

## Sensitivity to Status-Based Rejection: Implications for African American Students' College Experience

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The authors proposed a process model whereby experiences of rejection based on membership in a devalued group can lead people to anxiously expect, readily perceive, and intensely react to status-based rejection. To test the model, the authors focused on race-based rejection sensitivity (RS–race) among African Americans. Following the development and validation of the RS–Race Questionnaire (Studies 1 and 2), the authors tested the utility of the model for understanding African American students' experiences at a predominantly White university (Study 3). Students high in RS–race experienced greater discomfort during the college transition, less trust in the university, and relative declines in grades over a 2- to 3-year period. Positive race-related experiences, however, increased feelings of belonging at the institution among students high in RS–race.

Every day, I wear a suit and tie. I get on the train. I always have *The New York Times*, and a cup of coffee too. But you know what? Every day, I am the last person people sit next to on the train! Especially White women. Do you know that one day I got off the train and I happened to be walking behind this woman and she clutched her bag, started walking faster, and kept turning around, as if I was following her! Like I wanted to take her purse . . . I'm so used to this happening that even when a woman might be in a rush to get to work, and maybe she didn't even see me, I think she's scared and running away from me. Your mind starts to play tricks on you like that, after a while.

—Ian, African American focus group participant

Whether one is a disabled person entering the workplace, a woman entering the U.S. military, or an African American student entering a predominantly White university, a history of rejecting

experiences based on status characteristics can lead to doubts about one's acceptance by members of these social institutions (Aronson, Quinn, & Spencer, 1998; Branscombe, Schmitt, & Harvey, 1999; Crocker, Luhtanen, Broadnax, & Blaine, 1999; Goffman, 1963; Tyler, 1990; Tyler & Smith, 1998). Despite the removal of legal and other structural barriers to achieving diversity, research suggests that some members of historically excluded groups continue to experience such doubts in social institutions that have marginalized them in the past (Bowen & Bok, 1998; Frable, Blackstone, & Sherbaum, 1990; Jones, 1972/1997; Steele, 1997; Steele & Aronson, 1995; Terrell & Terrell, 1981). In this article, we examine how expectations of rejection based on membership in a stigmatized social category or status group influence people's personal and interpersonal experiences in majority-dominated social institutions. In particular, we examine whether anxious expectations of rejection based on such group membership can strain social relationships and undermine people's confidence in the institution's fairness and legitimacy, diminishing the motivation to persist in the pursuit of valued personal goals. Support for this proposition would provide evidence that maximizing individual and institutional potential requires moving beyond diversity solely in numerical terms to ensuring that members of various groups feel—and have a basis for feeling—a sense of belonging, acceptance, and trust in the institution and its representatives (Cohen, Steele, & Ross, 1999; Fine, Weis, & Powell, 1997; Terrell & Terrell, 1981; Tyler, 1990, 1997; Tyler & DeGoey, 1995).

Prior research on close relationships provides a basis for the proposition that rejection expectations influence the quality of people's relationships and well-being. There is considerable evidence that expectations of rejection of the self as an individual by important others can undermine close relationships and goal pursuit (e.g., Leary, 2001; D. T. Miller & Turnbull, 1986; Reis & Downey, 1999). Consistent with the observation that self-identity reflects one's qualities both as an individual and as a member of social groups (Tajfel & Turner, 1986), we suggest that people's

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expectations of rejection on the basis of personal characteristics capture only one dimension of their acceptance–rejection expectations. People also may develop expectations of acceptance or rejection based on direct or vicarious experiences related to status characteristics. As targets of discrimination and prejudice, members of stigmatized groups might be particularly likely to develop expectations of rejection by those who do not share their stigma and by social institutions that have historically excluded or marginalized them.

Contributing to a growing body of research examining the impact of stigmatization on its targets and on social relationships more generally (e.g., Aron & McLaughlin-Volpe, 2000; Heather-ton, Kleck, Hebl, & Hull, 2000; Pettigrew, 1997; Prentice & Miller, 1999; Reis & Downey, 1999; Swim & Stangor, 1998), we focus here on the specific case of African Americans' expectations of race-based rejection. We test whether such expectations are distinct from expectations of personal rejection, whether they exacerbate difficulties during the transition to a predominantly White university, and whether they have an enduring negative impact on students' college experience. We focus on African Americans making the transition to a predominantly White university because, as several researchers have noted, African Americans experience doubts about belonging in educational institutions with particular intensity, which may contribute to the well-documented Black–White educational achievement gap (Bowen & Bok, 1998; Steele, 1997).

### Theoretical Framework: The Rejection Sensitivity Model

Downey and colleagues (Ayduk, Downey, & Kim, 2001; Downey & Feldman, 1996; Downey, Freitas, Michaelis, & Khouri, 1998; Feldman & Downey, 1994) have previously proposed a processing dynamic, rejection sensitivity (RS), to account for the influence of rejection experienced by the self as an individual on subsequent close relationships. In this article, we extend theory and research on RS to account for the personal and interpersonal consequences of rejection by unfamiliar others as a result of one's membership in a stigmatized group. We define RS as a cognitive–affective processing dynamic (Mischel & Shoda, 1995) whereby people anxiously expect, readily perceive, and intensely react to rejection in situations in which rejection is possible. The basic structure of this processing dynamic generalizes readily to rejection based on membership in a social group; however, the origins, trigger features, and consequences should differ across domains to reflect the different ways and contexts in which personal rejection and status-based rejection are communicated.

### *Origins of Anxious Rejection Expectations*

Drawing on attachment approaches to social relationships (e.g., Hazan & Shaver, 1987; Reis & Patrick, 1996), Downey and Feldman (1996) proposed that when repeated experiences in close relationships (e.g., with parents or important peers) communicate rejection rather than acceptance, individuals may develop anxious expectations of rejection directed toward them as individuals (for a more complete discussion of the relation of RS to attachment theory, see Downey & Feldman, 1996). Independent of potential rejecting experiences in close relationships, direct or vicarious experiences of mistreatment, prejudice, discrimination, and exclusion based on membership in a devalued social group can also

communicate rejection (Branscombe et al., 1999; Essed, 1991; Root, 1992; Steele, 1997). Such rejection, especially when experienced as painful and distressing, can generate anxious expectations that future status-based rejection will occur (Allison, 1998; Feldman Barrett & Swim, 1998). We view anxious expectations of rejection as affectively amplified, or hot, cognitions (Metcalf & Mischel, 1999) that reflect appraisals of threat (Lazarus, 1993).

### *Activation of Anxious Expectations of Rejection*

Consistent with recent conceptualizations of behavioral organization and coherence (e.g., Cervone & Shoda, 1999; Mischel & Shoda, 1995), we hypothesize that anxious rejection expectations are activated only in those situations in which rejection is possible, meaning applicable as well as personally salient (Higgins, 1996). Different kinds of situations should activate anxious expectations of rejection of the self as an individual versus of the self as a group member. Situations in which concerns about close relationships are pertinent (e.g., asking one's significant other to meet one's family) should more readily activate expectations of personal rejection. By contrast, situations in which concerns about the possibility of a devaluing experience based on group characteristics are pertinent (e.g., for an African American, encountering a roadblock at which the police are selectively pulling people over) should more readily activate expectations of status-based rejection. Thus, situations that are viewed as benign by the nonstigmatized may pose considerable threat to the stigmatized (Allison, 1998; Blascovich, Spencer, Quinn, & Steele, 2001; Frable, 1993; Lang, 1995; Steele, 1997; Terrell & Terrell, 1981).

### *Perceiving and Reacting to Rejection*

People who are high in RS not only expect rejection but also are highly concerned that this negative outcome will occur. As both Lang's (1995) motivational theory of emotion and Metcalfe and Mischel's (1999) hot–cool framework of self-regulation suggest, being in a state of anticipatory threat lowers the threshold for perceiving the expected negative outcome. This state also prepares people to react intensely when such an outcome is perceived. Thus, in the presence of rejection cues, even innocuous or ambiguous ones, people high in anxious expectations of rejection should more readily perceive rejection, and they should show more intense affective, cognitive, and behavioral reactions to the perceived rejection.

### *Consequences of RS*

Expectations, perceptions, and intense reactions to rejection directed toward the self as an individual and the self as a group member should have long-term consequences in different domains. Sensitivity to rejection directed toward the self as a person (RS–personal) should lead people to feel less trust in and support by significant others and to experience more troubled close relationships. By contrast, the long-term consequences of expecting rejection as a member of a status group should be more evident in people's relationships with individuals thought to hold the norms, standards, and culture of the high-status group. To the extent that institutions have a history of upholding such norms and values, expectations of status-based rejection also may compromise one's

sense of belonging at those institutions and the legitimacy that one accords their authorities. Among African Americans, for example, this implies reduced trust and engagement in academic institutions and more wariness of the people seen as representing those institutions (e.g. professors, nonminority students). This pattern of reactions is likely to undermine academic success.

The disconfirmation of one's expectations of negative treatment, however, may attenuate the impact of those expectations on behavior and outcomes. As Merton (1957) suggested, institutions can play a central role in this process through the implementation of measures and procedures that legitimize and address the concerns of the institution's various members. For example, race-related events such as cultural fairs, although not organized or necessarily embraced by majority group members, can communicate implicit endorsement of minority groups within the institution.

### Support for the RS Model in Personal Relationships

Findings from experimental and correlational studies support the various links of the RS model as applied to close relationships. First, rejection from parents and peers predicts heightened levels of self-reported anxious expectations of rejection (Bonica & Downey, 1999; Downey, Khouri, & Feldman, 1997; Feldman & Downey, 1994). Second, anxious rejection expectations predict a readiness to perceive rejection in the ambiguous behavior of others (Downey & Feldman, 1996, Studies 2 and 3). Third, anxious rejection expectations predict a heightened physiological state of threat in the presence of ambiguous cues of rejection (Downey, Magios, & Shoda, 2001). Fourth, anxious expectations of rejection lead to cognitive, affective, and behavioral reactions that undermine significant relationships (Ayduk et al., 2001; Downey & Feldman, 1996; Downey, Freitas, et al., 1998). Finally, these relationship-undermining behaviors occur specifically in response to perceived rejection (Ayduk, Downey, Testa, Yen, & Shoda, 1999). Taken together, these studies support the proposed model of RS in the domain of personal relationships.

### Status-Based RS: Converging Viewpoints

Converging lines of research provide indirect support for the RS model applied to the domain of status-based rejection. Several theories of the effects of prejudice on the stigmatized imply a link between expectations of status-based rejection and a readiness to perceive rejection (e.g., Allison, 1998; Feldman Barrett & Swim, 1998; Stephan & Stephan, 1996), although this link has not yet been tested directly. There is also evidence for the prediction that perceptions of status-based rejection elicit intense negative reactions (for reviews, see Crocker, Major, & Steele 1998; Jones, 1972/1997). For example, perceptions of devaluation on the basis of one's race or ethnicity have been shown to elicit anger and dejection (McNeilly et al., 1996).

Several studies support the prediction that anxious expectations of status-based rejection, presumably rooted in personal or vicarious devaluing experiences, may ultimately disrupt the pursuit of valued goals. Expectations of rejection among those labeled mentally ill were found to undermine well-being and social functioning, irrespective of psychiatric symptomatology (Link, Cullen, Frank, & Wozniak, 1987). Similarly, the expectation of being

stigmatized regardless of one's own behavior, termed *stigma consciousness*, predicted women's avoidance of situations in which gender stigmatization might occur (Pinel, 1999). Among low-status groups, intergroup anxiety, presumably activated by the anticipation of negative interactions with out-group members, predicted more wariness toward out-group members during initial interactions (Stephan & Stephan, 1996). Among African Americans, mistrust of Whites was correlated with poorer academic test performance and a reduced likelihood of institutional support system use in predominantly White colleges (Terrell & Terrell, 1981).

The potential costs of expectations of devaluation for stigmatized groups have been documented most compellingly in Steele and colleagues' (Aronson et al., 1998; Steele, 1997; Steele & Aronson, 1995) studies, which show that awareness of one's membership in a group that is stigmatized in a valued domain diminishes performance in that domain. For example, when awareness of the relevant negative stereotype is activated experimentally, math-identified college women do more poorly in math, and African American college students do more poorly on standardized tests than when the relevant stereotype is not activated. The phenomenon postulated to account for this performance decrement, termed *stereotype threat*, is presumed to be a disruptive apprehension about verifying or being judged as matching the stereotype in situations in which a negative stereotype is salient and self-relevant.

Sensitivity to status-based rejection is similar in important respects to stereotype threat, and it complements the work of Steele and colleagues in two ways. First, whereas the focus of stereotype threat research has been primarily on achievement-related situations that activate negative stereotypes, which subsequently affect academic performance, our research focuses on interpersonal situations that activate rejection concerns and can affect interpersonal outcomes as well as academic ones. Second, Steele and colleagues have focused on showing that stereotype-relevant situations (e.g., standardized test taking for African Americans) elicit a sense of threat among stigmatized groups relative to less-stigmatized groups. Our research, however, focuses on individual differences in sensitivity to status-based rejection among members of stigmatized groups. This allows us to examine more directly the cognitive, affective, and interpersonal processes linking stereotype-relevant situations with the potential disruption of pursuit of valued goals. More specifically, if status-based RS plays a role in the disruption of goal pursuit in stereotype-relevant contexts, then those individuals in whom the dynamic is stronger should show underperformance in valued domains compared with those in whom it is weaker.

### Overview of the Research

Given the enduring nature of race as a source of stigma (Jones, 1972/1997), in this article we focus on sensitivity to race-based rejection (RS-race) among African Americans as a first step in testing the status-based RS model. We reasoned that the impact of RS-race should be particularly evident in institutional settings from which African Americans have been historically excluded or marginalized on the basis of their group membership and in which they continue to be underrepresented. Thus, we assessed whether preexisting anxious expectations of race-based rejection play a formative role in African American college students' transition to

a selective, predominantly White university. The impact of preexisting expectations should be particularly evident during such transitions because people then have little basis other than expectations for evaluating the likelihood of positive or negative treatment (Higgins, Loeb, & Ruble, 1995; Ruble & Seidman, 1996). Of particular interest is the emergence of differences between those high and low in RS-race in well-being and attitudes toward the institution and its members, as such differences might index the beginning of trajectories that ultimately lead to differences in the quality of intergroup relationships and in goal realization.

This article describes three studies undertaken to test our model of RS-race as applied to African Americans coping with the transition to a predominantly White college. Study 1 describes the development of the RS-Race Questionnaire (RSQ-Race) for African Americans, which assesses individual differences in anxious expectations of race-based rejection, and, together with Study 2, provides evidence for the questionnaire's convergent and discriminant validity. In Study 3, African American students entering college completed this measure prior to the beginning of classes as well as daily structured questionnaires about their feelings and experiences during the first 3 weeks of classes. In annual follow-ups, participants reported on the diversity of the relationships they formed, their attitudes toward the university and its representatives, and their academic achievement.

### Study 1

The first step in testing the RS model as applied to the status characteristic of race involved the development of a measure of RS-race. Because we view anxious expectations of rejection as being at the core of the RS dynamic (Downey & Feldman, 1996), RS-race is operationalized as anxious expectations about the possibility of race-based rejection in relevant situations. Such rejection can take the form of overt or covert exclusion, mistreatment, or discrimination. Pilot work with African American college students indicated that this type of rejection is particularly likely in encounters with unfamiliar others, who are more likely than are familiar others to make behavior-guiding inferences on the basis of an interactant's visible characteristics, such as race. The RSQ-Race focuses on such situations, probing people's expectations about the outcome of the situations and their feelings of anticipatory anxiety in them. Insofar as a person both expects rejection on the basis of his or her race and feels anxious or concerned at the possibility of this outcome, he or she is considered to anxiously expect race-based rejection.

On the basis of our model of the dynamics of RS-race, we predicted that anxious expectations of race-based rejection would be related to heightened levels of perceiving such rejection in the actions of others as well as to heightened reactivity following this rejection. This prediction is consistent with our position that anxious rejection expectations are both a cause and a consequence of perceptions of and reactivity to rejection (Downey & Feldman, 1996). To test this prediction, we assessed the association between the RSQ-Race and two subscales of the Perceived Racism Scale (McNeilly et al., 1996). One of these subscales measures the frequency with which African Americans perceive the actions of others as motivated by race-based negativity. The other subscale measures intensity of emotional reactions to perceived race-based negativity.

Because we view RS-race and RS-personal as distinct manifestations of RS, we hypothesized that the association between anxious expectations of race-based rejection, on the one hand, and perceptions of and reactivity to race-based negativity, on the other, should remain robust when controlling for RS-personal. We also expected these relationships to remain robust when controlling for ethnic identity. Although ethnic identity and expectations of race-based rejection both involve an awareness of one's ethnicity, these constructs are theoretically distinct from each other. Someone can identify strongly with a particular ethnicity without having expectations of rejection on the basis of ethnicity. Alternatively, individuals can disidentify with their ethnicity while expecting rejection on the basis of it. By this reasoning, ethnic identity should be associated with a tendency to perceive racially motivated negativity only to the extent that ethnic identity overlaps with anxious expectations of race-based rejection.

The relation between self-esteem and RS also was examined. Higher levels of RS-personal have consistently been associated with lower personal self-esteem (e.g., Ayduk et al., 2001; Downey & Feldman, 1996; Downey, Lebolt, Rincon, & Freitas, 1998). On the basis of prior research (e.g., Crocker & Lawrence, 1999), we expected that African Americans and White Americans would have similar levels of self-esteem and that both groups would have higher self-esteem than would Asian Americans. However, we did not predict an association between anxious expectations of race-based rejection and self-esteem, on the basis of evidence that self-esteem is not contingent on negative experiences perceived to result from uncontrollable status characteristics (Crocker & Major, 1989, 1994). Thus, whereas we expected a significant positive correlation between RS-personal and self-esteem, we predicted the correlation between RS-race and self-esteem to be near zero and nonsignificant.

The third goal was to show that the RSQ-Race has distinctive relevance for African American college students relative to other groups. We expected that both African Americans and Asian Americans would score higher than White Americans on the questionnaire because of their shared minority status. However, African Americans should score higher than Asian Americans, because the questionnaire was designed to represent the unique experiences of the former group (e.g., their more negative experiences with police and security personnel as well as in the academic domain). Thus, although prejudice toward Asian Americans does exist (Chew & Ogi, 1987), members of this group were expected to be less sensitive to being rejected on the basis of their race in the particular situations contained in our questionnaire. Considerable variability in RSQ-Race scores among African Americans was also expected; for the other groups, we expected lower variability as well as lower means.

In contrast to our expectation of heightened levels of RS-race among African Americans, we expected minimal and nonsignificant group differences in RS-personal. Given the greater salience of ethnic identity and of experiences of racism in minority groups and especially in African Americans, we expected that African Americans would score higher than White Americans on ethnic identity and on perceiving and reacting to race-based negativity, as assessed with the Perceived Racism Scale. We expected that Asian Americans would score between the two groups on these measures.

## Method

### Setting

Study 1 was conducted at a selective, medium-sized research university in the United States. Between 1995 and 1999, undergraduate enrollment by ethnicity was as follows: White, 51.4%; Asian, 14.7%; Black, 9.2%; Hispanic, 7.7%; other, 17.0%. In the fall of 1999, professors at the university were 77.3% White, 11.3% Asian, 7.4% Black, and 3.9% Hispanic.

### Sample and Procedure

Study participants were 359 undergraduates (age:  $M = 19.76$  years,  $SD = 4.42$ ). Of these, 130 identified themselves as African Americans, 88 identified themselves as Asian Americans, and 141 identified themselves as White Americans. Students of other backgrounds were excluded from the analyses because of small sample sizes. The sample was 51.0% female; 3 participants did not indicate their sex.

**Subsamples.** The total sample combines data from four subsamples. Sample 1 consisted of 116 undergraduates (39.0% female; 42 African Americans, 38 Asian Americans, 36 White Americans; age:  $M = 21.87$  years,  $SD = 6.77$ ). Sample 2 consisted of 97 undergraduates (48.5% female; 11 African Americans, 30 Asian Americans, 56 White Americans) who completed the questionnaires as part of an unrelated study (age:  $M = 20.14$  years,  $SD = 2.73$ ). Samples 1 and 2 were recruited through notices on campus and through direct invitations by research assistants and were asked to complete a questionnaire on attitudes and expectations about students' lives. Participants completed the measures in mixed-race groups and received \$5. Two weeks after the initial survey, the second sample also completed follow-up questionnaires, including the RSQ-Race.

The two additional samples consisted of 146 first-year college students who were recruited during orientation week of their 1st year in college (Sample 3,  $n = 99$ ; 55.0% female; 35 African Americans, 19 Asian Americans, 45 White Americans; Sample 4,  $n = 47$ ; 72.0% female; 42 African Americans, 1 Asian American, 4 White Americans) to participate in the daily diary study reported in Study 3 (age:  $M = 17.85$  years,  $SD = 0.60$ ). Sample 3 also completed several measures, including the RSQ-Race for a second time, after the 3-week diary study. Preliminary analyses showed that the results reported below did not differ significantly as a function of sample, sex, or their interaction. Moreover, controlling for gender and sample did not alter the findings.

**Background data.** Participants in Samples 1, 3, and 4 were asked to provide estimates of their family's income in the past year, using the following scale: 1 (\$10,000–20,000), 2 (\$20,000–30,000), 3 (\$30,000–60,000), 4 (\$60,000–90,000), 5 (\$90,000–110,000), 6 (\$110,000 and above). A total of 249 participants (109 African Americans, 84 White Americans, and 56 Asian Americans) completed this measure. An analysis of variance (ANOVA) revealed a significant overall effect of race on reported family income,  $F(2, 246) = 30.20, p < .001$ . Paired  $t$  tests, which were corrected for multiple comparisons using the Bonferroni method, revealed that African Americans ( $M = 2.92, SD = 1.54$ ) differed on this index both from White Americans ( $M = 4.30, SD = 1.53$ ),  $t(191) = 6.31, p < .001$ , and from Asian Americans ( $M = 4.55, SD = 1.39$ ),  $t(163) = 6.61, p < .001$ . White Americans and Asian Americans were not significantly different from each other,  $t(138) = -0.98, ns$ .

Participants were also asked to indicate both parents' level of education on the following scale: 1 (*some high school*), 2 (*high school*), 3 (*some college*), 4 (*college*), 5 (*some graduate school*), 6 (*graduate school*). A total of 262 participants (118 African Americans, 85 White Americans, and 59 Asian Americans) completed this measure. Because education levels of mothers and fathers were highly correlated,  $r(244) = .69, p < .001$ , these scores were averaged. An ANOVA revealed significant differences among the three groups in parental education level,  $F(2, 259) = 23.21, p < .001$ . Paired  $t$  tests, which were corrected for multiple comparisons using the Bonferroni method, revealed that African Ameri-

cans ( $M = 3.21, SD = 1.47$ ) differed significantly both from White Americans ( $M = 4.51, SD = 1.40$ ),  $t(201) = 6.46, p < .001$ , and from Asian Americans ( $M = 4.18, SD = 1.27$ ),  $t(175) = 4.36, p < .001$ . White Americans and Asian Americans did not differ significantly from each other on this measure,  $t(144) = 1.35, ns$ .

### Measures

**RSQ-Race.** The initial step in developing this questionnaire involved conducting a pilot test in which 150 undergraduates indicated whether they had ever been rejected because of a status characteristic such as race, religion, gender, ethnicity, or sexual orientation. Those who responded affirmatively were asked to describe one such experience. African Americans were more likely than students from other racial/ethnic groups to report having experienced race/ethnic-based rejection. Their descriptions of such situations were then used to initiate discussions in two 10-person focus groups of African American students, which were convened to generate additional situations in which race-based rejection could occur. Group participants were asked to identify situations in which they would be concerned about feeling devalued, left out, or different from other students because of their race and to describe their thoughts and feelings in such situations. The focus group discussions further confirmed the salience of race-related rejection for African American students.

The pilot test and focus group studies yielded over 20 situations in which African American students might experience concerns about race-based rejection. The situations involved interactions with unfamiliar or nonclose high-investment figures identified by their social roles (e.g., public authorities, professors) as well as low-investment figures (e.g., strangers). To confirm that these situations elicited concerns about race-based rejection in African American but not White students, we interviewed 20 additional students (12 African American, 8 White) about their expectations and feelings in each situation. Most of the African American students but none of the White students indicated that they would experience race-based rejection expectations and concerns. The 12 situations that were nonrepetitive and that generated variance among African Americans are listed in Table 1. The RSQ-Race is composed of these situations, and it is modeled after the RSQ-Personal (Downey & Feldman, 1996).

The RSQ-Race assesses participants' concerns about and expectations of rejection based on race for each situation. Participants first indicate their concern or anxiety that the negative outcome would occur because of their race (e.g., for Item 6 in Table 1, "How concerned or anxious would you be that the guard might stop you because of your race/ethnicity?") on a 6-point scale ranging from *very unconcerned* (1) to *very concerned* (6). Participants then indicate the likelihood that the other person would engage in rejecting behavior toward them as a result of their race (e.g., "I would expect that the guard might stop me because of my race/ethnicity") on a 6-point scale ranging from *very unlikely* (1) to *very likely* (6). In terms of the hot-cool framework and our conceptualization of anxious expectations of rejection as hot cognitions, the expectation is viewed as the cognition, and the anxiety is viewed as the hot, or emotional, component, which serves to amplify the impact of the cognition on subsequent thoughts, feelings, and behavior. To capture this amplification process, we weighted the expectation score for each situation by the anxiety score.<sup>1</sup> Scores for

<sup>1</sup> Within our theoretical framework, neither expectations of rejection without anxiety over its actual occurrence nor anxiety about the possibility of race-based rejection when unaccompanied by expectations of rejection should be a sufficient condition to elicit a strong sense of threat and trigger the RS dynamic. As such, expectations of rejection and anxiety over the possibility of rejection form a unitary psychological construct (i.e., hot cognitions). Thus, the theoretically indicated measurement model is the Anxiety  $\times$  Expectations interaction term, in which the cognition is weighted by the affective, or hot, component (Krantz & Tversky, 1971).

Because expectations and anxiety have generally been only weakly correlated in our prior research using the RS-personal measure, the statis-

Table 1  
Factor Loadings for RS–Race Questionnaire Items and Psychometric Properties of RS–Race Questionnaire for African Americans

Item and statistic	Factor loading
1. Imagine that you are in class one day, and the professor asks a particularly difficult question. A few people, including yourself, raise their hands to answer the question.	.66
2. Imagine that you are in a pharmacy, trying to pick out a few items. While you’re looking at the different brands, you notice one of the store clerks glancing your way.	.68
3. Imagine you have just completed a job interview over the telephone. You are in good spirits because the interviewer seemed enthusiastic about your application. Several days later you complete a second interview in person. Your interviewer informs you that they will let you know about their decision soon.	.73
4. It’s late at night and you are driving down a country road you’re not familiar with. Luckily, there is a 24-hour 7-11 just ahead, so you stop there and head up to the counter to ask the young woman for directions.	.74
5. Imagine that a new school counselor is selecting students for a summer scholarship fund that you really want. He has only one scholarship left and you are one of several students that are eligible for this scholarship.	.78
6. 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.	.70
7. Imagine you are riding the bus one day. The bus is full except for two seats, one of which is next to you. As the bus comes to the next stop, you notice a woman getting on the bus.	.58
8. Imagine that you are in a restaurant, trying to get the attention of your waitress. A lot of other people are trying to get her attention as well.	.78
9. Imagine you’re driving down the street, and there is a police barricade just ahead. The police officers are randomly pulling people over to check drivers’ licenses and registrations.	.73
10. Imagine that it’s the second day of your new class. The teacher assigned a writing sample yesterday and today the teacher announces that she has finished correcting the papers. You wait for your paper to be returned.	.52
11. Imagine that you are standing in line for the ATM machine, and you notice the woman at the machine glances back while she’s getting her money.	.69
12. Imagine you’re at a pay phone on a street corner. You have to make a call, but you don’t have change. You decide to go into a store and ask for change for your bill.	.64
<i>M</i>	12.25
<i>Mdn</i>	11.58
<i>SD</i>	6.53
Minimum score	1.2
Maximum score	27.9
<i>N</i>	130

Note. In the RS–Race Questionnaire, the Anxiety × Expectation product scores are obtained for each item, reflecting anxious expectations of race-based rejection as the theoretically relevant unit of analysis. These product scores are then averaged over the 12 situations in the questionnaire. RS = rejection sensitivity; ATM = automatic teller machine.

the 12 situations were then averaged. On the basis of this method of calculation (whereby the Anxiety × Expectation product score at the item level becomes the unit of analysis), we examined the psychometric prop-

erties of the measure. The descriptive statistics of the RSQ–Race from the African American participants who completed the measure in Study 1 are presented in Table 1.

tical significance of the Anxiety × Expectations term tended to be similar regardless of whether main effects for expectations or anxiety were included. However, in the studies using the RS–race measure reported in this article, expectancy and anxiety are correlated, on average, .45. Thus, to the extent that participants expected race-based rejection, they tended to be anxious about the possibility that it would occur. As a consequence, certain combinations of expectations and anxiety are unlikely to be observed (e.g., high expectations/low anxiety and low expectations/high anxiety). Thus, there is low power to detect a significant Anxiety × Expectations interaction term in the presence of the main effect terms for anxiety and expectations (McClelland & Judd, 1993). However, although the Anxiety × Expectations term did not significantly improve model fit beyond the main effects of anxiety and expectations in the analyses reported in the article, a model that only included main effects did not have a significantly superior fit to the model that only included the interaction term. Moreover, there was no evidence from the main effects analyses that anxiety was consistently a stronger predictor of outcomes than expectations or vice versa. Given that the theoretically based interaction model is supported in our prior research with RS–personal in addition to fitting the data as well as the main effects model, which, though more parsimonious, does not reflect our theoretical approach, we opted to continue with the Anxiety × Expectations operationalization of the construct at the item level.

erties of the measure. The descriptive statistics of the RSQ–Race from the African American participants who completed the measure in Study 1 are presented in Table 1.

*RSQ–Personal.* The RSQ–Personal (Downey & Feldman, 1996) assesses anxious expectations of rejection by significant others due to individual characteristics (as distinct from characteristics due to membership in a social group). The questionnaire consists of 18 hypothetical situations in which rejection by a significant other is possible (e.g., “You ask your friend to do you a big favor”). For each situation, people first indicate their concern or anxiety about the outcome (e.g., “How concerned or anxious would you be over whether or not your friend would want to help you out?”) on a 6-point scale ranging from *very unconcerned* (1) to *very concerned* (6). They then indicate the likelihood that the other person would respond in an accepting fashion (e.g., “I would expect that he/she would willingly agree to help me out.”) on a 6-point scale ranging from *very unlikely* (1) to *very likely* (6). The score for acceptance expectancy is reversed to index rejection expectancy (expectancy of rejection = 7 minus expectancy of acceptance). One obtains a score for each situation by multiplying the expected likelihood of rejection by the degree of anxiety about the outcome of the request. One computes a total score by averaging the scores for all 18 situations. The measure is reliable and normally distributed, with distinctive predictive validity (Downey & Feldman, 1996). A total of 328 participants (Sample 1: *n* = 85; Sample 2: *n* = 97; Sample 3: *n* = 99; Sample 4: *n* = 47; *M* = 9.43, *SD* = 3.50) completed the RSQ–Personal. No significant sex or age differences were observed.

**Perceived Racism Scale.** According to the RS–race model, individuals who anxiously expect status-based rejection should perceive such rejection more frequently than those who do not and also react more strongly to such rejection once it is perceived. Therefore, we expected scores on the RSQ–Race to be correlated with scores on the Perceived Racism Scale (McNeilly et al., 1996). The Perceived Racism Scale assesses the frequency of perceptions of race-based negative events and affective reactivity following such events. Section 1 (43 items) measures the frequency of perceptions of various manifestations of racially motivated devaluation in academic, occupational, and public settings. Participants indicate how often they have perceived themselves as targets of race-based negativity over the past year on a scale ranging from *not applicable* (0) to *several times a day* (5). A sample situation from this questionnaire is, “I have been called insulting names because of my race/ethnicity.” This study used an abbreviated 17-item version of the scale consisting of the first 6 job-related items, the first 6 academic-related items, and the first 5 public realm items. Section 1 of the Perceived Racism Scale was completed by 213 participants (Sample 1:  $n = 113$ ; Sample 3:  $n = 100$ ). Scores did not differ significantly by sex or age.

Reactivity to perceived race-based negativity was assessed by Section 2 of the Perceived Racism Scale. For each domain, participants indicate on a 5-point scale (*not at all* = 1, *extremely* = 5) how angry, frustrated, powerless, hopeless, and ashamed they would feel if the event occurred. A factor analysis in the present sample of African Americans revealed that, with the exception of hopelessness, ratings on these items loaded onto a single factor. Thus, we created a composite index of emotional reactivity, excluding hopelessness, by averaging ratings across these items. This measure was completed by 207 participants (Sample 1:  $n = 109$ ; Sample 3:  $n = 98$ ). There were no significant sex or age differences in scores on the measure.

**Rosenberg Self-Esteem Questionnaire.** The Rosenberg (1979) Self-Esteem Questionnaire is a valid and reliable 10-item Likert-format scale that consists of items such as “I take a positive attitude toward myself.” Respondents indicate on a 6-point scale how much each statement reflects their self-attitudes, with a high score indicating high self-esteem. Self-esteem data were available for 349 participants (Sample 1:  $n = 116$ ; Sample 2:  $n = 87$ ; Sample 3:  $n = 99$ ; Sample 4:  $n = 47$ ;  $M = 4.76$ ,  $SD = 0.96$ ). There were no significant sex or age differences in scores on this measure.

**Ethnic Identity Scale.** The Ethnic Identity Scale (Phinney, 1992) is a 20-item Likert-type scale that consists of items such as “I have spent time trying to find out more about my own ethnic group, such as history, traditions, and customs.” Respondents rate their agreement with each statement on a scale from *strongly disagree* (1) to *strongly agree* (4). Responses are averaged across the 20 items, with higher scores indicating higher levels of ethnic identity. The scale was completed by 261 participants (Sample 1:  $n = 114$ ; Sample 3:  $n = 100$ ; Sample 4:  $n = 47$ ), and scores did not differ significantly by sex or age.

## Results and Discussion

### Factor Analysis and Psychometric Properties

For the African American sample, a principal-components factor analysis was conducted on the anxious expectations scores for each of the 12 RSQ–Race situations to establish whether a single factor could be extracted from the data. The analysis yielded two factors with eigenvalues greater than 1.00, but only one factor was retained on the basis of the scree test. This factor had an eigenvalue of 5.72 and accounted for 48% of the variance (the next four factors had eigenvalues of 1.25, 0.97, 0.73, and 0.63, and accounted for 10%, 8%, 6%, and 4% of the variance, respectively). All 12 RSQ–Race items loaded at higher than 0.50. Table 1 gives the factor loadings, mean, median, standard deviation, and range of scores on the RSQ–Race. RS–race was not significantly related to

age,  $r(126) = -.05$ , *ns*; sex,  $r(126) = -.11$ , *ns*; parental education level,  $r(104) = .07$ , *ns*; or family income,  $r(107) = -.13$ , *ns*.

The RSQ–Race shows high internal reliability for African Americans on the basis of the 12 product scores ( $\alpha = .90$ ). To assess the short-term test–retest reliability of the measure, we had 41 African American participants from Samples 2 and 3 complete the RSQ–Race for a second time 2–3 weeks after the first assessment. This sample was similar to the total sample in age, RS–race, and RS–personal. The test–retest reliability,  $r(39) = .80$ ,  $p < .001$ , was comparable to that obtained for the RSQ–Personal over an equivalent time period (Downey & Feldman, 1996).

### Construct Validity

Among African Americans, anxious expectations of race-based rejection assessed with the RSQ–Race were significantly correlated with frequency of perceiving race-based negativity over the past year,  $r(74) = .46$ ,  $p < .001$ , and with emotional reactivity following such negativity,  $r(72) = .30$ ,  $p < .01$ . These associations remained significant when we partialled out the effects of RS–personal, ethnic identity and self-esteem; perceived race-based negativity: partial  $r(57) = .44$ ,  $p < .001$ ; emotional reactivity: partial  $r(57) = .28$ ,  $p < .05$ . The disattenuated correlation between anxious expectations of race-based rejection and both perceived race-based negativity,  $r(74) = .57$ , and reaction to such negativity,  $r(72) = .38$ , was significantly less than 1.00, indicating that our measure did not completely overlap with either of these two scales.

Ethnic identity was significantly associated with RS–race,  $r(115) = .34$ ,  $p < .001$ . RS–personal also was associated with RS–race,  $r(115) = .28$ ,  $p < .01$ . RS–personal was a significant correlate of self-esteem when we controlled for RS–race, partial  $r(112) = -.42$ ,  $p < .001$ , but RS–race was not associated with self-esteem when we controlled for RS–personal, partial  $r(112) = -.09$ , *ns*.

### Differences Among African Americans, Asian Americans, and White Americans

Table 2 gives the means and variances of RS–race, RS–personal, perceptions of and reactions to race-based negativity, ethnic identity, and self-esteem for African Americans, Asian Americans, and White Americans. For each of these three groups, the table also shows the alphas for each scale. African Americans were significantly higher than were Asian Americans and White Americans in RS–race, as were Asian Americans compared with White Americans. This pattern of results held when we adjusted for income and parental education levels. The variance of RS–race also was significantly higher for African Americans than for Asian Americans or White Americans. As expected, the three groups did not differ significantly in RS–personal. They also did not differ significantly in self-esteem, but, replicating prior research, Asian Americans reported the lowest levels of self-esteem (e.g., Crocker & Lawrence, 1999). African Americans scored higher than White Americans and Asian Americans in ethnic identity and perceptions of race-based negativity, with Asian Americans scoring between African Americans and White Americans. Asian Americans and African Americans scored higher than White Americans in emotional reactivity to race-based rejection.

Table 2  
Means for African Americans, Asian Americans, and White Americans on Measures Administered in Study 1

Measure	Group		
	African Americans	Asian Americans	White Americans
RS-race			
<i>M</i>	12.25 <sub>a</sub>	5.82 <sub>b</sub>	2.87 <sub>c</sub>
<i>SD</i>	6.53 <sub>a</sub>	3.99 <sub>b</sub>	2.47 <sub>c</sub>
$\alpha$	.90	.86	.92
<i>n</i>	130	88	141
RS-personal			
<i>M</i>	8.99 <sub>a</sub>	9.58 <sub>a</sub>	9.73 <sub>a</sub>
<i>SD</i>	3.35 <sub>a</sub>	3.07 <sub>a</sub>	3.85 <sub>a</sub>
$\alpha$	.85	.83	.88
<i>n</i>	117	77	134
Frequency of perceiving race-based negativity			
<i>M</i>	1.83 <sub>a</sub>	1.10 <sub>b</sub>	0.72 <sub>c</sub>
<i>SD</i>	0.94 <sub>b</sub>	0.60 <sub>a</sub>	0.64 <sub>a</sub>
$\alpha$	.90	.87	.95
<i>n</i>	76	58	79
Emotional reactions to race-based negativity			
<i>M</i>	2.25 <sub>a</sub>	2.41 <sub>a</sub>	1.28 <sub>b</sub>
<i>SD</i>	1.02 <sub>a</sub>	0.92 <sub>a</sub>	1.07 <sub>a</sub>
$\alpha$	.76	.77	.91
<i>n</i>	74	58	75
Ethnic identity			
<i>M</i>	2.98 <sub>a</sub>	2.75 <sub>b</sub>	2.36 <sub>c</sub>
<i>SD</i>	0.37 <sub>a</sub>	0.42 <sub>a,b</sub>	0.54 <sub>b</sub>
$\alpha$	.80	.83	.84
<i>n</i>	118	58	85
Self-esteem			
<i>M</i>	4.87 <sub>a</sub>	4.64 <sub>a</sub>	4.74 <sub>a</sub>
<i>SD</i>	0.80 <sub>a</sub>	0.90 <sub>a,b</sub>	1.28 <sub>b</sub>
$\alpha$	.82	.83	.84
<i>n</i>	128	85	136

Note. Means and standard deviations across rows with different subscripts differ significantly at  $p < .05$  or less, with Bonferroni corrections for multiple comparisons. In cases in which variances are significantly different from each other, group differences were tested using  $t$  tests assuming unequal variances.

### Summary

Study 1 had two objectives. The first was to develop a measure of anxious expectations of race-based rejection among African Americans. The second was to provide initial correlational evidence for the validity of the RS construct applied to the domain of status-based rejection.

Consistent with our predictions from the RS model, anxious expectations of race-based rejection assessed with the RSQ-Race were related significantly with frequency of perceiving race-based negativity as well as with emotional reactivity following such negativity, even when we controlled for self-esteem, RS-personal, and ethnic identity. Replicating earlier research (e.g., Downey & Feldman, 1996), RS-personal showed a significant negative relationship with self-esteem. However, consistent with evidence that self-esteem is not contingent on race-related experiences (e.g., Crocker & Major, 1989), RS-race was not a significant distinctive correlate of self-esteem.

Also as expected, African Americans scored higher than did both Asian Americans and White Americans on the RSQ-Race,

and they showed significantly greater variability than did Asian Americans and White Americans. No significant race differences were found in RS-personal, and the patterns for the other variables assessed in the study (self-esteem, ethnic identity, perceived racism, and reactivity to perceived racism) replicated prior research.

The findings from this study thus provide initial evidence for a relationship between anxious expectations of race-based rejection and a tendency to perceive and react strongly to race-based rejection. Nevertheless, a potential concern about the measure remains: Responses to the RSQ-Race in Study 1 may have been driven by the explicit mention of race/ethnicity. Our theoretical position is that anxious expectations of rejection based on personal versus status characteristics should be activated in different types of situations and that these situations are captured in the RSQ-Personal and RSQ-Race, respectively. Evidence of the distinctive predictive utility of the RSQ-Race in the absence of explicit references to race would provide further evidence for the discriminant validity of the RS-race and RS-personal constructs. Study 2 seeks such evidence directly.

### Study 2

Study 2 addresses the situational specificity of the activation of anxious expectations of race-based rejection. Our model predicts that these expectations should be activated among people high in RS-race specifically in situations in which race-based rejection is applicable and personally salient, regardless of the explicit mention of race. To examine this prediction directly, in this study we asked African American and White participants to indicate the degree to which they would anxiously expect rejection in situations from both the RSQ-Race (RS-race situations) and the RSQ-Personal (RS-personal situations). The cause of the rejection was not specified in either case. Participants were also asked to imagine actually being rejected in these situations and to report their spontaneous attributions for the rejection. Whereas race-based rejection was predicted to be a potential concern for African Americans but not for White Americans in the RS-race situations, rejection from significant others was predicted to be of equivalent concern for both groups in the RS-personal situations. Thus, we predicted that African Americans would be more likely than White Americans to anxiously expect rejection in the former situations but that both groups would be equally likely to anxiously expect rejection in the latter situations.

We also predicted that African Americans would spontaneously attribute rejection to race in the RS-race situations but not in the RS-personal situations. White Americans were not expected to attribute rejection to race in either type of situation. In addition, among African Americans, we anticipated that rejection expectations in the RS-race situations would predict racial attributions for rejection in these same situations but not in the RS-personal situations. Finally, to further establish that African Americans' anxious expectations of rejection in the RS-race situations were race-related and to provide a point of comparison with the findings of Study 1, we assessed the relation of rejection expectations with the frequency of perceiving racially motivated negativity, as measured by Section 1 of the Perceived Racism Scale. We predicted that, among African Americans, anxious expectations of rejection in the RS-race situations but not in the RS-personal situations would significantly correlate with perceptions of racially motivated negativity. Among White Americans, anxious expectations



of rejection in neither the RS–race situations nor the RS–personal situations were expected to relate significantly with perceptions of racially motivated negativity.

## Method

### Sample and Procedure

Fifty-seven African American and 57 White American college students (age:  $M = 20.82$  years,  $SD = 3.75$ ) were recruited individually to participate for pay in a study of “people’s beliefs and feelings in a variety of situations that college students are likely to face.” Participants completed a 30-min questionnaire in mixed groups. On arrival, each participant received a large manila envelope containing three individually numbered envelopes. Envelope 1 contained the Rejection Expectations Questionnaire (REQ), Envelope 2 contained the Rejection Attributions Questionnaire (RAQ), and Envelope 3 contained Section 1 of the Perceived Racism Scale (McNeilly et al., 1996) as well as demographic questions, including race. Participants were asked to complete each envelope in order to prevent participants’ responses to the earlier questionnaires being influenced by responses to the later questionnaires. Preliminary analyses indicated that the results did not differ significantly by gender and were not altered when we controlled for gender.

### Measures

**REQ.** This 15-item questionnaire consisted of seven situations from the RSQ–Personal (Items 5, 11, 12, 13, 15, 16, and 17) interspersed among eight situations from the RSQ–Race (Items 1, 2, 4, 6, 7, 8, 9, and 11). All references to race/ethnicity were removed from the RSQ–Race situations. Thus, for all 15 items, participants were asked to indicate their agreement with “how concerned or anxious would you be over whether [a rejecting outcome would occur]?” and “I would expect that he/she would [act rejectingly].” We obtained a score for each situation by weighting the expected likelihood of rejection (1 = *very unlikely*, 6 = *very likely*) by the degree of anxiety or concern about the outcome (1 = *very unconcerned*, 6 = *very concerned*). We computed separate rejection expectations scores in the RS–race and RS–personal situations by averaging the scores for the appropriate situations. Each subscale showed adequate internal reliability for both African Americans (RS–race situations,  $\alpha = .82$ ; RS–personal situations,  $\alpha = .63$ ) and White Americans (RS–race situations,  $\alpha = .78$ ; RS–personal situations,  $\alpha = .79$ ). Confirmatory factor analysis indicated that a two-factor solution, in which the RS–race items loaded on one factor and the RS–personal items loaded on another factor, was a better fit to the data than a one-factor solution for both African Americans,  $\Delta\chi^2(1, N = 57) = 52.6, p < .001$ , and White Americans,  $\Delta\chi^2(1, N = 57) = 21.4, p < .001$ . This suggests that both groups have distinctive rejection expectations in situations involving personal relationships and in situations involving less familiar others.

**RAQ.** For each situation described in the REQ, participants were asked to imagine that they had experienced the rejecting outcome and to explain why it had happened. The open-ended format of the question allowed participants to generate as many explanations as they chose. Each response was coded by a trained coder, who was unaware of the hypotheses of the study, for racial attributions, attributions to other status characteristics (religion, gender, sexual orientation, age), attributions to personal characteristics (looks, personality), and attributions to external factors (situational factors, the other person’s disposition). Each response was given up to three separate codes. For example, “Because I’m Black” would have received a single code for racial attribution, whereas “Because I’m a Black woman” would have received both a code for racial attribution and a code for other status-characteristic attribution.

For each situation, dichotomous (1 or 0) scores were obtained for each of the four different types of attributions listed above. A second, independent coder who was unaware of the hypotheses of the study also coded the

responses for half of the sample. Interrater agreement for each type of attribution was as follows: race, 99.5%; other status characteristics, 99.6%; personal characteristics, 97.3%; external factors, 87.6%. Analyses were conducted using only the first coder’s ratings.

For each type of attribution, we computed separate total attribution scores for the RS–race and RS–personal situations by averaging the scores for the appropriate situations. Participants generated more attributions in the RS–race ( $M = 9.71, SD = 2.67$ ) than in the RS–personal situations ( $M = 7.42, SD = 0.96$ ),  $F(1, 113) = 92.31, p < .001$ , and this was true for both White American and African American participants.

**Perceived Racism Scale, Section 1.** This measure is described in the *Method* section of Study 1. The Study 2 means were 2.11 ( $SD = 0.93$ ) for African Americans and 0.74 ( $SD = 0.46$ ) for White Americans.

**Family income.** This measure is described in the *Method* section of Study 1. The Study 2 means were 3.43 ( $SD = 1.51$ ) for African Americans and 4.47 ( $SD = 1.60$ ) for White Americans,  $t(104) = 3.42, p < .001$ .

**Parental education level.** This measure is described in the *Method* section of Study 1. The Study 2 means were 3.67 ( $SD = 1.36$ ) for African Americans and 4.60 ( $SD = 1.27$ ) for White Americans,  $t(112) = 3.78, p < .001$ .

## Results and Discussion

### Rejection Expectations

Consistent with predictions, African Americans ( $M = 11.46, SD = 5.62$ ) and White Americans ( $M = 6.97, SD = 4.04$ ) differed significantly in anxious rejection expectations in RS–race situations both in mean level,  $t(101) = 4.92, p < .001$ , and in the variances of their scores,  $F'(56, 56) = 1.97, p < .01$ . By contrast, rejection expectations in RS–personal situations did not differ significantly between African Americans ( $M = 10.34, SD = 2.96$ ) and White Americans ( $M = 10.17, SD = 3.47$ ) either in mean level,  $t(111) = 0.28, ns$ , or in variance,  $F'(55, 56) = 1.38, ns$ .

### Attributions for Rejection

**Racial attributions.** Neither White Americans nor African Americans (with one exception) attributed rejection in the RS–personal situations to race (African Americans:  $M = 0.01, SD = 0.13$ ; White Americans:  $M = 0.00, SD = 0.00$ ). Similarly, White Americans made almost no attributions to race in the eight RS–race situations ( $M = 0.05, SD = 0.29$ ). African Americans, however, made race-related attributions in 28.0% of the eight RS–race situations ( $M = 2.28, SD = 2.15$ ); this proportion is significantly different from zero,  $t(55) = 8.00, p < .001$ .

**Other types of attributions.** White Americans made more external attributions ( $M = 6.58, SD = 1.51$ ) than did African Americans ( $M = 5.40, SD = 2.27$ ) in the RS–race situations,  $t(112) = 3.25, p < .001$ , but not in the RS–personal situations (African Americans:  $M = 6.87, SD = 1.08$ ; White Americans:  $M = 7.15, SD = 0.92$ ),  $t(112) = 1.49, ns$ . No significant group differences were obtained for attributions to other status characteristics either in the RS–race (African Americans:  $M = 1.30, SD = 2.54$ ; White Americans:  $M = 0.77, SD = 1.34$ ),  $t(112) = 1.38, ns$ , or in the RS–personal situations (African Americans:  $M = 0.04, SD = 0.19$ ; White Americans:  $M = 0.02, SD = 0.13$ ),  $t(112) = 0.58, ns$ . Similarly, no group differences were obtained for attributions to personal characteristics either in the RS–race (African Americans:  $M = 1.39, SD = 1.54$ ; White Americans:  $M = 1.67, SD = 1.20$ ),  $t(55) = 1.08, ns$ , or in the RS–personal situations (African Americans:  $M = 0.44, SD = 0.60$ ; White Americans:  $M = 0.31, SD = 0.51$ ),  $t(112) = 1.18, ns$ .

Table 3  
*Correlates of Expectations of Rejection in RS–Race and RS–Personal Situations for African Americans and White Americans*

Variable	Rejection expectations			
	African Americans ( <i>n</i> = 57)		White Americans ( <i>n</i> = 57)	
	RS–race situations	RS–personal situations	RS–race situations	RS–personal situations
Rejection expectations in RS–race situations		.35**		.48***
Attributions of rejection to race	.47***	.05		
Perceived racism in past year	.41**	.13	–.07	.03

Note. RS = rejection sensitivity.

\*\*  $p < .01$ . \*\*\*  $p < .001$ .

### *Interrelations Among the REQ, RAQ, and Perceived Racism*

Table 3 gives the correlations for African Americans and for White Americans in the RS–personal and RS–race situation subscales of the REQ, attributions of rejection to race in the RS–race situations of the RAQ, and perceptions of race-based negativity. Correlations involving attributions of rejection to race in the RS–race situations were not computed for White Americans because of the almost complete absence of such attributions in this group. The pattern of results in Table 3 did not change when we adjusted for parental education or income.

As the table shows, among African Americans, anxious expectations of rejection in the RS–race situations of the REQ correlated significantly with spontaneous attributions to race in the RS–race situations of the RAQ as well as with perceptions of race-based negativity. These findings were not altered when anxious expectations of rejection in the RS–personal situations were statistically controlled. By contrast, anxious expectations of rejection in the RS–personal situations were not significantly correlated with attributions to race in the RS–race situations or with perceived race-based negativity. Among African Americans, attributions of race for the RS–race situations correlated significantly with perceived race-based negativity,  $r(55) = .47, p < .001$ . Among White Americans, perceived race-based negativity was not significantly correlated with expectations in either the RS–personal or the RS–race situations.

### *Summary*

The results indicate that the situations described in the RSQ–Race elicited race-based rejection expectations in African Americans in the absence of explicit reference to race/ethnicity. The results also indicate that African Americans' anxious expectations of race-based rejection were activated specifically in situations in which such rejection is relevant. White Americans did not expect rejection based on race either in RS–personal or in RS–race situations. These findings provide evidence that, among African Americans, sensitivity to race-based rejection is distinct from sensitivity to rejection from significant others and that the RSQ–Race does not simply tap a chronic tendency to interpret any type of negative event through the lens of race.<sup>2</sup>

### Study 3

This study investigates the utility of the RS model for understanding stigmatized group members' experiences in social institutions that have previously marginalized their group. Specifically, we test predictions derived from the model about the implications of expectations of race-based rejection for how African American students experience the transition to a selective, predominantly White university. In addition to normative student concerns (Cantor, Norem, Niedenthal, & Langston, 1987; Zirkel, 1992), African Americans typically enter such institutions aware of a history of discrimination against their group and with heightened concerns about negative treatment based on their visible minority status (Bowen & Bok, 1998). Such expectations should be particularly influential during transitions because of the ambiguity associated with interpreting social cues in a new environment (Ruble & Seidman, 1996). To the extent that African American students enter college with race-based rejection concerns and expectations, their immediate and long-term college experience may be adversely affected (Bowen & Bok, 1998; Steele & Aronson, 1995). The RS model predicts that by influencing how students experience the transition, preexisting rejection expectations may contribute to the emergence of differences in attitudes and behavior toward the institution and its representatives and, ultimately, in goal attainment. However, to the extent that expectations of rejection are not confirmed and evidence is available of one's group's acceptance at the institution, then the negative expectations may not lead to the anticipated pattern of more negative outcomes (Merton, 1957). We examine these possibilities with data from a daily diary study conducted during the first 3 weeks of college and subsequent yearly follow-ups. The specific predictions derived from the RS model that we tested follow.

First, we tested the prediction that anxious expectations of status-based rejection would lead to more frequent experiences of and more negative reactions to such rejection. Whereas in Stud-

<sup>2</sup> In future research, it would be interesting to determine whether the effects of RS–race differ depending on the presumed race of the interactant. When interactants are members of the same social category, status-based concerns may not arise. Indeed, for members of stigmatized minorities, we expect that, in same-race interactions, RS–race concerns are less likely to arise than are RS–personal concerns.

ies 1 and 2 we tested this prediction with cross-sectional data, the longitudinal nature of this study allowed us to test the prediction prospectively by examining whether students who entered college with greater anxious expectations of race-based rejection (as assessed by the RSQ–Race before the beginning of classes) reported more negative race-related experiences and more intense reactions following such experiences over the diary study compared with students entering college with lesser anxious rejection expectations. Because the model posits, and the RSQ–Race assesses, a specific sensitivity to race-based rejection, we did not expect RS–race to predict the frequency with which participants reported positive race-related experiences.

Second, we tested the prediction that expectations of status-based rejection would have an adverse effect on the transition experience. Specifically, we tested whether anxious expectations of race-based rejection would predict a lower sense of well-being and belonging in the university and more wariness toward professors and peers. We also examined whether differences in these indices between those who are high and low in race-based rejection expectations intensified over the course of the diary period, as might be expected if such differences reflect an accumulation of reactions to situations in which race-based rejection is applicable and salient.

Third, we tested the prediction that negative events that are perceived as race-based would have a more negative impact on students' well-being and attitudes toward the university and its representatives to the extent that the students anxiously expect race-based rejection. We capitalized on the daily nature of the diary study to ask whether experiences perceived as being race-based on a given day had a more negative impact on the next-day attitudes and feelings of students who were high in RS–race than of those who were low in RS–race. This lagged analysis approach permits more confident inferences than does a within-day analysis about the causal impact of perceived race-based negativity on these outcomes (Bolger & Zuckerman, 1995).

Fourth, we predicted that expectancy-inconsistent experiences would attenuate negative outcomes (Merton, 1957). In this study, we focused on the occurrence of race-positive events at the institution. Such experiences, whether organized by the institution or not, could communicate acceptance of minority culture by the majority group and thus disconfirm rejection expectations. Insofar as students are sensitive to being rejected in a majority institution, positive experiences within that context may be perceived to carry more information about the majority's attitudes toward the minority status group. Thus, whereas we expected that such events would benefit all African American students, we also tested whether such events are particularly beneficial for students high in RS–race. We tested this prediction again using a lagged analysis approach, focusing on the link between positive race-related experiences and students' next-day feelings and attitudes.

Fifth, we tested the prediction that RS–race would ultimately affect individuals' relationships with the institution and its representatives in ways that undermine achievement within the institution. Our model suggests that if students high in RS–race find the transition to college more uncomfortable and alienating than do students low in RS–race, the former may be more wary of developing interracial friendships, of according legitimacy to institutional representatives, and of seeking assistance from such representatives as teaching assistants and professors. A consequence of this apparent avoidance of opportunities for rejection is likely to be

declining academic performance. We addressed these predictions through yearly follow-ups of study participants' social relations, use of institutional resources, and academic performance. To test the specificity of these predicted outcomes, we also asked about the perceived legitimacy of other groups the students had become members of in their 1st year and about level of comfort in seeking aid from friends.

## Method

### Sample and Procedure

During 1st-year orientation functions at the beginning of two successive academic years, research assistants invited incoming undergraduates to participate in a study of 1st-year college student experiences. Interested students were asked to attend an initial session, where they completed background questionnaires and then received a package containing three return envelopes and three packets of seven identical, structured questionnaires to be completed nightly for 21 days. Each week's set of diaries was to be returned to the experimenter on completion through campus mail or in person. Participants who completed all 21 diaries received \$25. Approximately 3 weeks prior to final exams of each cohort's respective 1st year, participants were recontacted by phone and/or E-mail and invited to complete a brief questionnaire "to see how 1st-year students change and adjust to college life over the first 2 semesters." Those who completed the follow-up received \$10. One year after the second cohort completed the 1st-year follow-up, all participants were again recontacted and invited to complete a second follow-up on student experiences. Participants were either juniors (Cohort 1) or sophomores (Cohort 2) at this time. They were offered \$15 for completing this second follow-up.

Seventy-eight students who identified themselves as Black or African American (25 men and 53 women; age:  $M = 18.10$  years,  $SD = 0.60$ ) completed the background questionnaires (35 in Cohort 1 and 43 in Cohort 2). This gender breakdown reflects the proportion of African American men and women at the university. Fifty-four of these participants completed all 21 days of the diary (32 in Cohort 1 and 22 in Cohort 2). One participant dropped out for personal reasons after completing 16 diaries. Because of a campus mail delivery error, only 14 days' worth of diary data were available for an additional 11 participants in Cohort 2. Twelve participants dropped out within the first 14 days of the study, but these participants did not differ from the others in self-esteem, ethnic identity, RS–personal, or RS–race (all  $t_s < 1.00$ ). The analyses reported below are based on the 66 participants (19 men and 47 women) who provided a minimum of 14 days of data. Preliminary analyses indicated that the results did not vary significantly as a function of cohort, gender, or their interaction. Moreover, controlling for cohort or gender did not alter the pattern of results.

### Follow-Up Data

At the end of the participants' 1st year, questionnaires were completed by 59 of the African American participants (18 men and 41 women) who had filled out background questionnaires. These participants did not differ significantly in self-esteem, ethnic identity, RS–personal, or RS–race from those who did not provide follow-up data (all  $t_s < 1.00$ ). Sixty-one participants completed the second follow-up questionnaire (23 from Cohort 1 and 38 from Cohort 2). Again, no significant relationship was observed between completion of this phase of the study and RS–race, RS–personal, self-esteem, or ethnic identity scores (all  $t_s < 1.00$ ).

### Background Measures

In addition to demographic information, background measures included the Rosenberg Self-Esteem Questionnaire (Rosenberg, 1979;  $M = 3.84$ ,  $SD = 0.75$ ), the Ethnic Identity Scale (Phinney, 1992;  $M = 3.05$ ,

$SD = 0.34$ ), the RSQ–Personal (Downey & Feldman, 1996;  $M = 8.98$ ,  $SD = 3.33$ ), and the RSQ–Race ( $M = 12.33$ ,  $SD = 6.81$ ), among other measures. These scores did not differ significantly as a function of sex or cohort.

### Diary Measures

A two-page structured daily diary questionnaire was developed to assess thoughts and feelings about various aspects of college experience. Each diary took about 7 min to complete and asked about current feelings, sense of belonging in the university, attitudes toward peers and professors, and interpersonal experiences. To minimize experimenter demand, the daily diary included questions not only about race but also about other aspects of identity, including gender, religion, sexual orientation, personality, and physical appearance. Participants indicated the date on which they completed each diary; 98.2% of all diary entries were completed on the assigned date.

*Feelings of well-being and rejection.* Participants indicated how much they were currently experiencing (i.e., “right now”) each of 27 feelings on a 4-point scale ranging from *not at all* (0) to *a lot* (3). To facilitate comparison with the remaining diary measures, we converted these scores to a scale that ranged from 1 to 10 by multiplying the original score by 3 and adding 1. The present study focuses on feelings of well-being and feelings of rejection. Well-being was measured with an 11-item composite (i.e., “supported,” “cared for,” “accepted,” “appreciated,” “loved,” “happy,” “confident,” “pleased,” “successful,” “satisfied,” “content”;  $\alpha = .90$ ;  $M = 6.60$ ,  $SD = 1.54$ ).<sup>3</sup> Rejection was measured with a three-item composite (i.e., “rejected,” “alienated,” “unwelcome”;  $\alpha = .96$ ;  $M = 2.09$ ,  $SD = 1.31$ ).

*Belonging in the university.* Three scales assessed participants’ sense of belonging in the university. These scales were preceded with instructions to “circle the number that best describes your feelings toward the university now.” The first scale ranged from *thrilled to be here* (1) to *miserable* (10). The second scale ranged from *definitely fit in* (1) to *do NOT fit in* (10). The third scale ranged from *very welcome* (1) to *NOT welcome* (10). We computed a composite score by reversing these variables so that higher scores indicated a higher sense of belonging and then averaging across the three scales ( $\alpha = .92$ ;  $M = 7.21$ ,  $SD = 2.21$ ).

*Positivity toward dormmates and professors.* Participants rated their positivity toward dormmates (PD) and professors by indicating how much they liked and felt comfortable with each. We operationalized dormmates in this study as participants’ roommates, suitemates, and floormates. First-year dormitory assignment is random and does not reflect personal choice; thus, the racial breakdown of 1st-year students’ living quarters are likely to reflect that of the university. Following instructions to “circle the number that best describes your feelings towards your roommates, suitemates, or floormates today,” participants completed a liking scale ranging from *like them* (1) to *do NOT like them* (10) as well as a comfort scale ranging from *feel comfortable with them* (1) to *do NOT feel comfortable with them* (10). Participants then completed the same two scales for their professors. Scores were reversed so that higher scores indicated higher levels of liking and comfort. The averages of the comfort and liking scales were then obtained separately for dormmates and professors. Participants generally felt positively toward both their dormmates ( $\alpha = .88$ ;  $M = 6.09$ ,  $SD = 3.20$ ) and their professors ( $\alpha = .90$ ;  $M = 6.57$ ,  $SD = 2.33$ ).

*Factor analyses of measures.* Factor analyses conducted with the items constituting the five measures described above (well-being, rejection, belonging, PD, positivity toward professors) yielded the expected five-factor solution, with items loading highly on the appropriate factors.

*Daily positive or negative experiences.* Participants were asked to check (yes/no) whether they had “a positive or negative experience today that was in some way related to your race/ethnicity, religion, sexual orientation, gender, personality, or looks” (if more than one experience had occurred, they were asked to choose the one that affected them the most). This format was chosen to emphasize various aspects of identity equally, drawing attention away from our interest in race. If participants checked

“yes,” they were asked to provide an open-ended description of the event and to check which of the attributes listed was relevant to their experience (participants could check more than one category). Finally, they were asked to indicate the nature of their experience using a checklist that included both positive and negative experiences. Examples of positive experiences included in the checklist are “did a favor to me,” “gave me preferential treatment,” and “was especially helpful to me.” Examples of negative experiences are “excluded me from an activity,” “insulted me,” “was suspiciously watching me,” “made a condescending remark toward me,” “told a joke in poor taste,” “gave me bad service,” and “started a conflict with me.” For each category of identity, including race, participants were assigned a score of 1 if they reported having had an experience or 0 otherwise.

The mean probability of experiencing a negative event on a given day was .07 ( $SD = .25$ ), whereas the mean probability of experiencing a positive event was .11 ( $SD = .31$ ). The daily probability of experiencing a negative event related to each personal or status characteristic was as follows: race = .04 ( $SD = .20$ ), religion = .0007 ( $SD = .03$ ), sexual orientation = .003 ( $SD = .05$ ), gender = .01 ( $SD = .12$ ), personality = .02 ( $SD = .13$ ), and appearance = .02 ( $SD = .15$ ). For positive events, the mean probabilities were as follows: race = .03 ( $SD = .18$ ), religion = .005 ( $SD = .07$ ), sexual orientation = .004 ( $SD = .07$ ), gender = .02 ( $SD = .15$ ), personality = .04 ( $SD = .20$ ), and appearance = .04 ( $SD = .19$ ).

Because of our particular interest in race-related experiences, participants’ open-ended descriptions of positive and negative experiences of this type were further examined. Examples of negative race-related experiences (NREs) included being followed around the university bookstore, overhearing peers make insensitive comments, and being denied access to a building restricted to university students on the assumption that the participant was not a student. Examples of positive race-related experiences (PREs) included going to campus meetings of the Black Student Organization, having a conversation about being Black at the university with African American peers, and going with fellow students to a Caribbean festival. Further coding of these experiences into whether they occurred on or off campus and whether they involved peers or strangers did not yield differential results. Thus, these experiences remain collapsed in further analyses.

*Feelings of rejection and alienation following positive or negative experiences.* If the occurrence of a positive or negative experience was reported, participants indicated how much they experienced each of nine feelings (i.e., “accepted,” “insecure,” “happy,” “angry,” “rejected,” “alienated,” “pleased,” “depressed,” “resentful”) on a 4-point scale ranging from *not at all* (0) to *a lot* (3) following the event. These scores were converted to a 10-point scale for purposes of comparison. As we had specific predictions about rejection and alienation following race-related events, the two items referring to these feelings were averaged into a composite ( $\alpha = .94$ ) in which high scores indicated higher levels of rejection and alienation ( $M = 1.52$ ,  $SD = 0.99$ ).

### Follow-Up Measures

*Friendships at the end of the 1st year.* To test whether RS–race influenced the friendships that people formed in the 1st year of college, we asked participants to indicate the race of their most important friends at the end of the 1st year. On the first page of the follow-up, participants listed the first name of up to 10 friends that they had made over their 1st year of college. Participants then answered other questions regarding their end-of-year attitudes. Finally, on the last page of the questionnaire, participants were instructed to return to the section where they had listed their friends and to provide the age, gender, and race of each friend. This procedure allowed us to assess friends’ ethnicity while simultaneously ensuring that participants’ reports of their friendships were not subject to demand char-

<sup>3</sup> We computed alphas for diary study variables by first averaging daily observations across days for each individual.

acteristics. Two participants did not complete this part of the follow-up. Our analyses focus on number of Black friends and number of White friends.

Participants reported 8.01 friends on average ( $SD = 2.52$ ). Of these, significantly more were Black ( $M = 5.60$ ,  $SD = 2.98$ ) than White ( $M = 1.14$ ,  $SD = 1.72$ ),  $t(57) = 8.01$ ,  $p < .001$ , Latino ( $M = 0.61$ ,  $SD = 1.05$ ),  $t(57) = 10.87$ ,  $p < .001$ , Asian ( $M = 0.49$ ,  $SD = 1.22$ ),  $t(57) = 10.90$ ,  $p < .001$ , or other ethnicities ( $M = 0.17$ ,  $SD = 0.63$ )  $t(57) = 13.35$ ,  $p < .001$ .

*Perceived legitimacy of the university at the end of the 1st year.* Using items adapted from Tyler and DeGoey (1995), participants indicated how much trust and obligation they felt toward the university. To assess trust, participants indicated on a 1 (*strongly disagree*) to 5 (*strongly agree*) scale whether “the university’s administration does its job well” and “the university’s administration can be trusted to make decisions that are good for everyone.” To assess perceived obligation, participants indicated on a similar scale whether “respect for the university’s administration is an important value for people to have,” “disobeying school policy is seldom justified,” and “people should obey school policy even when they go against what they think is right.” We computed a perceived legitimacy index by taking the average of participants’ ratings on these items ( $\alpha = .76$ ;  $M = 2.70$ ,  $SD = 0.75$ ).

*Perceived legitimacy of extracurricular groups at the end of the 1st year.* Participants indicated the extracurricular group with which they identified the most, then indicated the degree of trust and obligation they felt toward their group’s administration using the same scale described above but with reference to the specific group with which they were identified ( $\alpha = .67$ ;  $M = 3.53$ ,  $SD = 0.61$ ).

*Attitudes toward seeking academic help at the end of the 2nd/3rd year.* Participants were asked to indicate the degree of anxiety they would feel about approaching professors and teaching assistants with an academic problem on a scale ranging from 1 (*extremely comfortable*) to 6 (*extremely anxious*;  $\alpha = .80$ ;  $M = 2.43$ ,  $SD = 1.24$ ). To assess the generalizability of such anxiety, we also asked participants to indicate on a similar scale how anxious they would feel about approaching their friends with an academic problem ( $M = 2.00$ ,  $SD = 1.51$ ). In addition, participants were asked to indicate on a 7-point scale ranging from *never* to *always* how often they had attended review sessions at the university (an optional resource commonly used by students to clarify course-related questions and concepts prior to midterm and final examinations;  $M = 4.85$ ,  $SD = 1.32$ ).

*Academic records.* To explore whether RS–race had an impact on students’ academic achievement, we asked participants to provide consent to the researchers to access their academic records, including their grades up to either their fourth (second cohort) or fifth (first cohort) semesters as well as their SAT scores. Among those participants who provided access to their records in the first cohort ( $n = 21$ ), the mean grade point average (GPA) was 2.91 ( $SD = 0.37$ ), and the mean cumulative SAT score was 1238.18 ( $SD = 130.52$ ). Among those in the second cohort who provided consent ( $n = 37$ ), the mean GPA was 2.89 ( $SD = 0.40$ ), and the mean cumulative SAT score was 1235.43 ( $SD = 120.76$ ). Three participants declined to provide consent.

### Daily Diary Analyses

To address the four questions involving daily diary data outlined in the Study 3 introduction, we conducted analyses using a multilevel or hierarchical linear model (HLM; Bolger & Zuckerman, 1995; Bryk & Raudenbush, 1992; Kenny, Kashy, & Bolger, 1998). The model has two levels, a within-person level and a between-persons level. For the within-person level, each person has his or her own equation specifying the distinctive association between variables of interest. The within-person level of analysis can be used to address the following questions: (a) What is the average level and the change over time in an individual’s attitudes, affects, and experiences over time (e.g., mean level and change in PD from Day 1 to Day 21 of the study; mean level and change in probability of having an NRE)? and (b) On average, how much of today’s dependent variable (e.g.,

PD) can be predicted by the previous day’s independent variable (e.g., NRE)? The between-persons level of analysis can be used to examine whether these processes (e.g., average probability of an NRE, temporal change in PD, relation between NRE and PD) vary across people as a function of RS–race. Prior to conducting the analyses, we centered RS–race and day on their means by subtracting the mean value of the respective variable from each individual value. This rescaling aids the interpretation of results.

The multilevel approach permits the simultaneous analysis of within-person and between-persons variation (Bolger & Zuckerman, 1995; Bryk & Raudenbush, 1992; Kenny et al., 1998). In contrast, conventional linear models either aggregate across within-person data, resulting in information loss, or conflate within-person and between-persons variation, resulting in incorrect tests of significance (see Kenny et al., 1998).

*Mean level and change over time.* A multilevel approach to assessing mean level and temporal change in variables measured at the daily level and to establishing whether the mean level and change differ as a function of RS–race involves specifying two equations. In describing these equations, we use participants’ PD as an example of the dependent variable. Time is indexed by day in the study. The within-person equation specifies that the value of the dependent variable for a given participant on a given day,  $PD_i$ , is a linear function of the average level of PD across time,  $a_0$ ; the diary study day,  $Day_i$ ; and a residual component of the dependent variable,  $r_i$ , which is specific to each day and is assumed to have a mean of zero and a constant variance across individuals and days. Equation 1 is the result:

$$PD_i = a_0 + a_1 Day_i = r_i. \quad (1)$$

The coefficient  $a_0$  can be interpreted as the average level of PD across time because day has been centered such that zero is the average day. The coefficient  $a_1$  is the main effect of day on PD. Equation 2 specifies that differences between participants in  $a_0$  (individual’s PD averaged over diary period) are a function of RS–race. Estimates of  $a_0$  are obtained for each participant:

$$a_{0i} = b_0 + b_1(RS\text{--}race)_i + e_i. \quad (2)$$

The term  $b_0$  is the average level of PD across all participants. This is the case because RS–race scores have been centered on zero; that is, each person’s score has had the sample mean RS–race subtracted from it. The term  $b_1$  is the change in average PD for every unit change in RS–race. The term  $e_i$  refers to the residual component of the dependent variable unique to person  $i$ . It is normally distributed with a mean of zero and a constant variance across all levels of RS–race.

An estimate of  $a_1$  in Equation 1 is also obtained for each participant in the sample. The between-persons equation specifies that, for each participant  $i$ , the linear change in PD over time is a function of that participant’s RS–race:

$$a_{1i} = c_0 + c_1(RS\text{--}race)_i + f_i. \quad (3)$$

In this equation,  $c_0$  is the linear association between day and PD for the average participant, and  $c_1$  is the change in that association for each unit change in RS–race. The residual component of the dependent variable specific to each individual is  $f_i$ , and it is assumed to be a normally distributed random variable with a mean of zero and a constant variance across levels of RS–race.

If we substitute Equation 2 for  $a_{0i}$  and Equation 3 for  $a_{1i}$  in Equation 1, we get the following equation:

$$PD_i = b_0 + b_1(RS\text{--}race)_i + c_0 Day_i + c_1(RS\text{--}race)_i \times Day_i + (r_i + e_i + f_i). \quad (4)$$

In this equation,  $b_0$  is the mean level of  $PD_i$  across participants and time,  $b_1$  is the estimate of the main effect of RS–race on PD,  $c_0$  is the linear association between day and PD for the average participant (main effect of

time), and  $c_j$  is effect of RS–race on the association between day and  $PD_i$  (the RS–Race  $\times$  Time interaction effect).

*Mean level analyses.* The above analyses describe the degree to which RS–race predicted both mean level of and change in dependent variables. In some of the analyses reported below, our interest is in the association of RS–race with the mean level of the dependent variable over the diary period (e.g., NREs). The main effect of level can be obtained by dropping out the main effect of day, where relevant, from the above equations. Thus, when we use NRE as an example of the dependent variable, Equation 4 becomes

$$NRE_t = b_0 + b_1(RS\text{-}race)_i + (r_t + e_t). \quad (5)$$

*Lagged analyses.* In addition to the level and change over time question, it is also possible to ask whether the occurrence of specific experiences on  $Day_{t-1}$  are related to variables reported on  $Day_t$ . This approach allows us to conclude with greater confidence whether a causal relationship exists between events occurring on  $Day_{t-1}$  and outcome variables on  $Day_t$  (Larson & Almeida, 1999). A within-person and a between-persons equation are estimated here as well. In describing these equations, we again use participants' PD as an example of the dependent variable and the occurrence of an NRE as an example of the independent variable. The within-person equation specifies that the value of the dependent variable for each individual on a given day,  $PD_t$ , is predicted by that individual's average PD across all days of the study,  $a_0$ ; the level of PD on the previous day,  $PD_{t-1}$ ; the level of the independent variable on the previous day,  $NRE_{t-1}$  (with  $PD_{t-1}$  and  $NRE_{t-1}$  at their average values); and a residual component of the dependent variable specific to each day,  $r_t$ . The variable  $r_t$  is assumed to have a mean of zero and a constant variance across persons and days. The equation is as follows:

$$PD_t = a_0 + a_1PD_{t-1} + a_2NRE_{t-1} + r_t. \quad (6)$$

The between-persons equation specifies that for each person, the effect of the previous day's NRE on PD today is a function of the individual's RS–race. Estimates of  $a_{0i}$ ,  $a_{1i}$ , and  $a_{2i}$  are obtained for each person  $i$ .

As in Equation 2 above,

$$a_{0i} = b_0 + b_1(RS\text{-}race)_i + e_{0i}. \quad (7)$$

Here,  $b_0$  is the average level of PD across all participants, and  $b_1$  denotes the change in PD between participants for each unit change in RS–race. The term  $e_{0i}$  signifies the residual component of the dependent variable that is unique to person  $i$ .

$$a_{1i} = b_2 + e_{1i}. \quad (8)$$

Here, the term  $b_2$  signifies the main effect of the previous day's PD on the current day's PD for the average person. The term  $e_{1i}$  signifies person  $i$ 's deviation from that average.

$$a_{2i} = c_0 + c_1(RS\text{-}race) + e_{2i}. \quad (9)$$

In this equation,  $c_0$  is the average effect of NRE across all participants (given that RS–race is centered on zero), and  $c_1$  denotes the between-persons change in PD per unit change in RS–race. The term  $e_{2i}$  signifies the residual component of the dependent variable that is unique to person  $i$ .

Substituting Equations 7, 8, and 9 for  $a_0$ ,  $a_1$ , and  $a_2$  yields the following:

$$PD_t = b_0 + b_1(RS\text{-}race)_i + b_2PD_{t-1} + c_0NRE_{t-1} + c_1NRE_{t-1} \times (RS\text{-}race)_i + (r_t + e_{0i} + e_{1i} + e_{2i}). \quad (10)$$

Thus, in Equation 10,  $b_0$  is the mean level of  $PD_t$  across participants and time (with  $PD_{t-1}$ ,  $NRE_{t-1}$  and RS–race at their average values),  $b_1$  is the estimate of the main effect of RS–race on  $PD_t$ ,  $b_2$  is the estimate of the main effect of the previous day's PD on  $PD_t$ ,  $c_0$  is the estimate of the main effect of the previous day's NRE on  $PD_t$ , and  $c_1$  is the estimate of the main effect of RS–race on the association between  $NRE_{t-1}$  and  $PD_t$  (i.e., the interaction). We implemented the analysis approaches described above

using the SAS program PROC MIXED (see Singer, 1998). In all of the multilevel analyses reported below, the results were adjusted for first order autocorrelations in the error terms, and RS–personal was included as a covariate. The pattern of results did not change when the analyses were controlled for day of the week, gender, cohort, participants' self-esteem (Rosenberg, 1979), or participants' ethnic identity (Phinney, 1992). The pattern of results also did not vary significantly as a function of cohort or gender.

### Results

#### *Is RS–Race Associated With a Readiness to Perceive and React to NREs?*

Using the mean level analysis described in the *Daily Diary Analyses* section (Equation 5), we tested whether RS–race was related to the probability of perceiving an NRE.<sup>4</sup>

RS–race predicted a higher frequency of NREs ( $B = 0.003$ ),  $F(1, 62) = 6.55, p = .01$ . The predicted probabilities of having an NRE on a given day for someone at the 25th or at the 75th percentile on RS–race were .03 and .07, respectively. Indicating the discriminant specificity of the association between RS–race and the perception of NREs, RS–race was not a significant predictor of rates of positive interpersonal experiences attributed to any aspect of identity, including race; any positive:  $B = -0.0009$ ,  $F(1, 62) = 0.18, ns$ ; PREs:  $B = 0.0006$ ,  $F(1, 62) = 0.18, ns$ . In addition, RS–race was not significantly associated with any type of nonrace-related negative experiences ( $B = 0.0008$ ),  $F(1, 62) = 0.63, ns$ . This finding held when we examined the association between RS–race and experiences related to the specific nonrace domains: religion,  $F(1, 62) = 0.14, ns$ ; sexual orientation,  $F(1, 62) = 0.69, ns$ ; gender,  $F(1, 62) = 2.60, p > .10$ ; personality,  $F(1, 62) = 0.08, ns$ ; or physical appearance,  $F(1, 62) = 2.46, p > .10$ . Thus, the findings support the prediction that anxious expectations of race-based rejection predict a specific tendency to perceive race-based negativity.

Does RS–race predict feeling alienated and rejected following the perception of race-based rejection? We analyzed participants' reported levels of alienation and rejection following an NRE using the mean level analyses described above; however, in this case the analysis was restricted to days in which an NRE was reported. RS–race was significantly associated with these feelings ( $B = 0.14$ ),  $F(1, 23) = 5.12, p < .05$ . The predicted values for alienation and rejection following an NRE for someone at the 25th or at the 75th percentile on RS–race are 2.63 and 4.16, respectively. When we restricted the analysis to days in which a PRE was reported, however, RS–race was not significantly associated with postevent alienation and rejection ( $B = 0.002$ ),  $F(1, 32) = 0.03, ns$ . RS–race was also not significantly associated with any of the other feelings assessed following either an NRE or a PRE.

#### *Does RS–Race Influence Mean of and Change in Daily Feelings and Attitudes Over the Diary Period?*

Using the mean level and change over time analysis described in the *Daily Diary Analyses* section (Equations 1–4), we examined

<sup>4</sup> The results were unchanged when we redid the analysis of the diary data that involved categorical (1, 0) dependent variables (e.g., analyses addressing the question of whether RS–race predicted the occurrence of race-negative events on diary days) using a logistic approach available in the HLM package (Bryk, Raudenbush, Seltzer, & Congdon, 1989).

the association of RS–race with both mean of and change in feelings of support, happiness, rejection, and belonging in the university as well as PD and positivity toward professors over the diary period. We conducted multilevel analyses in which the dependent variables were regressed on RS–personal, RS–race, day of study, and the interaction of RS–race and day of study. The results of these analyses are given in Table 4, which indicates the correspondence between the coefficients given in Equation 4 and the estimates of these coefficients from the analyses. RS–personal was not significantly associated with any of the outcome variables reported below.

*Feelings of well-being and rejection.* As Table 4 shows, RS–race ( $b_1$  in Equation 4) was significantly associated with feelings of well-being and rejection, with students higher in RS–race reporting lower well-being and a higher sense of rejection than those lower in RS–race. The results also revealed significant effects of day ( $c_0$  in Equation 4) for these two measures, suggesting that, on average, over the initial weeks of college, participants' sense of well-being increased and their sense of rejection decreased. In addition, the Day  $\times$  RS–Race interaction term ( $c_1$  in Equation 4) was significant for well-being. Figure 1 plots the predicted values for well-being, respectively, for someone at the 25th percentile and someone at the 75th percentile of the RS–race distribution by day of the study (values for the 1st, 7th, 14th, and 21st days are plotted for purposes of illustration). Simple slope analyses were conducted following the approach described by Aiken and West (1991). These analyses indicated that whereas participants low in RS–race experienced a significant increase in feelings of well-being over the first 21 days of school ( $B = 0.053$ ),  $F(1, 64) = 13.13$ ,  $p < .001$ , participants high in RS–race did not experience such an increase ( $B = 0.003$ ),  $F(1, 64) = 0.04$ , *ns*.

*Sense of belonging at the university.* As Table 4 shows, analyses revealed a significant effect of day on belonging such that, overall, participants felt an increased sense of belonging over the diary study period. RS–race was also significantly associated with sense of belonging at the university, with those higher in RS–race showing a reduced sense of belonging relative to those lower in RS–race. The RS–Race  $\times$  Day interaction term indicated a non-significant trend for feelings of belonging at the university to increase more among those low in RS–race than among those high in RS–race ( $p < .15$ ).

*PD and positivity toward professors.* As Table 4 indicates, RS–race was significantly associated with attitudes toward both

dormmates and professors. Significant main effects of RS–race for both measures indicate that those higher in RS–race felt less positively toward dormmates and professors than did those lower in RS–race. No effects of day were observed. Additionally, the Day  $\times$  RS–Race interaction term was statistically significant for positivity toward professors. This interaction is illustrated in Figure 2. Simple slope analyses revealed that whereas participants low in RS–race tended to feel increasingly more positive toward their professors over the course of the first 21 days of school ( $B = 0.028$ ),  $F(1, 64) = 3.46$ ,  $p = .06$ , participants high in RS–race did not experience such an increase ( $B = -0.014$ ),  $F(1, 64) = 0.96$ , *ns*. The RS–Race  $\times$  Day interaction term ( $p = .17$ ) for positivity toward peers, though not significant, suggests that differences between those high and low in RS–race increased over the diary period in the predicted direction.

### *Is the Association Between Yesterday's Race-Related Experiences and Today's Feelings Stronger Among Those High in RS–Race?*

Using the lagged analysis described in the *Daily Diary Analyses* section (Equations 6–10), we examined whether the association between a given day's NRE or PRE and the next day's feelings and attitudes depended on level of RS–race. As shown in the equations, these cross-day analyses control for the lagged value of the dependent variable.

*NREs.* The analyses revealed a significant RS–Race  $\times$  Lagged NRE interaction term for attitudes toward dormmates ( $B = -0.052$ ),  $F(1, 62) = 7.89$ ,  $p < .01$ . Simple slope analyses indicated that low RS–race participants' attitudes toward dormmates did not differ significantly depending on whether an NRE occurred ( $B = 0.29$ ),  $F(1, 64) = 1.72$ , *ns*. For high RS–race participants, on the other hand, their positivity differed significantly as a function of whether such an experience had occurred ( $B = -0.41$ ),  $F(1, 62) = 8.14$ ,  $p < .01$ . This pattern of results is illustrated in Figure 3. The findings suggest a more detrimental effect of such experiences on the relationships of high RS–race participants. The other outcome variables did not show significant lagged main effects of NRE or significant RS–Race  $\times$  Lagged NRE interaction terms, although the signs of the coefficients were in the expected direction.

*PREs.* For PREs, significant lagged main effects for belonging ( $B = 0.22$ ),  $F(1, 62) = 3.76$ ,  $p = .05$ , and positivity toward

Table 4  
*Unstandardized Parameter Estimates From the HLM Analysis*

Variable	Intercept ( $b_0$ )	RS–r ( $b_1$ )	Day ( $c_0$ )	RS–r $\times$ Day ( $c_1$ )
Well-being (support and happiness)	7.90 (0.42)	-.075** (.02)	.024* (.009)	-.004** (.001)
Rejection	1.71 (0.34)	.087*** (.02)	-.029** (.01)	-.001 (.001)
Belonging in the university	7.11 (0.60)	-.126*** (.03)	.025** (.02)	-.0017 (.001)
Positivity toward peers (liking and comfort)	7.58 (0.64)	-.163*** (.03)	-.002 (.01)	-.0023 (.001)
Positivity toward professors (liking and comfort)	8.14 (0.64)	-.074* (.03)	.007 (.01)	-.003* (.001)

*Note.*  $N = 66$ . Numbers in parentheses are the standard errors for the estimates. All intercept terms are significantly different from zero. The results shown above adjust for RS–personal and first-order autocorrelation. The interaction terms for well-being as well as for positivity toward professors are plotted in Figures 1 and 2. HLM = hierarchical linear modeling; RS–r = sensitivity to rejection based on race.

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

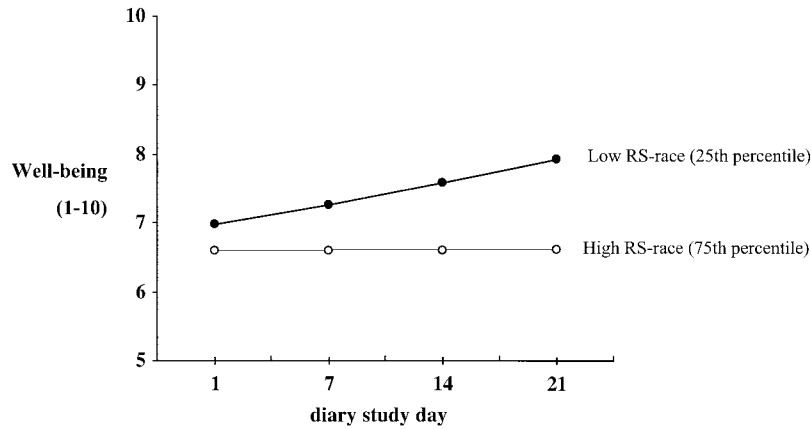


Figure 1. Feelings of well-being (happiness and support) over the 21-day period of the diary study as a function of sensitivity to rejection based on race (RS-race). Unstandardized parameter estimates from this analysis are presented in Table 4, and the figure illustrates the results on the basis of these estimates. Predicted values were computed using the 25th (−5.28) and the 75th (5.47) percentile values of the centered RS-race distribution for low RS-race and high RS-race individuals, respectively.

professors ( $B = 0.61$ ),  $F(1, 62) = 9.95$ ,  $p < .01$ , as well as a marginal one for PD ( $B = 0.23$ ),  $F(1, 62) = 3.01$ ,  $p < .09$ , suggest beneficial effects of PREs for all participants in our study. Further, a significant RS-Race  $\times$  Lagged PRE interaction term was found for feelings of belonging at the university ( $B = 0.035$ ),  $F(1, 62) = 4.33$ ,  $p < .04$ . This interaction is plotted in Figure 4. Again, simple slope analyses indicated that whereas low RS-race participants' sense of belonging did not differ significantly as a function of the experience ( $B = -0.008$ ),  $F(1, 64) = 0.00$ , *ns*, those high in RS-race experienced a significant increase in belonging following such an experience ( $B = 0.45$ ),  $F(1, 64) = 9.39$ ,  $p < .01$ . As the figure indicates, differences in feelings of belonging among low RS-race and high RS-race participants decreased on days following a PRE, reflecting an increase in feelings of belonging among high RS-race participants following such events.

Follow-Up Data

*Friendship patterns.* When we controlled for RS-personal, RS-race was unrelated to the total number of friends that participants reported at the end of the school year, partial  $r(54) = -.10$ , *ns*. However, when we controlled for number of African American friends, RS-race was significantly negatively correlated with the number of White friends, partial  $r(53) = -.34$ ,  $p < .01$ . When we controlled for number of White friends, RS-race was not significantly correlated with number of African American friends, partial  $r(53) = .02$ , *ns*.

*Perceived legitimacy of the institution.* When we controlled for RS-personal, there was a significant negative relationship between RS-race at the beginning of college and perceived legitimacy of the university at the end of the 1st year, partial  $r(56) =$

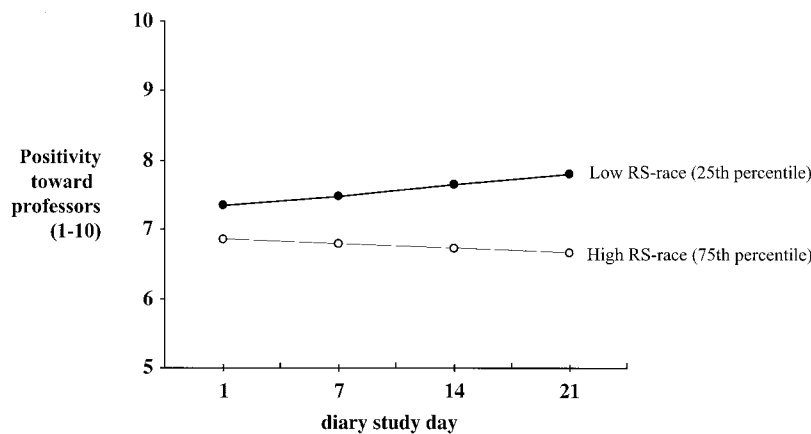


Figure 2. Positivity (comfort and liking) toward professors over the 21-day period of the diary study as a function of sensitivity to rejection based on race (RS-race). Unstandardized parameter estimates from this analysis are presented in Table 4, and the figure illustrates the results on the basis of these estimates. Predicted values were computed using the 25th (−5.28) and the 75th (5.47) percentile values of the centered RS-race distribution for low RS-race and high RS-race individuals, respectively.



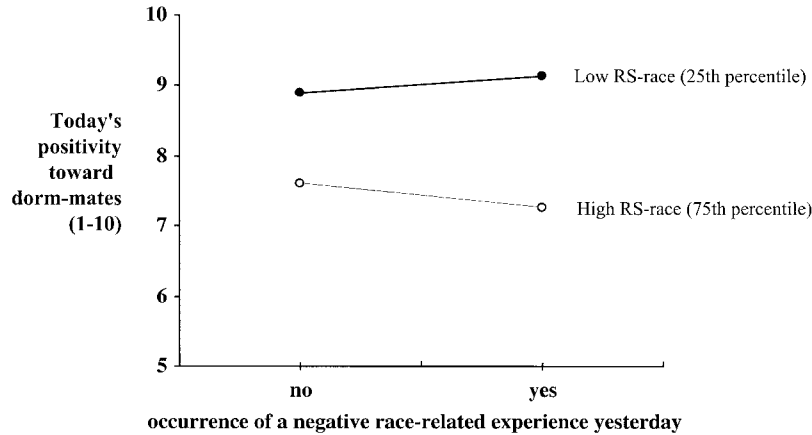


Figure 3. Today's positivity toward dormmates as a function of sensitivity to rejection based on race (RS-race) and yesterday's negative race-related experiences, with yesterday's positivity controlled for. Predicted values were computed using the 25th (-5.28) and the 75th (5.47) percentile values of the centered RS-race distribution for low RS-race and high RS-race individuals, respectively.

-.28,  $p < .04$ . To further investigate whether these results stemmed from a general tendency for individuals high in RS-race to accord less legitimacy toward any administrative entity, we examined the relationship between RS-race and the perceived legitimacy of the extracurricular organization with which participants identified most. This correlation was not significant, partial  $r(56) = .05$ , *ns*, suggesting that RS-race specifically affects the perceived legitimacy of the university administration.

*Attitudes toward receiving academic help.* When we controlled for RS-personal, we observed a significant relationship between RS-race at the beginning of college and anxiety about approaching professors and teaching assistants with an academic problem assessed during participants' sophomore or junior year, partial  $r(58) = .31$ ,  $p = .01$ . This relationship remained unchanged when we controlled for anxiety about approaching friends with an academic problem, partial  $r(57) = .33$ ,  $p < .01$ . A negative relationship between RS-race and attendance at review sessions, partial  $r(58) = -.28$ ,  $p < .03$ ,

suggests that anxiety with professors and teaching assistants may translate into an avoidance of contexts and activities that are designed to address the customary problems and questions that students have with course work.

*Change in GPA.* Using the HLM analytic approach that we used to analyze changes in participants' feelings and attitudes over the first 21 days of college (Equations 1-4), we examined the relationship between RS-race and participants' GPA over the first five semesters of college, allowing HLM to estimate fifth semester grade values for participants in the younger cohort. When we adjusted for the effects of RS-personal and autocorrelation, the analysis revealed a significant RS-Race  $\times$  Semester interaction ( $B = -0.006$ ,  $F(1, 188) = 4.33$ ,  $p < .05$ ). This pattern remained unchanged when we controlled for participants' SAT scores ( $B = -0.007$ ,  $F(1, 169) = 4.40$ ,  $p < .05$ ). As shown in Figure 5, simple slope analyses revealed that high RS-race participants' grades declined as a function of semester ( $B = -0.064$ ,  $F(1, 55) = 5.45$ ,  $p < .03$ , whereas the grades of low RS-race participants did not

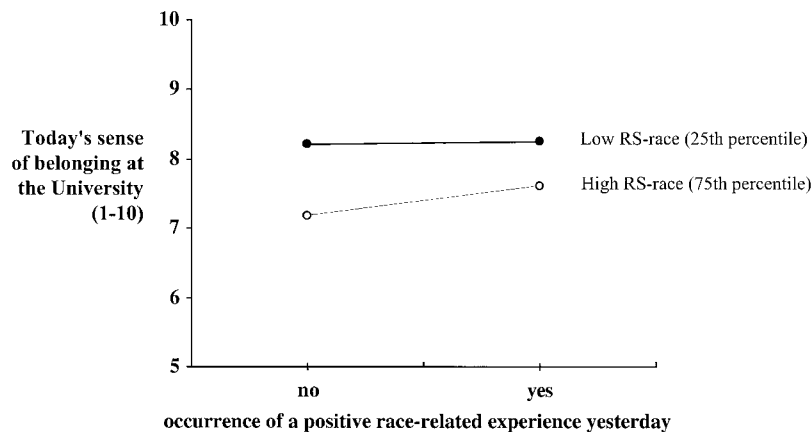


Figure 4. Today's belonging at the university as a function of sensitivity to rejection based on race (RS-race) and yesterday's positive race-related experiences, with yesterday's level of belonging controlled for. Predicted values were computed using the 25th (-5.28) and the 75th (5.47) percentile values of the centered RS-race distribution for low RS-race and high RS-race individuals, respectively.

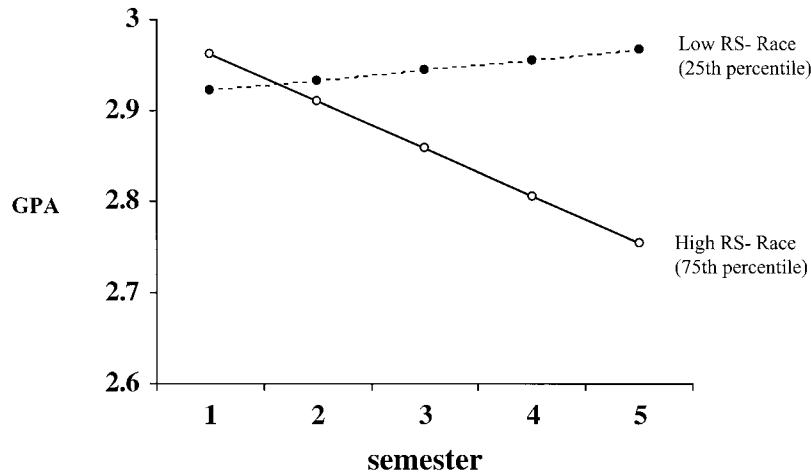


Figure 5. Grade point average (GPA) over the course of five semesters as a function of sensitivity to rejection based on race (RS-race). Predicted values were computed using the 25th ( $-5.28$ ) and the 75th ( $5.47$ ) percentile values of the centered RS-race distribution for low RS-race and high RS-race individuals, respectively.

significantly vary over time ( $B = 0.020$ ),  $F(1, 55) = 0.47$ , *ns*. When analyses controlled for SAT scores, the pattern of results remained unaltered: For participants high in RS-race, there was a decline in grades ( $B = -0.07$ ),  $F(1, 49) = 5.25$ ,  $p < .03$ , whereas for participants low in RS-race, there was no change ( $B = 0.02$ ),  $F(1, 49) = 0.47$ , *ns*.

### Discussion

This study provides evidence consistent with predictions concerning the implications of sensitivity to status-based rejection for stigmatized group members entering institutions that have marginalized their group in the past. In the specific case examined here—African Americans entering a predominantly White college—five predictions from the model were generally supported.

First, African American students who entered college with high anxious expectations of race-based rejection reported more frequent experiences of race-based negativity during the transition and a stronger sense of alienation and rejection following such race-based negativity than did students with low expectations. The self-report nature of the data makes it impossible to distinguish whether students high and low in such expectations perceived the same objective events differently or differed in their objective experiences of negative race-related events. People high in RS-race may indeed be the targets of more such events: Their appearance may elicit a prejudiced response from others independently of their behavior, or their trepidation about others' negativity may prompt awkwardness, aloofness, or anticipatory hostility that elicits expectation-confirming negative responses from nonstigmatized others (Downey, Freitas, et al., 1998; C. T. Miller & Myers, 1998; Frable et al., 1990). Consistent with the view that sensitivity to status-based rejection is specifically threat-related and triggered in particular situations, RS-race was a significant predictor neither of perceptions of positive race-based events nor of events unrelated to race.

Second, during the transition, students were significantly lower, on average, on various indices of well-being to the extent that they entered college expecting race-based rejection. In addition, there was some evidence of increasing differentiation on these indices

between those high and low in anxious rejection expectations, as might be expected if the effects of experiences of race-based rejection accumulate over time. In the cases of well-being and of positivity toward professors, the increase in differences between those high and low in RS-race was significant. In the cases of belonging at the university and of PD, there were nonsignificant trends toward increasing differences. For these latter variables, the differences between those high and low in RS-race were already substantial at the beginning of the diary study (see Table 4). Because all students attend a 2-week orientation period prior to the beginning of classes, the divergences may have mostly occurred prior to the beginning of the study. In the fifth case (feelings of rejection), the Day  $\times$  RS-Race interaction term was nonsignificant.

Third, using a lagged analysis approach, we tested the prediction that race-based rejection experiences would have a more negative impact on the next-day attitudes and feelings of students high in RS-race than of those low in RS-race. We found that on days following a race-negative event, high RS-race participants' PD decreased significantly when we controlled for the previous day's positivity. Although not statistically significant, the results for the other variables were all in the expected direction.

Our approach to assessing race-based rejection may help explain why the lagged RS-Race  $\times$  Race-Negative Events interactions were in general weaker than expected. Each day, participants reported on only one event, either positive or negative, that was attributable to something about them as an individual or as a member of various social categories. The rate of perceived race-based rejection in the study was low, reducing the power to detect the expected effects. An approach that sought to maximize reports of perceived race-based rejection might have revealed a stronger role for such events in explaining differences in the transition experiences of high and low RS-race students. It is also possible that the particular model of the effects of race-negative events that was tested was not optimal. Students may have recovered to a large extent by the next day from race-negative events through various adaptive coping strategies, which may differ in their effectiveness for students high and low in RS-race.

The fourth prediction we examined was that the experience of race-positive events would help counteract the negative consequences of being high in RS–race. Irrespective of level of RS–race, students felt more positively about their sense of belonging at the university, their professors, and, to a marginally significant degree, their peers on the day following a race-positive event. Also, relative to students low in RS–race, those high in RS–race showed a greater increase in feelings of belonging at the college on days following a race-positive event. Qualitative descriptions indicated that race-positive events typically involved interactions with same-race peers in settings where concern about the possibility of race-based rejection was absent, indicating the potential benefits of such opportunities. These types of events may have a beneficial effect because they help disconfirm negative expectations about the institution's position toward minority group events and thus about one's ability to find a comfortable place within that institution (Cross & Strauss, 1998). It is important to remember, however, that interracial experiences in which participants were made to feel comfortable and accepted as individuals rather than as members of social categories may not have been encoded as race-positive events. Also, as with negative race-based events, our methodology may have underestimated positive race-related events.

Finally, we found support for the hypothesized longer term effects of race-based rejection expectations on students' adjustment to the university, interpersonal relationships, and academic performance. Those students who began college high in RS–race perceived the university authorities to be less legitimate and reported fewer White friends at the end of their 1st year than did those who began college low in RS–race. Two to 3 years later, students high in RS–race reported greater anxiety than did those low in RS–race about discussing an academic problem with professors or teaching assistants as well as less frequent attendance at academic review sessions. By this time, a significant gap in academic achievement had emerged between those high and low in RS–race, even when we controlled for SAT scores.

Despite yielding findings generally consistent with our theoretical predictions, the study has several limitations aside from those already discussed. First, given that the diaries were returned weekly, participants may not have always completed the diaries on the appropriate days. Second, although the longitudinal nature of the data suggests a causal relationship between RS–race and the outcome variables measured, such causal claims need to be supplemented with experimental data. Third, the study does not allow us to address the impact of status-based RS outside of universities where African Americans are underrepresented. An examination of the implications of RS–race on African American students' experiences at predominantly Black colleges, for example, would provide an interesting point of comparison with the present data.

These caveats notwithstanding, the findings from this study provide support for the general prediction of the status-based RS model that individuals who enter majority institutions anxiously expecting status-based rejection will experience greater difficulties at the institution and in availing of its resources, compromising the pursuit of institution-related goals. These findings also suggest some ways institutional factors can help reduce these difficulties.

## General Discussion

The present research focuses on people's expectations of being accepted or rejected on the basis of status characteristics. We have shown that these status-based rejection expectations are distinct from expectations of rejection for personal reasons and have implications for people's sense of acceptance and well-being, their social relationships, and their achievement within a social institution that evolved reflecting the values and norms of a higher status group. The findings provide evidence for our process account of how status-based rejection expectations affect people's attachment to such institutions and the relationships people form within them.

Although we view the construct of status-based rejection and the rejection sensitivity model more generally as applicable to different status groups, our focus in this research is specifically on African Americans in college. The focus on a particular group reflects our assumption that rejection is communicated to different groups in different contexts and with different consequences. African Americans who anxiously expected race-based rejection were found in Studies 1, 2, and 3 to perceive it more frequently and in Studies 1 and 3 to react more intensely to it. These findings support our conceptualization of RS–race as a processing dynamic (Mischel & Shoda, 1995) encompassing expectations, perceptions, and reactions to race-based rejection. In Study 3, RS–race was shown to influence African American students' well-being, sense of belonging, relationships with peers and professors, and academic achievement at an educational institution where they have been historically underrepresented as well as the legitimacy accorded to those who administer the institution. Overall, these findings suggest that expectations of race-based rejection—viewed as rooted in experience and developed as an adaptive mechanism to cope with the possibility of being negatively targeted in the future—can help explain why some African American students view their college experience as alienating and undermining, whereas others do not.

### *Distinguishing the Legacy of Experiences on the Basis of Status Versus Individual Characteristics*

The data highlight the value of distinguishing the psychological legacy of people's experiences as individuals and as social group members and of seeking to determine when each type of legacy influences social behavior. Among African Americans, individuals distinguished between situations in which they expected race-based rejection and situations in which personal rejection was expected. The results of Study 2 in particular show that RS–race does not reflect a generalized tendency either to be sensitive to rejection or to globally perceive the world through the lens of race. Rather, the RS–race dynamic is triggered specifically in situations in which race-based rejection is plausible. Consistent with recent theoretical integrations of personality and social psychology (e.g., Mischel & Shoda, 1995), our approach explicitly incorporates the social situation into a processing disposition. That is, the status-based RS construct encompasses both the relevant cognitive-affective mediator of behavior (anxious expectations of rejection) and the situations in which the mediator is likely to operate (situations in which status-based rejection is a possibility). Although it lacks the breadth and generality of context-free approaches, the model allows for the study of personality in context, making possible a more fine-grained understanding and more

specific predictions of how situations and individuals interact to influence behavior (Mendoza-Denton, Shoda, Ayduk, & Mischel, 1999; Mischel, Shoda, & Mendoza-Denton, 2002).

### *Issues for Future Research*

#### *How Do Individuals Cope With Sensitivity to Status-Based Rejection?*

The negativity and stress associated with status-based rejection concerns potentially lead to the adoption of stress-alleviating coping styles (Clark, Anderson, Clark, & Williams, 1999; Crocker et al., 1998; Jones, 1972/1997; C. T. Miller & Major, 2000; Steele, 1997). Some of these strategies may compromise the attainment of valued goals or well-being, whereas others can facilitate both goal fulfillment and the successful management of prejudice and stigma.

One strategy for reducing such stress involves avoiding exposure to status-based rejection. This can involve avoiding specific situations in which exposure to status-based rejection is a possibility or, more generally, avoiding out-group members (Junger, 1987; Pettigrew, 1964; Pines, 1999; Simpson & Yinger, 1985). Another strategy involves selectively disengaging from domains in which one's group is negatively stereotyped, either by disidentifying from the domain or by discounting feedback from the stigmatizing source (Major, Spencer, Schmader, Wolfe, & Crocker, 1998; Steele, 1997). Although these strategies serve self-protective functions, they can also constrain the diversity of one's social contacts, limit one's use of available resources, and compromise one's success in the disidentified domain (Crocker et al., 1998; Jones, 1972/1997; C. T. Miller, Rothblum, Barbour, Brand, & Felicio, 1990; Ogbu, 1986, 1991; Pettigrew, 1997; Steele, 1992). The Study 3 findings that individuals high in RS—race felt less trustful of and obligated toward the institution, had fewer White friends, and were less likely to attend academic review sessions may index a process of disidentification from an institution perceived as rejecting.

Another coping strategy aimed at reducing the relevance of status-based rejection concerns is negating or minimizing one's identity as a member of a low-status group (Deaux, 1991, 1993, 1996; Ellemers, 1993). This strategy may involve adopting what one believes to be mainstream attitudes, values, and behaviors. Conformity to the mainstream may paradoxically result in heightened stress as a result of the continuous monitoring of one's behavior, of silencing one's concerns vis-a-vis mainstream others, and of the potential alienation from members of one's own group.

One potentially adaptive way of coping with a perceived hostile environment, which appeared to benefit high RS—race participants in Study 3, is to become associated with an organization that brings together members of one's own group. Such organizations may provide essential comfort zones where people can be off duty from the mindfulness and vigilance that operate during interactions with the nonstigmatized (Blascovich, Mendes, Hunter, Lickel, & Kowai-Bell, 2001; Crocker et al., 1998; Frable et al., 1990; Jones, 1972/1997). Such settings provide an opportunity to learn about the experiences of fellow members of one's group with majority group members and to adjust one's expectations of status-based rejection accordingly. Within supportive groups, stigmatized individuals also may learn more about culturally shared coping strategies that allow for the control and management of possible

exposure to race-based rejection while also fostering success in domains in which one's group is stigmatized (Cross & Strauss, 1998). It is interesting that these strategies require both an awareness that one may be the target of status-based rejection and the ability to anticipate how to cope in contexts in which such rejection is possible (Cross & Strauss, 1998; Frable et al., 1990; C. T. Miller, Rothblum, Felicio, & Brand, 1995). Repeated exposure to situations in which rejection concerns are activated may foster the development of potentially valuable skills, including an attentiveness to subtle interpersonal cues and attention to the other person's perspective, that may be used to effectively overcome prejudice. Ultimately, then, sensitivity to status-based rejection potentially can be harnessed as a key component of a culturally taught self-regulatory mechanism that fosters successful coping in domains dominated by members of the majority group.

#### *How Do Social Institutions and Their Representatives Help Confirm or Disconfirm Expectations of Status-Based Rejection?*

This article focuses on the implications of the rejection expectations that minority group members bring to social institutions whose structures, value systems, and practices were shaped in their absence. As such, the generalizability of the results to African Americans in other settings remains a topic for future research. Another task for future research is the role of the institution and its majority group members in confirming or disconfirming these initial expectations. This will involve both investigating social encounters between members of minority and majority groups and identifying institutional arrangements that can influence feelings of belonging and legitimacy. Understanding the outcomes of encounters between majority and minority group members requires attention to the expectations that both parties bring to the encounters and to how these expectations influence the interactional process (Blascovich, Mendes, et al., 2001; Crocker et al., 1998; Jones, 1972/1997; Pettigrew, 1997, 1998). Even among nonprejudiced people, fear of behaving in a manner that can be construed negatively can arouse anxiety and undermine the realization of efforts to be helpful. As Jones (1972/1997) has noted, "mutual anxiety escalates miscommunication and has a tendency to create a self-fulfilling prophecy whereby each confirms his or her own negative expectation" (p. 320). The likelihood of such negative cycles could perhaps be reduced by interventions that inform institutional representatives about ways of providing support and critical feedback that research has identified as being effective (Bolger, Zuckerman, & Kessler, 2000; Cohen et al., 1999).

In his initial description of the self-fulfilling prophecy, Robert Merton (1957) cautioned that the phenomenon whereby fears are translated into reality "operates only in the absence of deliberate institutional controls" (p. 436). The finding that high RS—race participants' sense of belonging in the institution increased on the day after a race-positive event provides initial evidence for the beneficial effect of having institutionally sanctioned events and organizations that facilitate such experiences. When universities and similar institutions explicitly value and support these organizations and events, they may defy negative expectations about the institution's lack of support and foster a sense that the institution is attentive to the needs of all its members. Thus, a task for future research is to identify institutional arrangements that can lead to—and those that can prevent—the realization of rejection con-

cerns. An equally important task is to identify how institutions can build on evidence that bridging groups or cultures is facilitated when each culture views the other as fair, respectful, and trustworthy (Tyler & Smith, 1998).

### Conclusions

This article outlines a model of RS that posits a common mechanism for the ways people expect, perceive, and react to rejection of the self as an individual and as a member of a social group. The model specifies that individuals' social-cognitive learning histories have implications for the types of rejection expectations that the individuals develop and that the contexts in which individuals find themselves determine the types of expectations that become activated. To test our general model, we examined the specific case of RS-race, developing a measure to assess African Americans' race-based rejection concerns and showing the implications of RS-race for African American students' college experience. To help establish the broader applicability of the model, it will be useful in the future to examine whether status-based rejection concerns can help explain the outcomes of other low-status groups, not only within the American context but also internationally. For example, the model might be used successfully to understand the experiences and outcomes of mainland Chinese immigrants in Hong Kong society (Salili, Chiu, & Lai, 2001) or of members of the Buraku in Japanese society (Ikeda, 2001). As such, it is our hope that this research will contribute to the efforts of historically stratified societies to gain the trust of traditionally excluded groups, so as to maximize individual and institutional potential.

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