

# Distinguishing Institutional Identification From Academic Goal Pursuit: Interactive Effects of Ethnic Identification and Race-Based Rejection Sensitivity

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We examined the interactive effects of ethnic identification (EI) and race-based rejection sensitivity (RS–race) on institutional outcomes among African American college students. We distinguished between effects on institutional identification on the one hand and academic goal pursuit (e.g., staying in school, grade point average [GPA]) on the other. Supporting the utility of this distinction, we found that EI and RS–race interacted to predict these outcomes differently. Higher EI in combination with higher RS–race predicted reduced identification with the institution (Studies 1, 2, and 3a). This combination, however, did not lead to decreases in GPA over time. Moreover, EI was positively related to intentions to stay in school as well as to GPA increases among those lower in RS–race (Studies 1 and 3b). Implications for understanding identity negotiation vis-à-vis performance in institutional settings are discussed.

*Keywords:* academic achievement, belonging, ethnic identity, stigma, prejudice

The social milieu of predominantly White universities poses unique challenges for minority students beyond the normative transitional difficulties of entrance to university, such as creating new social networks and adjusting to more demanding coursework (Ruble & Seidman, 1996). Minority students may experience anxiety and discomfort arising from the sense that their group is undervalued and perhaps only grudgingly accepted (Bowen & Bok, 1998; Ethier & Deaux, 1994; Purdie-Vaughns, 2004). At the same time, both the students and their universities are invested in the students' achievement. The potential conflict between identification and academic goal pursuit at a given institution is the focus of this article.

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Over the past two decades, a body of literature on stereotype and social identity threat (Steele, Spencer, & Aronson, 2002) and status-based rejection sensitivity (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002) has outlined the ways in which concerns about being stereotyped or marginalized on the basis of one's status group membership can lead to decrements in academic performance (Aronson, 2002; Cohen, Garcia, Apfel & Master, 2006; Cohen & Sherman, 2005) as well as institutional belonging (Mendoza-Denton, Page-Gould, & Pietrzak, 2006; Walton & Cohen, 2007). It has been argued that being strongly identified with a group that is stigmatized in an institution can increase the threat surrounding such stigmatization, leading to a devaluing of and disengagement from core institutional goals such as academic achievement (Major, Spencer, Schmader, Wolfe, & Crocker, 1998; Steele et al., 2002). Indeed, Steele et al. (2002) noted that "the more one is identified with the group about whom the negative stereotype exists . . . the more stereotype threat one should feel in situations where the stereotype applies" (p. 391).

In contrast to this literature, a parallel body of research and theory has emerged linking ethnic identification with a host of positive academic outcomes for minority students, including perseverance, self-efficacy, and academic achievement (Cokley, 2003; Cross, Strauss, & Fhagen-Smith, 1999; Davis, Aronson, & Salinas, 2006; Phinney, 1992; Roberts et al., 1999; Shelton et al., 2006; Spencer, Noll, Stoltzfus, & Harpalini, 2001). This literature is based on the notion that a strong sense of ethnic identification provides individuals with a sense of groundedness, community, and historical perspective that can serve as a source of personal strength in general and within alienating institutional contexts in particular (Shelton et al., 2006; Wong, Eccles, & Sameroff, 2003).

In this article, we integrate insights from both of the above literatures, recognizing both that university contexts can be threatening for minority students as a result of their ethnicity and that identification with one's ethnicity can provide protective effects within these very contexts. We argue that a fuller understanding of the role of ethnic identification within the academic context requires (a) disentangling the effects of such identification from the effects of stigma-related threat within the predominantly White social milieu and (b) differentiating between identifying with the university on the one hand and pursuing academic goals within the university on the other (Cokley, 2003; Graham, 1994). In what follows, we marshal relevant theoretical and empirical literature in support of these distinctions, which jointly lead to the hypotheses that inform the present work.

### ETHNIC IDENTIFICATION AND STIGMA-RELATED THREAT

We propose that the implications of identifying with a stigmatized social group in a superordinate context depend both on the strength of that identification and the extent to which an individual experiences threat as a result of group membership in that context. More specifically, we postulate that for minority students at predominantly White universities, the benefits of strongly identifying with one's ethnic group may depend on the extent to which one anxiously expects the institution and its representatives to reject or discriminate against this group.

Our focus was on the interactive relation between ethnic identification (EI) and race-based rejection sensitivity (RS-race) in predicting institutional attitudes as well as academic goal pursuit and attainment. In line with social identity theory (Tajfel & Turner, 1986), we conceptualized ethnic identification as a positive sense of belonging to one's group, including its concomitant attitudes, feelings, and behaviors (Phinney, Cantu, & Kurtz, 1997; Roberts et al., 1999). RS-race (Mendoza-Denton et al., 2002) refers to a process whereby direct or vicarious experiences of race-based mistreatment, devaluation, and discrimination lead people to develop anxious expectations that they might be victims of similar ill treatment in future relevant situations.

Ethnic identification and the threat of rejection on the basis of ethnic group membership are clearly related constructs; both require awareness and salience of category group membership. Nevertheless, consistent with efforts to more precisely articulate different processes often subsumed under the construct of collective identity (Ashmore, Deaux, & McLaughlin-Volpe, 2004), we distinguished between these two aspects of experience related to one's ethnicity. Research using the Multigroup Ethnic Identity Measure (MEIM), for example, consistently finds that Outgroup Orientation loads onto a different factor than does Ethnic Identity (Phinney, 1992; Ponterotto, Gretchen, Utsey, Stracuzzi, & Saya, 2003; Worrell, Conyers, Mpofo, & Vandiver, 2006). Similarly, Luhtanen and Crocker (1992) reported that the relation between the Identity and Public subscales of their Collective Self-Esteem Scale, which seem most closely tied to ethnic identification and RS-race respectively, correlate across four studies between .05 and .30. Finally, Mendoza-Denton et al. (2002, Study 2) reported a positive yet modest correlation (.34) between ethnic identification and RS-race specifically. Thus, there seems to be both theo-

retical and empirical support for distinguishing between these two related yet separable constructs.

As Phinney (1992) remarked, "[A]ttitudes toward other groups are not part of ethnic identity, but they may *interact* with it as a factor in one's social identity in the larger society" (p. 161, emphasis added). Accordingly, we examined how the interactive effects of ethnic identification and RS-race might help us understand minority students' academic outcomes in predominantly White universities. As previewed earlier, we distinguished between two such outcomes, institutional identification and academic goal pursuit, because empirical evidence suggests different processes at work.

### INSTITUTIONAL IDENTIFICATION VERSUS ACADEMIC ACHIEVEMENT IN THE INSTITUTION

We expected that the implications of identifying with a minority ethnic group within a predominantly White university would depend not only on the strength of that identification but also on the extent to which one anxiously expects rejection as a result of minority group membership in this context. We distinguish between effects on institutional identification on the one hand and academic goal pursuit on the other. These two types of institutional outcomes have at times been used interchangeably in the literature on minority achievement, with the assumption that low institutional identification implies poor academic outcomes (McWhorter, 2000; Ogbu & Simons, 1998). We argue, however, that these are outcomes that may be affected differently by ethnic identification and RS-race.

#### Institutional Identification

We hypothesized that as RS-race increases, there should be an increasingly negative association between ethnic identification and institutional identification, since a sense of affiliation with the institution would imply affiliation with those who devalue a group with which one is positively identified. In support of this idea, several researchers have postulated that one of the principal factors underlying incompatibility between superordinate and subordinate identities is the degree to which individuals feel that members of the superordinate group will exclude or devalue members of the subordinate group (Deaux & Ethier, 1998; Dovidio, Gaertner, Flores Niemann, & Snider, 2001; Sidanius, Feshbach, Levin, & Pratto, 1997; Spencer et al., 2001; see also Brown & Hewstone, 2005).

What might the relation between ethnic identification and institutional identification be among students lower in RS-race? As stated earlier, we argue that if the institution is not viewed as rejecting of one's ethnic group, feeling identified with one's ethnic group need not conflict with feeling identified with the institution. However, even if the two foci of identification are compatible for students lower in RS-race, given that the university is not an ethnically centered organization per se but is instead organized around its educational mission, we did not expect a systematic positive relation between ethnic identity and institutional identity.

To summarize: we hypothesized that individual differences in RS-race would moderate the relation between ethnic identification and institutional identification, such that among students higher in RS-race, strength of ethnic and institutional identifications would

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be negatively related, while among students lower in RS-race, the strength of these identities would not be significantly related. These predicted relations are presented schematically in Figure 1a.

### Academic Goal Pursuit Within the Institution

Even though ethnic identification may be negatively related to institutional identification specifically in the presence of stigma-related threat, there is reason to believe that weaker attachment to the institution may not automatically translate into decreased academic goal pursuit. We propose that African American students may cope in threatening contexts by strategically separating their feelings toward the institution from the academic achievement goals they seek to accomplish therein (i.e., "I may not like this place, but I am still going to get what I came here for"; Burke & Hoelter, 1988; Carson, 2004; Graham, 1994). In support of this notion, Cokley (2003) found that African American students' academic self-concept was closely tied to instrumental goals (e.g., learning material on which they will be tested) and less to esoteric knowledge acquisition goals (e.g., learning for learning's sake), particularly within predominantly White university settings.

Various scholars (Cokley, 2003; Shelton et al., 2006; Spencer et al., 2001) have suggested that ethnic identification should bear a positive relation to achievement-related outcomes. We argue, however, this relation should be evident only when students do not have to contend with the disruptive anticipatory threat stemming from discrimination concerns. In support of this idea, Davis, Aronson, & Salinas (2006) examined whether strength of racial identity moderated the effects of a stereotype threat manipulation on a Graduate Record Examination performance task. Strongly racially identified participants in the low-stereotype-threat condition outperformed all other groups, suggesting that in the absence of threat, one may be particularly likely to see an incremental benefit of being identified with one's group.

Taken together, the findings described suggest that among students lower in RS-race, one should expect a positive relationship between ethnic identification and achievement-related outcomes. At the same time, even though we anticipated that students who highly identified with their ethnic group would show reduced institutional identification if they were also high in RS-race (as in

Figure 1a), we did not necessarily expect them to show similar reductions in academic achievement due to a strategic separation of institutional goals from institutional attitudes. The predictions are illustrated in Figure 1b and provide a point of comparison for the predictions for institutional identification in Figure 1a.

## THE PRESENT STUDIES

We tested the predictions that we have outlined in the preceding sections in three studies with African American students attending selective, historically White universities. Study 1 was a correlational study undertaken as an initial test of these hypotheses; individual differences in RS-race and ethnic identification were measured. In Study 2, we investigated how situationally priming ethnic identification affected African American students' university identification and whether this effect was moderated by individual differences in RS-race. In Study 3, we followed a group of students through several semesters of college and observed how individual differences in ethnic identification and RS-race, measured before college began, interacted to predict changes in students' institutional identification as well as their grade point average (GPA) trajectory.

### STUDY 1

We conducted a cross-sectional, correlational questionnaire study to establish preliminary links among ethnic identification, RS-race, and institutional outcomes. On the basis of prior research (Harris, Middleton, & Joiner, 2000; Tropp & Wright, 2001), we developed and used a pictorial Inclusion of Other in the Self-Institution (IOSI; see *Measures* section) scale as a measure of institutional identification. As a measure of institutional goal pursuit, we examined students' self-reported intentions to stay in school.

### Method

#### *Participants and Procedure*

Seventy-one African American undergraduates from a selective, predominantly White college in the United States were recruited

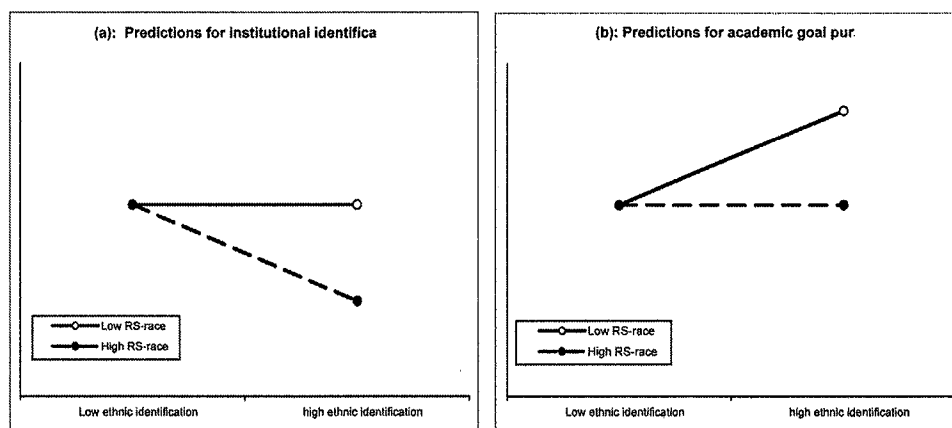


Figure 1. Predictions for the relationship of ethnic identification to (a) institutional identification (left panel) and (b) academic goal (right panel) outcomes as a function of RS-race.

from the psychology participant pool and through targeted advertisements to participate in a larger laboratory study. In 2003, undergraduate enrollment at this college by ethnicity was as follows: 48.0% White, 15.5% Asian, 6.5% Black, 7.3% Hispanic, and 22.7% other. In 2000 (the last year in which statistics for specific ethnicities were reported), 22.6% of professors were minorities: 11.4% Asian, 7.2% Black, 3.8% Hispanic, and 0.2% other.

Participants were compensated with \$15 or course credit for approximately 1 hr of their time. One participant failed to fill out the relevant measures, which left us with a sample of 70 for the analyses (20 men, 50 women; mean age = 20.4 years,  $SD = 2.1$ ). As part of the larger study, participants completed the measures described in the following section.

### Measures

#### RS–Race Questionnaire

To capture variability in anticipatory threat to discrimination, we used the RS–Race Questionnaire (Mendoza-Denton et al., 2002), which assesses anxious expectations of race-based rejection. Individual differences in RS–race have been found to predict a variety of important academic outcomes among minority students, including a lack of institutional belonging, unstable academic efficacy, and a pattern of declining scholastic performance over time (Aronson & Inzlicht, 2004; Mendoza-Denton et al., 2002).

The RS–Race Questionnaire consists of 12 scenarios depicting situations in which African Americans might feel the threat of being discriminated against or being subject to prejudicial treatment. A sample item is “Imagine you have just finished shopping, and you are leaving the store carrying several bags. It’s closing time, and several people are filing out of the store at once. Suddenly, the alarm begins to sound, and a security guard comes over to investigate.” Using 6-point scales, respondents indicate for each scenario (a) how concerned or anxious they would feel about the possibility of being rejected because of their race/ethnicity and (b) their expectation that the rejection would actually occur. Within each scenario, anxiety scores are multiplied by expectation scores to capture the conceptualization of anxious expectations as “hot cognitions,” whereby affect amplifies the effect of a given cognition (Metcalf & Mischel, 1999, p. 3). Anxious expectation scores are averaged across the 12 scenarios to arrive at a unitary RS–race score.

For the purposes of the larger study and for reasons unrelated to our current investigation, Item 10 (see Mendoza-Denton et al., 2002, Table 1) was removed from the scale in Study 1. For the 70 African American participants of this study, the alpha for the remaining 11 items was .88, and the mean RS–race score was 10.97 ( $SD = 6.31$ ). All analyses involving RS–race in this study and throughout the article were conducted using RS–race as a continuous variable.

#### Multigroup Ethnic Identity Measure (MEIM)

The original MEIM (Phinney, 1992) consists of 14 items that tap into pride in achievements of the ethnic group, feelings of belonging to an ethnic group, and sharing cultural customs and norms. Items include “I have spent time trying to find out more about my

own ethnic group, such as history, traditions, and customs.” Respondents indicate their agreement with each statement on a scale from 1 (*strongly disagree*) to 4 (*strongly agree*). All items loaded highly onto a single factor,  $\alpha = .80$ . Therefore, responses were averaged, with higher scores indicating higher levels of identification with one’s ethnic group ( $M = 3.19$ ,  $SD = 0.49$ ). The MEIM was positively correlated with RS–race,  $r(68) = .22$ ,  $p = .06$ .

#### Rejection Sensitivity–Personal Questionnaire

The Rejection Sensitivity–Personal Questionnaire (RS–personal; Downey & Feldman, 1996) measures anxious expectations of rejection on the basis of one’s unique characteristics or personal qualities (as distinct from one’s membership in a devalued group). By statistically controlling for RS–personal scores in the analyses described later, we could rule out the possibility that any effect of RS–race observed was due to having general expectations of rejection in social/interpersonal contexts, rather than specific concerns of rejection because of one’s membership in a stigmatized racial group (see Major & O’Brien, 2005).

The RS–Personal Questionnaire is constructed similarly to the RS–Race Questionnaire, with 18 items denoting interpersonal situations wherein rejection for personal reasons might occur (e.g., “You ask your parents to come to an occasion important to you”) followed by questions about anxiety and expectations of rejection. RS–personal scores are tabulated by multiplying responses to the anxiety and expectation questions for each situation and then averaging across the 18 situations (for this sample,  $M = 8.72$ ,  $SD = 2.83$ ,  $\alpha = .77$ ). The measure has been shown to be reliable, normally distributed, and valid (Downey & Feldman, 1996). RS–personal and RS–race scores were not significantly related in this study,  $r(68) = .15$ ,  $p = .23$ .

#### State Self-Esteem

To ensure that any observed effects were independent of participants’ self-esteem, we administered Heatherton and Polivy’s (1991) 20-item State Self-Esteem Scale. This measure assesses participants’ state self-worth in the social, appearance, and performance domains on a scale from 1 (*not at all*) to 5 (*extremely*). Responses were averaged to derive a unitary state self-esteem score ( $M = 3.61$ ,  $SD = 0.66$ ,  $\alpha = .90$ ). Consistent with evidence that self-esteem is not contingent on negative experiences resulting from uncontrollable status characteristics (Crocker & Major, 1989), RS–race was not significantly related to state self-esteem in this study,  $r(68) = -.11$ ,  $p = .35$ .

#### Year in School

To account for potential differences in students’ attitudes as a function of the length of time they had been at the university, we controlled for participants’ year in school ( $M = 2.94$ ;  $SD = 1.34$ ). Year in school was not significantly related to RS–race,  $r(68) = .10$ ,  $ns$ .

#### Institutional Identification

Institutional identification was assessed with the Inclusion of Other in the Self–Institution (IOSI) Scale. It is patterned after the Inclusion of Other in the Self (IOS) Scale (Aron, Aron, & Smollan,

1992). The original IOS scale consists of 7 pairs of circles. The area of overlap of the circles progressively increases, while the total surface area remains constant; one circle of each pair symbolizes the self, while the other symbolizes the other person. The IOS has been adapted to measure the closeness one feels between the self and groups (IOSG, where G indicates group use; Harris et al., 2000) as well as between the self and the ingroup (Inclusion of Ingroup in the Self, or IIS; Tropp & Wright, 2001). This latter scale, most analogous to our measure, has shown construct validity and test-retest reliability. While the IIS circles depict the self overlapping with the ingroup, in the current measure the circle denotes the self overlapping with the institution—that is, the “other” is the university. Following Harris and colleagues (2000), we expanded the scale to 10 circle-pairs. A higher score on this measure reflects greater overlap between self and the institution and is conceptualized as tapping into identification with the institution ( $M = 5.38, SD = 2.13$ ).

*Intentions To Stay in School*

We operationalized intentions to stay in school by reverse scoring considerations of dropping out before earning one’s degree. Students rated their agreement with the statement “I have considered dropping out of [the university] before earning a degree” on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Reversing participants’ scores on this scale helps in making comparisons across the other outcome measures in this article ( $M = 5.73, SD = 2.01$ ). Intentions to stay in school and the IOSI were significantly correlated but, as expected, did not overlap completely,  $r(68) = .40, p < .01$ . This is consistent with findings from Brewer, von Hippel, and Gooden (1999), showing a moderate relation between institutional belonging and academic commitment.

**Results**

We conducted a series of regression analyses to assess the hypothesized relations between the variables. Predictor variables were first standardized; significant interactions were then plotted

graphically using predicted values for individuals 1 standard deviation above and below the mean on the predictor variables. Preliminary analyses revealed no main effects or interactions as a function of age or gender; thus, these variables were not included in the analyses. We also controlled for the effects of self-esteem and RS-personal. Year in school, though only exerting an effect on intentions to stay in school, was retained as a control variable for both dependent variables in the interest of consistency.

*Institutional Identification*

We regressed IOSI scores on RS-race, ethnic identification, and their interaction, controlling for participants’ RS-personal, state self-esteem, and year in school. We observed no significant main effects of year in school,  $F(1, 63) = 1.33, p = .25$ ; RS-race,  $F(1, 63) = 0.26, ns$ ; or ethnic identification,  $F(1, 63) = 1.99, p = .16$ , on institutional identification. However, the analyses revealed the predicted interaction between RS-race and ethnic identity,  $b = -0.68, F(1, 63) = 6.05, p < .02$ . These results are illustrated graphically in Figure 2a. Simple slope analyses revealed that among students higher in RS-race, increases in ethnic identification were significantly negatively related to identification with the university,  $b = -1.06, t(63) = -2.44, p < .02$ . Among students lower in RS-race, ethnic identification and institutional identification were not significantly related,  $b = 0.29, t(63) = 0.87, ns$ . Similarly, among students higher in ethnic identification, RS-race was marginally significantly negatively related to institutional identification,  $b = -0.81, t(63) = -1.95, p = .056$ , whereas among those lower in ethnic identification, RS-race was not significantly related to institutional identification,  $b = 0.53, t(63) = 1.61, ns$ .

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*Intentions To Stay in School*

Preliminary analyses on intentions to stay in school revealed a main effect of year in school,  $b = -0.88, F(1, 63) = 14.27, p < .001$ , such that more advanced students were unsurprisingly more likely to have considered dropping out before earning their degree. Controlling for RS-personal and self-esteem, no significant main

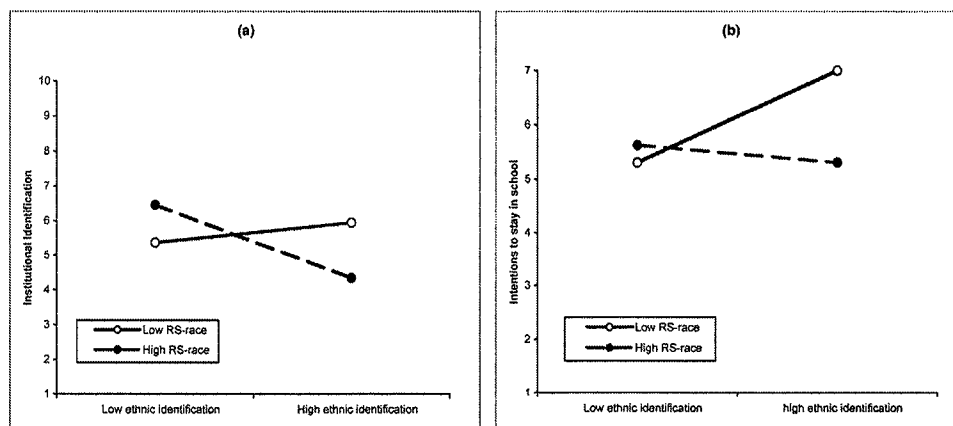


Figure 2. Study 1: (a) Institutional identification (left panel) and (b) intentions to stay in school (right panel) as a function of RS-race and ethnic identification. Markers denote predicted scores for individuals 1 standard deviation above and below the mean of the RS-race/ethnic identification distribution.

effects of RS-race or ethnic identification were observed; however, the analysis did reveal the predicted significant interaction between RS-race and ethnic identification,  $b = -0.54$ ,  $F(1, 63) = 4.67$ ,  $p < .05$ . This interaction is illustrated in Figure 2b.

Further analyses revealed that the simple slope for ethnic identity among participants higher in RS-race was not significant,  $b = -0.15$ ,  $t(63) = -0.40$ , *ns*, whereas it was significantly positive among those lower in RS-race,  $b = 0.92$ ,  $t(63) = 3.05$ ,  $p < .005$ . Among those higher in ethnic identification, RS-race was significantly negatively related to motivation to stay in school,  $b = -0.91$ ,  $t(63) = -2.42$ ,  $p < .02$ , whereas RS-race did not significantly predict intentions to stay in school among those lower in ethnic identification,  $b = 0.16$ ,  $t(63) = 0.54$ , *ns*.

### Discussion

The findings support the view that the implications of ethnic identification for minority students at a historically White institution depend on whether they view the superordinate institution and its typical members as threatening and whether the outcome is institutional identification or one's academic goals at the institution.

We first examined effects for institutional identification, as measured by the IOSI. Consistent with the pattern depicted in Figure 1a, for students lower in RS-race, there was no systematic relation between ethnic identification and institutional identification. For those higher in RS-race, the negative relation between strength of ethnic identification and concurrent identification with the university suggests incompatibility between these two identities. We then examined effects for academic goal pursuit, as measured by intentions to stay in school. Consistent with the pattern depicted in Figure 1b, the findings suggest that when one is lower in RS-race, the stronger one's ethnic identification, the stronger one's intentions to stay in school. However, among students higher in RS-race, ethnic identification was not significantly related to such intentions.

All analyses controlled for self-esteem, RS-personal, and year in school. These controls bolster our confidence that the observed effect of RS-race and ethnic identification on the outcomes observed in Study 1 were independent of students' feelings of self-worth, their generalized concerns about being rejected, or the time students have spent at the university.

### STUDY 2

Although the Study 1 findings were consistent with our predictions, this study had several limitations that we attempted to address in the next two studies. First, both of the outcomes examined in Study 1 were assessed with single-item measures. To test our hypothesis in Study 2, we used a composite measure of institutional identification based on prior literatures. Using an alternative measure also ensured that the identification pattern observed in Study 1 was not idiosyncratic to the IOSI.

A further limitation of Study 1 was its correlational design. To partially address this issue, in Study 2 we examined the effect of priming positive aspects of African American identity with culturally relevant icons, following Hong, Morris, Chiu, and Benet-Martinez (2000). Such exposure should lead to heightened acces-

sibility of these representations when processing subsequent stimuli (Higgins, 1996).

Although our brief experimental manipulation was not expected to capture the richness and complexity of ethnic identification as experienced in everyday life, we hypothesized that the accessibility of identity-relevant representations would nevertheless mimic the chronically accessible positive aspects of African American identity that are captured by the MEIM. As such, we expected that among students higher in RS-race, increasing the accessibility of ethnic identification would lead to decreases in institutional identification. By contrast, among students lower in RS-race, such priming should have no effect on institutional identification. We did not examine academic goal attainment in Study 2, as this outcome was addressed in the context of the longitudinal study described in Study 3.

### Method

#### Participants

Participants were 55 African American university students (34 women, 16 men, 5 participants did not provide sex information; age data was not available). Thirty-six students were recruited from the university described in Study 1 and were selected from a sample who had completed the 12-item RS-Race Questionnaire between 30 and 60 days prior to the study. They were compensated \$5 for completing the study. The remaining 19 students were recruited from a comparably competitive university where African Americans are similarly underrepresented both in the student body (4.3%) and among the faculty (3%). In the latter sample, the participants completed the RS-Race Questionnaire following the completion of the study so that race-based rejection would not be primed prior to the experimental manipulation. Participants were also compensated with \$5. Four participants from Sample 1 did not complete the institutional identification measure that served as the dependent variable; thus, the analyses reported are restricted to the 51 participants for whom we had full data.

#### Materials and Procedure

Participants were scheduled to come individually to the lab, where they were told they were partaking in a pilot study to help the experimenter collect ratings of various images. Participants were randomly assigned to one of two priming conditions. Ethnic identification was primed using four images representing African American achievement and pride (mural of Martin Luther King, Jr.; drawing of Africa in green, red, and black; Apollo theatre; mural of Muhammad Ali). The control primes consisted of four images that did not evoke African American identity per se (a Ferris wheel, fireworks, the Simpsons cartoon characters, abstract art). Pilot testing as well as an analysis of open-ended descriptions of the study primes revealed that the African American identity primes reliably evoked more positive associations related to this identity. By contrast, the control primes did not evoke identity-related associations (Pietrzak, 2004).

Participants in each condition were presented with individual images on separate pages. To make sure participants did not flip through the pages without considering the images, participants were asked to make positivity and interest ratings for each image

on a scale from 1 (*not at all*) to 7 (*extremely*) and to describe in a few sentences what the image meant to them personally. Positivity and interest ratings were correlated,  $r(49) = .62, p < .001$ , and thus averaged to form a unitary score of prime attractiveness. Preliminary analyses revealed that the African American identity primes were significantly more attractive to participants ( $M = 5.53, SD = 0.78$ ) than the control primes ( $M = 4.73, SD = 0.85$ ),  $t(49) = -3.49, p < .001$ . Given this unexpected difference, we subsequently controlled for this variable in the analyses reported. We did this to ensure that any observed effects of condition on institutional identification were not attributable to the attractiveness of the stimuli. Following the priming manipulation, participants completed the institutional identification measure along with other measures unrelated to this study. Participants were then debriefed, thanked, and paid. Measures of RS–personal and self-esteem were not obtained because of a concern that the length of the study would deter participation; we used these covariates again in Study 3. Due to length concerns, we also did not assess demographic variables such as year in school.

*Measures*

*RS–Race Questionnaire*

Participants filled out the 12-item RS–Race Questionnaire (Mendoza-Denton et al., 2002). Scores differed significantly between the two samples (Sample 1:  $M = 11.7, SD = 5.78$ ; Sample 2:  $M = 17.27, SD = 9.42$ ),  $t(49) = 2.62, p < .02$ . However, the results reported were not moderated by sample. Thus, all analyses controlled for the sample main effect.

*Institutional Identification*

Three items modeled after the work of Tyler and colleagues (e.g., Smith & Tyler, 1997; Tyler & Degoey, 1995) were used to assess institutional identification and were answered on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). These items were “I am proud to think of myself as a member of [the university],” “I often talk about [the university] as a great place,” and “I am proud to tell my friends about [the university]” ( $M = 4.94, SD = 1.48, \alpha = .90$ ). No significant differences as a function of sample were observed.

**Results**

We conducted regression analyses predicting institutional identification by RS–race (continuous), priming condition (2: ethnic vs. control), and the interaction term between them. Sample and prime attractiveness ratings were included as covariates. No significant main effects of RS–race or of priming condition were observed ( $F_s < 1$ ). However, the predicted interaction between RS–race and priming condition was significant,  $b = -0.81, F(1, 45) = 4.08, p < .05$ . Figure 3 illustrates the pattern of results graphically.

Simple slope analyses revealed that for participants higher in RS–race, there was a significant effect of priming condition,  $b = -1.29, t(45) = -2.23, p < .04$ , such that ethnic identification priming led to less institutional identification than control priming. For participants lower in RS–race, the effect of priming condition on institutional identification was not significant,  $b = 0.32,$

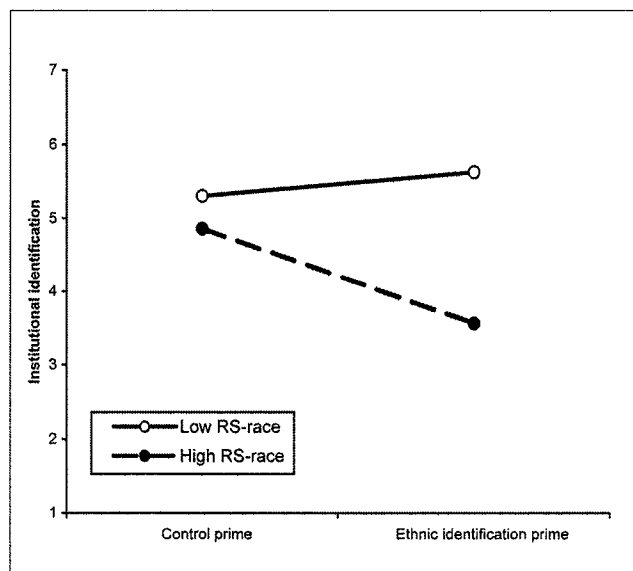


Figure 3. Study 2: Institutional identification after priming with ethnic or neutral images. Markers denote predicted scores for individuals 1 standard deviation above and below the mean of the RS–race/ethnic identification distribution.

$t(45) = 0.53, ns$ . Similarly, among participants in the identity prime condition, RS–race showed the predicted significant negative relation with institutional identification,  $b = -1.03, t(45) = -3.64, p < .001$ . In the control prime condition, RS–race was not significantly related to institutional identification,  $b = -0.22, t(45) = -0.73, ns$ .

**Discussion**

In Study 2, we replicated with experimental data and a different measure of institutional identification the finding that an incompatibility between ethnic identification and institutional identification emerges only in the presence of race-based rejection concerns. More specifically, priming positive aspects of one’s ethnic identification among African Americans led to lower levels of institutional identification only among students higher in RS–race. The findings provide one set of boundary conditions around the notion that ethnic and academic identities are oppositional (McWhorter, 2000; Ogbu & Simons, 1998), as these foci of identification seem incompatible only in the presence of race-based rejection concerns. No support for such incompatibility was observed among participants lower in RS–race, for whom there is less of a concern about the superordinate entity rejecting one’s subordinate identity.

In order to establish the patterns found in Studies 1 and 2 more solidly and to replicate and establish the real-world significance of these associations, we conducted a longitudinal study of incoming college students outside of the laboratory context. In this third study, we were able to examine the interactive effects of ethnic identification and RS–race not only for changes in institutional identification over time but also for the trajectory of students’ GPA over time.

F3

## STUDY 3

In Study 3, we sought to replicate and establish the real-world significance of the associations found in Studies 1 and 2. In a longitudinal study of incoming African American college students, we examined the interactive effects of ethnic identification and RS-race on change in institutional identification as well as GPA. Examining change in institutional identification as well as GPA over the course of several semesters allowed us to draw more confident inferences about the impact of ethnic identity and RS-race on these outcomes (see Bolger, Davis, & Rafaeli, 2003).

The analyses relevant to institutional identification and GPA involved different subsets of participants at different points in time of the longitudinal study. Therefore, we first describe the methods and results for change in institutional identification (Study 3a), followed by the methods and results for change in GPA (Study 3b).

## Study 3a: Change in Institutional Identification

*Method**Participants and Procedure*

Over the course of 2 years, research assistants invited incoming 1st-year students at the university described in Study 1 to participate in a study on student life adjustment. Students were invited during orientation functions held the week before classes began. Interested students were invited to fill out a background set of measures that included the RS-Race Questionnaire and the MEIM. Seventy-eight of the participants identified themselves as Black or African American (35 in the first cohort and 43 in the second cohort; 25 men and 53 women; mean age, 18.1 years,  $SD = 0.60$ ). This gender breakdown reflects the proportion of African American men and women at the university. Participants were paid \$25 for the completion of this background questionnaire and a 21-day diary study described in Mendoza-Denton et al. (2002).

At the end of each cohort's 1st year (Follow-Up 1), participants were invited to complete a questionnaire that included measures of institutional identification modeled on the work of Tyler and colleagues (Smith & Tyler, 1997; Tyler & Degoey, 1995). Fifty-eight participants accepted and were paid \$10 for completing this follow-up. Then, at the end of the second cohort's sophomore year (the first cohort's junior year), participants from both cohorts were simultaneously contacted for a second follow-up (Follow-Up 2). This follow-up included a set of questions tapping into institutional attitudes such as institutional identification as well as a request for permission to access student records from the university registrar. Sixty participants completed this follow-up and were paid \$15 for their efforts. RS-race and ethnic identification were not systematically related to attrition from the studies.

To examine the predictive utility of RS-race and ethnic identification over and above the effect of students' feelings of self-worth or their academic achievement, we controlled for self-esteem (averaged across all three assessments) as well as overall GPA (i.e., GPA averaged over the number of semesters that each participant had completed by Follow-Up 2). The analysis focused on the 45 students with complete data on all measures; these students did not differ in any of the predictor variables from the group of students not included in the analysis. In addition, prelim-

inary analyses revealed no significant main effects or interactions as a function of gender or cohort.

We tested whether RS-race and ethnic identification would predict institutional identification at Follow-Up 2 while controlling for institutional identification at Follow-Up 1. Despite some differences in the content of the identification indexes across the two follow-ups, there was considerable similarity in overall content (see *Measures* section).

*Measures*

*The RS-Race Questionnaire.* Participants completed the 12-item RS-Race Questionnaire (Mendoza-Denton et al., 2002). For the 45 African American participants included in this study, the mean score was 12.61 ( $SD = 6.91$ ,  $\alpha = .92$ ).

*MEIM.* The MEIM (Phinney, 1992) was administered as described in Study 1. This sample had a mean of 3.57 ( $SD = 0.42$ ,  $\alpha = .78$ ). The correlation between MEIM scores and RS-race scores was .36 ( $p < .05$ ).

*The RS-Personal Questionnaire.* The RS-Personal Questionnaire (Downey & Feldman, 1996) was administered as described in Study 1. For this sample, the mean score was 9.04 ( $SD = 3.76$ ,  $\alpha = .84$ ). RS-personal scores were not significantly related to RS-race scores,  $r(43) = .10$ ,  $p = .52$ .

*Global self-esteem.* On this widely used valid and reliable 10-item measure (Rosenberg, 1979), respondents indicate on a 6-point scale how much each statement reflects their self-attitudes, with a high score indicating high self-esteem. Participants completed this measure at each of the three assessment points. Adopting a strategy similar to that used by Ayduk et al. (2000) to handle covariate measures assessed at multiple time points, we averaged across these scores rather than choosing any particular one as a covariate ( $M = 5.06$ ,  $SD = 0.64$ ). Similar to Study 1, this self-esteem composite was not significantly related to RS-race,  $r(43) = -.09$ ,  $p = .57$ .

*GPA.* To ensure that any differences in institutional identification were independent of academic performance at the university, we controlled for overall GPA. This data was obtained from participants' academic records ( $M = 2.94$ ,  $SD = 0.40$ ).

*Institutional identification (Follow-Up 1).* This four-item composite was answered on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). It consisted of "I am proud to think of myself as a member of [the university]," "I talk up [the university] as a great place to be a part of," "When someone praises [the university], it feels like a personal compliment to me," and "It would be hard to find another college I would like as much to be a part of" ( $M = 3.38$ ,  $SD = 1.02$ ,  $\alpha = .88$ ).

*Institutional identification (Follow-Up 2)* This composite was assessed on a scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). This composite consisted of the following items: "I am proud to think of myself as a member of [the university]," "I am proud to tell my friends about [the university]," "I often talk about [the university] as a great place," "I am a person who feels strong ties to [the university]," and "I would be proud to be identified as a [university] student" ( $M = 4.75$ ,  $SD = 1.59$ ,  $\alpha = .94$ ). Institutional identification scores at Follow-Up 1 and Follow-Up 2 were correlated,  $r(43) = .55$ ,  $p < .001$ . Consistent with prior findings showing no relationship between African American students' sense that the university cared about them and



GPA (Brewer et al., 1999), this institutional identification index was not significantly correlated with overall GPA,  $r(43) = .01, ns$ .

**Results**

Institutional identification at Follow-Up 2 was regressed on ethnic identification and RS-race, controlling for RS-personal, self-esteem, overall GPA, and institutional identification at Follow-Up 1. Main effects of RS-race and ethnic identity were not significant ( $F_s < 1$ ). Replicating the results of Studies 1 and 2, however, a significant interaction was observed between ethnic identification and RS-race,  $b = -.51, F(1, 37) = 4.41, p < .05$ . The pattern of results is illustrated in Figure 4a. Simple slope analyses revealed that among participants higher in RS-race, ethnic identification was negatively associated with institutional identification,  $b = -.69, t(37) = -1.78, p = .08$ . For individuals lower in RS-race, ethnic identification was not significantly related to institutional identification,  $b = .34, t(37) = 1.25, ns$ . The analyses further revealed that among those higher in ethnic identification, the relationship between RS-race and institutional identification was significantly negative,  $b = -.69, t(37) = -3.05, p < .005$ , whereas among those lower in ethnic identification, RS-race and institutional identification were not significantly related,  $b = .32, t(37) = 0.77, ns$ . The fact that the analysis controls for the previous year's level of institutional identification increases our confidence that ethnic identification and RS-race may have a causal effect on shifts in institutional identity (Bolger et al., 2003; Singer & Willett, 2003).

**Study 3b: Change in GPA**

**Method**

**Procedure**

In Study 3b, we sought to examine change in participants' GPA over the course of up to six semesters. To aid in the reliability of these change estimates, we conducted a third follow-up in the spring semester of the second cohort's junior year (the first co-

hort's senior year) with the primary goal of acquiring additional GPA data. Fifty-nine of the original 78 African American students who completed the precollege measures (26 from Cohort 1 and 33 from Cohort 2) completed this follow-up, which included other measures including self-esteem. As in Study 3a, attrition from the study from precollege measures to follow-up was unrelated to RS-race or ethnic identification. Participants were paid \$10 for their participation.

**Measures**

**GPA.** To ease students' potential concerns about the researchers having access to their records, participants were asked to access their private university records on a lab computer and then to list their semester-by-semester GPA on a form. Overlapping GPA data given by participants at Follow-Up 3 correlated perfectly with the Follow-Up 2 registrar data when rounding error was taken into account, suggesting that the self-report method in Follow-Up 3 yielded reliable data on grades. Nevertheless, one student reported a very large jump in GPA from Semester 4 to Semester 5 that could not be verified against official records; therefore, we only included the student's records from the first four semesters. Combining nonoverlapping GPA data from Follow-Ups 2 and 3 yielded data across six semesters from 23 participants, data across five semesters from 19 participants, data across four semesters from 19 participants, and data across three semesters from 1 participant for a total of 62 participants who were included in the analyses reported in later sections.

**RS-race.** Participants completed the 12-item RS-Race Questionnaire. In this sample, the mean was 12.74 ( $SD = 6.60$ ).

**MEIM.** The MEIM was administered as described in Study 1. In this sample, the mean was 3.54 ( $SD = 0.42$ ). MEIM scores were significantly correlated with RS-race scores,  $r(60) = .32, p = .01$ .

**RS-personal.** The RS-Personal Questionnaire was administered as described in Study 1. For the participants in this sample, the mean score was 8.93 ( $SD = 3.51$ ). RS-personal scores were not significantly related to RS-race scores,  $r(60) = .12, p = .33$ .

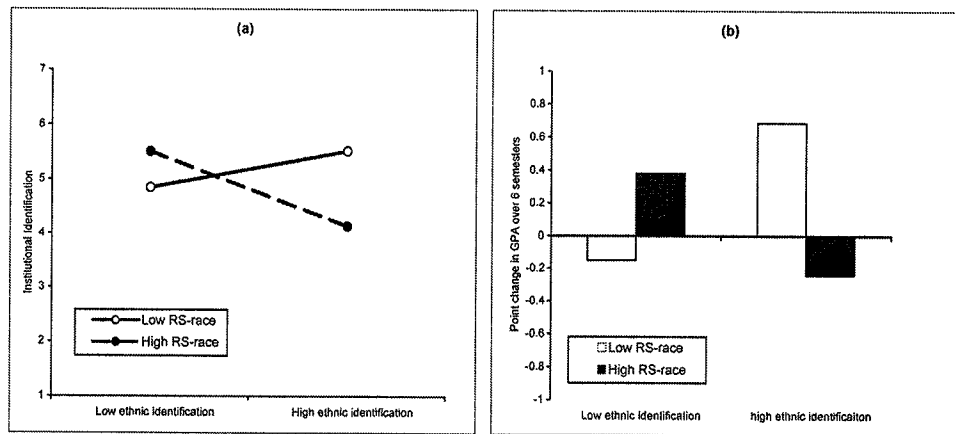


Figure 4. Study 3: (a) Institutional identification after 2-3 years of college (left panel) and (b) point change in grade point average over six semesters (right panel) as a function of RS-race and ethnic identification. Markers denote predicted scores for individuals 1 standard deviation above and below the mean of the RS-race/ethnic identification distribution.

F4

*Global self-esteem.* We also collected self-esteem data at Follow-Up 3. Again, following Ayduk et al. (2000), we averaged participants' available self-esteem scores across the available assessment periods (background plus the follow-ups described earlier) to arrive at a representative self-esteem score ( $M = 5.00$ ,  $SD = 0.61$ ). Scores on this composite were not significantly related to RS-race scores,  $r(60) = -.02$ ,  $p = .85$ .

*Results*

Change in GPA over six semesters was modeled on RS-race, ethnic identity, and semester, as well as their combined interactions, using multilevel or hierarchical linear modeling in SAS, Version 9.0 (2003). RS-personal and self-esteem were included in the model as covariates. All predictor variables were standardized prior to conducting the analyses to aid in the interpretation of the coefficients. The results were adjusted for first-order autocorrelation in the within-participant error terms.

The analysis revealed a main effect of ethnic identification,  $b = .10$ ,  $F(1, 56) = 3.93$ ,  $p = .052$ , which was qualified by the predicted significant interaction of RS-race, ethnic identity, and semester,  $b = -.07$ ,  $F(1, 245) = 4.0$ ,  $p < .05$ . The predicted values of GPA for Semesters 1 and 6 among individuals falling 1 standard deviation above and below the mean on RS-race and ethnic identification are listed in Table 1.

To facilitate an understanding of this three-way interaction and to provide a basis for comparison with the other figures in this article, we subtracted participants' predicted values for GPA in Semester 1 from their predicted GPA in Semester 6. This yielded a GPA-change score, where positive values indicate increasing GPA across semesters. We then plotted these change scores as a function of ethnic identification and RS-race (as with our other figures) in Figure 4b.

Among students higher in RS-race, the two-way interaction between ethnic identification and semester was not significant,  $b = -.062$ ,  $F(1, 245) = 1.61$ , *ns*, as illustrated by the two gray bars in Figure 4b. Simple slope analyses revealed that higher RS-race students' GPA did not reliably change over time whether they were lower,  $b = .076$ ,  $F(1, 245) = 0.90$ , *ns*, or higher,  $b = -.048$ ,  $F(1, 245) = 1.00$ , *ns*, in ethnic identification.

Among lower RS-race participants, the two-way interaction between ethnic identification and semester was positive and approached significance,  $b = .08$ ,  $F(1, 245) = 3.52$ ,  $p = .06$ , as illustrated by the two white bars in Figure 4b. Simple slope analyses confirmed our expectation that for lower RS-race students who were higher in ethnic identification, there was a positive change in GPA over time,  $b = .14$ ,  $F(1, 245) = 4.23$ ,  $p < .05$ . By contrast, for lower RS-race students who were lower in ethnic identification, GPA change across semesters was not significant,  $b = -.030$ ,  $F(1, 245) = 0.26$ , *ns*.

We also examined the pattern of findings as a function of ethnic identification. Specifically, there was a significant negative interaction between RS-race and semester among participants higher in ethnic identification,  $b = -.093$ ,  $F(1, 245) = 5.37$ ,  $p < .03$ , as illustrated by the right-hand bars in Figure 4b. By contrast, the RS-Race  $\times$  Semester interaction was not significant among participants lower in ethnic identification,  $b = .053$ ,  $F(1, 245) = 0.85$ , *ns*, as illustrated by the left-hand bars in Figure 4b.

*Discussion*

The findings from Studies 3a and 3b extend those for Studies 1 and 2 to a longitudinal study of African American college students. The findings from Study 3a show that, as predicted, students who began college higher on both RS-race and ethnic identification showed decreases in institutional identification over time. The GPA data from Study 3b, however, shows a different pattern, such that ethnic identification was associated with increases in performance among students lower in RS-race and had no significant relationship with performance change among students higher in RS-race. Overall, the data from Studies 3a and 3b support the utility of distinguishing between institutional identification and academic performance when trying to understand minority students' coping in majority-dominated educational settings.

GENERAL DISCUSSION

In this research, we have attempted to integrate insights from the stereotype threat and the social identity literatures. We assume that individuals differ both in the strength of their group identification (Ashmore et al., 2004) and the sense of threat that they experience in situations where negative stereotypes and attitudes about their group are salient (Mendoza-Denton et al., 2002). In line with a burgeoning literature on the role of contexts in the expression, management, and behavioral manifestations of threatened identities (Stewart & Dottolo, 2006; Strauss & Cross, 2006), we found that the implications of strong ethnic identification for academic success and institutional identification depend on one's anticipatory threat about discrimination in the educational context.

Across three studies, we found a consistent pattern showing that ethnic identification was negatively related to institutional identification among African American students who anxiously expected race-based rejection. This supports our proposition that race-based rejection concerns set up an incompatibility between identifying strongly with one's ethnic group and identifying with an institution in which one may be rejected on the basis of this identity. Among those lower in such concerns however, no relation between institutional identification and ethnic identification was observed. The potential compatibility of these identities among

Table 1  
Predicted Values for Grade Point Average for Semesters 1 and 6 from the Hierarchical Linear Modeling Analysis

Predictor		Estimated grade point average	
RS-race	Ethnic identity	Semester 1	Semester 6
Lower	Lower	2.95	2.80
Lower	Higher	2.84	3.53
Higher	Lower	2.67	3.05
Higher	Higher	3.08	2.84

*Note.* Predicted values were estimated using the following unstandardized parameter estimates: 2.9744 (intercept) - 0.05314 (RS-personal) - 0.1545 (self-esteem) - 0.05956 (RS-race) + 0.1055 (ethnic identification) - 0.05215 (RS-Race  $\times$  Ethnic Identification) + 0.03382 (semester) - 0.01999 (RS-Race  $\times$  Semester) + 0.01068 (Ethnic Identification  $\times$  Semester) - 0.07294 (RS-Race  $\times$  Ethnic Identification  $\times$  Semester).

T1

students lower in RS-race highlights the conditions under which efforts to foster a common ingroup identity in diverse institutional settings are likely to be successful. The common ingroup identity model (see Gaertner & Dovidio, 2005), for example, suggests that one effective strategy for reducing intergroup bias and potentially increasing feelings of belonging and commitment among underrepresented students is to foster identification with the superordinate category—in this case, the institution (Dovidio et al., 2001). Among underrepresented or low-status groups in particular, the benefits of fostering the superordinate identity are most apparent when this does not imply relinquishing ethnic identity—that is, when one can have a dual identity (Brown & Hewstone, 2005; Gaertner, Dovidio, Nier, Ward, & Banker, 1999; Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994; Gonzalez & Brown, 2006). To the degree that the institution can earn the trust of minority students by making sure subordinate identities will not be threatened by increasing superordinate identification, the goal of promoting a dual identity should become more realistic and achievable.

Our data additionally suggest that among students lower in RS-race, having a strong sense of ethnic identification is related to increases in academic performance over time. Among students higher in RS-race, we found that ethnic identification neither harmed nor strengthened students' intentions to stay in school or academic performance. Consistent with accounts of ethnic identification as providing people with a source of strength, our data suggest that ethnic identification allows people to thrive particularly when they do not have to contend with threat over whether others question their belonging. These findings may provide one avenue toward understanding the inconsistent relationship of ethnic identification to academic performance in the literature.

#### Distinguishing Between Institutional Identification and Academic Achievement

The current findings additionally help clarify the complex relation between ethnic identification and educational outcomes by allowing us to distinguish between institutional identification and outcomes such as academic persistence and performance. The finding that ethnic identification and institutional identification are negatively related among those higher in RS-race but not among those lower in RS-race is consistent with the proposition of Ogbu and colleagues (Fordham & Ogbu, 1984; Ogbu & Simons, 1998) that school identity and minority identity are oppositional when there is a perceived conflict between upholding the values and traditions of one's ethnic group and endorsing the values of the dominant but potentially rejecting group. This work has been criticized for its implication that ethnic identity should be detrimental to achievement (e.g., Graham, 1994; Spencer et al., 2001); however, we have shown that these outcomes do not map onto each other directly. Our achievement findings among those lower in RS-race are more consistent with the emerging literature on the beneficial effects of ethnic identification. Among those higher in RS-race, we do not observe a detrimental effect of ethnic identity on performance; that is, while strong identification with one's race appears to impede institutional identification among those higher in RS-race, we find no evidence that it impedes academic engagement. It is nevertheless possible that achieving success within institutions that one does not feel a part of may require extra effort

and self-regulation (Inzlicht, McKay, & Aronson, 2006), which might then impact other aspects of life such as stress and health (Page-Gould, Mendoza-Denton, & Tropp, in press). We hope to address this issue in future research.

#### Highlighting Within-Group Variability in Collective Identity Processes

The findings presented in this article highlight within-group variability in a group that is too often studied categorically and compared monolithically to other ethnic groups (Betancourt & Lopez, 1993; Downey, Eccles, & Chatman, 2006). Accordingly, rather than relying on race or ethnicity as explanatory variables to understand academic outcomes, we have attempted here to shed light on the processing dynamics that differentially characterize members within the group (see Mendoza-Denton & Mischel, 2007; Worrell, Vandiver, Schaefer, Cross, & Fhagen-Smith, 2006).

Our findings prompt consideration of the experiences and worldviews of people who combine different levels of EI and RS-race. What is the phenomenology, for example, of positive ethnic identification combined with low anticipatory threat in discrimination-related contexts? On the one hand, high identification with low threat might indicate an empty or naive ethnic identification, perhaps akin to a foreclosed (Marcia, 1980) ethnic identity that is adhered to without consideration and understanding of the significance of the historical legacy of discrimination. Alternatively, this combination may be indicative of strong ingroup identification that does not ignore discrimination but rather is particularly successful at coping with it as a result of experience and/or socialization (e.g., Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer, 2006).

We favor the latter possibility for two reasons. First, our measurement of ethnic identification included endorsement of items such as "I have spent time trying to find out more about my own ethnic group, such as history, traditions, and customs," "I think a lot about how my life will be affected by my ethnic group membership," and "I am active in organizations or social groups that include mostly members of my own ethnic group." It seems unlikely that the endorsement of these items would signal an uninformed or idiosyncratic sense of identification that ignores the group's history of discrimination. Second, various theories have discussed how racial identification can coexist with neutral or positive attitudes about the outgroup, yet these theories consistently link miseducation and naivete with respect to stereotypes and discrimination to a lack of strong ethnic identification (Goffman, 1963; Phinney, 1990; Vandiver, Fhagen-Smith, Cokley, Cross, & Worrell, 2001; Worrell, Cross, & Vandiver, 2001). Future research is needed to shed better light on the phenomenology of these, as well as other, interactive processes related to people's negotiation of their collective identities. Multiple processes and strategies are surely at work as people negotiate identities in potentially threatening contexts, of which anxiety over the threat of discrimination by the outgroup and a positive sense of belonging to the ingroup are only two (Ashmore et al., 2004; see Sellers, Smith, Shelton, Rowley, & Chavous, 1998).

Models of the type exemplified by triple quandary theory of black identity (Boykin & Toms, 1985) and the racial-ethnic identity (REI) model (Altschul, Oyserman, & Bybee, 2006; Oyserman, Gant, & Ager, 1995) also warrant consideration in light of our

findings. Both models emphasize connecting with one's own group and coping with discrimination as crucial aspects of the negotiation of life as a minority group member within the superordinate society. Among the important points made by the REI model, for example, is that when education and academic achievement are incorporated into one's characterization of the ingroup, this can provide an important boost to academic success (Altschul et al., 2006; Oyserman, Harrison, & Bybee, 2001; see also Cohen et al., 2006). Our data suggest that such embedded achievement orientation may be particularly possible when a person feels a strong sense of attachment to the ingroup (high connectedness, or high ethnic identification), as well as low anxiety with respect to discrimination.

Nevertheless, questions for future research remain. Altschul et al. (2006) found that eighth graders high in REI Connectedness and high in Awareness of Racism had better GPAs and maintained their advantage through ninth grade. To the degree that REI Connectedness and REI Awareness of Racism might map onto ethnic identity and RS-race, Altschul et al.'s (2006) findings seem to contradict our own. How can we account for the discrepant findings? We propose that RS-race specifically taps into individual differences in the threat associated with anticipating discrimination, which has been shown robustly to lead to performance decrements (Cohen & Sherman, 2005). REI Awareness of Racism, by contrast, does not necessarily involve threat and when coupled with high REI Connectedness suggests that the individual may have found particularly successful ways of keeping anxiety at bay, perhaps through the sharing of coping strategies with peers and elders (Hughes et al., 2006).

### Future Directions

Generalizing the findings to other domains, populations, and contexts remains an important avenue for future research. We would expect, for example, that the relationship between superordinate identity and valued subordinate identities may be problematic not just in the academic domain but also across other domains in which identity can be threatened, such as the engineering profession for women (Betz, 1997) or the professional sports realm for gay Americans (Amaechi, 2007).

It is important to recognize that the relations among ethnic identity, institutional identification, and academic achievement may be different in contexts in which the institution does not have a history of marginalizing students on the basis of race. For example, Anderson, London, Downey, and Matthews (2006) found that despite similar levels of RS-race, African American students attending an historically Black college did not show the negative association between RS-race on the one hand and sense of belonging and use of academic resources on the other shown by students at a majority White institution (the study did not test whether ethnic identity was positively related to academic performance, as might be expected from our findings). In other words, consistent with a Person  $\times$  Situation perspective (Mendoza-Denton & Mischel, 2007), the processes outlined in this article may be moderated by the type of institution with which one is identifying. We look forward to examining this issue in future investigations.

As research on stigma from the target's perspective (see Oyserman & Swim, 2001) continues to expand, examinations of differ-

ent combinations of identity-relevant processes among different groups, in combination with different contexts, can shed further light into the specificity or universality of the strategies people use to cope with the discrimination that they face (Downey et al., 2006).

### Implications for Institutional Action

This research has potential implications for the ways in which universities approach the diversification of their membership. There is currently debate as to whether universities and other institutions should celebrate and emphasize diversity or instead adopt a "color-blind" approach (Purdie-Vaughns, 2004). Following Ogbu & Simons (1998), for example, it might be argued that supporting ethnically centered organizations in these contexts only perpetuates academic underachievement of minority students by promoting identities that are incompatible with academic success. Our current data, however, suggest otherwise. Rather, our data are consistent with accounts of ethnic identification as promotive of academic success—albeit when students have reason to expect that they will not be rejected their background and identity. This point highlights not only the theoretical but also the practical importance of distinguishing between ethnic identification and stigma-related threat. Specifically, the current research underscores the importance of promoting achievement and institutional affiliation not by discouraging ethnic identification but rather by changing the institutional environment and climate to ensure all students have reason to feel welcome within the institution (see Gaertner et al., 1994, 1999; Gonzalez & Brown, 2006).

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