attachment to people from my race”), and found that for both Whites and Blacks, stronger racial identity led to poorer performance on a cognitive ability test under threat. Since McFarland et al. found this effect for both Whites and Blacks, it is not clear whether this constitutes a stereotype threat effect. Interestingly, McFarland et al. also found that among Blacks, but not Whites, the effect of racial identity assessed before the performance task differed from the effect of identity assessed after the performance task. That is, when identity was assessed before the cognitive ability test, stronger identity predicted better performance on the cognitive test. When identity was assessed after the cognitive ability test, weaker identity predicted better performance. McFarland et al. found that greater pre-post differences on the identity measure predicted better performance among Blacks in the threat condition. They interpreted this as signifying that disidentification from Black identity during the test facilitated performance on a cognitive ability test.

In another study of racial identity as a moderator of stereotype threat (Davis, Aronson, & Salinas, 2006), a developmental model of racial identity (Cross, 1971, 1991, cited in Davis et al., 2006) was found to predict test performance among Blacks in a non-threat condition. Davis et al. operationalized the developmental model of racial identity using Helms and Parham’s Racial Identity Attitudes Scale-Revised, which assesses which of four identity statuses a participant holds. Of particular interest were those with “Internalization” status. Internalization entails being pro-Black without denigrating Whites. Davis et al. (2006) hypothesized that Internalization status test takers would perform better because they are less likely to endorse or seek to disprove negative stereotypes. It was further believed that the positive effects of Internalization status would be found in the non-threat condition, where situational forces would be less likely to overwhelm individual differences. Consistent with these predictions, Davis et al. found that Internalization status was positively related to test performance among Blacks, but only in the non-threat condition.

Smith and Hopkins (2004) examined the role of cultural identity in stereotype threat among Blacks. Using a measure indexing the extent to which participants followed beliefs and practices of African-American culture, they found that those individuals with a strong cultural identity and internal locus of control performed better on an arithmetic test. However, Smith and Hopkins failed to replicate the stereotype threat effect, and did not find that cultural identity played a role on a spelling test. Thus, while cultural identity may play a role in academic performance, it is not clear whether the domain of performance or stereotype threat interact with this identity to influence performance.

Finally, Oyserman and her colleagues looked at the influence of identity using an experimental paradigm that is similar to the stereotype threat paradigm. Specifically, in two studies (Oyserman, Gant, & Ager, 1995; Oyserman, Kemmelmeier, Fryberg, Brosh, & Hart-Johnson, 2003), Black participants were reminded of their racial identity, or not, and proceeded to complete a novel math task. Using persistence on the task as the dependent variable, Oyserman et al. (2003) found
that Blacks who did not define themselves in racial/ethnic terms (aschematics), and those who only identified in terms of their ingroup, persisted less than those who identified with both the ingroup and with larger society. Oyserman et al. (1995) found that connectedness with Black identity predicted less persistence on the math task in the identity salience condition. Thus, it appears that having dual ethnic and larger societal (superordinate) identities may buffer the negative consequences of identity salience on performance in a stereotype relevant domain.

Previous studies of the impact of ethnic identity on stereotype threat have found that defining oneself exclusively in terms of one’s ethnicity, but not with the broader society, can have detrimental effects on performance. However, these studies have not examined how other dimensions of ethnic identity (e.g., endorsement of identity-relevant ideologies, regard for the ingroup, etc.) affect stereotype threat. Furthermore, they have not consistently looked at the impact of identity in the threat condition. The current research fills a gap in the literature, then, by making use of a multidimensional model of Black identity (Sellers, Smith, Shelton, Rowley, & Chavous, 1998) to explore the influence of two dimensions of identity. Specifically, the current article examines the effects of public regard, or “the extent to which individuals feel that others view African Americans positively or negatively”, and private regard, or “the extent to which individuals feel positively or negatively towards African Americans as well as how positively or negatively they feel about being African American” (Sellers et al., 1998).

Public and private regard

Public regard has received less attention than private regard, in part because early work failed to use reliable and valid measures of the construct (Rowley, Sellers, Chavous, & Smith, 1998; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). More recent studies using reliable measures of public regard have found that high public regard tends to be a liability. That is, public regard has been found to moderate the relationship between perceived discrimination and depression, stress, and feeling “bothered” by discrimination, such that those higher in public regard are more susceptible to these negative outcomes (Sellers & Shelton, 2003; Sellers, Copeland-Linder, Martin, & Lewis, 2006). Sellers and his colleagues have proposed that individuals low in public regard may not be as affected by perceived discrimination because it is consistent with their worldview, and thus they may have developed strategies to cope with discrimination.

Early validation studies on private regard (Sellers et al., 1997) found that it correlated positively with nationalist ideology, race centrality, and contact with other Blacks. Nationalist ideology represents the notion that being of African descent is unique and important, while race centrality indicates the importance of race in one’s social identity. Other studies have found that private regard is related to positive health outcomes, such as less perceived stress (Caldwell, Zimmerman, Bernat, Sellers, & Notaro, 2002), increased self-esteem (Rowley et al., 1998), increased well-being (Sellers et al., 2006), and greater exploration of, and commitment to, one’s ethnic identity (Yip, Seaton, & Sellers, 2006).

Public and private regard are especially pertinent since the heart of stereotype threat theory lies in the assumption that domain-identified individuals are concerned about being seen through the lens of negative stereotypes (e.g., Steele, 1997). Given this assumption, one might predict that individuals low in public regard (i.e., those who believe others hold Blacks in low regard) would be particularly susceptible to the effects of stereotype threat. Indeed, this is what Sellers et al. (1998) postulate. On the other hand, if one knows about the negative stereotypes concerning the intellectual ability of Blacks—as American college students surely do, given how pervasive the stereotypes are (Devine, 1989; Ho, Thomsen, & Sidanius, 2009; Rothbart & John, 1993; Wheeler, Jarvis, & Petty, 2001)—and nevertheless believes that the stereotypes are not widely endorsed, one might be particularly apprehensive about acting in a fashion that lends credence to the stereotype.
In other words, it might be those who are high in public regard who are particularly concerned about not confirming negative stereotypes. If so, such individuals would be particularly susceptible to the pernicious effects of stereotype threat. We pose similarly divergent predictions for private regard. That is, one might predict that individuals who are low in private regard will be more susceptible to stereotype threat because they presumably believe in the stereotypes, or that high levels of private regard would render one more susceptible because one has a positive identity to uphold. The exploratory analyses in this article shed light on which of these two hypotheses concerning racial regard (public and private) is more likely to hold.

Method

Participants

Forty participants were recruited from the Department of Psychology Study Pool or from African-American student organizations at Harvard University. Participants ranged in age from 18 to 23 ($M = 19.7$); 22 participants were Black (i.e., self-identified as African American) and 18 self-identified as White. Participants were given either $10.00 or course credit in return for participation.

Measures

Multidimensional Inventory of Black Identity (MIBI) Black participants were given the MIBI, which assesses three dimensions of racial identity. Of particular interest here is the racial regard dimension, which assesses feelings of positivity and negativity toward being Black. The regard dimension consists of two subscales: private and public regard. Public regard, again, is “the extent to which individuals feel positively or negatively towards African Americans as well as how positively or negatively they feel about being African American” (Sellers et al., 1998). It is assessed by six items on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree) and exhibited adequate reliability ($\alpha = .60, M = 6.40, SD = .57$). Examples of items include, “I feel that Blacks have made major accomplishments and advancements” and “I am proud to be Black”. Public regard, or “the extent to which individuals feel that others view African Americans positively or negatively”, is also assessed by six items on the same 7-point scale, and proved to be a reliable measure ($\alpha = .83, M = 2.73, SD = .91$). Sample items are “In general, others respect Black people” and “Society views Black people as an asset”.

Graduate Record Exam (GRE) verbal items

Thirty-seven items were selected from the GRE Practicing to Take the General Test, verbal sections (GRE, 2002). Items took the form of antonyms, analogies, and reading comprehension, and come from GREs that were previously administered in real test situations. Since test difficulty has been found to moderate the stereotype threat effect in previous studies (e.g., O’Brien and Crandall, 2003), we chose items that were difficult, as indexed by the percentage of previous test takers who answered the items correctly. Specifically, only 13% of test takers in a three-year period answered the most difficult question correctly, while 68% answered the easiest question correctly. Averaging across the items we selected, 31% of national test takers responded correctly. For our primary dependent measure, we computed the percentage of questions a participant answered correctly out of the number of items they attempted ($M = .38, SD = .17$) (Shih, Pittinsky, & Ambady, 1999; Steele & Aronson, 1995).

Anxiety

Anxiety was assessed using the State Trait Anxiety Inventory (STAI, Form Y; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). This scale consists of 20 items asking participants to indicate how they “feel right now, … at this moment”. Sample items include “I feel nervous” and “I feel calm” (reverse scored). Participants responded on a 4-point scale, with 1 = not at all and 4 = very much so. This scale exhibited good reliability ($\alpha = .88$) in our sample. The mean score on the scale was 1.83 ($SD = .49$).
SAT verbal score  Self-reported SAT verbal scores were used as a control variable ($M = 713.00$, $SD = 75.79$).

Manipulation check and suspicion  Two questions at the end of the experiment served as manipulation and suspicion checks. First, participants were asked whether “the verbal questions were: (a) used to assess [their] cognitive and verbal reasoning abilities; (b) new standardized verbal questions that are under development and non-diagnostic of ability; or (c) presented to [them] to measure verbal learning”. Next, they responded yes or no to the question, “Did you believe our directions concerning the purpose of the test?” If they responded no, they were asked to indicate why.

Procedure  Participation took place over two sessions. The first session included a survey of participants’ demographic background and social attitudes. Participants were asked to return 22 days later on average for the experimental session of the study (this ranged from 11 to 41 days; the return date was not available for three participants). We purposely split the two sessions so that only participants in the “threat” condition would be primed with their ethnic identity during the second session. For the experimental session, participants were randomly assigned to either a stereotype threat (coded 1) or “no-threat” (coded 0) condition, with 11 Blacks and nine Whites in each condition. In the threat condition, participants were instructed that they were “being asked to work on a difficult verbal test” and that “we are interested in assessing [their] cognitive and verbal reasoning abilities” (Steele & Aronson, 1995). They were further asked to indicate their ethnic identification. Participants in the no-threat condition were asked “to help with the development of new standardized verbal questions”, and were informed that the “current version of the questionnaire is non-diagnostic (non-predictive) of ability”. No questions about ethnic identity were included in the no-threat condition. Participants were then told that they had 20 minutes to complete the verbal questions.

Results  

Manipulation check  
We conducted a $2 \times 2$ chi-square analysis to see if participants were more likely to respond that the test was used to assess their abilities or that it was non-diagnostic of ability as a function of their experimental condition. This revealed that participants in the threat condition were more likely to respond that the test was measuring their abilities while people in the no-threat condition were more likely to believe the test was non-diagnostic (Yates’ chi-square $= 6.96$, $p < .01$). Concerning suspicion, 54% of participants who responded to the question of whether they believed directions concerning the purpose of the test answered yes. Among those who said “no”, only two reported they thought we might be interested in race. One of these participants was White while the other was a Black participant in the no-threat condition (and thus would have worked against the stereotype threat hypothesis). Importantly, no participant reported suspecting racial identity played a role in our study. Most participants who responded that they did not believe the directions cited reasons not specific to this study, such as not believing psychology studies in general (nine participants).

Test performance and anxiety  
Moving on to our substantive questions of interest, we first examined whether our stereotype threat manipulation was successful by looking at test performance (questions answered correctly divided by questions attempted) as a function of experimental condition and race. An analysis of variance, controlling for SAT verbal scores and the SAT verbal score by condition interaction (Yzerbyt, Muller, & Judd, 2004), did not reveal a significant condition by race interaction ($F(1, 34) = 1.52$, $p = .23$), but follow-up analyses looking at test performance separately among Black and White students did uncover a stereotype threat effect. Specifically, the proportion of questions answered correctly out of those attempted was
much higher among Black students in the no-threat condition ($M = .45, SD = .17$) compared to those in the threat condition ($M = .26, SD = .11$). An analysis of variance, with SAT verbal scores included as a control variable, revealed that this conditional difference among Black students was indeed significant ($F(1, 19) = 4.68, p < .05, \omega^2 = .07$). In contrast, White participants appeared completely unaffected by our stereotype threat manipulation, answering about the same percentage of questions attempted correctly in the no-threat condition ($M = .42; SD = .14$) and threat condition ($M = .39, SD = .21; F(1, 15) = .03, p = .86$). Additionally, we looked at whether Blacks in our threat condition would score higher on the STAI than Blacks in the no-threat condition, as stereotype threat theorists would predict. A one-way ANOVA revealed no such difference between Blacks in the no-threat condition ($M = 1.87, SD = .66$) and Blacks in the threat condition ($M = 1.81, SD = .43; F(1, 20) = .08, p = .78$). We also examined the relationship between anxiety and test performance in our entire sample ($r = .15, p = .37$), for Black participants only ($r = .14, p = .53$), and for Black participants in the threat condition ($r = .44, p = .17$), but did not find that anxiety as measured by the STAI correlated with our index of performance.

**Public and private regard**

Having established the effectiveness of our threat manipulation on test performance, we moved on to the central question of this article, which concerns how racial regard, or feelings of positivity or negativity concerning being Black, affects susceptibility to stereotype threat. To explore this issue, we conducted hierarchical multiple regression analyses among the Black respondents to see if there were significant interactions between public or private regard, on the one hand, and experimental condition, on the other. After centering SAT verbal scores, condition, and public regard, we entered each of these variables in turn, followed by the condition $\times$ public regard interaction term. The public regard $\times$ condition interaction term was significant ($B = -.12, t(17) = -2.17, p < .05$; see Table 1), and the associated change in variance explained was also significant ($\Delta R^2 = .08, p < .05$). To understand the meaning of this significant interaction, we conducted a simple slopes analysis, which revealed that among those relatively low in public regard (i.e., 1 SD below the mean), the experimental manipulation did not influence test performance ($B = -.01, t(17) = -.16, p = .88$; see Figure 1a). However, among those relatively high in public regard (i.e., those 1 SD above the mean), assignment to the threat condition did impair test performance ($B = -.23, t(17) = -3.16, p < .01$). We further explored this interaction by looking at the simple slopes with experimental condition as the moderator. Here, we find that in the no-threat condition, those with high public regard (1 SD above the mean) had slightly, but not significantly higher test scores ($B = .04, t(17) = 1.34, p = .20$; see Figure 1b). In the threat condition, those with high public regard had relatively lower test scores (also not significantly; $B = -.08, t(17) = -1.67, p = .11$).

Because it is possible that those with high public regard would feel more anxiety in the threat condition, due to additional pressure to uphold regard, we conducted the same regression analysis using anxiety as the dependent variable. We found a significant public regard by condition interaction ($B = -.67, t(17) = -2.26, p < .05$). Follow-up simple slopes analyses revealed that in the threat condition, there is a non-significant trend of lower anxiety among participants higher in public regard ($B = -.41, t(17) = -1.64, p = .12$) and a non-significant trend in the non-threat condition of higher anxiety among those with higher public regard ($B = .26, t(17) = 1.55, p = .14$).

We conducted the same hierarchical regression analysis for the private regard dimension. After adding SAT verbal, condition, and private regard to the equation predicting test performance, the private regard $\times$ condition interaction was marginally significant ($t(17) = -1.80, p < .10$; see Table 2). The change in variance explained with the addition of the interaction term was also
marginally significant ($\Delta R^2 = .06, p < .10$). Among those relatively low in private regard (1 SD below the mean), assignment to the threat condition had essentially no effect ($B = -.02, t(17) = -.25, p = .81$; see Figure 2a). In contrast, those relatively high in private regard suffered performance decrements while in the threat condition ($B = -.19, t(17) = -2.85, p < .05$). Simple slopes with experimental condition as the moderator yielded a similar finding, with essentially no effect of private regard in the no-threat condition ($B = .03, t(17) = .54, p = .60$; see Figure 2b) and a marginally significant negative effect in the threat condition ($B = -.13, t(17) = -1.81, p < .10$). We also conducted this analysis with anxiety as a dependent variable, as we did with the public regard analyses. Here, we find no evidence of a private regard by condition interaction effect ($B = .43, t(17) = .94, p = .36$).  

**Table 1. Regression analysis with public regard by condition interaction predicting performance on a verbal test among African-Americans ($N = 22$)**

<table>
<thead>
<tr>
<th>Variable</th>
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<th>$\beta$</th>
</tr>
</thead>
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<td></td>
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<td>0.00</td>
<td>0.00</td>
<td>0.73***</td>
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<tr>
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<td></td>
<td></td>
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<tr>
<td>SAT Verbal (centered)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.60**</td>
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<td>Threat Condition (centered)</td>
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<td>0.05</td>
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<tr>
<td><strong>Step 3</strong></td>
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<td>0.00</td>
<td>0.59**</td>
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<td>0.03</td>
<td>0.03</td>
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<tr>
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<td></td>
<td></td>
</tr>
<tr>
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<td>0.00</td>
<td>0.53**</td>
</tr>
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<tr>
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<td>-0.33*</td>
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</table>

Note: $R^2 = .54$ for Step 1 ($p < .001$); $\Delta R^2 = .09$ for Step 2 ($p < .05$); $\Delta R^2 = .00$ for Step 3 ($p = .85$); $\Delta R^2 = .08$ for Step 4 ($p < .05$).

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

**Discussion**

In line with previous research (e.g., Steele & Aronson, 1995), we found that African-American students who were stereotype threatened suffered performance decrements on a standardized academic test compared to those not threatened, and compared with White participants. Having replicated the basic stereotype threat effect, we set out to explore opposing hypotheses concerning the influence of racial regard on susceptibility to stereotype threat. Sellers et al. (1998) postulated that Blacks high in public regard would be less susceptible to stereotype threat. While the reasoning behind this hypothesis was not fully specified, one might argue in favor of this hypothesis by suggesting that students who do not believe others hold the negative stereotype about their group would be less concerned about being perceived in terms of the negative stereotype concerning African-American intellectual ability. On the other hand, ample evidence exists revealing the pervasiveness of the stereotypes under consideration (e.g., Devine, 1989; Ho et al., 2009; Rothbart & John, 1993; Wheeler et al., 2001). Thus, one could also predict that if one knows others are aware of but do not endorse the stereotype, one would be particularly motivated to preserve the positive identity and avoid confirming the negative stereotype. We had similar opposing hypotheses concerning private regard. While participants low in private regard might be more susceptible to stereotype threat because of belief in the negative stereotype, one might also predict that individuals high in private regard would have most to lose in confirming stereotypes and thus would be more concerned when confronted with them.

The data at hand enabled us to assess the merit of these opposing hypotheses, and lent evidence in support of the latter hypothesis. Among the African-American students in our study, those who felt relatively positively about the perception...
Figure 1. Test performance (accuracy) as a function of experimental condition and level of public regard (1 SD below and above the mean).
that others have of African Americans tended to be more susceptible to the stereotype threat effect. We also have evidence that African Americans who feel positively about African Americans themselves are also more susceptible to the effect. This implies a similar process underlies the moderating effects that public and private regard have on stereotype threat. That is, among our participants with high racial regard, who are almost certainly aware of the negative stereotypes concerning the intelligence of African Americans, there lies an extra motivation to preserve the positive identity. This makes sense in light of other findings concerning the moderating effects of domain identity and ethnic identity. Just as those who are relatively high in domain and ethnic identity have the most to lose by confirming negative stereotypes (and thus are more susceptible to stereotype threat), those who believe that Blacks have a positive identity have more to lose in potentially confirming a negative stereotype than those who already believe that Blacks are viewed negatively. The motivational power of a potential loss in group-based esteem can further be understood in the context of other work documenting the motivational potency of potential losses (Kahneman & Tversky, 1984). It is argued that stereotype threat exerts its effect because people do not want to be seen through the lens of negative stereotypes and thus are faced with an extra cognitive burden when confronted with those stereotypes (Steele, 1997; Steele & Aronson, 1995). We add that those who are aware of the negative stereotypes, but believe Blacks are viewed positively, would be particularly motivated to avoid confirming negative stereotypes.

Given that our participants with high public and private regard were more susceptible to stereotype threat, one might question how secure these feelings of positive regard are. While one may claim that one’s group is viewed positively (by others and by oneself), how confident one is in this claim may impact the effect of racial regard on stereotype threat. Thus, future research should explore how positive racial regard interacts with the security of one’s identity to influence susceptibility to stereotype threat.

The current study did not find a relationship between experimental condition and anxiety or anxiety and test performance. This is not entirely surprising, given that other studies using explicit measures of anxiety have yielded inconsistent results (Steele, Spencer, & Aronson, 2002). Nevertheless, it does leave us with the question of what mechanism is responsible for the relationship between racial regard, stereotype threat, and test performance. There was an unexpected trend toward lower anxiety in the threat condition among those relatively high in public regard. At present, we do not

Table 2. Regression analysis with private regard by condition interaction predicting performance on a verbal test among African Americans (N = 22)

<table>
<thead>
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<th>SE B</th>
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<td>0.00</td>
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<td>-0.33*</td>
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<td>Public Regard (centered)</td>
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<td>Public Regard (centered)</td>
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<td>Step 4</td>
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<tr>
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<td>0.04</td>
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<tr>
<td>A × B</td>
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Note: $R^2 = .54$ for Step 1 ($p < .001$); $ΔR^2 = .09$ for Step 2 ($p < .05$); $ΔR^2 = .01$ for Step 3 ($p = .59$); $ΔR^2 = .06$ for Step 4 ($p < .10$). $+p < .10; *p < .05; **p < .01; ***p < .001$. 

The current study did not find a relationship between experimental condition and anxiety or anxiety and test performance. This is not entirely surprising, given that other studies using explicit measures of anxiety have yielded inconsistent results (Steele, Spencer, & Aronson, 2002). Nevertheless, it does leave us with the question of what mechanism is responsible for the relationship between racial regard, stereotype threat, and test performance. There was an unexpected trend toward lower anxiety in the threat condition among those relatively high in public regard. At present, we do not
Figure 2. Test performance (accuracy) as a function of experimental condition and level of private regard (1 SD below and above the mean).
know whether this finding is reliable, nor do we know whether implicit and explicit indices of anxiety would yield the same findings (Egloff & Schmukle, 2002). These questions should be examined by future research looking at the relationship between racial regard and test performance under stereotype threat.

It is also important to differentiate low public regard from stigma sensitivity (Inzlicht, McKay, & Aronson, 2006) and stigma consciousness (Brown & Pinel, 2003). Stigma sensitivity has been operationalized as race-based rejection sensitivity, or “one’s tendency to anxiously expect, readily perceive, and strongly react to rejection due to race” (Inzlicht et al., 2006, p. 263). Stigma consciousness is defined as the “extent to which individuals are chronically self-conscious of their stigmatized status”. While low public regard may precede stigma consciousness and sensitivity, believing that others do not highly regard African Americans does not necessarily imply one is overly concerned with being judged in terms of negative stereotypes. In addition, we cannot assume that individuals with low public regard also strongly identify with their race, which may influence whether one expects to be judged in terms of race. Thus, while the current work looking at low and high public regard could play a role in stigma sensitivity and consciousness, the constructs can be differentiated, and their relationship needs empirical attention.

Finally, the practical implications of the present study are also worth considering. Are we to sound alarm bells concerning the potential negative consequences of high racial regard? Certainly, having positive regard for one’s racial group is a desirable state. More reasonably, the present findings underscore the importance of creating supportive environments that do not pose a threat to members of groups that are negatively stereotyped (e.g., the “wise” schooling approach described by Steele (1997)). Just as we need to be concerned about domain disidentification (Steele, 1997), we should also be concerned with preserving positive identities that persist against a backdrop of negative stereotypes.

Notes

1. While we collected data on gender, we did not use this as a blocking factor in assignment to experimental conditions. Thus, there were four Black females and seven Black males in the no-threat condition and seven Black females and four Black males in the threat condition. Previous research (e.g., Davis et al., 2006; Steele & Aronson, 1995) examining stereotype threat among African Americans has not revealed a gender effect.

2. We conducted similar analyses using the number of items answered correctly as the dependent variable rather than accuracy. The pattern of results was largely the same, although most of these findings were not statistically significant. First, Black participants answered fewer items correctly in the threat condition ($M = 7.91$) than in the no-threat condition ($M = 10.36$), although the effect of condition, controlling for SAT verbal scores, was not significant ($F(1, 19) = .49$, $p = .50$). We also regressed the number of items answered correctly on public and private regard separately, using the same covariates we used in the analyses using accuracy as the dependent variable. The public regard by condition interaction term was not significant ($t(17) = -1.51$, $p = .15$), and the simple slopes, while reflecting a pattern found with accuracy as the dependent variable, were also not significant ($B = 1.32$, $t(17) = .38$, $p = .57$ at $1\ SD$ below the mean on public regard, and $B = -4.01$, $t(17) = -1.57$, $p = .14$ at $1\ SD$ above the mean in public regard). The private regard by condition interaction was marginally significant ($t(17) = -1.80$, $p = .09$), while simple slopes also mirrored the pattern found with accuracy as the dependent variable. Specifically, condition did not have an effect for those who were $1\ SD$ below the mean in private regard ($B = -0.02$, $t(17) = -.25$, $p = .81$), but had an effect on those who were $1\ SD$ above the mean in private regard ($B = -.19$, $t(17) = -2.85$, $p = .01$).

References


Steele, C. M., Spencer, S., & Aronson, J. (2002). Contending with group image: The psychology


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